

KEEPING TIME

A HISTORY

OF CLOCKS, WATCHES and BAROMETERS

IN A PROVINCIAL TOWN

from 1700 until 1900

Including a Directory of the makers

in the town of

GRANTHAM in LINCOLNSHIRE



HUGH F. WATSON



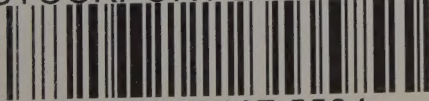
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BY

HUGH F WATSON



For Doreen, Denzil and Dora who have encouraged
and supported me in this project over many years.

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Foreword

There are many books available today about many different aspects of horology. This book is not aimed at the specialist but more to the many people today who have an interest in furnishing their homes with antique furniture and usually want a clock or two and wish to know a little more about their acquisitions. They may also want to know something about the old pocket watch which came from their grandfather's family.

I have had a lifetime's interest in clocks, watches and associated items which was encouraged by my wife, who at a loss to know what to buy me for my birthday in the first year of our marriage, gave me £3--10s to buy a grandfather clock from Hilley's junk shop in Boston where we were living at the time. There were a dozen or more to choose from. I bought one made by a local maker, Dickinson of Boston. It took me three trips to carry the various pieces to our little house off Sleaford Road. On the final journey I was carrying the case on my shoulder and as I crossed the town bridge, a man approached me and said, "Why ever don't you wear a watch!". I thought it very witty at the time! My wife looked rather dubiously at it and declared that she perhaps wouldn't have given me the money if she realised I was going to buy 'such a mucky old thing' but after some weeks of restoration it was allowed into the house. It set me off on a quest to learn more about clocks and their makers which has continued to this day.

Although the Directory of local makers is specific to this area the general notes are applicable to the trade in most provincial towns. I have tried to use previously unpublished examples and I am indebted to many friends for allowing me to photograph their clocks, and others who have written to me with photographs of their treasures. For reasons of security they must remain anonymous. I can however mention my dealer friends; Cliff Freeman of Castlegate Clocks, Roy Condor of Grantham Clocks, Roy Ellis of Time piece Repairs at Lincoln and John Bellinger, late of Ruskington Antiques, who have always given me free access to any of their stock of particular interest to me..

Extensive use of the local newspapers advertisements of the period, principally the Lincoln, Rutland and Stafford Mercury, many of which have been reproduced from the microfilm copies kindly provided by Lincolnshire Library Services. Also, over the years, I have read many books about horology and I must thank those authors for their efforts and the knowledge I have acquired from them.

I have endeavoured to research the local makers from the family historian's point of view and have included as much genealogical information as possible. The Grantham Corporation Minute books are held by the Lincoln Archives Office who were most helpful in giving me facilities to read these. Dennis Moore most generously extracted all the Lincolnshire Apprentice references from the records kept at Kew. He has recently published the complete transcript of all the British watch and clockmakers apprenticeships, a great contribution to horological history.

Finally I must thank my family and friends for their encouragement over the years, Barrie Fitton who has painstakingly read and corrected my manuscript and also Molly Burkett MBE. and the team at Barny Books for publishing advice and their work in preparing it for the printers.

I hope you enjoy reading this book as much as I have enjoyed writing it.

Hugh Watson, Grantham 2008.

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Handwritten notes in the middle of the page, possibly a date or a specific reference.

Handwritten notes at the bottom of the page, possibly concluding remarks or a signature.

Early Clockmaking

Horologists generally agree that the first mechanical clocks evolved on the continent of Europe and were in use in some of their religious houses probably as early as the 13th century. Prior to their invention, the life of the religious community would have been regulated by a bell struck manually by a monk, known as 'Clock Jack', who would have used a sundial and an hour glass to time the required intervals. The provision of a clock was an early example of automation replacing a boring manual job. These first clocks did not have dials but struck the hours on one of the church bells.

Their use spread to this country and they are known to have existed in some of our churches before the end of the 13th century, although few have survived. It is said that these early clocks were originally installed at ground level within the church, probably to enable these expensive marvels of engineering to be admired. Later some were provided with a dial and housed high up in the tower to enable the time to be seen from a distance. These early mechanisms were weight driven and would have required frequent winding, sometimes twice daily; badly worn tower steps often suggest the early provision of a turret clock.

It is supposed that most clocks before about 1600 were made by itinerant continental artisans who travelled from town to town using the forge of a local blacksmith. The local blacksmith would have been a versatile and highly skilled metal worker, quite capable of making all the component parts of the clock but would have been unfamiliar with the design and calculations necessary for the gear trains etc.. In some cases the clock was constructed entirely of iron but in other areas, for reasons of economy, the frame was made of wood. Once completed, the specialist clockmaker would move on and the care and maintenance of the clock would have been left to the local blacksmith.

By the end of the 16th century our native craftsmen had acquired and developed their own skills of clockmaking and, for a while, they were members of the Company of Blacksmiths. Eventually they petitioned for their own guild to regulate the trade and the Clockmakers' Company was incorporated in 1631. This guild exercised considerable powers to regulate the trade that by now included the manufacture of domestic clocks as well as turret clocks. They protected their members in so far as they controlled not only the number of persons employed in the trade but also the standard of workmanship and had powers to search and destroy work that was deemed to be inferior. It was at this time that makers were required to put their names to their work. The powers of the Clockmakers' Company however did not extend beyond the city of London. At this period it would have been necessary for most provincial clockmakers to pursue more than one trade to enable them to earn a sufficient living.

Although clockmaking in Grantham was not governed by the London Guild, all trade in the town was controlled by a body of elected Freemen known as Comburgesses and all who wished to practice a trade in town on their own account had to be Freemen. To become a Freeman one had to be the son of an established town freeman or one had to have served a satisfactory apprenticeship, usually of seven years, with a town freeman. A third route, by purchase, was some times possible but was at the discretion of the Comburgesses and the payment of a fee to them was required, usually about ten pounds, quite a considerable sum in the 17th century. In some cases part of it would be remitted for deserving persons.

There were penalties for ignoring these rules; in 1643 the Hall Book minutes:-

“the ancient order that anyone trading in the town who is not formally made free should forfeit ten shillings for every week of so offending”

and in 1646 was an order that:-

“the Constables in every Ward should list all strangers who during the last 4 years have set up trade not being Freeman”.

Subsequent meetings of the Comburgesses received numerous applications to be made Freeman by purchase. Evidently politics also came into it as in the case of a Nicholas Weyman, blacksmith, who desired to be admitted a Freeman, “the Court absolutely refused him having been in arms against the Parliament” (this being the time of the Civil War).

Their meetings or Courts were held in the old Guildhall that was on the corner of the High Street and what is still called Guildhall Street. It was demolished after the present Guildhall was built in 1865. Unfortunately no drawing or photograph of this building has so far turned up but we know that it had a clock with a dial as an entry in the Hall book refers to its repair:-

30th October 1635

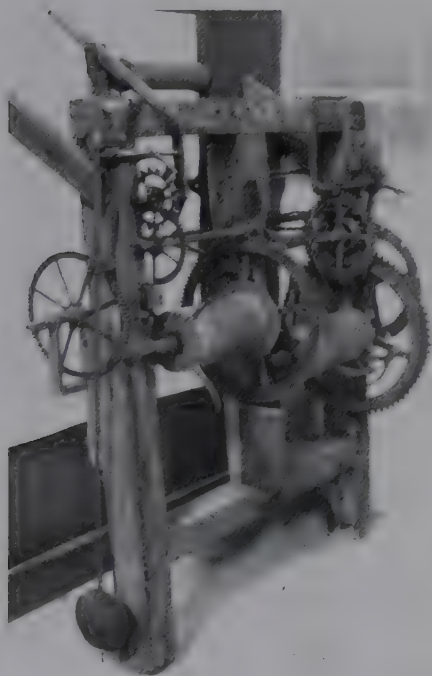
“at this Court with the general Consent of the same Tobias Pierson is hired to set & keep in good plight to goe free the Diall at the Guild Hall from time to time and from yeare to yeare and in Consideration of the Somme of VIIs VIIIId per annum, and the said Tobias Pierson is Contented to receive of the Chamerlynes for this yeare in consideration of his said worke and soe soon as hee shall perfect it, IIIs IIIIp upon the next accompt daye IIIs IIIId and soe from yeare to yeare afterwards uppon every Courte daye VIIs VIIIId so long as hee shall well faithfully performe the said worke”

At this date the dial would have had only one hand, the hour hand, and would have presumably faced towards the High Street. The minutes of their meetings were recorded in the Hall Books that survive and are now kept at the Archives Office at Lincoln. They are a valuable insight into the administration of the town. All apprenticeships were registered in the Hall books and after seven years the apprentice was entitled to be admitted as a Freeman and free to practice his trade in the town on his own account, although many continued to work as Journeymen for an established clockmaker in the town or elsewhere. He was also entitled to vote in the town's Parliamentary elections and was required to play his part in the running of the town's affairs. To be a Freeman had its privileges but also its responsibilities. Earlier in 1635, when his apprentice Daniel Cooke was made free, Tobias was described as an Armourer. He is also mentioned in a Petition of the Alderman and Burgesses of Grantham, dated in 1628, to obtain letters patent to receive charities to raise money for the parish church “for the timely happy prevention of the utter ruin and decay of so ancient and famous a structure”. It contains estimates of the necessary repairs totalling 1450 pounds including:- *“Tobias Pierson for Smith work general 100 pounds”*

A church as fine as St. Wulfram's would no doubt have had a clock since the Middle Ages, so this large sum might have included an allowance for its repair. This clock probably did not have a dial, which is still the case today, but would have sounded the hours on one of the bells in the church tower. There is an interesting entry in the Corporation Minute Book of the 11th. December 1640 relative to this:-

"Att this Courte by the generalle consente of the same Tobias Pearson is hired to sett and make the Chymes belonging to the steeple to goe perfecte & true and in good time. And likewise to amend the clocke hammer there and to make ytt go with a bigger compasse, so the sounde of the clocke may thereby bee better heard. In consideration whereof so soon as hee hath well and trulie finished & performed the same hee is to be paid foure pounds"

The reference to "the Chimes belonging to the steeple" is interesting as by this date some turret clocks had become quite complicated and could strike the quarters and some, known as Carillons, played a selection of hymn tunes at intervals throughout the day. All trace of this early clock have disappeared and it was probably replaced several times before the present clock in the tower which was made by Gillet and Bland of Croydon in 1876. Incidentally the church of All Saints Holbeach still retains its carillon, playing one of nine tunes at three hourly intervals.



The old church clock at Folkingham near Grantham.

A clock for Lincoln Cathedral was proposed in 1324 by the Treasurer at his own expense and he pointed out that Lincoln was without what other cathedrals and convents almost everywhere in the world are generally known to possess. Nothing was done however until John de Welbourne presented one towards the end of the century.

The clock at Salisbury Cathedral is considered to be one of the oldest surviving examples in this country and is known to have existed in 1386 because the accounts of that year include the provision of a house for the clock keeper. One of the difficulties of dating clocks from these early times is that their design remained substantially unchanged for several hundred years, so unless the actual mechanism is dated (which was not common at the time) the only accurate way is from documentary sources. Unfortunately there was not a specific word for a mechanical clock in the Middle Ages. The only word was "horologium" which was a generic term for all timekeepers and could include

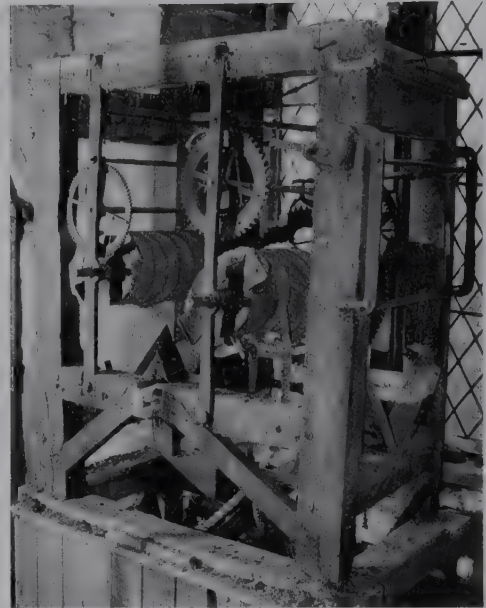
sundials which were to be found at nearly all churches.

These early clocks were not, by present day standards, good timekeepers but in an age when appointments were kept by the date and perhaps forenoon or afternoon they would have been adequate. The time keeping element of their mechanism was by a verge escapement and a foliot which was a reciprocating horizontal bar whose speed of oscillation could be adjusted by a small weight near each end. An accuracy of about plus or minus half an hour each day would have been the most one could have expected. A great leap forward occurred when the pendulum replaced the foliot c.1660 and timekeeping of a minute or so a day could be achieved. Further improvements followed with the replacement of the verge escapement by the anchor escapement with a longer pendulum. By the 1690s time keeping to within seconds a day could be achieved with a carefully constructed clock. At this point the provision of a dial with both hour and minute hands enabled the time to be read more accurately. Of course existing clocks would have remained in service but, as and when they required overhaul, they

were rebuilt incorporating the new technology and would have, in some cases, been provided with the additional minute hand. These improvements were so significant that very few clocks survive in their original form. One still working in its original state is in the chapel in the National Trust property of Cotleigh in Devon. There is one nearer to home, in the Rutland Museum at Oakham, which has been reconverted to its original foliot and verge escapement and can be seen working.

Richard Hickman, a landowner in Gonerby and Barkston, in his Will of 1640, left money to provide “a clock with a dial for Gonerby church that passengers may see the time of day” This has long since gone but the present more modern clock by Copes of Nottingham of 1897 still reminds passing motorists of the time. During the second half of the 17th century the desire for better long distance transport arrangements lead to the development of the staging system. This required considerable time-based organisation and somewhat more precise timekeeping and many public clocks were replaced or rebuilt using the more accurate escapement and pendulum and provided with dials. When the villagers of Morton near Bourne specified a clock for their church they required the dial to be large enough to be seen from the coach road some quarter of a mile distant. It retains its large dial and one can still read the time from the main road although not to be recommended whilst driving at the speed of modern traffic! Dials were not always updated with two hands. The church clock at Coningsby still retains its single hour hand and with its 12 foot dial, the largest in England, one is able to read the time easily within a minute or so. There is an interesting clock in the church tower of the nearby village of Marston which does not have a dial. It probably dates from the early 1700s. It has not worked for many years.

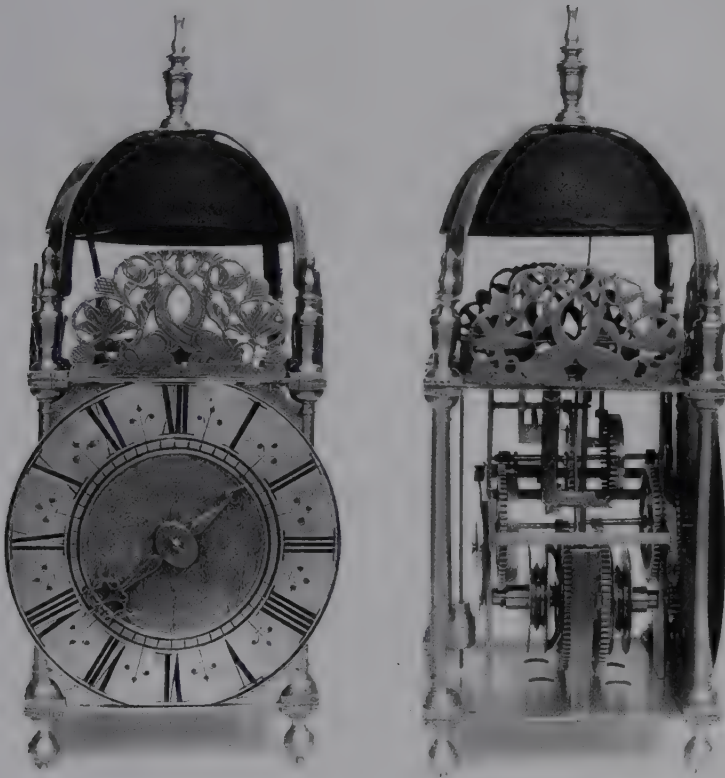
Whilst the earliest mechanical clocks were used in the religious houses of Europe it was not long before the aristocracy felt a need for these newfangled and costly machines and a scaled down version was developed for domestic use. The early chamber clocks were initially made in south Germany. Made of iron, they were weight driven with a single handed dial and struck the hours on a bell. Some also had an alarm mechanism. They would have been hung in the great hall on a bracket with their weights hanging from ropes. At first those in use in this country would have been imported from Germany but, by the 16th century, domestic clocks were being made here.



Marston church clock, early 18th century. (photo Michael Lee)

Domestic Clockmaking

The earliest style of British domestic clock was the lantern clock and these were made, unlike their German equivalents, mainly of brass. They were at first made by the London makers at the end of the 16th century with a verge escapement and a horizontal balance wheel instead of the foliot. Their time keeping was of the order of plus or minus a quarter of an hour per day and the single hour hand was sufficient to read the time. They often had an alarm feature as well as striking the hours and were made to fit on a wall bracket or hang from a hook with their weights suspended from ropes beneath them. These were expensive clocks and they sometimes were supplied with a fitted travelling box so they could be carried from place to place, perhaps to one's hunting lodge or country house for the season. The introduction of the pendulum to clockmaking by Ahasuerus Fromanteel in 1658 led to the balance wheel being replaced by a short pendulum but still retaining the verge escapement. Most of the existing balance wheel clocks were converted to pendulum. This was the time when clock making was beginning to be practised in provincial towns like Grantham and although no lantern clocks made in this town have, as yet, been recorded there are examples made in nearby Stamford, Newark and Leicester. By the end of the century they had adopted the more accurate long pendulum and anchor escapement and again many were converted from the less accurate verge escapement.



Lantern clock with short pendulum and verge escapement by John Watts of Stamford c.1680.

(photo courtesy Mr.P.Snowdon)

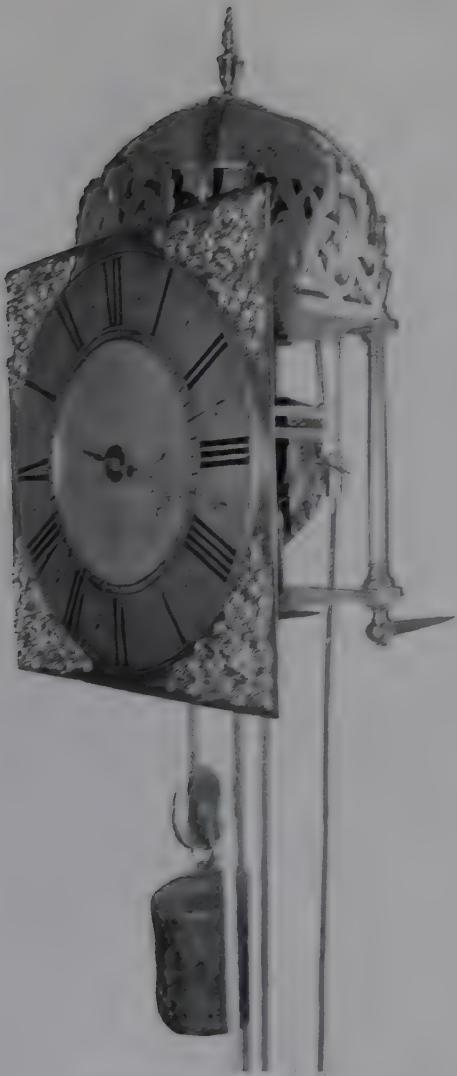


*Lantern clock by William Lee of Leicester (son of Roger)
c.1715 housed in a wooden case.
(Courtesy Leicester Museum)*

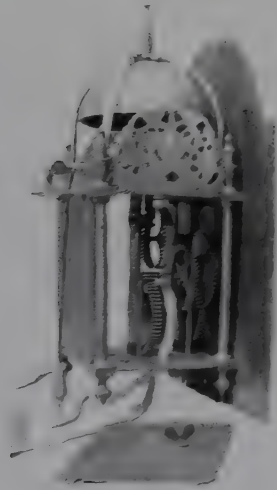


*Square dialled lantern clock by Roger Lee of Leicester c.1700
(Courtesy Leicester Museum)*

The use of the long pendulum, of about 39 inches and beating seconds, rendered it more vulnerable to accidental disturbance so the pendulum and hanging weights were sometimes enclosed in a wooden case for protection. This led to some lantern clocks being made with square dials that could be used either as hanging wall clocks or more easily housed in wooden cases and this style quickly developed into the longcase clock (or grandfather clock as it is commonly called today).



*Hoop-and-spur square dial lantern clock
by Isaac Blowers of Beedes c.1710.*



*A miniature lantern clock with verge escapement and 6 in.
silvered brass dial by Geo. Gudgeon of Bury c.1810*



The longcase clock quickly became fashionable but the uncased lantern clock was cheaper and continued to be made well into the second half of the 18th. century, particularly in the provinces. They were usually hung on the wall by a hoop riveted to the top plate and provided with projecting spurs to keep the clock from moving whilst being wound. Some were cased at a later date but often movements still retain evidence of the hoop and spurs revealing their earlier form.

Many lantern clocks, perhaps most, had alarm mechanisms although these usually had to be removed if they were converted to long pendulum, as most were.

Surprisingly an alarm facility was rarely provided in the longcase clock so a simplified version of the lantern clock continued to be made with alarm but without a striking train. Some of these clocks retained the verge escapement with a short pendulum because they were more easily transported and miniature versions were made which were fitted in wooden carrying boxes to become the travelling alarm clock of the day.



A timepiece alarm, the lantern clock in its final form, this one by Tomas Ollive of Cranbrook dates c.1760.



Not all of these small lantern-style colcks were intended to be portable. The type pictured here, sometimes called a “pantry clock” on the supposition that they were made for the ‘below-stairs’ quarters of large houses; more likely they were hung just outside the servants’ sleeping chamber to rouse the inmates in the morning. The wall hanging weight driven alarm clock continued to be made into the 19th. century. The firm of Whitehurst of Derby produced a well made version as a hooded wall clock or a cheaper version as a hoop and spur clock in a tin box. A still cheaper version was revived by the 19th. century German Black Forest makers to supply the increasing numbers of workers in the factories of our newly emerging industrial towns and cities. Made chiefly of wood they are often called “Postman Alarms”.

The Longcase Clock

The longcase clock became the most popular type of domestic clock and continued in production for the next two hundred years. Essentially it comprises three components: the dial, the movement and the case and we will examine its design and development in the next few pages. In modern times it is often called a "Grandfather clock". This term is in fact the invention of an American songwriter from his popular song of the 1870s of that title and reflects the old fashioned image clocks of this type had acquired. Mantel and wall clocks were the current fashion and many were destroyed or descended the social scale, which resulted in many fine clocks having their bases cut down to fit into low-ceilinged cottages. In contemporary accounts, inventories, etc., they are often referred to as "case clocks", presumably to distinguish them from the earlier lantern clocks.

The basic design of the square brass dial with a hood flanked by wooden columns, a slightly narrower trunk below and a base of similar width to the hood remained unchanged during its lifetime. Being an item of domestic furniture it was subject to the dictates of fashion and various stylistic changes took place almost continuously. As with other furniture, the aristocracy and gentry, irrespective of their location, slavishly followed the London style but for the less affluent in the provinces, distinct regional styles developed.

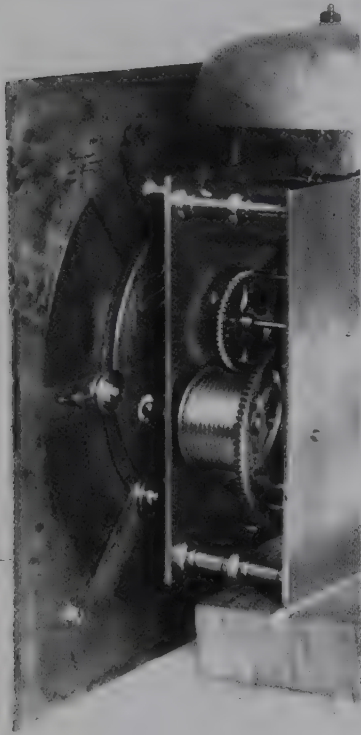
Technically, a clock's performance as a timekeeper was fully satisfied around 1658, when the pendulum combined with the anchor escapement was applied to the movement. Indeed it still proves perfectly adequate to this day. Whereas the lantern clock was usually of short duration requiring winding at least daily, longer durations between windings required heavier weights which were better suited to floor standing clocks. The longcase clock from its inception was made in both 30 hr. and 8 day versions. The improved accuracy of the pendulum warranted the provision of a minute hand for the more expensive 8 day clocks and was often offered as a choice for 30hr. versions.

James Swingler offered a month going clock in one of his newspaper advertisements of 1823 and a month duration wall clock by Benjamin Parr of Grantham is featured elsewhere in this publication. Clocks of three months and a year going were made but these are very unusual. In this area the longcase clock gradually fell out of favour after c.1860 due in part to changing fashion but also because of the availability of cheaper imported wall and mantel clocks.

A frequently asked question is "when was it made?" By researching the working periods of the makers and the stylistic changes in the design of the various components it is possible to build up a dating system which we will now examine. We will start with the dial as this seems to have been subject to the most frequent change. The earliest dials were made of brass and they continued to be made until about 1800 by which time the japanned iron dial, introduced about 1770, had completely replaced it. The 'japanned dial' is the term used at the time but it is usually referred to these days as the painted dial.

The Brass Dial 1700-1800

The dial plate was made of a thin sheet of cast brass and initially had an applied ring engraved with the hour numerals, known as the chapter ring, which was usually silvered to provide a contrast with the dial plate. This was before the availability of rolled brass sheet and the production of a thin cast plate would have been a skilful task for the local brass founder. Brass was quite expensive and would be charged by weight and some dials were cast with cut-out portions behind the part covered by the chapter ring to reduce the weight. Quite a lot of work would be required by the clockmaker to prepare the dial.



*The rear of a dial of a clock by John Fox.
Note the cut-outs behind the chapter ring and
the marks left by the planishing hammer*

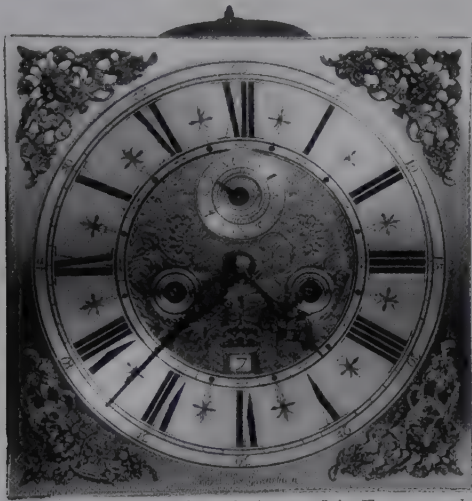
Firstly he would planish it which involved hammering from the back with a flat faced hammer on a smooth flat anvil to consolidate and harden the brass, then the edges would be squared-up and filed to size.

The front face would require scraping and filing and finally polishing. Often the centre would be matted and this would help to disguise any surface imperfections. The back of the dial, being unseen, was often left unfinished from the planishing hammer. Many clockmakers were also accomplished engravers, or employed men with such skills in their workshops, but for those who didn't have this facility the chapter ring would be sent out for engraving or bought in from a specialist supplier. Early brass dials were usually about 9 or 10 inches square but after about 1700 they increased in size and 12 inches became the standard for 18th. century 8 day clocks but 30 hr. clocks, for reasons of economy, often retained smaller dial sizes. The hours were indicated by Roman numerals and the inner edge of the chapter ring was divided into the quarters with a bold engraved device to define the half hours. In the case of a two handed dial the outer edge of the chapter ring was divided into five minute divisions with each five minutes numbered in engraved Arabic numbers 5, 10, 15, etc. This system enabled the time to be read, for those unused to the two handed dials, by reference to the hour hand only in the old fashioned single-handed way or the numbered minute divisions enabled the longer minute hand to be used to read the time more accurately.

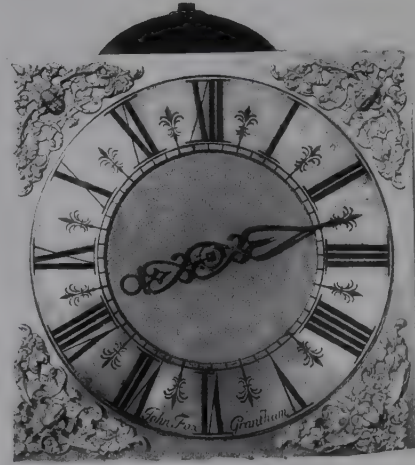
As the escape wheel of an 8 day clock rotated in a clockwise direction once per minute, seconds could be indicated on a subsidiary dial, usually an applied silvered ring engraved on the inner edge with sixty divisions numbered every 5, 10, 15, etc. Thirty hour clocks did not usually have seconds dials as with their three wheeled going train the escape wheel rotated anticlockwise, although occasionally a four wheel train was employed to enable a seconds dial to be used.

The spaces left at the corners, known as the spandrels, were decorated by applied brass castings, again usually obtained from a foundry or specialist supplier and fettled and finished by the clockmaker. These, with time, underwent changes in design and so provide datable features.

The centre of the dial in early clocks was sometimes engraved all over as was usual in lantern clocks, but this quickly gave way to the matted finish. This matting was achieved by using a multi-pointed punch or roller although some dials, particularly those of London made clocks, the matting is so fine it might have been by some other method. The date was frequently shown by a silvered calendar ring behind the dial plate which indicated the date in a square aperture in the lower part of the dial. Whilst the date was changed automatically it did require manual correction at the month-end. The winding holes at this period were often decorated by ring turning.



An 8 day dial c.1700 the maker's name John Fox engraved along the lower edge of the dial plate. Note the early style cherubs head spandrels.

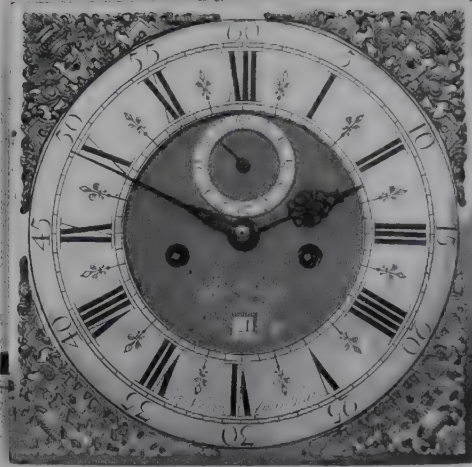


A 9 inch 30 hr. single banded dial by John Fox c.1710. Note the makers name now at the bottom edge of the chapter ring and the matted dial centre. The hour band is a later replacement.



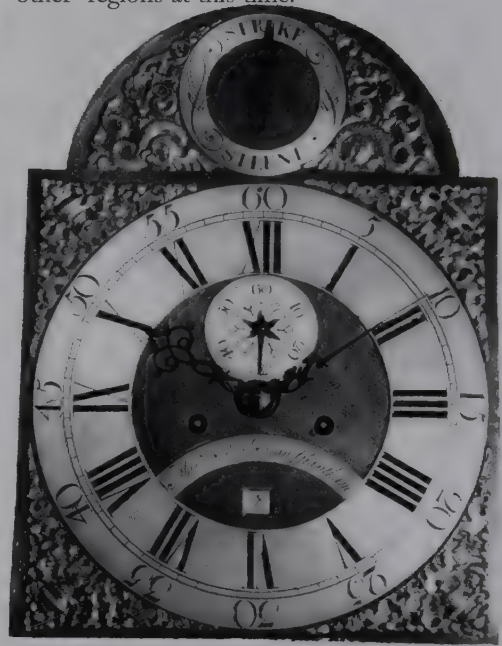
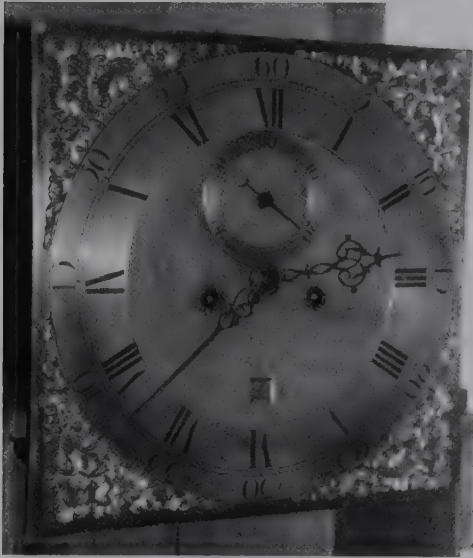
A 12 inch break-arch dial of c.1725. Note the minute numbering has become more prominent and the maker's name engraved on a domed roundel in the arch supported by 'dolphin' spandrels.

The blued steel hour and minute hands were of differing design and of course of different length to avoid confusion between the two. About 1720 the arch dial was introduced. In strictly architectural terms it is a "break arch" shape, the break being the two shoulders. Quite why this form was adopted instead of a true arch is not known but it was invariably used in British clocks and we will refer to it as simply as 'an arch dial'. It was more expensive to make and involved the casemaker with more work, but proved very popular and was used concurrently with the square dial throughout the longcase period. Occasionally one comes across a square dial where an arch has been riveted to the top to update an earlier clock.

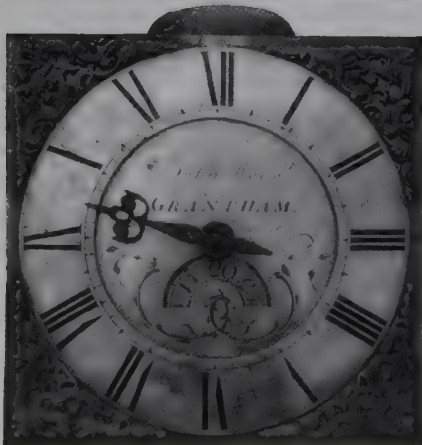


About 1725 the ringed winding holes fell out of use and some engraved decoration introduced on the matted dial centre, usually around the date aperture.

Around 1750 a number of changes took place to the engraving of the chapter ring. It would appear that the two handed dial had become fully understood and the quarter divisions of the inner edge and the half hour marks were no longer necessary. These changes coincided with the demise of John Fox and the arrival of John Wood from London. Similar changes were taking place in other regions at this time.



Eight day dial c.1760 with Strike/Silent in the arch by Morley Jenckinson of Grantham.



The Strike/Silent feature in the arch became a fashionable feature of the 1760-70s and during the next ten years or so the popularity of the matted dial centre declined in favour of engraved designs and the makers name began to take a more prominent position, now boldly engraved in the dial centre. The small square calendar was replaced by a large crescent shaped aperture.

By 1770 the seconds ring was being engraved directly on to the dial plate and the dial centre was also silvered to show off the engraving. Rococo scroll spandrels also became popular. Around this date the painted white dial was introduced by the Birmingham japanners although brass dials were still made for customers with more traditional taste. By the end of the 18th. century they were out of fashion. This change in taste must have taken a large amount of work away from the engravers, who realising that a “white dial” look was popular, introduced a single sheet brass dial completely silvered as an alternative and this enjoyed a certain amount of popularity in the 1770s but these declined after colour was introduced into the painted dial designs.



Eight day dial of c.1770 by John Wood.



A silvered single-sheet brass dial with engraved decoration and lettering c.1770.



'Old Father Time' rocking in the arch was a popular feature.

The Japanned or Painted Dial 1770-1870

The painted clock dial appeared in the early years of the 1770s, a product of the japanning trade based in Birmingham. The technique of producing the then fashionable lacquered finish in imitation of that from Japan (hence the term 'japanning'), had been learnt some twenty five years earlier and the decorated sheet-iron trays had become a well known item of the 'Birmingham wares'. White dials of vitreous enamel had been used, particularly by the French makers, for some years but there were difficulties in making these in larger sizes due to heat distortion. They were also brittle and easily damaged. It must have occurred to one of the Birmingham japanners that he could produce a similar looking but more robust product. The source of the sheet-iron blanks was already established by iron makers within the city and although the background colours of the japanner's trays were usually black or darker colours they could quite easily make a white ground.

The paint used in the japanning process was not an oil based paint but a varnish or gum, coloured with pigments. Many coats were applied, each baked in an oven and rubbed down until a perfectly smooth matt ground was formed which, although it lacked its glass-hardness, it was less easily damaged. After this the dial was decorated. For the corner spandrels in the early dials, gilt scrolls were used which resembled the cast spandrels of the brass dials. Often this scrolling was raised by using gesso which was then gilded with gold leaf. The numerals and minute markings were applied using Indian ink and the dial lettered with the clockmaker's name.

It was soon realised that the decoration could be colourful like the japanned tea trays and enamelled trinkets of the period and soon the spandrel designs were incorporating flowers and fruit and the arch gave even more scope to the painter. These dials became very popular, not because they were cheaper, they were in fact a little more expensive than brass dials, but because they were more legible and their pretty colourful decoration became very fashionable. The traditional brass dial continued to be offered for the more conservative customer but by about 1790s, they had fallen out of use in this area. The painted dial continued in use for a hundred years until the longcase clock finally ceased to be made. During this period the dictates of fashion demanded an ever changing style of decoration which enables us today to date the manufacture of a clock fairly closely by the style of the dial.

The painted dial did have one disadvantage to the clockmaker in that it was more difficult to make the attachment to the movement. When a brass dial was used the clockmaker fastened the dial to the movement by riveting pillars to the dial which were then pinned to the front plate of the movement in convenient positions which did not interfere with the various wheels and levers. In the case of an eight day clock with rack striking there was not a lot of space but this was not a problem provided he could choose the position of the pillars on the movement where there was room and in a place where their riveted attachment to the dial would be covered by the applied chapter ring. In the case of the painted dial however it was necessary for the dial maker to fix the pillars before the face of the dial plate was painted. It was difficult for the dial maker to anticipate the pillar positions because each clockmaker used his own particular layout and so it was necessary for the dial maker to have a plan of the front plate of the clock with the order to enable him to fix the pillars in a suitable position. Dials therefore needed to be made to each clockmaker's specification.

One of the early dial makers, Osborne and Wilson, produced a solution to this problem by providing an intermediate plate behind the dial which enabled the clockmaker to choose his own position for the pillars. They advertised this development in one of the Birmingham newspapers in 1772.

WHITE CLOCK DIALS

Osborne and Wilson, Manufactures of White Clock Dials in Imitation of Enamel, in a manner entirely new, have opened a Warehouse at No. 3, in Colmore Row, Birmingham, where they have an Assortment of the above-mentioned Goods. Those who favour them with their Orders may depend upon them being executed with the utmost Punctuality and Expedition.

N.B. The Dial Feet will be riveted in the Dials, and such Methods used as will enable the Clock-Makers to fix them to the Movements.

From Aris's Birmingham Gazette 21st. September 1772.



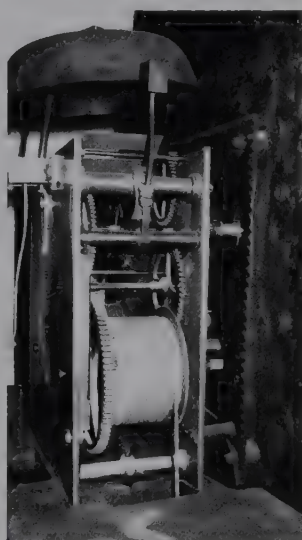
Osborne's name stamp on the rear of a date wheel



Cast iron falseplate of WILKES & SON BIRMINGHAM (1820-31)

The 'such methods' of fixing most probably refers to the provision of a back plate or false plate as it is now called and the idea was taken up by most of the other dial makers. This thin rectangular cast-iron plate was attached to the rear of the dial by four short pillars. Many dial makers had their name cast in. With dials that did not use a false plate many stamped their name on the back of the dial or on the rear of the date wheel, which very conveniently enables us to identify them. Some of the later falseplates were made of rolled sheet iron.

Dial attachment was not so much of a problem in the case of 30hr. clocks as they normally had a count-wheel striking system which involved very little mechanism on the movement front plate and the dial maker could position the (usually three) pillars to accept a wide variety of clockmakers' layouts; consequentially falseplates are not normally found on 30hr. clocks.



The rear of a dial by Walker and Hughes of Birmingham (1812-1835) for a clock by Thos. Salty of Grantham showing the falseplate method of attachment to the movement.

There was some degree of standardisation as far as the position of the winding holes, centre hole and hole for the seconds hand are concerned, as is evident from the back of some dials that white paint has run through from the front proving that they must have been made prior to painting. This is not always the case however and in some examples the clockmaker evidently drilled his own holes. False plates are not always present; very early dials don't have them and, as mentioned, 30 hour clocks did not need them. By the middle of the 19th century some factors were supplying movements together with suitably arranged dials. The false plate solution was convenient as it enabled the dial maker to make a standard pattern and the clockmaker to order his dials from any of the numerous dial painters who had established themselves in Birmingham by the early 1800s.

Brian Loomes, the author and clock dealer, has written numerous books on the longcase clock (see bibliography) and by his research and writings has done much to establish the status of painted dial clocks which at one time were not considered worthy of serious study. He has categorised these dials into three stylistic periods. His first period is those made from the early 1770s until c.1800, the second from 1800 to c.1830 and the third from 1830 until this type of clock fell out of fashion c.1870. The northern clockmakers were quick to adopt these changes, the London and southern counties were somewhat slower. Dials found on Grantham clocks, with the knowledge we have of their working periods, seem to fit the Loomes categories fairly closely, although some were conservative with their taste and hung on to older styles a little longer.

The pioneering partnership of Osborne and Wilson was dissolved in 1777 but they continued in the trade independently. Thomas Hadley Osborne and his family were producing dials until c. 1813 and the prolific James Wilson must have made many thousands of dials before his death in 1809. These dials, from what we may consider the first period, were artistically of a high standard: some with only gilt scrolling but others with spandrels of flowers and fruit and the arch with painted birds or vignettes of figures in a classical landscape. On some dials the painting extended to the dial centre. The chapters had Roman hours and the minutes dotted and numbered with Arabic numerals at five minute intervals in a similar style to that used on brass dials. Many of these dials were exported to the early clockmakers on the East coast of America. In this country during this period the demand for longcase clocks was increasing considerably and numerous other dial makers set up in Birmingham, which thus established itself as the principal centre for the trade. Eventually painted dials were also being made in other cities including Manchester, Halifax, Liverpool, Leeds and Edinburgh. Although all the Grantham made clocks so far recorded have Birmingham made dials, they were often sourced from a large number of different makers who had established themselves by the start of the 19th century.

What is remarkable is that, despite this great increase in production, it is very unusual to find any two dials alike. To our modern mind, so much conditioned to efficient production techniques, it would seem obvious to employ a number of painters, each with their own individual colour, and to pass the dial one to another and indeed this system of decoration was well established in the potteries by the mid 18th century which resulted in pieces with identical artwork. Not so with clock dials; just the opposite in fact. Every dial was an individual work of art in miniature. The early dial producers clearly employed established artists and their standards were quite high, especially in the periods one and two, although standards did decline somewhat in the final thirty years or so.

In the following pages we will examine the development of dial design during its hundred years of production.

Period one Dials 1772-1800



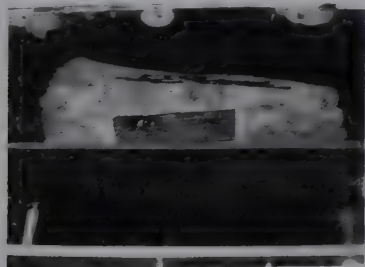
12 inch painted dial of a clock by Richard Rubins c.1775.

The early period painted dial was predominantly white in colour with minimal gilded gesso scrolls in the spandrels similar in design to those of the previous period brass dials. The dial pictured here for Richard Rubins, who died in 1779, dates therefore to the first few years of their production. The dotted minutes, boldly numbered at five minute intervals, are characteristic of this period. The subsidiary dial for date indication, although popular in other regions, was little used in Lincolnshire where the curved aperture, like the Wood dial below, was usually specified. Note that the non matching steel hands are similar in style to those used during the previous brass dial period; the seconds hand is probably a later replacement.

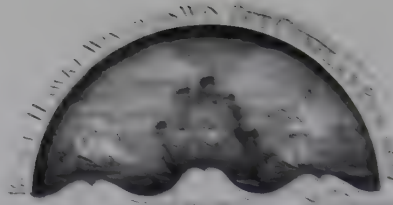


12 inch square dial by Wilson of Birmingham for John Woods c.1780.

It was soon realised that coloured decoration was possible and this quickly became popular. Well painted fruit and flower spandrels were typical. The arch gave scope for further decoration and, with square dials, the dial centre was sometimes used, as in this dial for John Wood, by the Birmingham dialmaker Wilson. Stuck on a patch of white paint on the rear of the dial is a small paper label divided into several named boxes "arch", "square", "moon", "raised", "monthly", "gilt" etc. which were ticked as instructions to the dial painter. These labels are peculiar to Wilson dials although various lettering and numbering has been seen on other makers dials. Dials gradually increased in size from 10 and 11 inches to 12 inches which became the standard for a number of years. Round dials were made popular by the well known clockmaker Whitehurst of Derby and are sometimes found in this area; there is a clock by John Wood illustrated elsewhere in this book with this type of dial. They have little space for decoration but occasionally have sprigs of flowers in the dial centre.



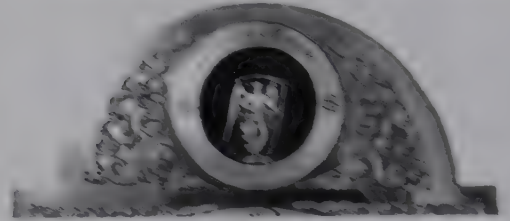
The back of the dial above with Wilson falseplate and above the small paper label stuck on a patch of white paint.



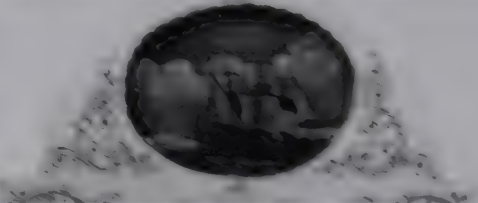
A rocking ship and the English fleet under William Cornwallis.



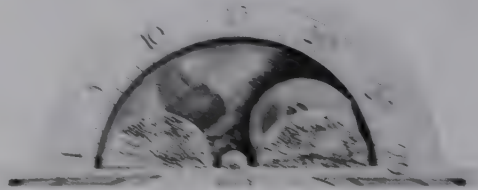
Part of the painted dial to The Seat of Gainsborough with an automaton in the arch of Adam and Eve in the Garden of Eden c.1790 this dial is replacement of a later one.



Water Cure "The parents are young" W. A. Southam Gainsborough



A rolling moon and ship on the sea to W. A. South Gainsborough



A rolling moon and ship on the sea to W. A. South Gainsborough

With the introduction of the arch dial or more accurately the break arch dial, c.1720, the arch was used initially in a fairly restrained way, almost as if the dial maker didn't quite know what to do with it. It often contained a silvered roundel engraved with the maker's name or an engraved design. Moon phases became popular sometimes engraved on a brass disc and later painted in colours. Some dials, even in the brass dial period, had a fully painted scene. Moving figures in the arch or automaton, were also features throughout the period, both with brass and painted dials, but becoming more frequently used for the painted dials. The most common were a rocking ship, Father Time or a rolling moon. The painted dial makers offered more complicated movements. Commonly used scenes were a boy and girl on a swing or playing shuttlecock and battledore (an early form of badminton), sometimes a classical bust with moving eyes. Special orders included a Carpenter in his workshop or a Monumental mason. The dial here for Thomas Scott of Gainsborough features Eve proffering the apple to Adam in the garden of Eden, a scene offered by many of the Birmingham dial makers. This clock, part of the Roy Sargeson bequest, can be seen at the Usher Gallery in Lincoln. A recently recorded one, which would have been a special order, depicts the bare-knuckle pugilists Molinaux and Crib in their contest near the Ram Inn Inn on the Great North Road south of Grantham.

Period two dials 1800-1830

In this period the increasing population of Grantham was supplied by a corresponding increase in the clockmakers in the town. The three makers of 1800 had grown to six by 1825. The painted dial was now firmly established and supplied by numerous Birmingham dialmakers selling either directly or via factors or wholesalers, who supplied a full range of clockmakers materials to the trade.

Dial design underwent various changes after c.1800. Most noticeably Arabic hour numerals instead of the traditional Roman style had become the vogue. Unlike the Roman numerals which were arranged radially, Arabic numerals were often arranged horizontally. When they were used radially the lower ones needed to be the 'correct' way up, often known as 'tumbling hours'. The gilt scrolls and sprigs of flowers of the previous period began to be replaced by spandrels filled with more colourful designs. Flowers were still popular but geometric designs of fans and patterns were introduced. The dotted minute marks were replaced initially by a ring divided by strokes and later by two concentric circles with the minute divisions between in a manner which is still used today. The arch dial became very popular particularly for eight day clocks and the arch often contained an oval vignette of a lady or rural scene.

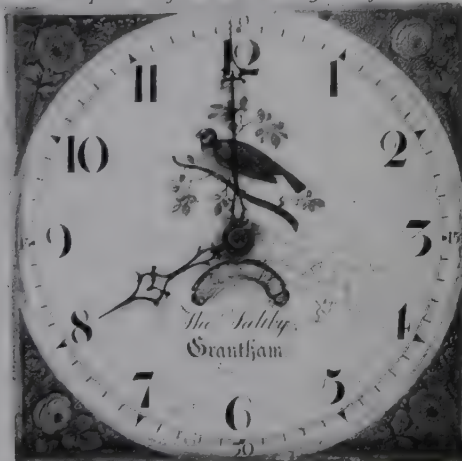
The dial by Abraham Shaw shows the transition; it still retains the bold minute numerals but uses a different spandrel design and the hands are now of a matching diamond pattern in steel. Similar hands made of brass were also introduced during this period. With the improved legibility of the painted dial it was no longer necessary to make the hour and minute hand so dissimilar and hands of matching style became the norm. Also the ability to read the time from a two handed clock had now become so well understood that the numbering of the minutes at five minute intervals became unnecessary. Initially the numbering was reduced to just the quarters, i.e. at 15, 30, 45 and 60, the intervening ones marked by an asterisk and finally by c.1830 they had disappeared altogether.



12 inch square dial of Abraham Shaw of Billingboro' c.1800.



12 inch square dial for a 30hr. clock by Geo. Johnson c.1815



Dial for Thos. Saltyb, Grantham c.1820

Although it is rare to find identical dials, several themes became common to a number of dial makers. The Four Seasons spandrels were used by several makers, as were The Four Continents and in the arch the moon phases were a feature throughout the painted dial era. Moving figures in the arch, propelled by the action of the pendulum, began to appear; Adam and Eve in the garden of Eden, figures playing shuttlecock and battledore, children playing on a swing and various tradesmen about their trades were all available to special order at extra cost. The hand bill here is for a Samuel Baker of c.1820 and shows the range of sizes and designs available

The above is not the service of a watch
 however, as it is shown to have been
 ordered by a person in the
 name of Samuel Baker.

PRICES OF JAPANNED CLOCK DIALS,

MANUFACTURED BY

SAMUEL BAKER,

76, SLABBY STREET, BIRMINGHAM.

		£	s.	d.	
FOURTEEN	inch Arch Moon Dial	1	4	0	9/0
Thirteen	inch ditto ditto	1	2	0	8/-
Twelve	inch ditto ditto	1	0	0	7/3
Fourteen	inch Square ditto	1	2	0	
Thirteen	inch ditto ditto	1	0	0	
Twelve	inch ditto ditto	0	18	0	
Fourteen	inch Solid Arch Eight Day	0	16	0	6/-
Thirteen	inch ditto ditto	0	14	0	5/6
Twelve	inch ditto ditto	0	12	0	4/9
Fourteen	inch square ditto	0	14	0	
Thirteen	inch ditto ditto	0	12	0	
Twelve	inch ditto ditto	0	11	0	2/-
Fourteen	inch Round ditto	0	13	0	5/-
Thirteen	inch ditto ditto	0	11	0	4/-
Twelve	inch ditto ditto	0	10	0	3/9
Thirteen	inch Arched Thirty Hour	0	13	0	
Twelve	inch ditto ditto	0	11	0	4/9
Eleven	inch ditto ditto	0	10	0	
Fourteen	inch Square ditto	0	13	0	
Thirteen	inch ditto ditto	0	12	0	
Twelve	inch ditto ditto	0	10	0	3/9
Eleven	inch ditto ditto	0	8	6	
Ten	inch ditto ditto	0	7	0	
Fourteen	inch Round ditto	0	12	0	
Thirteen	inch ditto ditto	0	10	0	
Twelve	inch ditto ditto	0	9	0	
Six	inch Round Spring Dial	0	7	0	
Eight	inch ditto ditto	0	8	0	
Six	inch Arch ditto	0	8	6	
Eight	inch ditto ditto	0	10	0	

OVAL AND ROUND DIALS OF ALL SIZES.

		£	s.	d.	
Additional Paintings & Movements charged as follows:					
Seasons, Quarters, Virtues, Elements, &c.		0	8	0	5/-
Landscapes or Figure Pieces in Arch		0	4	0	2/6
Single Figures painted in Arch		0	2	0	1/5
Adam and Eve to move		0	7	6	6/-
Ditto, if Serpent to move		0	10	0	7/-
Ship to move, Old Time, &c.		0	6	0	5/-
Swan's Neck to move		0	6	0	5/-
Boy and Girl swinging, Harlequin and Columbine, &c.		0	7	0	6/-
Shuttlecock and Battledore, to move		0	7	0	8/-

MOVEMENTS AND PAINTINGS OF EVERY DESCRIPTION.

Discount per Cent. of Paintings.

These three dials are of similar date and show some of the variety available during this period. The Saltby dial on the right retains the flowered spandrels and has an oval vignette in the arch showing Britannia surrounded by patriotic symbols. The minutes are defined by a single circle with dashes at each minute and numbered at the quarters with the intervening five minutes marked by an asterisk. Matching brass hands are the usual style throughout this period.

The dial lower left by Walker and Hughes for Thos. Saltby has spandrels depicting the four continents. Top left represents Europe with a figure of Britannia with flags and a horse, top right with a rather English looking young lady holding a flask of aromatic spices and a camel in the back ground portrays the Asian continent. Lower right the Americas, have a Red Indian with feathered head dress and a strange looking birdlike beast which is probably supposed to be a crocodile, (clearly the artist had never seen a picture of a crocodile so painted from a written description). Bottom left, Africa, features a negro sitting on a lion. The arch is filled by a scene of bull baiting which was topical at the time and subject to considerable debate in much the same way that hunting with hounds is at the present time. Nearby Stamford was the last town in the country to hold this annual event.

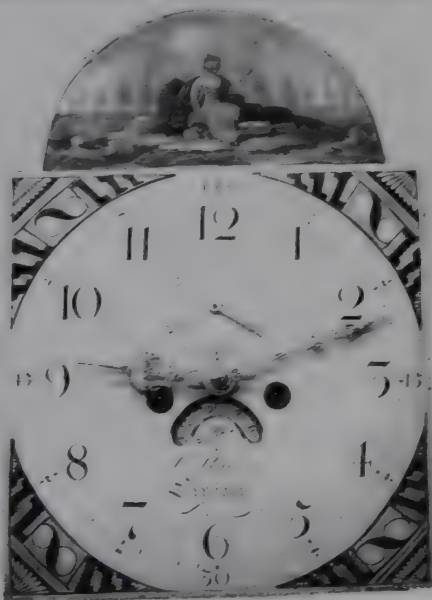
The lower right-hand dial of a clock by Samuel Peacock of Lincoln has a portrayal of Britannia, with symbols of the British Empire, surrounded by the British fleet which fills the arch. The spandrels are of a quite bizarre design which must have looked very modern at the time.



Arch dial of a clock by Saltby of Grantham c.1820



Dial by Walker & Hughes for Thos. Saltby c.1820



Dial for S. Peacock of Lincoln c.1820.



12 inch dial with fan corners and rolling moon for Thomas Dickinson of Boston c.1815.



12 inch dial with the four agricultural seasons by B.Hipkiss of Birmingham c.1815

Not all dials of this period used Arabic hour numerals; the period two dials shown above retain the Roman hours but the one on the right, by the Birmingham dial maker B.Hipkiss for Wm. Hall of Grantham, used them disposed horizontally, (as many of the arabic numerals were), but this arrangement didn't become popular.



12 inch dial for Broderick and Son of Spalding with four seasons spandrels and zodiac signs in place of hour numerals c.1800. (Courtesy Robert Woodhouse of Delwood Antiques Hunstanton)

The maps drawn on the hemispheres of the rolling moon dials were sometimes transfer printed, a technique much used by the pottery decorators for repetitive designs.

There have been other variations recorded; in this dial of c.1800. The hour numerals have been replaced by the astrologer's shorthand notation for the signs of the zodiac, Aries is at one o'clock and continuing clockwise finishing with Pisces at twelve. This type of symbolism was popular with Freemasons in this period although more commonly for the dials of pocket watches. This dial was probably specially commissioned for a member of the Brotherhood or possibly for the premises of one of the local Lodges.

The art work of the first period was of a high standard; their flowers-and-fruit spandrels were carefully observed and must have been painted from life or perhaps, more likely, from the botanical prints available at the time, although it is strange that the birds which were used sometimes with these dials bear very little resemblance to any known species. The moon's phases are of little interest to us today but in the days before street lighting, footpads and highway robbers abounded so it was important if one were travelling at night to pick a time when there was a good moon; these dials were popular throughout all periods.

The design elements of the period two dials reflected a wide variety of sources, including the patriotic feelings and events of the time. The battle of Trafalgar in 1805 and later the death of Nelson in 1815 were very popular and enable us to date these clocks quite closely. The interest in agriculture and the rural pastimes of hunting, shooting and fishing, were commonly employed particularly in this area. Maritime subjects were a favourite through all periods with makers near the coast and as the moon ages and the tides are directly related they often incorporated a moon dial with the time of high tide at a named port. The "four seasons" spandrels were commonly used with period one and two dials and interpreted in different ways by the various dial makers. The "four continent" spandrels were another favourite in the later two periods. Robert Woodhouse, the clock restorer from Hunstanton, points out that they were frequently used by Dutch map makers as early as 1594 as a corner decoration on their maps and were adopted with very little change by clock dial painters. Scottish dial painters were fond of colourful designs often using gold leaf over-painted with translucent colours; biblical scenes or their Scottish heroes.

Oval dials were occasionally made to special order and this one with a bible scene in the arch was made for the well known maker Deacon of Barton in Leicestershire.



*Oval dial for Deacon of Barton c.1815. (Courtesy
Leicester Museum Services & photo Earl Shilton Clock Club.)*

Period Three Dials.

Around 1830 dial design began to change, the Arabic numerals so popular in the previous period fell out of fashion and the numbered minutes were omitted, with the result that the now Roman hours increased in size to fill the space. Spandrel and arch painting became even more colourful. Dial sizes were becoming larger progressing from the previous 12 inch standard to 13 and 14 inch and the arch dial became the norm. Another development of around this time was the 'raised' or 'swelled' dial where the central circular part was convex.

The first documentary evidence of this feature is in an advertisement of James Swingler in 1827 and a similar dial, in this case with a rolling moon in the arch, is pictured here.

JAMES SWINGLER, Clock and Watch Maker, Westgate, GRANTHAM, returns his sincere thanks to his friends and the public for the many favours he has received, and begs leave to inform them that he has reduced the prices of his Clocks and Gold and Silver Watches full 50 per Cent. under Doctor Quack. £. s. d.

30-hour Clock, in wainscot case, in-laid with mahogany...	3	13	6
Arch ditto	4	4	0
Arch ditto, 8 days.....	5	5	0
Arch ditto, swelled dial, extra cases	5	15	6
12-inch Arch, mahogany case, swelled dial	7	7	0
14-inch Arch, ditto, ditto, quarter clocks	10	10	0
New Watches	3	3	6

Gold and Silver Watches, Clocks, &c. warranted 12 months; and if not approved of, will be exchanged. Clocks and Watches repaired at reduced prices.

A Caution to the Public.—All persons who may want their Clocks and Watches repairing, are recommended to apply to some person who has been regularly brought up to the trade, and not to Quack Doctors; or else, as soon as the watch is opened, it will want either a warge or a mainspring.—*N. B. Advice: Italian Puffs and Physic must be paid for—Quack! Quack! Quack!*

LR&SM 4th. May 1827



12 inch "swelled" moon dial for James Swingler c.1830.

In Grantham the dials of clocks by the Green family, Wm. Palethorpe, Henry Pearce, John Taylor and the Sexty Brothers all belong to this period. Landscape and pastoral scenes filling the arch and diagonally matching spandrels of similar style were commonly used, as was a gilt band surrounding the now rather heavy Roman chapters. Clearly the early japanned dial makers had employed established artists but it is evident that as this period progressed the artistic quality of some dials declined until, by the 1860s, designs had degenerated into unrealistic landscapes and scenes. This was probably due to increasing competition; looking at the price list for Samuel Baker of the 1820s, a moon dial of the type used by James Swingler represented about 20% of the total cost of the clock in 1827 which would have left little for the provision of the movement plus case and a margin of profit. Dial makers must have been under considerable pressure to reduce prices resulting in the employment of less skilful painters producing more dials in less time.



13 inch dial by Wright of Birmingham for John Taylor of Grantham c.1855



13 inch dial of a clock by R.W. Sexty of Grantham c.1860

The two dials pictured above are typical of the period. The dial for John Taylor has flowered spandrels with some gilded and overpainted detailing and a river scene in the arch; it does not have a false plate but is stamped on the rear of the dial plate WRIGHT BIRM. The dial of the Sexty clock has a sheet iron false plate but is not marked. The painting features buildings of distinctly Continental style. Note that the minute divisions are now marked between a double concentric circle with a triangle at the five minute position, a style which remains common to the present day.



bespoke dial for Henry Pearce of Grantham c.1856.

The dial for Henry Pearce with the coat of arms of the Oddfellows would have been a special order. The elaborately scrolled lettering of the makers name was fashionable on dials of both second and third period dials. Note that the hands used with these dials are matched pairs in cast brass with punched decoration and are typical during this period.

Square dials were not so common in this period, although the resulting clocks were not as tall as an arch dialled one, they were still supplied in 30 hour and 8 day form for customers with low ceiling cottages.



Rectangular dial for John Hall of Sleaford c.1850.

Alternative dial shapes were tried. The round dial was used particularly by Whitehurst of Derby and became popular in what is now the East Midlands area and in Scotland. The rectangular dial pictured here for John Hall of Sleaford is an unusual shape. The resulting tall hood gave the clock a rather top heavy appearance to the case and did not prove popular.



12 inch arch dial for Wm. Chapman of Lincoln with transfer printed design c.1840. Photo courtesy Brian Loomes

The dial pictured here is unusual as it has a transfer printed design in the arch which was then hand painted with colour. This technique was used extensively by the pottery industry when it was necessary to decorate sets of china with identical patterns. Clock dials, however, always had a tradition of individuality, each one a work of art as it were, so this method was not much used apart from some later dial makers who used it for the hemisphere maps of rolling moon dials.

Some Painted Dials for Local Clockmakers



Sexton of Grantham c.1860



Dial by Wright of Birmingham for John Taylor of Grantham c.1850.



Dial for Salthay of Grantham c.1825.



Dial for Broderick of Spalding with Zodiac numerals c.1800.

Some Painted Dials for Local Clockmakers



Dial for Green of Grantham c.1830.



Dial for Samuel Peacock of Lincoln c.1820.



Dial for Deacon of Barton c.1820.



Dial by Walker and Hughes for Pearse of Grantham c.1860.

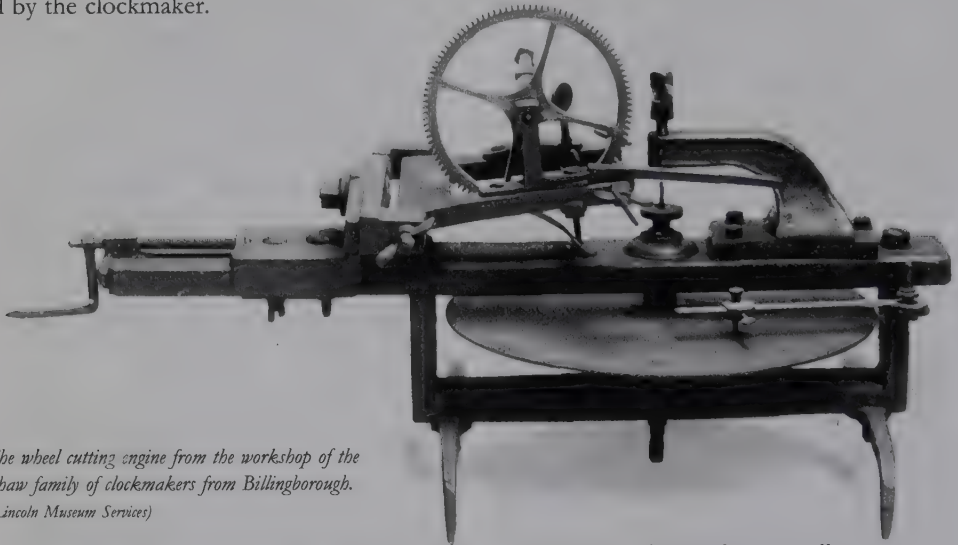
The Longcase Movement

The most important part of a clock is of course the works or movement - the part that drives the hands and powers the pendulum. People often express surprise that it is so small and perhaps it is relative to the overall size of a longcase clock but in this mechanism, certainly in an 18th. century context, is the culmination of a lot of skill and knowledge. It represents the ultimate in domestic technology at the time. It is difficult to find an equivalent in modern times but the ownership of a clock in the early 1700s would have been similar to owning a television receiver in the 1940s. Modern technology is fast developing and manufacturing techniques quickly make present day inventions affordable to us all, but this was not so in the 18th century and the clock remained an exclusive item for a hundred years or more.

To make the movement the clockmaker would have needed first to assemble the necessary materials, brass for the dial, plates and wheels and iron and steel for the arbors, pinions, detents and levers etc. The brass components would have been obtained from the brass founder. These would be cast from wooden patterns sometimes supplied by the clockmaker or, in larger towns, the brass founders would hold suitable patterns. Brass was an expensive metal (about ten times the price of iron and steel) but it had the advantage that these components could be cast near to finished size, the wheels would be cast with the crossings, or spokes, in place to reduce the weight and the amount of finishing. In very remote areas some clockmakers are known to have done their own brass casting but in a town such as Grantham there would have been a brass foundry since early times which would be experienced in producing thin-walled cast brass cooking utensils etc. The iron and steel components would be supplied as forgings from the local blacksmith. Later on in the 18th century there developed specialist suppliers for various trades and these would have supplied many of the rough materials for the clockmaker either through factors based in London, Birmingham and Manchester or via local hardware dealers in the town such as Barston's in Grantham.

Having collected the necessary parts, the clockmaker would then hammer or planish the brass castings on a flat surface to harden them and then file and scrape the plates smooth and flat. The front of the front plate, not being readily seen, was often left as finished from the planishing process. The plates were then fastened together by small rivets top and bottom and the edges filed up square. The wheels would receive similar treatment, the spokes or crossings filed out smooth. It was necessary for the clockmaker to decide on the wheel count, i.e. the number of teeth in each wheel and pinion, different combinations would be required for 30hr or 8 day duration whether it was a single hand or two handed clock. It is quite an involved calculation and many different wheel counts were possible depending on the pinion size, 6, 7 or 8 leaved pinions were usually used. It was by no means standardised and many different combinations were adopted by different makers as a result of their own calculations or what they had learned during their apprenticeship. Having decided the wheel count and the size of the teeth, or module, the wheels could then be turned to the required diameter in the lathe. The lathe was the first form of what we would today call a machine tool used by clockmakers. The earliest, known as the turns, were hand powered by a gut bow using a similar principle to the wood turners pole lathe. For heavier work the rotation was provided by a hand turned or treadle powered flywheel using belts and pulleys.

In very early clocks the wheel teeth were cut by hand using a saw and file but by the 18th century a special machine, known as a wheel cutting engine, had been developed which could cut any number of teeth although it only cut slots. The tops of the teeth had to be rounded up with a file. This together with the lathe would have been the only machine tools used by the clockmaker.



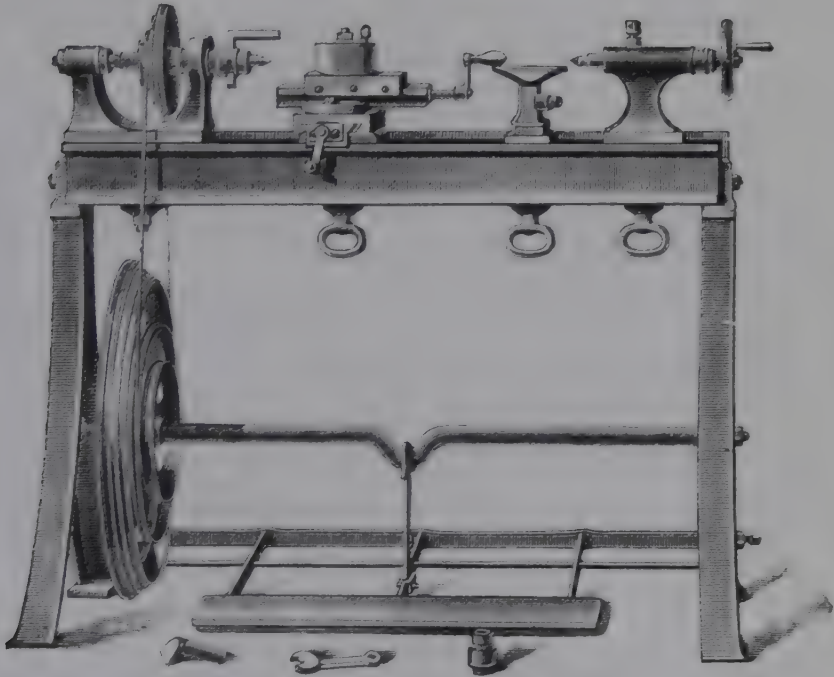
*The wheel cutting engine from the workshop of the Shaw family of clockmakers from Billingborough.
(Lincoln Museum Services)*

The wheel cutting engine must have been quite an expensive tool as not all clockmakers possessed one, so they had to rely on others to do their wheel cutting for them. As late as the 1840s the surviving Day Books of John Foster of Lincoln tell us that he was cutting sets of wheels for several local clockmakers.

The engine illustrated above came from the workshop of the Shaw family who worked for several generations in the village of Billingborough; a few miles to the east of Grantham. The large disc underneath has a series of circles with various numbers of holes to include all the possible combinations of tooth counts used in clockmaking. A spring loaded peg which could be located over the required circle enabled the disc to be turned to give the correct number of teeth. The wheel blanks were mounted on the vertical shaft and the cutter was driven by the geared crank handle mounted on the hinged frame which was then lowered to make each cut. The blank was then rotated by moving the disc until the peg dropped into the next appropriate hole. It was a time consuming procedure so the clockmaker would usually cut the teeth of several blanks of each size at the same time.

The arbor forgings were turned up in the lathe and the pinions cut in a similar way to the wheels and the pivots turned in the lathe. The wheels were then mounted on their arbors by riveting them on a brass hub or collet driven or soldered on the arbor. Whilst the movement plates were still riveted together the pivot holes were drilled after being carefully set out to give the correct meshing of the gears. Often the scribed circles can be seen on the front plate where the clockmaker has done this. The holes for the pillars, usually four but sometimes five, would also be drilled. The pillars, cast in a long stick, would be turned to shape in the lathe and parted off and after separating the plates one end was riveted to the back plate and the other end projected through the front plate which would be secured by taper pins. All the other brass castings of the various bridges and cocks would need to be filed up to size, the arbors, levers, springs, bell hammer of the striking mechanism and the steel anchor of the escapement filed up from the various forging. Many of the parts of the movement were fastened by cross drilled holes and taper pins but some parts were screwed together using screws hand made by the clockmaker using a screwplate to cut the threads.

The wheels of each train would be assembled and the action of each wheel and pinion checked. It was essential that they engaged smoothly. Any bad depths had to be corrected by topping and re-forming the wheel teeth or plugging and relocating the pivot hole. The escapement would then be checked and the pallets adjusted to give the correct action with the escape wheel. The wheels of the striking train would be checked in a similar manner and the various components assembled and the striking sequence checked. The movement would then be set up on a test stand with its weights and pendulum, the dial and hands fitted and the clock set going and the pendulum adjusted to give correct timekeeping.



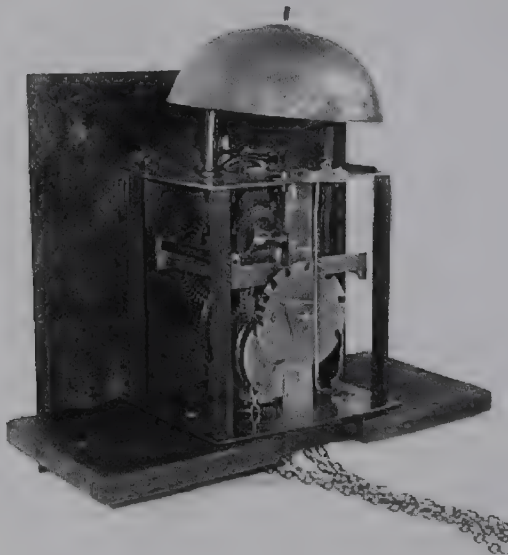
An early 19th. century treadle powered lathe.

Types of Movement

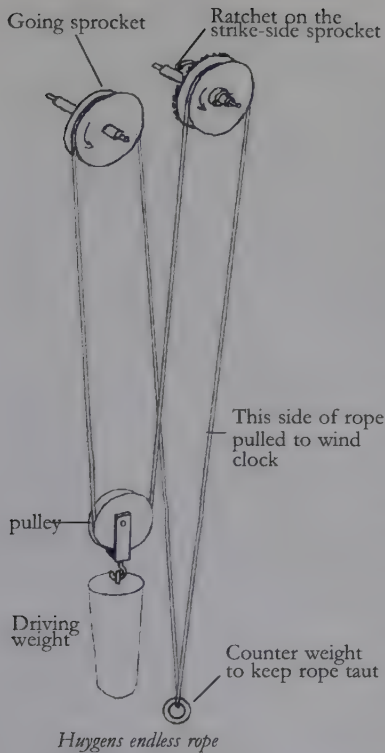
Unlike the dial which was subject to changes of fashion the movement remained much less changed during the period although it was made in different forms. Nearly all used an anchor escapement with a one second pendulum, this enabled a seconds dial to be used which was a feature of the majority of eight day clocks. There are exceptions occasionally one comes across 30 hour clocks with non-standard pendulum lengths and some 18th century eight day clocks had longer than normal pendulums. The invention of the more accurate dead beat escapement made little difference as the earlier design was more than adequate for domestic purposes. They all incorporated a striking system to sound the hours and occasionally quarter striking and musical movements were made. Unusually some month going and even year going clocks were made.

The 30 hr Posted Frame Clock (sometimes known as the Bird Cage Frame).

The makers of lantern clocks found that now the clock was contained within a case its decorative features were no longer necessary. The vertical turned brass pillars were replaced by plain bars, usually of iron but sometimes brass, turned finials and frets discarded and the bell was supported by a single iron upstand instead of the four-armed bell cage. The top and bottom plates were often brass but sometimes iron. This type of movement was used for some 30hr. clocks particularly by makers who had previously made lantern clocks and later it continued to be favoured by makers in the southern counties and the west country throughout the period for both brass and painted dial clocks. It was probably marginally cheaper to make as it used less brass. It was easier for the clockmaker to work on as the striking and going trains could be assembled separately but, lacking a front plate, it was not so convenient for the layout of rack striking and other behind-the-dial features. It was used mainly for the 30hr. square dial count-wheel-strike type of clock in both single and two handed forms.



*Posted frame 30hr. movement by John Watts of Stamford
with a ten inch single banded brass dial c.1720.*



The Huygens Endless Rope System

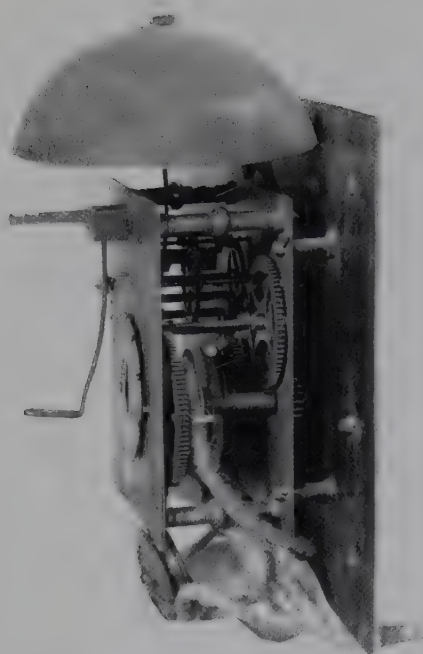
The earliest 30hr clocks were probably rope driven but both rope and chain driven movements are found throughout the period. The adoption of the endless rope system introduced by Christiaan Huygens enabled both striking and going trains to be driven by the same weight. The rope was a specially made soft braided type, not a sash cord, and was sometimes made locally. In his diary of 1857 'Clocky Hewitt' of Folkingham claimed to have plaited 18,622 yards of it during his career for which he was paid 1 shilling (5p.) per yard. It did wear out after a number of years and, as it is somewhat difficult to splice, many clocks were later converted to chain drive. To do this it is necessary to change the spiked sprockets within the movement and kits were available from later horological suppliers to do this. Although these were the cheapest clocks, they were capable of very accurate time keeping and the Huygens endless rope system maintained the driving power during winding. They were potentially more accurate than the key-wound eight day clocks which in fact run backwards whilst being wound thus spoiling their time keeping. It was necessary to provide a system of maintaining power to overcome this problem with precision eight day clocks, or regulator clocks.

The 30hr Going Train

The pendulum was first applied to clocks around 1650 using the old fashioned verge escapement with a short pendulum but, by 1680, the anchor escapement had been developed, again by the Dutchman Christiaan Huygens, and its narrow arc of operation enabled the long pendulum to be used. This combination provided accuracy far in excess of domestic requirements and remained in use throughout the two hundred years of longcase production. The shorter duration 30 hr clock only required three wheels in the going train, the great wheel, the intermediate wheel and the escape wheel. A pendulum beating seconds was usually, but not always, employed. As the rotation reverses at each wheel the escape wheel rotates anticlockwise so a seconds dial is not often a feature of 30hr clocks. Occasionally one is found but they don't look quite right with the seconds hand going backwards. Usually if a seconds dial has perhaps been specified by a customer we find a 30hr movement with a four wheel train and a thirty-tooth escape wheel which then does rotate clockwise. The 30 hr. duration is normal and gives a little leeway to the daily winding. The choice of wheel count (i.e. the number of teeth for each wheel and pinion), was very much up to the individual maker and the many variations are well documented in "The Thirty Hour Clock" by Darken and Hooper.



The anchor or recoil escapement



This is a 30hr clock by John Fox of Grantham with a 10 inch brass dial and a single hand. The knopped pillars separating the plates are typical of the early 1700s. The movement has a count wheel striking train to sound the hours. Note the large bell. As this would probably be the only clock in the household, a loud and sonorous ring would enable it to be heard throughout the house. This one could probably be heard in the next street!

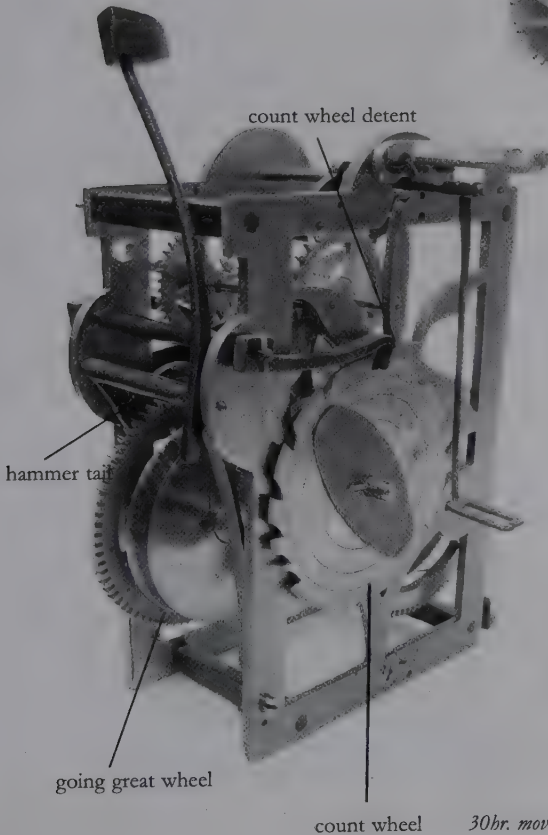
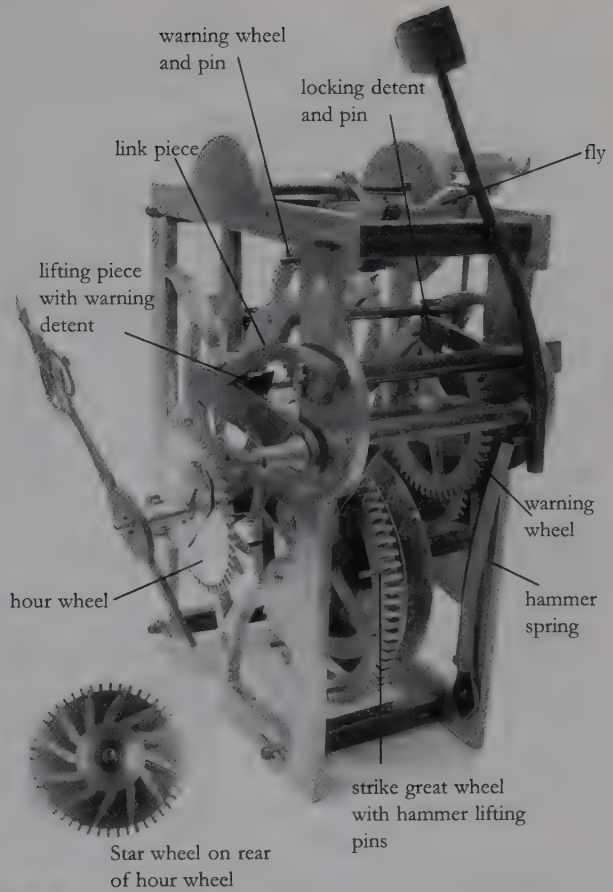
30hr. single hand movement by John Fox of Grantham c.1700

The Count-wheel striking Mechanism

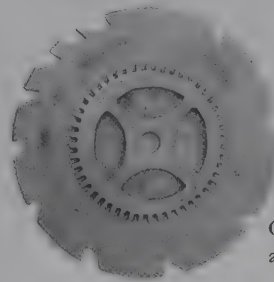
This was the earliest system for striking the hours. One of its disadvantages was that the number of hours struck was sequential, i.e. at each succeeding hour one more blow was struck irrespective of the time shown by the dial and it was possible, for instance when resetting the hands or when the clock had been allowed to run down, for the sequence to get out of step with the time indicated by the dial. Around 1700 an alternative design, known as the rack and snail system, was developed which overcame this problem but the count wheel mechanism was well understood and easier to make so, despite its shortcomings, the count wheel was retained by most makers throughout the longcase period for their cheaper 30hr. clocks. The number of hours struck was controlled by the count wheel, a brass disc geared to the striking train with a series of slots cut into its periphery and arranged to rotate once in 12 hours of striking the hours in succession (a total of 78 blows to the bell). The number struck at each hour was determined by the space between adjacent slots, each space being one stroke longer than the previous one. Longcase striking systems incorporate a warning stage before the hour when the striking train is unlocked but held for a few minutes before being released to strike exactly on the hour. The train is locked by a detent in conjunction with a pin on the locking wheel (the second wheel of the train) and the warning stage by another detent and a pin on the warning wheel (the third wheel of the train). This arrangement is known as "pin wheel locking". A variation uses a locking wheel with an attached hoop and a slot for the locking detent known as "hoop wheel locking". The final wheel in the train is the fly which is a rotating vane acting as an air break to control the speed of strike. Although the principles remain the same different arrangements of these components were used by individual makers, many of which are classified and carefully described by John Robey in his book "The Longcase Clock"

Count-wheel Striking Sequence,
with Pin-wheel Locking

Just prior to the hour the lifting piece, with its warning detent, is raised by the star wheel on the rear of the hour wheel. This in turn, via the link piece, raises the count wheel detent and the locking detent which unlocks the train but this is quickly checked by the warning detent which is now in the path of the warning pin. On the hour the lifting piece drops off the point of the star wheel releasing the warning pin and the train runs. The count wheel detent rides up the curved edge of the slot raising the locking detent clear of the locking pin, the train continues to run and strikes the appropriate number of hours whilst the count wheel detent runs on the edge of the count wheel, eventually dropping into the next slot to re-lock the train.



The hour wheel is attached to the star wheel and its arbor by the elliptical spring washer and pin to provide a frictional clutch to enable the hour hand to be set to time. It has 48t and is driven by a pinion of 12t on an extension of the going great wheel arbor. The count wheel of 48t is driven by a pinion of 8t on the end of an extension of the striking great wheel arbor.

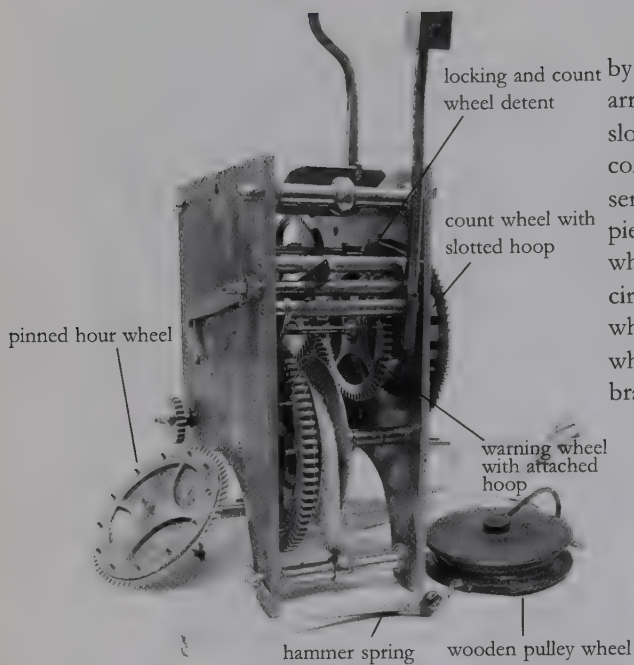


Count wheel drive wheel and pinion 48t x 8t

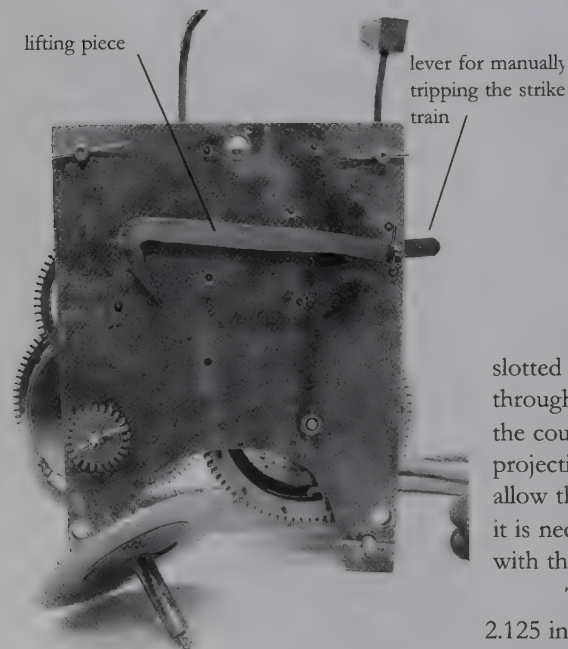
count wheel

30hr. movement with count wheel striking and skeletonised plates c.1740

Count-wheel Striking with Hoop-wheel Locking.

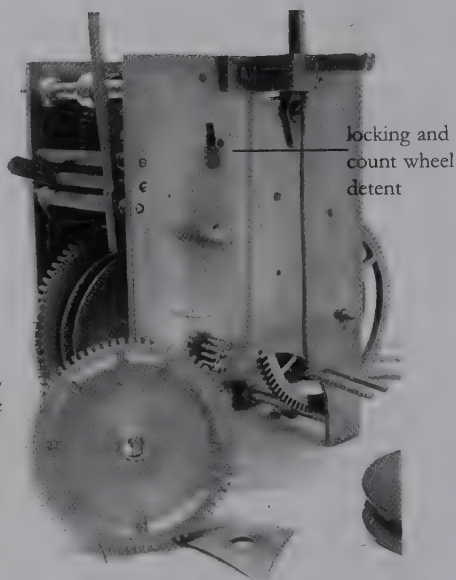


Note: Hammer spring and hour wheel have been removed.



30hr movement by John Wood with hoop wheel locking, c.1760.

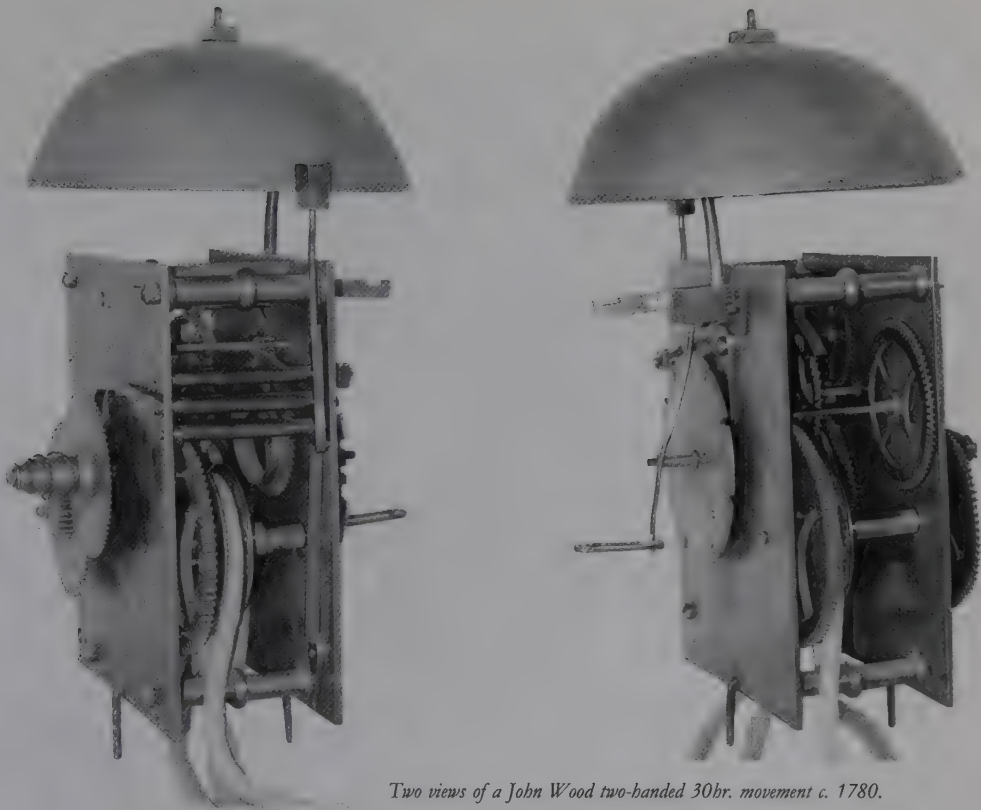
This 30 hr. single hand movement by John Wood uses the hoop wheel locking arrangement. The train is locked when the slots in the hoop wheel and the count wheel coincide. Note that the hour wheel has a series of twelve pins to raise the lifting piece, easier to make than the earlier star wheel. This movement has large semi-circular cut outs at the bottom of the plates which together with the wooden pulley wheel reduced the amount of expensive brass.



Note: Count wheel has been removed.

The count wheel in this clock has a slotted hoop and the locking detent projects through a hole in the back plate and serves as the count wheel detent also. The lever projecting from the lifting piece arbor is to allow the strike train to be tripped manually if it is necessary to synchronise the hours struck with the dial time.

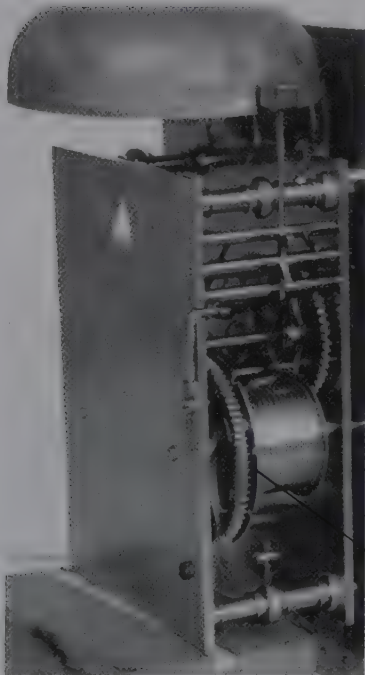
The plates measure 4.5 x 6 ins. spaced 2.125 ins. and fitted to a 10 ins square dial. Note also the scribe marks on the front plate, used when laying out the trains of wheels.



Two views of a John Wood two-handed 30hr. movement c. 1780.

The two handed 30hr. movement by John Wood pictured above was used for both his brass and later painted dial clocks. He no longer bothered with the plate cut outs but continued with his characteristic movement to seat-board fixing detailed elsewhere.

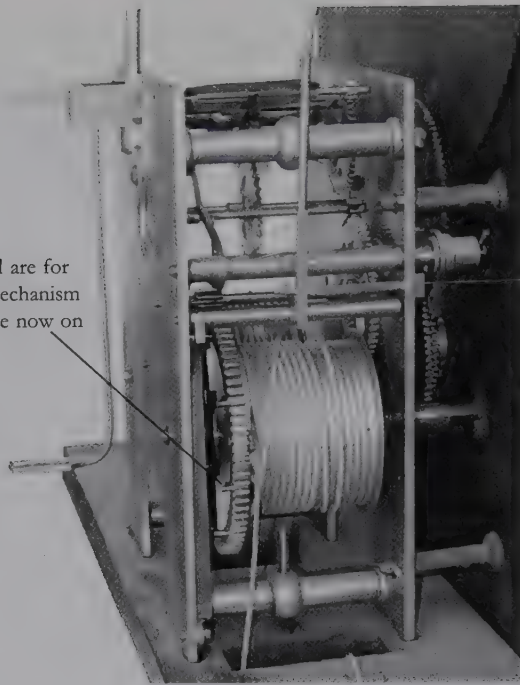
As mentioned earlier many makers retained the count wheel system throughout their working lives for both 30hr. and eight day clocks. When used in an eight day clock the striking great wheel was usually arranged to make one revolution in 12 hours so it was possible to attach the count wheel to the great wheel between the plates as in this movement by John Fox. The hammer lifting pins are now on the second wheel of the strike train.



Count wheel attached to the striking great wheel

Eight day movement by John Fox c.1720 with inside count wheel striking.

the pins on the great wheel are for the count wheel striking mechanism (the hammer lifting pins are now on the second wheel)



hammer stop

Eight day clock by Broderick of Spalding with pinned internal count wheel c.1800.

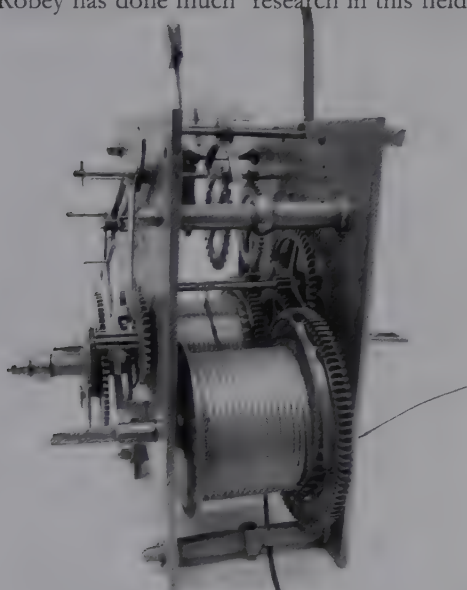
The Brodericks of Kirton and Spalding were old established clock and watchmakers. They retained the use of the count wheel system into the painted dial era for both 30hr. and eight day clocks. One of their characteristics was the use of the pinned count wheel which instead of having slots for the locking detent to drop into used suitably spaced pins which in this case held up the locking detent to lock the train. For their 30hr. clocks they used an external pinned count wheel and for their eight day clocks, as here, the pins were on the striking great wheel. Note also the hammer stop which in this movement is a peg screwed into the front plate.

The Rack and Snail Striking System.

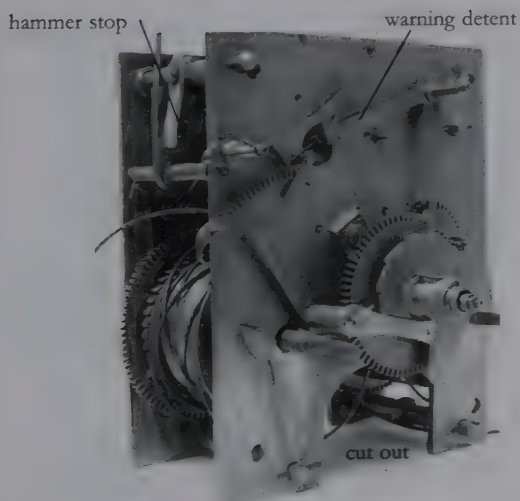
By the middle of the 18th. century most, (but not all) makers had adopted the rack striking system for their eight day clocks. The advantage of the rack system is that the time struck is determined by the position of the hour hand so it always strikes the correct hour. It enabled the provision of a Strike/Silent feature and in some cases a repeat feature whereby the last hour struck could be repeated. In the days when rooms were gloomily lit by candle or oil lamp and difficulty was experienced in reading the dial it would be possible to, at least, repeat the last hour. There are some reports that by an arrangement of cord and pulleys the clock could be made to strike remotely, from say the bedroom; Bellatti in several of his newspaper advertisements mentioned "clocks that strike at a distance". Could this have been this type of arrangement?

The movement pictured here and on the next page is from a clock by Thomas Saltby of about 1820, by which time the design had evolved to a fairly standard layout used by most makers, although there are many details which were characteristics of individual makers.

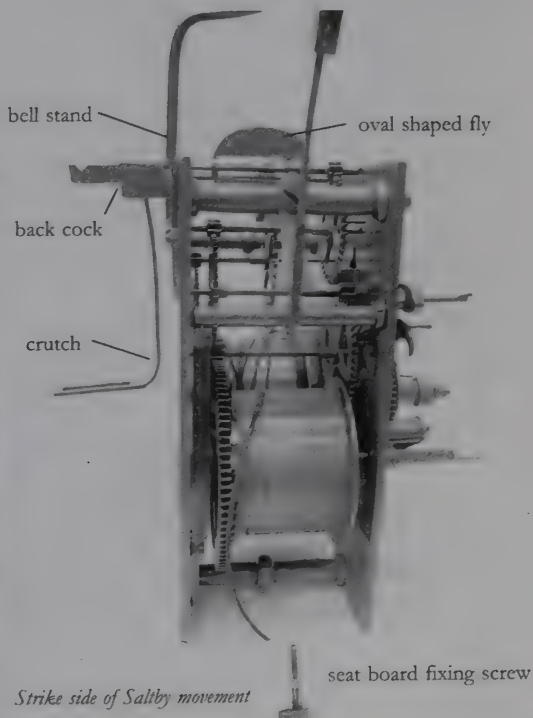
At this period, some clockmakers were beginning to make movements for sale to other clockmakers, who perhaps did not have the equipment or skill to make eight day rack strike movements of their own. Unlike the dialmakers very few movement makers named their products, so it is worth recording any idiosyncratic features. For instance on this movement the shape of the warning detent, the oval shaped fly, the hammer stop, the bell stand which passes through the back cock, the seat board fixing by screws through the centre of the pillars, the size of the plates and the cut away at the bottom. Individually these may not be of great significance but when found collectively may provide a 'signature' of a particular maker. John Robey has done much research in this field but there is still scope for more.



Going side of Saltby movement



Movement plates measure 6.25x5 inches



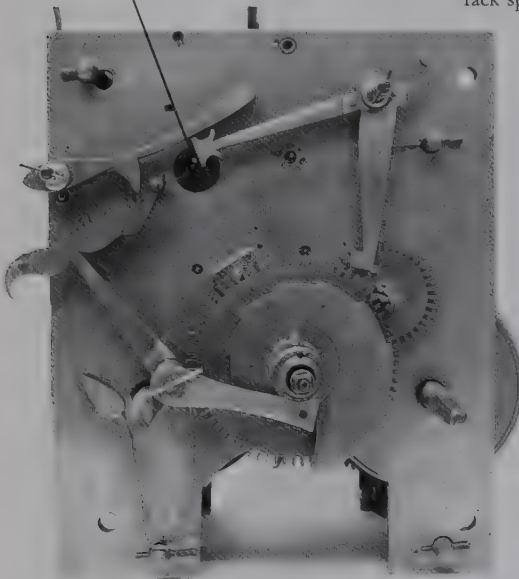
Strike side of Saltby movement

The Rack and Snail Striking Sequence

1. The striking train locked

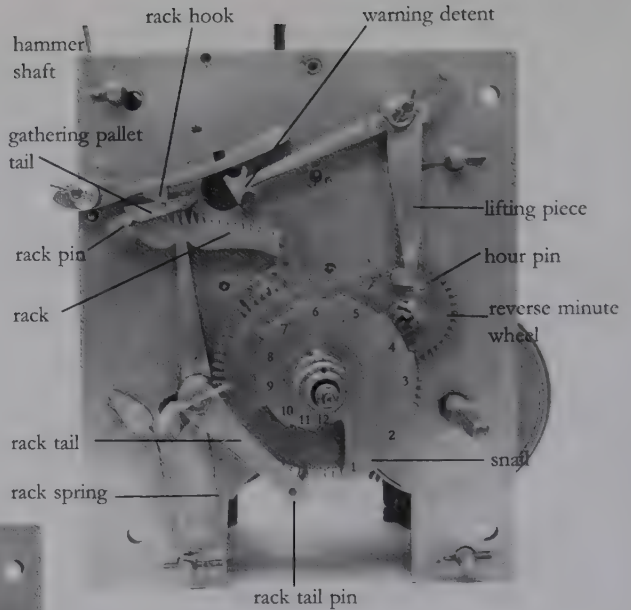
The twelve-stepped cam or snail is attached to the hour wheel which also carries the hour hand and it is this that determines the number of blows struck by the hammer. The striking train is at present locked by the tail of the gathering pallet which has been intercepted in its anticlockwise rotation by the rack pin. The hour pin on the reverse minute wheel, which revolves anticlockwise once per hour, is approaching the lifting piece.

warning wheel pin



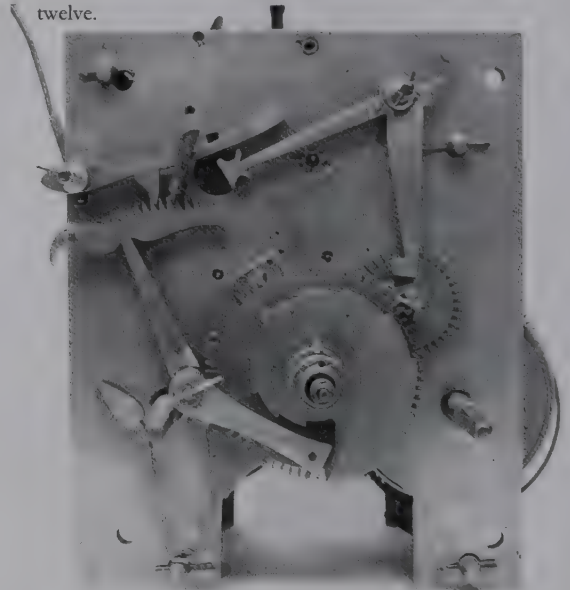
3. The striking train running

The lifting piece has now dropped off the hour pin which has allowed the locking detent to drop out of the path of the warning wheel pin and the striking train is running. The gathering pallet, which rotates once per stroke, gathers a tooth of the rack at each stroke; it has already struck six blows and there are a further six teeth to collect. The rack is held between each stroke by the rack hook which acts, by gravity, as a ratchet pawl. When all the rack teeth have been gathered, the clock will have struck twelve and the pin on the rack will intercept the tail of the gathering pallet to re-lock the train.



2. The striking train warned.

At this point, about two minutes before the hour, the hour pin has moved the lifting piece and raised the warning detent, which in turn has lifted the rack hook and allowed the rack to fall to the left until it is stopped by the rack tail pin making contact with one of the steps on the snail, in this case the deepest one at 12. The tail of the gathering pallet is now free to rotate and the train is unlocked. It starts to run but is checked almost immediately by a pin on the warning wheel and is now held by the warning detent that projects into its path through the hole in the front plate. The clock is now primed and ready to strike twelve.



This movement is from clock by Thomas Salby of Grantham c.1820.

The increasing wealth and population brought about by industry, which was developing in towns like Grantham during the 19th. century, led to greater demands for clocks. During the 18th. century the town of Grantham supported only one or two clockmakers and in the early years they needed to combine this with other trades such as gunsmiths or whitesmiths. By 1830 there were four watch and clockmakers in business in the town selling a wider range of articles including barometers, jewellery, silver etc. and some were also opticians. The suppliers of horological components responded to the increased demand and factors began to supply not only dials but a range of castings and forgings for the clockmaker. Some clockmakers developed their workshops to supply longcase movements to other clockmakers who had not the facilities to make their own. Wm. Foster of Lincoln is known to have done this as is Samuel Deacon, whose workshop was at Barton-in-the Beans near Leicester. It is difficult to be sure how much this facility was used. No doubt, it was used occasionally by some makers when they were particularly busy or short of staff. It would have been a more expensive way of doing things but convenient if they had a special order for a complicated clock from a wealthy customer. Musical clockmaking, for instance, was a job for which the local clockmaker would buy in a movement from a workshop that specialised in this branch. The quarter chiming clock supplied by William Hall to the Duke of Rutland around 1816 is an example of this practice.

There was an attempt to bring a degree of standardisation into movements by Samuel Harlow who was from a family of clockmakers based in Ashbourne in Derbyshire. He published a small book in 1813, "The Clock Maker's Guide" which contained a series of plans showing the layout of both 30 hr. and eight day movements which he suggested should be adopted by all makers. It opens with the following statement:--

ADDRESS

The utility of the following Designs, I should hope, cannot fail of being duly estimated by the various intelligent Manufacturers concerned in the laudable employment of accurate clock making. It is to be regretted, that a work of this kind has not appeared before this time, to regulate the several departments in manufacturing that highly important and useful article, a CORRECT CLOCK. A want of a regular system in clock making has created great inaccuracies and inconvenience, and it is to obviate these evils, that I now humbly and respectfully submit the following plates to the consideration of the Trade; taking no merit to myself farther than the greatest accuracy. I however feel confident, that if Dial and Movement Makers observe the rules laid down, the movements and dial will fit with most exactness--the Pinion Makers may also make their pinions to size. I am of the opinion, that the mode of shifting the moon wheel in the manner described, will be found by experience to be the best and surest method which can be devised; the Clock case Maker will be enabled to cut his clock case sides to fit the clocks, by taking his dimensions from the centre holes.

There are various other methods of making clocks, but I will take the liberty to recommend the following, convinced there is no better when well executed.

SAMUEL HARLOW

S. HARLOW respectfully informs the Trade, that he manufactures Moon Wheels, to sell any size Dial, also Caliper Plates correct for Dial Makers. The socket Pinion and Star Wheel, will be sent with the Dials. Likewise may be had of him, Chime quarters, or plain Movements, made by the best hands (to go with Spring or Weight) also Engines, Lathes, Tools, Files or material proper for the Business of Clock Making.

The book also illustrates the wheels, pinions, castings and forgings etc. which they were able to supply for the clockmaker to build a movement in his own workshop. It is likely that they also could supply an assembled movement which would only require detail finishing and testing. Illustrated below is plate 2 from his book together with a photograph of the movement of a clock by Thomas Dickinson of Boston. This movement was clearly built to Harlow's plan either supplied complete by Harlow or built by Dickinson using Harlow's components.

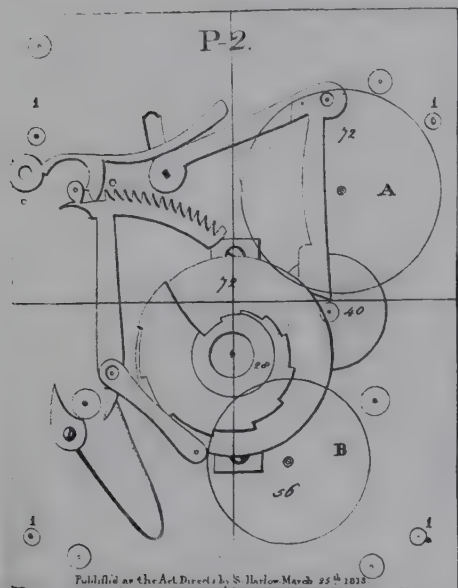
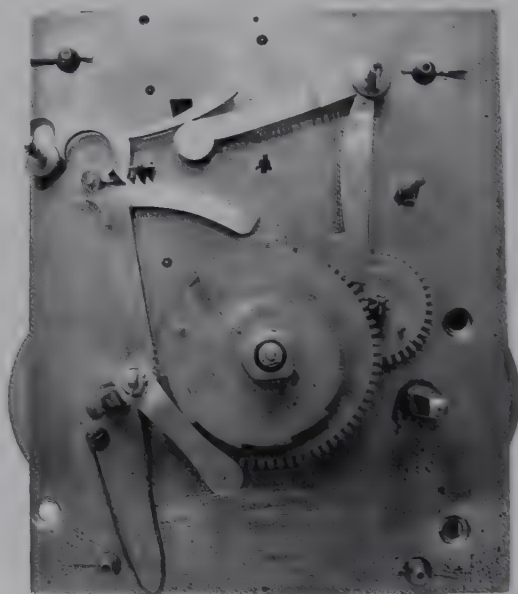


Plate 2 from Harlow's Clockmakers Guide showing the front plate of an 8 day movement with date and moon wheels.



An 8 day movement of a clock by Thomas Dickinson of Boston with rolling moon dial. The moon wheel is missing and there is no date indicator otherwise it is identical to Harlow's design. The plates measure $5 \frac{3}{16}$ ins. X $6 \frac{3}{8}$ ins. ($132\text{mm.} \times 163\text{mm.}$) and are spaced $2 \frac{3}{16}$ " (56mm.) apart.

Increasingly some makers availed themselves of these trade facilities in the 19th. century but the evidence of surviving movements show great diversity in detail design, so it is difficult to attribute them to individual workshops. John Robey in his two volume work "The Longcase Clock" addresses this area in some detail but there remains much scope for further recording and research. The measurement of the plates would help establish common foundry suppliers.

What is apparent is that longcase movements were in all periods handmade in small workshops not, as was at one time believed, mass produced in factories.

The Clock Case

The apprenticeship system made the metal and wood working trades quite separate; as a rule the clockmaker did not make the wooden cases for his clocks. He would specify and buy the case from a local joiner or cabinet maker and then fit it up to make a complete clock. In some instances the customer would buy the clock movement and dial from the clockmaker and then make his own arrangements with a local woodworker to supply a suitable case. Thomas Scott, a clockmaker from Gainsborough, advertised in 1792 that, "he now has an elegant assortment of Clocks in either Mahogany or Wainscot cases having engaged a Case-maker from London". Presumably he worked in Scott's workshop in Gainsborough. In the provinces clockcase making would have been part of the repertoire of the local joiner but with the development of veneered and inlaid furniture the trade developed into that of a cabinet maker who specifically made furniture. In the cities and larger towns clockcase making became a further specialisation of the cabinet making trade.

The overall design of the longcase clock was established by the late 17th century. Essentially the case consisted of the hood containing the dial and movement, the trunk protecting the pendulum and weights and the base to provide a firm standing. During the next two hundred years this basic construction remained the same whilst being subject to adaptation to suit changing fashions and regional preferences.

The early London made clocks were housed in quite small cases often veneered in ebony (sometimes dyed or 'ebonised' fruitwood was substituted) but they soon began to follow the furniture styles in fashion at the period. The 'barley sugar' turned columns either side of the hood were typical of this early period as was the long rectangular door which occupied most of the trunk. Often there was a glazed aperture, or lenticule, through which one could observe the motion of the brass faced bob of the recently introduced long pendulum. The base of square, (or slightly lower than square), proportions standing on bun feet, or a skirting board or plinth, was usual. Walnut was the premiere cabinet wood of the period, marquetry furniture in the Dutch style was also popular and the exotic lacquer decoration in the Chinese style had a long period of popularity after it's introduction in the early 1700s. The dial size determined the overall proportions of the case and the small early cases with 9 or 10 inch square dials gave way to more imposing pieces of furniture with 12 inch dials and increased further in height with the introduction of the arch dial around 1720.

THE

LONDON

CABINET MAKERS'

Union

BOOK OF PRICES.

A DRESSING OR LOBBY CHEST.

£. s. d.

All solid. Three feet long, two feet eight inches high, the ends one foot seven inches wide, plain back, four long drawers in ditto, cock or flush headed, or to shew a corner string by black or white holly rabbeted round as a head; the top to project half or three quarters of an inch, the edge of ditto square: on common brackets block'd on the bottom of the carcass; the ends, bottom, and partition edges faced with mahogany, with straight slips under the partitions to fill the groove 0 13 0

EXTRAS AND DEDUCTIONS.

*The opening page of the London Cabinet
Makers' Union Book of Prices of 1811*

In London there had been a dispute between the journeyman cabinet makers' and their masters which led to a strike in 1761. This resulted in the formation of the Cabinet Makers Society who, with a committee of both masters and journeymen published, in 1787, a book of agreed piecework prices to be paid for a complete range of domestic furniture. The pages consist of a price for the basic piece followed by a list of 'extras', each item priced. It is significant the clockcases are not included in this book indicating that, in London, they had become a separate branch of the cabinet makers trade. The book went through many editions up to the middle of the 19th century.

DANTZICK OAK CLOCK CASE.

With arch head, scroll pediments, quarter rounded eants in body, canted corners in pedestal, mahogany frieze door, and pedestal banded - - - 1 9 0

MAHOGANY CLOCK CASE.

With arch head, scroll pediment, glass friezes, two pillars in head, door and pedestal veneered, cross banded and string, quarter round corners or square filled up in body and pedestal, frieze veneered cross way, and band mitred round do. plintils veneered, banded pedestal, and door framed - - - 1 17 0

If pedestal be veneered with a circle, and filled up, with cross band, then string and mahogany margin long way extra 0 1 6

If made with full column extra - - - 0 0 6

Head pillars reeded each - - - 0 0 4

A clockcase from the Whitehaven Book of Prices 1810

A CLOCK-CASE,

All solid, no pedement, plain cornice, square door and front, - - - 0 15 9

EXTRAS.

Veneering the front of pedestal, - - - 0 0 5½

Ditto, if jointed in front, - - - 0 0 3

If a line to shew a band, - - - 0 0 4

A mahogany banding round ditto, - - - 0 0 9½

If with a single line—See Table.

A corner line in ditto, - - - 0 0 3½

Banding, with hollow corners, - - - 0 1 7½

Veneering the covers, - - - 0 0 4½

Ditto the pedestal ends - - - 0 0 5½

For slipping the edge of stiles - - - 0 0 4

Veneering ditto in front the long way and mitered - - - 0 0 8½

Extra the cross way - - - 0 0 8½

Veneering the body door on mahogany 0 0 6

Jointing up the door of deal, each joint 0 0 0½

For slipping and banding to shew solid 0 0 11½

Veneering both sides of door - - - 0 1 0

Banding with a single line - - - 0 0 10

Many other groups of cabinet makers in cities and towns are known to have produced similar books of prices which again usually omit clockcases but those printed by the unions in Glasgow and Whitehaven did include detailed pricing structures for clockcases.

Whilst Grantham had ready communication with London, the cost of transporting something as bulky as a clock case would add considerably to the prices so only those made for more wealthy clients, perhaps the lesser gentry, would have been housed in London-made cases. The upper classes would have bought the complete clock from a London maker.

	L. s. d.
Ditto with a double line - - -	0 1 0½
Head columns, banded and lined, on the front, each column - - -	0 0 6
A belt in centre of ditto if provided, each - - -	0 0 2
If not provided - - -	0 0 3
If back columns, each - - -	0 0 2
If body columns done the same way, double paid - - -	0 0 4
Banding the glass door with a corner line - - -	0 1 2½
For cutting founding holes, each hole - - -	0 0 5½
Veneering the pannels above the arch with a single line - - -	0 0 0
If a moulding round the arch - - -	0 1 11½
If a cock beed projects round the arch - - -	0 0 11½
If banded extra - - -	0 1 0
For a plain frieze with a single line - - -	0 0 11½
For a plain solid pedement - - -	0 2 2½
For a single line in ditto - - -	0 0 9
If pedement cut, extra - - -	0 1 11½

A ROUND HEADED CASE,

Done in the common way with reeded columns and a brass door - - - 1 4 7

For jointing the sides end-way, each joint 0 0 2

Pages from the Glasgow Book of Prices 1806

In provincial towns in the 18th. century furniture was made by joiners who would have needed to embrace a wide range of wood working skills from house joinery to furniture making. In the villages they would have been even more versatile. We know from the Diaries of George Bird of Corby that although he was principally a farm wagon maker he was called upon to make all manner of things from coffins to a set of a dozen chairs for the local chapel. Oak was the usual wood for provincial domestic case furniture with elm, ash and yew used for chairmaking. Fruitwood was used occasionally for clockcases. Walnut was more expensive and mostly used, in the 18th. century, as a veneer which in itself was an expensive process. Pine and deal were used but not frequently in this area and then always painted or scumbled to simulate more expensive woods. The stripped pine we see today is a modern fashion. Whilst some cases were perhaps made from locally grown English oak, furniture makers generally used the straight grained timber imported from the Baltic countries often known as 'wainscot'. Note the Whitehaven maker specifies his case as being made of "Danzick Oak".

London case styles



London longcase c.1670 with an architectural top to the case, the pendulum door and dial: veneered in eyes fruitwood in imitation of ebony.

Source: courtesy of the Victoria and Albert Museum



London longcase of c. 1695 in the Dutch style of "bird and flower" marquetry.

Timbers like ebony were expensive and were more economically used as a veneer glued to a base of cheaper timber. The Dutch used veneers of contrasting woods which were also coloured with dyes to produce elaborately marquetry designs often incorporating birds, flowers and foliage. These imported cases were much admired and were soon being made in London, initially by immigrant craftsmen until the London cabinet makers learnt the technique. When new these cases would have been very brightly coloured, almost garish, but as we see them today the dyed woods have usually faded to shades of brown.



*London longcase of c.1720 in
book matched walnut veneers.*



*London case lacquered in the Chinese
style c.1760*

Walnut with a curly and decorative grain, often cut from burrs, was again expensive and difficult to work in the solid; it was also liable to warp, so this too was usually used as a veneer with a carcass of straight grained oak or pine which resulted in a more stable board.

Lacquering of furniture together with gold leaf decoration was learned from the Chinese and Japanese and was very popular throughout the 18th century. It was used extensively for clockcases, not only with a black ground but with other colours including red, blue and green. These would have been very striking when new but have now usually faded and darkened with age. The lacquered finish is easily damaged. It doesn't travel very well and many of these clocks today are distressed and require expensive restoration.



London mahogany case with pagoda topped hood very typical of the 1750-1800 period

Native walnut had been the premier cabinet wood for a hundred years or more but a series of damaging frosts had taken its toll of standing trees and it became increasingly scarce and expensive. In the 1720s cabinet makers began to turn their attention to the recently introduced mahogany timber from the West Indies. They found it to have good colour and grain and easy to work and carve. Its use was encouraged by the removal of the duty on imported timber in 1733 and it rapidly became the preferred wood for elegant furniture. Veneer cut from the mahogany from Honduras and Cuba was particularly prized for its finely figured grain, often called "flame mahogany".

The clock case pictured here became a standard London pattern used by many clockmakers. The astragal panelled base with the double plinth is typical of London work. The pagoda top to the hood is an element of design borrowed from Japanese and Chinese temple architecture and reflects the interest in far eastern design current at the period. It was adopted enthusiastically, particularly for clockcases, by the London trade and also by the makers of North Lincolnshire and Hull.

At the beginning of the 19th. century a different way of producing veneer was introduced. Instead of the timber being sliced manually by a special saw a method of slicing by a knife was used. Two methods were employed, with one system the log was mounted between centres in a large lathe and a long knife was introduced at a slight angle to peel a continuous slice from the full length of the log. This method enabled very large sheets of veneer to be produced, albeit of rather straight grain. The second method was to cut, again with a long knife, slices from the side of a quarter sawn log, this produced smaller sheets of veneer but with interesting grain patterns. Flame mahogany veneers were produced in this way. In both methods the timber had to be soaked in boiling water to enable the wood fibres to be cut cleanly but it enabled thin veneers to be made very quickly and cheaply.

Typical 18th. century saw-cut veneers are about 1/10 to 1/8 inch thick whereas the 19th. century veneers are a 1/16 to 1/32 inch in thickness. This development led to the increased use of veneer and inlay for provincial furniture and clock cases.

Lincolnshire clockcases

Oak was the usual choice of provincial clock case makers who were selling into a less affluent market and where the clock was required to fit in with the existing vernacular furnishing styles. In the early 18th. century a square dialled clock usually had a flat topped hood with a moulded cornice or sometimes a shaped caddy top. The columns which flanked the hood were usually plain, sometimes tapering towards the top and bottom, with turned wooden bases and capitals which in some cases were gilded. They were often attached to the door and opened with it, sometimes there were matching quarter columns at the rear of the hood. Between the hood and the trunk was a shoulder, usually a concave moulding. The trunk had a full length rectangular door with a simple moulded edge and a rebate to fit the door frame, or in some cases an applied moulding to provide the rebate. Some more primitive cases have no rebate and the door fits inside the frame of the trunk. Many early trunk doors (pre c.1720) have a glazed aperture through which the pendulum bob was visible.

The case for a square dial clock could be made by any competent joiner but the introduction of the arch dial (strictly speaking the broken arch dial) around 1720 required more cabinet making skills as the arched glazed hood door was more difficult to make and fit. The columns were moved away from the door frame to become free-standing. A variety of designs for the top of the now taller hood was used. The flat top with a cornice was retained by some makers but others used a curved top following the shape of the dial with a semicircular moulded cornice. Many makers used a variety of differing pediments of architectural styles and eventually adopted, towards the end of the century, a pediment comprising two ogee scrolls, (sometimes known as a swan-neck pediment), which particularly suited the arch dial and this became the favourite design in this area. Further decoration of the pediment was provided by gilded wooden finials. Also about this time the top of the trunk door began to reflect the broken arch shape of the dial. Later in the century more fancy shapes were used for the trunk door top and the, now free standing, columns were sometimes fluted or reeded and provided with brass bases and capitals, together with brass finials for the hood.

Beneath the trunk was a moulding, often of a more complex profile than the upper one. The base of the clock was of square proportion or slightly lower than square with a skirting or sometimes bracket feet. This is the most vulnerable part of the case. Due to it having stood on a damp floor, which was probably regularly wet-mopped, any glued bracket feet have probably disappeared after 200 years of such treatment and the bottom been subject to a certain amount of rot. The usual repair was to abandon the bracket feet and nail a skirting around the bottom of the base. Often a certain amount of height is lost in the process. In other circumstances, when these clocks became unfashionable and descended into more humble accommodation, their bases would have been cut down so they fitted into low-ceilinged cottage rooms. This seems to have happened to many surviving clocks and it is difficult to restore the damage convincingly.

These changes in design were additions to the earlier styles and although some of the changes were also adopted in other regions they were introduced at different times. The older styles continued in use, particularly for square dial 30 hour clocks, throughout the 18th. century.

Native elm and fruitwood were used by some casemakers and occasionally walnut and later imported mahogany were more expensive alternatives to oak. These 18th. century oak cases were made from timber which was sawn, planed, scraped and finally rubbed down with pumice powder. Freshly sawn oak varies in colour; the heart wood is quite dark brown becoming lighter towards the outer sap wood but it darkens with exposure to the atmosphere. Pumice mixed with linseed oil also acted as a grain filler and the case was finally finished with a beeswax polish. Some makers used a mixture of brick dust and oil as a grain filler and this imparted a warm brown colour to the oak. Repeated wax polishing and dusting over the years has produced that fine soft patina so much admired by antique collectors today. Later cases were French polished which was a shellac based finish which was introduced towards the end of the 18th. century. It resulted in a much shinier finish which was popular at the time for all types of furniture and many older cases were refinished in this way.

In other parts of the country, provincial case design developed in different ways and distinct regional styles developed. It is difficult to attribute clock cases to individual cabinet makers because unlike the clockmakers there was never an obligation or tradition for them to mark their work. All provincial towns in the 18th. century had joiners and cabinet makers and no doubt clockcase making was part of their repertoire. There are individual details peculiar to certain makers which are worth noting and eventually, if a documented case is found, it may be possible to attribute a group of cases to a particular workshop. Much work and research remains to be done in this field.

Having said this we are unusually fortunate in this area to have a group of clockcase makers who did indeed mark their cases with a paper label or a stamp. These cases, which mainly date from the end of the 18th. century, display a range of design features which constitute a distinct regional style which was recognised and noted in "Lincolnshire Notes and Queries" of Jan. 1896.

13. ARE INLAID OAK CLOCK CASES PECULIAR TO LINCOLNSHIRE?—"Grandfather's Clocks" a hundred years ago or so must have been extensively made, certainly in this county, for many have on their faces the names of watch and clock makers in the various towns; thus Bunyan of Lincoln, Scott of Gainsborough, &c. They are generally made of oak, *polished*, not carved, but with inlaid portions of mahogany. At the angles there are sometimes pilasters of that material, and perhaps an inlaid border to the door. Generally, the upper part of the case is surmounted by a curved broken pediment (this is usually entirely of mahogany) with brass balls and spikes, or birds, upon the ends and centre. The faces are sometimes painted, sometimes wholly of brass. The hands delicate brass or iron work. Frequently mahogany pillars with brass caps and bases support each angle of the part containing the face. Their height varies from 6 to 9 feet. Putting aside the question of Chippendale clock cases, are these inlaid oak clock cases common to other counties besides our own? I see "The Cable" thinks they have belonged to old families and gradually descended into their present lowly position, in labourers' cottages. In spite of the rage for them, it is quite surprising how numerous they are.

E.M.S.
REPLIES.

Lincolnshire Notes & Queries, Vol. V. No. 33. Jan. 1896. p.14

The writer had accurately noticed most of the design elements, which although not individually peculiar to this region where a number are used together they define this local style. We will examine some of these cases in the next few pages.

A Lincolnshire Longcase of c.1790

This case was made by an anonymous cabinetmaker for John Hargrave of Sleaford



Oak case with mahogany detailing for a clock by John Hargraves of Sleaford c.1790.



The reeded columns and applied strip to the hood door.



The reeded reeded corners of the trunk.

Overall height 84"
Dial 12"
Trunk 13 1/4" w. x 6 1/2" d
Base 17 1/2" w. x 19" h.
Door 8 1/4" w. x 32" h.

The oak with mahogany cross-banding to the door and base became popular in this area in the late 18th. century usually with painted dial clocks, although it had been in use in other parts of the country for some time. The mahogany scrolled top to the hood with the centre wedge also conforms to the local style. This particular casemaker was used by quite a number of south Lincolnshire clockmakers. The "humped" top to the door and the reeded columns and corners to the trunk are typical of this workshop, as is the method of providing the glazing rebate by an applied strip of mahogany. The turned wooden finials of the hood appear to be original but the base has lost its feet.

A Lincolnshire Longcase c.1820

This case was made by an anonymous cabinet maker for Thomas Saltby of Grantham.

Brass patera and finial

Upper part of the hood veneered in mahogany with scrolled (or swan neck), pediment with wedge shaped "keystone" in the centre and scratch moulded line around the arch

shaped turned columns, sometimes plain, reeded or fluted with brass caps and bases

Cupid's-bow shaped checks often plain sometimes with matching 1/4 columns.

Concave moulding

Long oak trunk door cross-banded with mahogany, the top corners usually with chamfered or concave corners as here.



Inlaid shell in trunk door, (sometimes a vase or diamond).

Canted trunk corners, sometimes reeded or veneered and inlaid as here



Plain oak sides

Concave/convex moulding

Overall height 88"
Dial 13"
Trunk 14: 2'w. x 19"d.
Base 16: 2'w. x 19"h.
Dial 2: 2'w. x 30"h.



inlaid vase in the centre of the oak base with mahogany cross-banding all round

Bracket feet, sometimes only at the front



Henry Blow of Lincoln

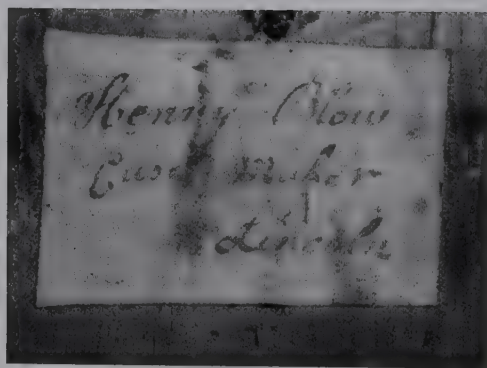


Clockcase by Henry Blow for Musson of Louth c. 1840

Henry Blow was born c.1786 in Lincoln, the son of John and Christina Blow; he married Sarah Robson in 1815. It is not known where he learnt his clockcase making skills but he seems to have worked c.1820-55, although he does not appear in the directories until White's of 1842 and Kelly's of 1855, where he is listed as a Clockcase maker of Priorygate, Lincoln. Clocks housed in cases with his characteristic hand written label have been recorded by the Lincoln makers John Foster, Wm. Chapman and James Simpson, and by Musson of Louth, Pinkness of Brigg and Green of Grantham.

The oak and mahogany detailed case illustrated here is typical of his work. The wedge shaped "keystone" between the scrolls and the mahogany veneered upper part of the hood with its fluted columns, the mahogany cross banded 3/4 length trunk door and base are typical of this area and period. The disc and line inlay of the canted corners, hood door, the mahogany impost above the trunk door and the diamond inlay in the centre of the door are all characteristic of this maker.

Stylistically these cases are very similar to those of James Usher which suggests that they might have worked together at some stage and there might have been a connection between the two families through marriage with the Otter family of wood workers.



Henry Blow's label, hand written in ink on thin card, stuck to the back board inside the case. (Sometimes fixed with 4 small tacks)

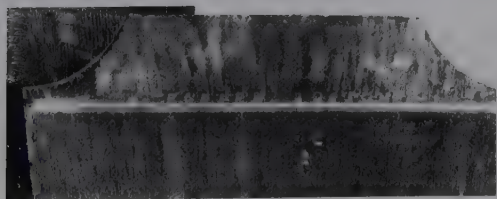
William Foster of Boston

William Foster is listed in White's 1826 directory as a cabinet maker at St. Georges Lane, Boston and later, in Pigot's of 1835, at Rosegarth Street. The LR&SM on 8th. May 1835 records "Died on Tues. Last aged 73 Mr. William Fawster Clockcase maker of Lincoln Lane Boston".

Many of his cases are named, sometimes in pencil on the backboard, **W. Foster Boston**, and sometimes by a stamp on the inside top rebate of the trunk door as the case is illustrated here. This scroll top oak case with mahogany cross banding, the top of the trunk door with concave corners; the canted trunk corners, sometimes reeded to match the columns or faced in mahogany with a simple inlaid line, are all typical. What is perhaps peculiar to his work is his use of an applied strip to provide the glazing rebate for the door of the hood; also the use of a ridged top to the hood as an alternative to a flat board. The reason for this feature is not obvious but by lowering the 'shoulders' it does provide a slightly more elegant sweep to the scroll topped hood. Both these features are seen on unmarked cases, the one for Thomas Saltby on a previous page for instance, and suggest they might have come from the same workshop.



Oak case with mahogany details by Wm. Foster of Boston for Wm. Read of Grantham c.1805.



The case stamp of W. Foster Boston.



The hood of a Foster case showing the ridged top board.

John Hill of Nottingham.

John Hill is listed in the census return of 1841 as a 25 year old Clockcase maker living in Stretton's Yard, off Long Row, Nottingham. He was probably the son of Thomas Hill who was listed in Pigot's Directory of 1841 and White's Directory of 1844 as "Thomas Hill and Son, Clockcase makers Stretton Yard" although Thomas does not appear in the census return of 1841 and might have died by this date leaving his son to continue the business.

The census of 1851 tells us that 37 year old John Hill, a clockcase maker, had been born in Loughborough and was living with his wife and six children at Stretton's Yard. He was clearly in a considerable way of business as the 1861 census lists him as employing 10 men and a son John, now aged 22, was also included as a clockcase maker. By 1871 the longcase clock had fallen out of fashion and John senior, now living at 111 Wollaton Road, describes himself as a Master Cabinet maker but still employing 10 men. He continues at this address in Kelly's directory of 1881 but in White's of 1885 he is at 17 Ilkeston Road, still listed as a Cabinet and Clockcase maker (this may be John junior as his father would now be 70 years old).

This workshop must have made thousands of clockcases and many are stamped "JOHN HILL N.T.M." on the inside of the rebate at the top of the trunk door. Although his cases follow a general trend towards more fancy designs popular in other parts of the country, his have a recognisable style which enables us to attribute some to his workshop even if they are not stamped.

The case pictured here is typical of his work. It is made principally of quarter sawn oak with the door and base cross banded in 3/4" wide mahogany with quadrant corners. The scroll topped hood is veneered in mahogany with rosewood banding around the arch defined by boxwood stringing. A 4" deep impost above the door has a satinwood panel framed by boxwood stringing with rosewood banding around. The trunk door is now quite short measuring 19 1/2" x 9 3/4" and beneath is a fielded and cross banded panel 4 1/2" x 10". The base, slightly taller than wide at 20" x 19", as well as being cross banded around the edge, has a central inset fielded and cross banded panel measuring 14 1/2" x 13 1/2", and stands on its original 3 1/2" bracket feet.



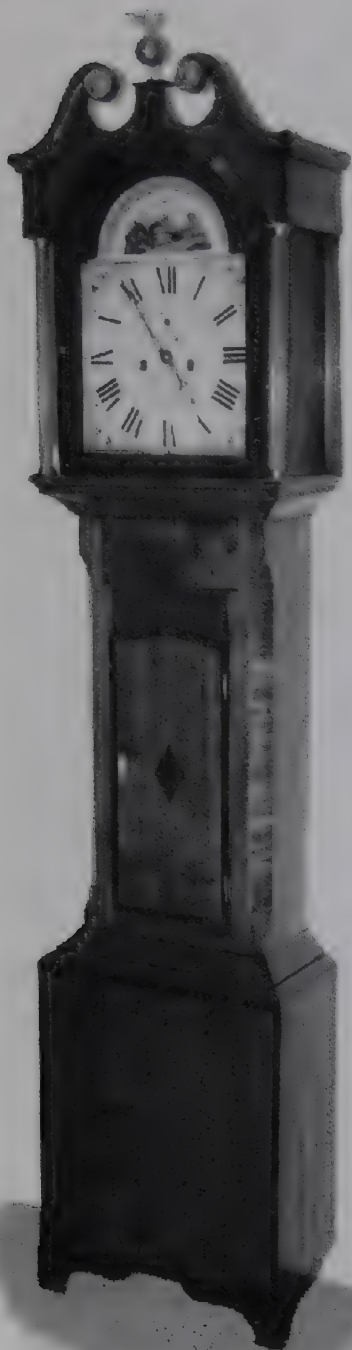
Oak and mahogany case by John Hill of Nottingham for R.W. Sexty Grantham c.1860.

Overall height 87"
Dial 13"
Trunk 15 1/4" w. x 63/4" d.
Base 19" w. x 20" h.
Door 9 3/4" w. x 19 1/2" h.



The stamp of John Hill.

A version veneered entirely in mahogany is illustrated in the section dealing with Henry Pearce and although not stamped most probably came from this maker. They were used by many of the Nottingham clockmakers but they must have been awkward and expensive to transport any distance by horse-drawn wagon. They could have come to Grantham by barge after the opening of the canal in 1793 but the coming of the railway connection between Grantham and Nottingham in 1851 would have made them much more affordable to makers like Henry Pearce and Richard Sexty in Grantham.



Oak and mahogany cross-banded case by Charles Oliver of Spalding c.1840.

It is not known where Charles Oliver learnt his trade - perhaps he was apprenticed to a cabinet maker in Spalding as this is where he was married in 1805 to Mary Lawson and where he set up business as a clock case maker. He is listed as a clockcase maker in the directories from 1828 at Holbeach Road, Spalding and in 1842 at Leather Court Lane.

His cases are typical of the area and period, usually of oak with mahogany cross-banding and mahogany faced canted corners, as in the one pictured here. He labelled many of his cases with a printed paper label stuck to the backboard inside the trunk door. Four different versions of his label have been recorded.

Clocks by Spalding and Stamford makers have been recorded with Oliver's labels.



The case illustrated here incorporates most of the Lincolnshire features, albeit the trunk and door proportions are a little different. It houses a clock by Thomas Wilson of Spalding who was in business from 1820 until 1849. A similar clock can be seen in the collection of the Lincolnshire Life Museum.

Charles advertised in the LR&SM on several occasions; in 1806 for an "Apprentice to clockcase maker"; in 1809 "Charles Oliver, Cabinet and Chair maker etc.. announces that he has engaged Mr. C. Topham, that well known workman and late joiner to Mr. Stiles of Pinchbeck" and again in 1812 as below.

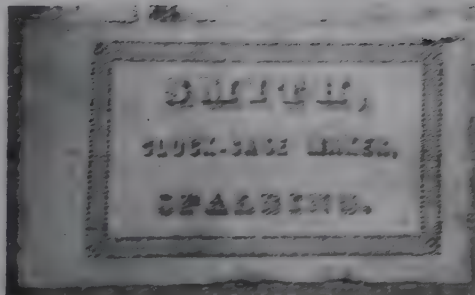
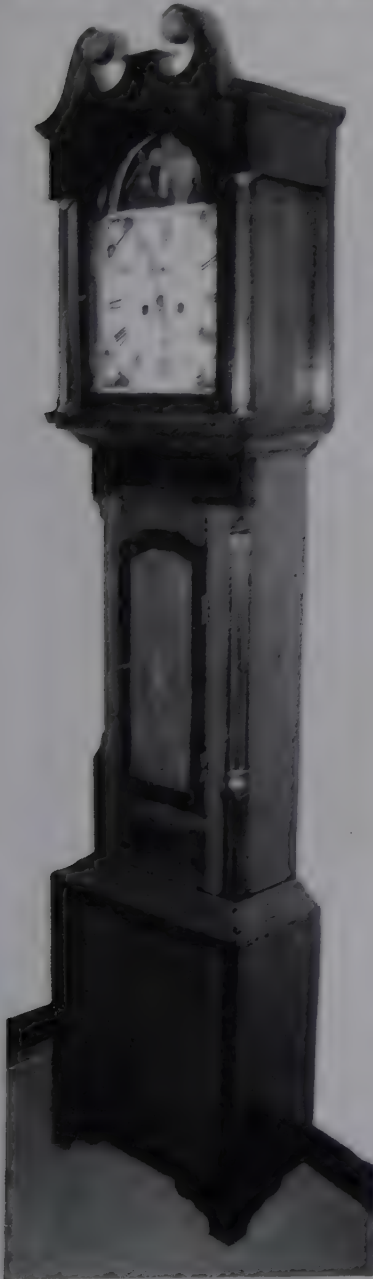
WANTED immediately, a Journeyman Clock-case Maker.—Constant employ may be had, by applying to CHARLES OLIVER, Spalding, Lincolnshire.

LR&SM 31st Jan. 1812

Joseph Smith is listed in Pigeon's directories from 1830 to 1840. In White's directories of 1842 and 1856 he is described as a "Joiner and Carpenter" and in Slater's 1857 directory he is described more specifically as a "Clockcase maker".

The case pictured here is primarily of oak with mahogany, dealing. The door and base have mahogany cross-banding about 1 1/2 inches wide which is applied on the surface, not inlaid as is normal practice. The mahogany veneered scroll top bezel with the central 'tee' beneath the final support, the carved corners with inlaid crossband stringing, the cross banded mahogany wrap-around the trunk door are all typical of South Lincolnshire casework. The shorter door with a veneered panel beneath suggests a date of c.1850.

Richard Wilson and later his son, also Richard, were in business in Lincoln up until the mid 1850s and clocks of his are known in cases by James Fisher of Lincoln. The fact that he needed to obtain a case from Spalding must have indicated they were in short supply in his home town at the time.

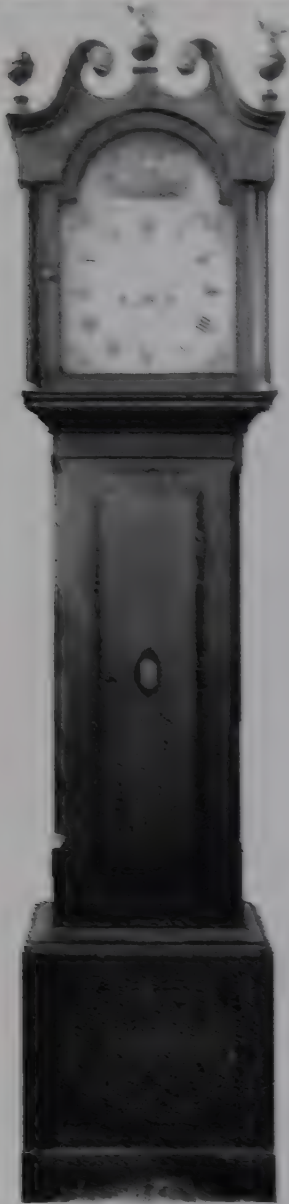


A unique clock of R. Wilson of Lincoln in a restored case of Joseph Smith of Spalding, c.1850. (Source: American Furniture Library)

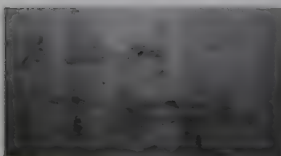
Baxter Stanton of Danington near Boston

Baxter Stanton was christened at Hockington, near Seaford in 1777 the son of Fawcett Stanton and Mary (nee Baxter hence the rather unusual Christian name). It is not known where he learnt his trade, perhaps in Seaford as that is where his five children were born after his marriage in 1801. Later children were baptised at Skinbeck near Boston, then Sempeningham and finally Alfred was baptised at Danington, near Boston, in 1839 and where Baxter Stanton is listed in White's directory of 1826 as a cabinet maker. In the later directories, up to 1842, he is mentioned specifically as a clockcase maker. Although he did not use a label he did mark some of his cases in pencil or in ink on the backboard. This signature, particularly when in pencil, is often quite faint so it is worth looking carefully. During his years in business, probably 21, he must have made hundreds of cases, only a few marked cases have been seen so it seems he did not regularly sign his work and many survivors are unrecognised. During this period there were two clockmakers in the town, Christopher Howard who moved to Danington from Boston around 1835 and James Mead who was in business there from c.1840-66. Presumably these two would have used Stanton's cases and he would, no doubt, have supplied the Boston and perhaps Seaford clockmakers also.

The case illustrated here was made for the Boston clockmaker Thomas Dickinson who was trading in the Market Place up to c.1828. It has many of the local features i.e. the wedge between the scrolls of the mahogany veneered hood, the cross banded trunk door, the top of which has the usual concave corners and a mahogany impost above, the curved trunk corners with string inlay etc. What is different is the face which, instead of being a cross banded oak board, is a fluted/fielded panel with quadrate corners. The half bell remnant of the curved stringing above the arch is a different and pretty feature.



Clockcase by Baxter Stanton of Danington for Thomas Dickinson of Boston c.1825.



The ink signature on the backboard.



Detail of the top of the clockcase hood.



The face of the Baxter Stanton case (the fluted panel with quadrate corners).

John Summerscales of Lincoln

John Summerscales was born in Lincoln in 1781 and was apprenticed in 1798 to Lincoln joiner, cabinet maker and upholsterer William Curtois and was later transferred, in 1802, to his widow Mary and son Charles. John was married in 1805 to Ann Usher, possibly a relation of the Usher family of cabinet and clockcase makers. He took on an apprentice cabinet maker in 1809.

Numerous clockcases with the paper label lettered "J. Summerscales Cabinet and Clockcase maker Lincoln No..." have been recorded. Most of the cases recorded are similar in style and of the period between c.1805 and 1830.

The case pictured here is typical of his work, the upper part of the hood is veneered with mahogany with a scratch moulded line following the break arch. (Nearly all these scrolls have warped backwards due to the shrinkage of the horizontal grain of the pine backing). A long cross banded trunk door with concave top corners and central shell inlay together with a cross banded oak base with vertical grain is usual.

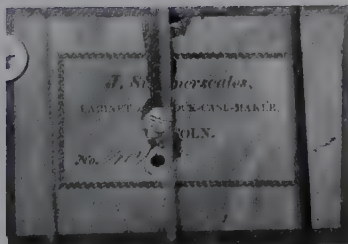
An alternative design has a simple chamfered door top and the trunk corners with a beaded edge and cross banding.



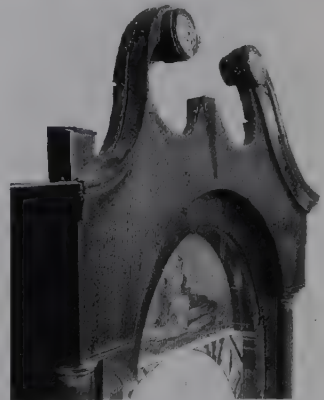
Detail of the trunk canted corner



An alternative door top and trunk corner style on a case for S.Peacock of Lincoln.



Summerscales label pasted to the backboard (unfortunately someone put a screw through the middle!).



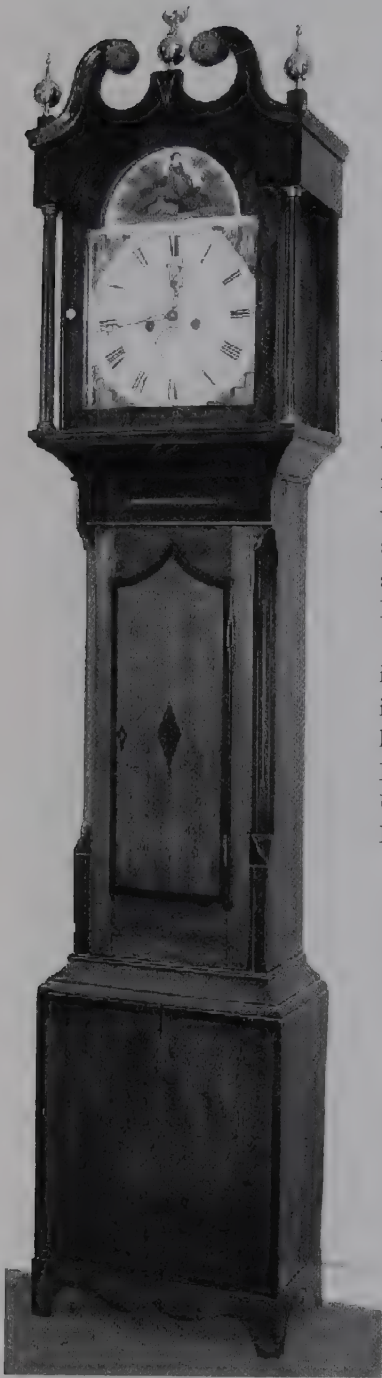
Note the simple scratch moulded line around the arch and how the scrolls are warped slightly backwards.

Oak case with mahogany details by John Summerscales of Lincoln, No. 481, for John Hargraves jnr. of Sleaford c.1815.

(Courtesy Gershom Partington Collection, Bury St. Edmunds)

The Usher family

James Usher of Lincoln

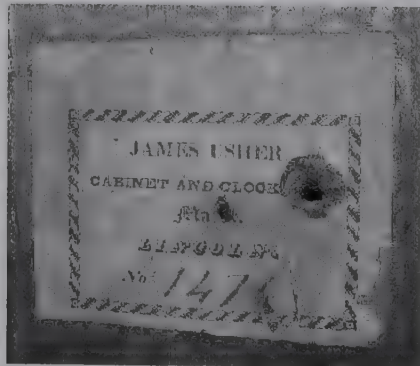


James the second son of John and Elizabeth Usher was born in 1788 at Lincoln. It is not known to whom he was apprenticed but he first appears in business in The Drapery in St. Martin's parish Lincoln in 1808. He married Ann Otter in December 1809. Ann was the daughter of Edward Otter a cabinet maker in Lincoln. Another of Edward's daughters was married to Henry Blow who was also a clockcase maker during this period in Lincoln; their cases are very similar. Although there is no documentary evidence it is possible that both James and Henry learned their trade from their father-in-law Edward Otter.

These cases are quite distinctive, usually of oak with mahogany cross banding. No doubt depending on price, some further embellishment such as veneered and inlaid canted corners, a mahogany impost above the door etc. was provided. The disc and line stringing are a feature of many of the cases which usually have a trunk door-top with hollow corners (concave) or sometimes coming to a single point. James was capable of very high quality work as is instanced by the fine mahogany case for the clock by Benjamin Parr of Grantham featured elsewhere.

Numerous examples of his work have been seen, identified by a printed paper label pasted on the backboard inside the case. Two versions of label were used, one lettered "J. Usher, Cabinet & Clockcase Maker, LINCOLN." and another, probably later, "JAMES USHER. CABINET AND CLOCKCASE MAKER, LINCOLN No."

Often the label is numbered in ink but not always and sometimes the number is illegible. Not all his cases are labelled. No doubt some have lost their labels but his work seems to have been confined to longcase clocks and occasionally tavern style wall clocks



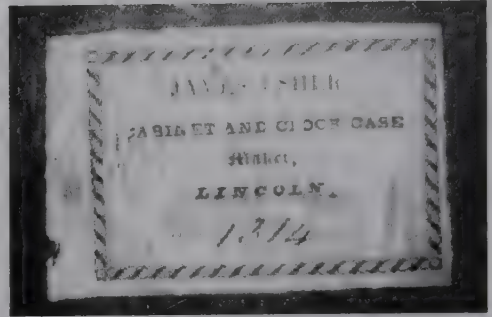
Clockcase by James Usher No. 1476 for R. Wilson of Lincoln c.1830.

Over a dozen clockmakers within about a 30 mile radius of Lincoln are known to have used his cases. The following list of clocks has been compiled by Roy Ellis, Dr. Stuart Walker, Brian Loomes, myself and others. There are undoubtedly many other existing examples which we would be pleased to record.

Label No.	Clockmaker	Town	
??	Robert Bunyan	Lincoln	
45	John Hall	Alford	
568	Thomas Saltby	Grantham	this case must date prior to his death
in 1835			
573	John Hall	Sleaford	
576	Benjamin Parr	Grantham	this case must date prior to his death
in 1830			
	Benjamin Parr	Grantham	
593	Penistan	Horncastle	
688	Benjamin Parr	Grantham	
793	????????		
936	W. Hewson	Lincoln	
963	Thomas Wigglesworth	Caister	
990	William Foster	Lincoln	
1040	Sampson Allkins	Horncastle	
1049	Blades	Horncastle	
1065	John Pearson	Louth	
1067	Chas. Dexter	Market Rasen	
1088	Wiggleworth	Caister	
1147	now with an anonymous brass dial		
1167	Chas. Dexter	Market Rasen	
1179	Hewson	Lincoln	
1263	William Hewson	Lincoln	
1264	Tomlinson	Horncastle	
1274	????????	Lincoln	
?275	John Pearson	Louth	
12??	John Pearson	Louth	
??21	John Pearson	Louth	
?232	William Green	Grantham	
1311	Allkins	Horncastle	
1314	William Green	Grantham	
1372	William Green	Grantham	
1409	J. Western	Wragby	
1451	Joseph Hall	Alford	
1476	R. Wilson	Lincoln	
1478	J. Western	Wragby	
1489	Wigelsworth	Caister	
1655	J. Western	Wragby	
1665	Jas. Usher	Lincoln	
1695	now with a married dial and movement		
1728	James Swinger	Grantham	
1918	John Tomlinson	Horncastle	
21?6	John Pearson	Louth	



The oak and mahogany clock case pictured here was supplied to William Green for a 30 hr. arch dial clock of c.1830. The mahogany veneered scrolls of the hood, the canted trunk corners with disc-and-line inlay and the diamond in the centre of the door with a single point top are all typical of the Usher style. It is missing its bracket feet and hood-top details.



Case with its paper label No. 1314 by James Usher of Lincoln for a 30 hr. clock by William Green of Grantham. (Courtesy Grantham Museum)

Overall height 79"
Dial 12"
Trunk 13 1/2" w x 6 1/2" d
Door 8 1/2" w x 23" h
Base 17 1/4" w x 18" h

The disc and line inlay of the canted corners.

James and Ann had several sons; George b. 1810, William b. 1813 and John b.1815 all of whom went into woodworking trades. James is included in the census of 1841 listed as a cabinet maker living in the Drapery together with his wife Ann, a daughter Harriet a 20 year old Dressmaker, a son Robinson, an apprentice coach maker and another son, Charles, aged 13. Although James is included in White's directory of 1842 it seems likely that he is the James Usher whose death is recorded in the registers on 4th Dec. 1841.

His wife Ann is recorded in the 1851 census as a 60 year old widow, still living in the Drapery and described as a publican, together with her son Charles, now described as a bricklayer. Her now married daughter Harriet with her husband and their two children are included in the household. Ann continues to be listed in the directories of 1849 and 1855 as a beer retailer. The Drapery is a narrow lane which runs parallel to the west of The Strait in an area which appears to have been a mixture of artisan dwellings and workshops.



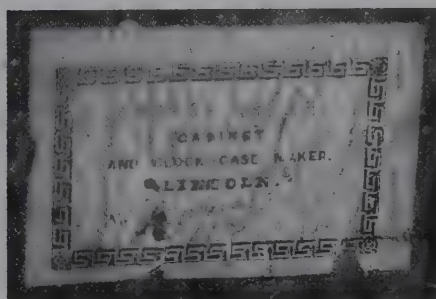
A mahogany veneered case made by George Usher for his cousin clockmaker James Usher. c. 1840.

George, the son of James and Ann Usher was born in 1810 (the 'Robinson' Christian name came from his paternal grandmother) and was married, in 1832, to Elizabeth Taylor. He followed his father's trade as a clockcase maker and probably worked in partnership with him until his father's death in 1841.

He continued in business using his own label. His cases are similar to those of his father and many of the clocks made by his cousin James Usher II are housed in his cases. George died in 1859 at a time when the longcase clock was declining in popularity. Although his son John, born in 1835, had been apprenticed as a cabinet maker we have no evidence of him making clockcases.



Detail of the hood showing the disc and line inlay.



The label of George Usher.

Henry Usher

Market Rasen

b.1816, trading c.1845

Henry was the nephew of the Lincoln case maker James Usher. The Lincoln Apprentice Registers record the apprenticeship in 1830 of Henry Usher, son of Richard of Bulwell, Nottinghamshire to John Brumby of Lincoln cabinet maker and upholsterer. He later established his business in the town of Market Rasen some 7 miles north of Lincoln. Several clock cases by him have been recorded with the printed paper labels of H. Usher Cabinet and Clockcase Maker, Market Rasen. Two of these were for John Western of Wragby, one of them numbered 70, another number 86 now has a later anonymous Edwardian brass dial. This oak case has inlaid broad mahogany cross banding, mahogany impost and canted corners with concave corners to the top of the trunk door. All very much in keeping with similar cases by other members of the Usher family.

Henry would have been free of his apprenticeship about 1845, maybe he worked in the Lincoln workshop of his relations for a while before setting up in business at Market Rasen.

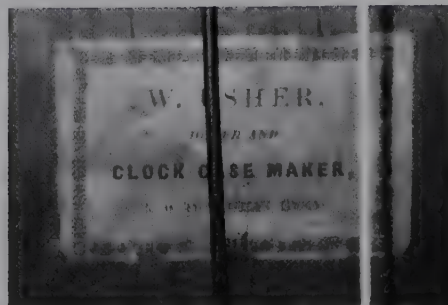
John Usher

Another son of James and Ann and brother of George and William was John, born 1815. He was also a cabinet maker included in the census returns of 1841, 51 and 61. there is no evidence of him labelling his work - perhaps he worked with his brothers. He lived at various addresses, Motherby Lane in 1841, St. Michael's Terrace in 1843, 29 Holland's Row in 1851 and 21 Pelham Street in 1861. In Kelly's directory of 1868 he is still at Pelham Street but now listed as a boarding house keeper.



Another son of James and Ann Usher was William b.1813 who also traded as a joiner and clock-case maker. He used a printed paper label giving his address as 19 Maud Terrace, Lincoln. He and his family are included in the 1851 census at home at Motherby Hill when he is described as a 34 year old carpenter and joiner, which suggests that case making was only part of his woodworking skills. Also in the house was his wife Elizabeth and two children as well as 3 male lodgers, one of whom was a joiner.

The case pictured here was made for his cousin, clockmaker James Usher, and is in the collection at the Usher Gallery, Lincoln. Note the somewhat wider cross-banding, the turned columns and alternative door top. Several other clocks by James have been recorded in William's cases.



An 8 day longcase clock by James Usher housed in a labelled case by William Usher. c.1840. (Courtesy the Usher Gallery Lincoln).

Other Usher family members

Whilst they are not cabinet or clockcase makers we ought to mention here two other members of the Usher family, James II and his son James Ward Usher, son and grandson of Richard and Millicent Usher.

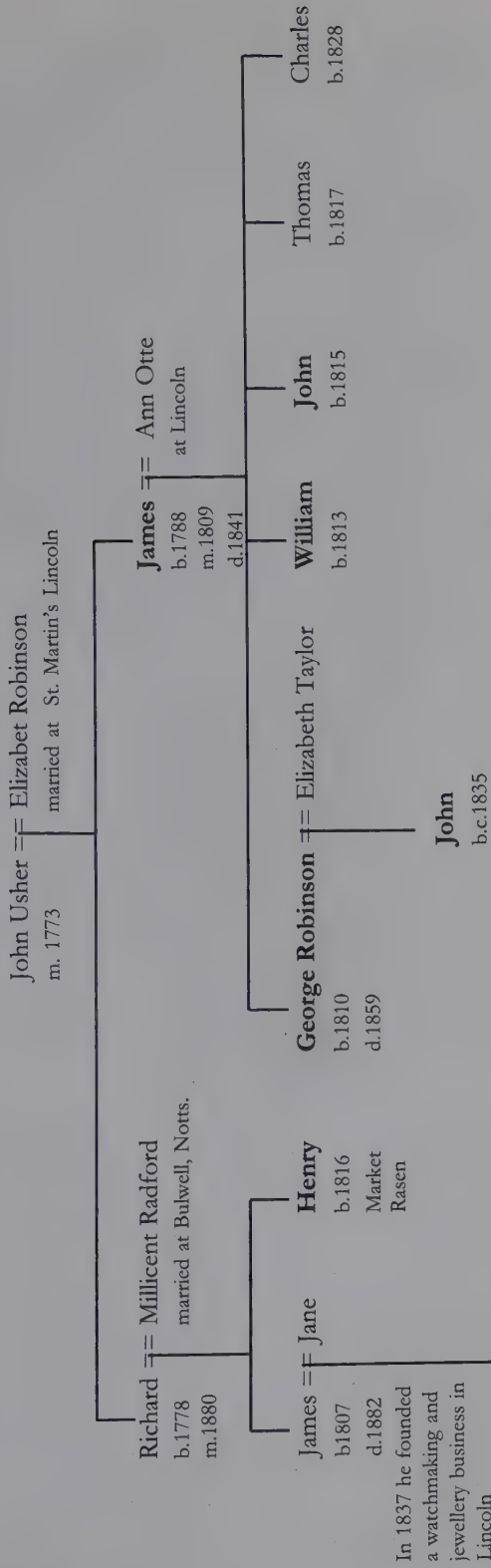
James II was born at Bulwell in 1807 moving later with his family to Lincoln. He set up in business as a watch and clockmaker and jeweller in 1837. He would have presumably served an apprenticeship in the trade although it is not known where or with whom. It is said that having no money to acquire stock he used his own watch to display in his shop window, initially at Swanpool Court. By the time of the 1841 census of he is at 28 Silver Street and in the Post Office Directory of 1849 he is at 317 High Street and at 192 High Street in 1855. He was in partnership with his son James Ward from 1860, retired in 1874 and died in 1882. Many watches and clocks have been recorded by him.

James Ward continued the High Street business very successfully. One of his many ideas which helped make his fortune was the marketing of the Lincoln Imp, a grotesque carving in the Cathedral, which became a famous symbol of the City of Lincoln used by a whole variety of tourist souvenirs from Osbourne's Ivorex wall plaques to brass door knockers. He was an avid collector and described his treasures in a privately published book which he illustrated with his own water-colours. This included a remarkable collection of decorative antique watches. When he died without an heir in 1821 he left his collections to the City of Lincoln together with his life savings, sufficient to fund the building of the wonderful Usher Gallery. It stands in a commanding position on Lindum Hill and houses his famous collections.



Lincoln City map showing the area where the Usher family lived and worked.

The Usher Family of Cabinet and Clockcase Makers



In 1837 he founded a watchmaking and jewellery business in Lincoln

Watchmaker, Silversmith and Jeweller founder of the Usher Gallery, Lincoln to which he donated his collections of watches and objet d'art

Notes (1). The members of the Usher family who were Cabinet and/or Clockcase makers are shown in bold type.

(2) I am indebted to Elizabeth Manterfield, a descendant of the Usher family, for help in compiling this family tree.

Wall Clocks

As we have seen elsewhere in this book, the earliest form of domestic clock in this country was in fact a wall hanging lantern clock which eventually developed into a floor standing cased clock. An alternative to this development was a clock with just the dial and mechanism enclosed in a wooden case with the weights and pendulum hanging below. These are usually known today as "Hooded Wall Clocks". They were obviously cheaper than a full longcase clock but they were not as popular. Examples do survive, usually of thirty hour clocks by 18th century country makers.

Another version was a wall clock with a long trunk which enclosed the weights and pendulum. This type of clock evolved with the development of the stage coach system in the early 18th. century which provided rapid transport on main roads maintained by toll charges. A change of horses was required every 15 to 20 miles which led to the provision of Coaching Inns with stabling. A large semi-public clock was required to enable the ostlers to prepare a set of fresh horses at the right time. These clocks had large wooden dials and were usually hung high up on the wall and were generally of 8 day duration time pieces, i.e. no striking. With numerous coaching stages on the major routes these clocks must have been made in considerable numbers by local clockmakers. The introduction of the tax on clocks and watches in the late 1790s probably did increase their use by other local public houses and businesses to enable the now clock-less inhabitants to check the time. They are often referred to as "Act of Parliament Clocks". It is a fanciful name as the style was well established before this period and the clock tax was abandoned the following year. "Tavern Clock" is a more appropriate name for these clocks. The golden age of the stage coach system was eventually brought to a close by the coming of the railways in the mid 19th. century and the coaching inns were rebuilt as hotels. This type of clock was not particularly suitable for domestic use so their survival rate today is poor.

These clocks underwent some design changes during the 18th century. The early ones had large unglazed shield shaped dials often in black or coloured lacquer with gilt Roman numerals and the trunk doors decorated in the Chinese style or sometimes with a varnished and coloured engraved print. Later ones had round dials sometimes white with black numerals. No doubt both the George and the Angel Inns in Grantham would have had similar clocks during the coaching era but they are now lost. The nearest one at the present time is in the restaurant at nearby Belton House, with a round black dial and a mahogany trunk was made by Wm. Thomas of Lincoln c.1780. Another survivor, by John Wilson, is illustrated elsewhere in this book..

A further development of this type of clock was a more domestic version with 12 or 14 inch painted iron dial with a turned wooden bezel and a slim trunk, usually of mahogany, to house the weights and a one second pendulum. They were popular with the clockmakers of Norwich and are commonly known today as "Norwich Clocks". In other parts of the country weight driven wall clocks, more or less similar to a longcase clock of the period but without the base were produced. They were often found in the lofty kitchens of country houses and one can be seen in the old kitchen at Belvoir Castle made by Pearce of Grantham c.1840. Another example by Pearce, also one by Thos. Saltby of Grantham, are illustrated elsewhere in this publication. A little later the newly established Railway Companies, who needed an accurate and reliable clock, adopted a similar style of clock as their principal station timekeeper. To enable a meaningful timetable to be published these were kept at Railway Time i.e. London as opposed to Local time.



*Mid 18th. century Tavern clock by John Lee of Cookham
(Courtesy G.K.Hadfield)*



*A late 18th. century Tavern clock by William
Robinson of Lincoln, formerly in the Baptist
Meeting House, St. Benedict's Square, Lincoln.
(Courtesy The Usber Gallery Lincoln)*

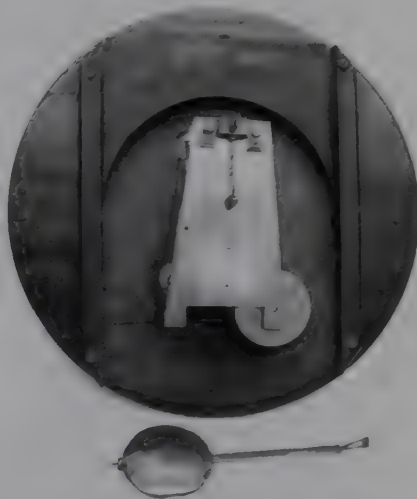
But the choicest spot in all Scotland-yard was the old public-house in the corner. Here, in a dark wainscotted-room of ancient appearance, cheered by the glow of a mighty fire, and decorated with an enormous clock, whereof the face was white, and the figures black, sat the lusty coalheavers, quaffing large draughts of Barclay's best, and puffing forth volumes of smoke, which wreathed heavily above their heads, and involved the room in a thick dark cloud. From this apartment might their voices be heard on a winter's night, penetrating to the very bank of the river, as they shouted out some sturdy chorus, or roared forth the burden of a popular song; dwelling upon the last few words with a strength and length of emphasis which made the very roof tremble above them.



The tavern clock in the 'public house on the corner, Scotland Yard, London' from "Sketches by Boz" by Charles Dickens, 1839.

The English Dial Clock.

Towards the end of the 18th. century wall clocks began to be made with 8 day spring driven movements. Initially a verge escapement movement with a fusée was used similar to that of 18th. century bracket clock but without any striking work. As they did not need a trunk to accommodate the weights and only had a short pendulum the whole of the mechanism could be housed in a box behind the dial and so the dial clock was born. The early ones used a silvered brass dial sheet covered with a glass in a cast brass bezel, often of concave section, in a very narrow wooden surround. The painted iron dial was quickly adopted, either flat or sometimes convex; 12 inch was the usual diameter although they were made in all sizes from 6 to 24 inches.



Dial clock by Wm. Hunter of Clapham c.1780. The very narrow dial surround to the 12 inch convex painted iron dial, the heavy cast brass bezel of concave section, the hands similar to those of a late 18th century longcase clock and the movement with "A" shaped plates are all typical of early dial clocks. The movement originally had a verge escapement but was converted, as many were, to anchor at a later date.



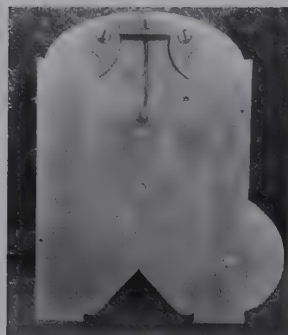
This Dial clock c.1790 has a 15 inch convex painted iron dial, it retains its original verge escapement and a passing strike arrangement i.e. one blow on the bell on each hour.

The verge movement was soon replaced by one with an anchor escapement but still retaining the fusée. The retention of the fusée, necessary for accurate timekeeping with a verge movement which was sensitive to the driving power, was not needed when using an anchor escapement but such was the conservatism of the English makers it continued in use into the early 20th. century.

This style of wall clock proved very popular and was adopted by the railway companies for their waiting rooms etc. and used extensively in schools and offices. For domestic use a more decorative case was offered with a longer pendulum housed in a short trunk sometimes with a glazed aperture through which the pendulum bob could be seen. These are commonly known as "drop dial" clocks.



A 12 inch Drop Dial clock c.1820 by Stevenson of Nottingham (app. 1805 rtd. 1841). The mahogany veneered 'drop' case with inlaid brass stringing and fan shaped 'ears', the slim Roman numerals of the convex painted iron dial and narrow dial surround, are all typical features of early 19th century dial clocks.



The anchor escapement movement of Stevenson's clock now has shaped rectangular plates.

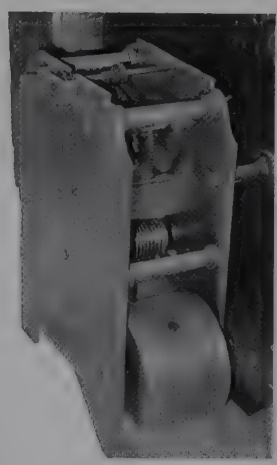


An 8 inch dial clock by Jno. Walker of London, a prolific maker and supplier to many of the Railway Companies c.1870.

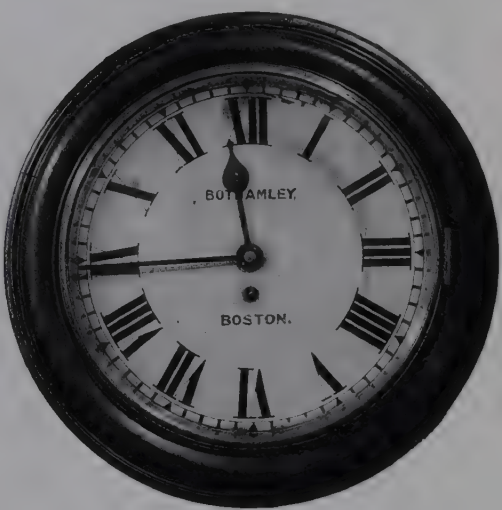
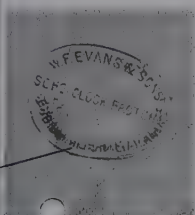


A drop dial clock by Wilkinson of Leicester in a mahogany veneered case, a style popular in the mid 19th century.

As the 19th. century progressed the dial surrounds became wider and more decorative, sometimes octagonal with inlay of brass, pewter and mother of pearl. Rolled brass bezels began to replace the earlier cast brass type.



An 8 day English drop dial clock with octagonal dial surround inlaid with brass and pewter c.1850. Note the rectangular movement plates with shaped top corners, typical of the period.



12 inch fusée dial clock c.1900. Note the wider turned dial surround and the movement pillars now screwed to the back plate. Although the dial is lettered for the old established business of Bothamley of Boston, it uses a bought-in movement made at W.F.Evans & Son, Sobo Clock Factory, Birmingham, England; their stamp can just be seen between the plates.

Whilst the late 18th and early 19th century clocks of this type were probably locally made the majority of the later ones were in fact bought in more or less complete from, usually anonymous, workshops in London or Birmingham. They were standard stock for all the 19th. century clockmakers and the name on the dial was merely an advertisement for the business. The 8 day English dial clock was produced well into the 20th century and is still popular in the antiques trade today. There are accurate reproductions made and imported into this country from the Far East, often with well known London makers' names on the dial. (buyer beware!).



*An 12 inch 8 day English fusee dial clock
with inlaid lettering made for the
Methodist Chapel at Branston, near Lincoln.*

This is an unusual dial clock made as a Watchman's clock or Noctuary. This type of clock was in use in the late 18th century by owners of large houses who employed security staff to patrol their property at night. They are to be found in most country houses, Belton House near Grantham has two, weight driven versions, made by Whitehouse of Derby.

The inner brass dial, which revolves in 12 hours, has projecting radial pins at half-hourly intervals, pulling the cord depresses the pin appropriate for that time. This enabled the butler to check the following morning that the watchman was at that place at a that time thus ensuring that he was doing his job. The pins were automatically reset after 12 hours. They were used later in the 19th. century in factories at several points to check that the night watchmen were doing their rounds conscientiously.



*A Noctuary or Watchman's clock, in the form of a
dial clock c.1870. (Courtesy Castlegate Clocks, Grantham)*

The German clockmakers soon realised the popularity of the dial clock and produced a similar looking round dial clock with a mahogany surround, but as these used their traditional wooden framed weight driven movement with a long pendulum they did not appeal to the commercial market.



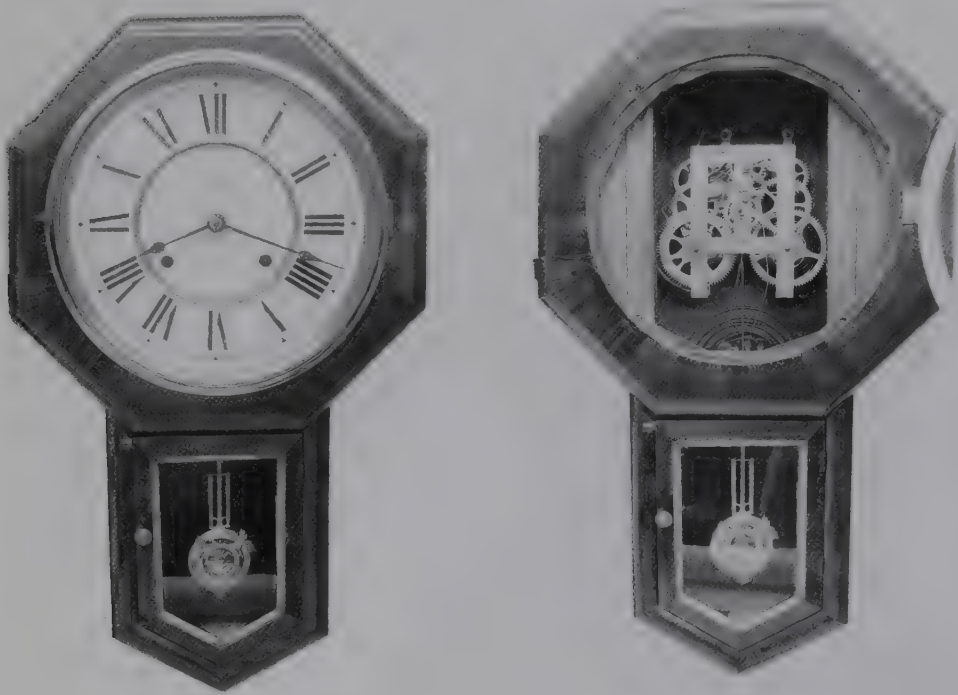
A Black Forest drop dial clock, the octagonal dial surround veneered in mahogany and rosewood with brass inlay and a 9 inch wooden dial. The 30 hour striking movement is a spring driven version of their traditional wooden framed weight driven clock. c.1870.

Courtesy Castlegate Clocks.

Around the 1860s they produced a copy of the English drop dial clock fitted with a spring driven version of their wooden framed movement. The fact that it contained very little costly brass enabled them to market this much cheaper than the English clocks with their heavy brass fusée movements.

At about this time the American makers produced their version of the drop dial clock fitted with their own spring driven, usually striking movements. These movements were considered to be much inferior to the English movement but nevertheless worked well and were of course much cheaper and appealed to the working class domestic market. Their cases used attractive veneers, some of the inlaid marquetry cases were made in this country but used the imported American movements. Their dials were often lettered for the English retailer but can be readily distinguished from the English clocks as the American movement only required a case depth of about 3 1/2 inches whereas an English fusée clock needed a case usually 4 1/2 to 6 inches front to back. Again these clocks became an important part of the stock in trade of most of the 19th century clockmakers.

Although the clock illustrated has an all brass movement, the skeletonised plates and the wheels were made from rolled brass, much thinner than in English movements. These American movements were factory made in large batches at a fraction of the cost of the English product.



An 8 day American drop dial clock c.1880. (shown also with the dial removed). The 10 inch printed card dial is lettered for J. Turner of Penrith although the clock was made by Wm.L. Gilbert Clock Co., Winsted Conn. U.S.A. (1871-1934).

In some cases the movements alone were imported and cased here in England by companies such as the Anglo American Clock Co. and Holloway & Co.; examples of this type of clock are illustrated elsewhere in this publication.

Bracket Clocks

The term bracket clock is something of a misnomer which stems from the fact that occasionally this type of clock was supplied with a matching wall bracket. The majority were not but the name, peculiar to the British, has stuck. In other countries they are called mantel clocks, shelf clocks or table clocks. They are in fact spring driven clocks, semi-portable, so they usually have handles, for carrying from one room to another or when supplied with a fitted carrying box, from one's town residence to one's country house. They date from the late 17th century through to the 19th century. As they were expensive they were, certainly in the early years, very much restricted to the so called 'polite' furniture of the upper classes and usually supplied by the London makers. They followed much the same material use as the longcase clocks of the period i.e. black ebonised veneers, marquetry inlay and then lacquer finishes followed by walnut and mahogany veneers changing from brass to painted dials at similar times. They did differ in that they continued to use the verge escapement in preference to the more modern anchor escapement because this, with its wide angle of pendulum action was more able to tolerate differences in level when moved from place to place. Later many were converted to anchor escapement when they needed repair and the need to move them became less necessary. As already mentioned, they were not really the stock of the provincial clockmaker until the 19th century when we do find some examples supplied by local clockmakers; even then they were often sourced from London suppliers.



An ebonised bracket clock by "Charles Gratton in Fleete Street" with a 6 1/2 inch brass dial c.1690.

There is one maker we can be excused in mentioning and that is Charles Gretton who became a very eminent London clockmaker along with some other late 17th and early 18th century London makers like Tompion, Graham and Knibb who all became famous and rich. We can claim some affinity because he was born in Claypole, between Grantham and Newark and was apprenticed in London. He did not forget his village origins as he founded a charity to enable the premium to be paid for the apprenticeship of boys from more humble origins.

Some of these clocks were quite complicated, striking the quarters and playing hourly tunes on multiple bells. The Georgian ones usually had elaborately engraved back plates although this declined in Victorian times to just an engraved border. Below is a selection of the most popular styles from late 17th to the late 19th centuries.



Ebony and gilt brass basket top bracket clock c.1700



Inverted bell top bracket clock with bracket c.1730



Bell top musical bracket clock c.1777



Ebonised arch top elaborated bracket clock with anchor escapement c.1805



Mahogany arch top bracket clock with brass inlay c.1815



A mahogany bracket clock with painted dial and anchor escapement c.1825

A selection of London made Bracket clocks. (All photographs courtesy of Southeby's, London).

Clocks from the Black Forest area of Germany

As the industrial revolution gained pace in the late 18th century the population of the town of Grantham increased and with it the demand for clocks. By 1800 the town was supporting three clock makers. Whilst these were capable of supplying the emerging merchant and business classes, they were not equipped to supply the increasing demands of the working classes who needed a cheap clock to regulate their working day. In this country, during the previous hundred years, the development of time keepers had led to us becoming the leading nation for quality and accuracy of timekeepers with a high reputation throughout the world. But English makers were not interested in making anything cheap to satisfy the lower end of the market and were happy to allow the clockmakers from the Black Forest to sell their clocks here.

Germany, of course, had a long tradition of clockmaking. Indeed the very earliest domestic clocks came from Southern Germany but these were expensive and the prerogative of the rich. However, in the Black Forest region a very simple type of domestic clock had evolved which tradition tells us was made by the farmers as a winter occupation when their land was snowbound. There had been a long tradition of wood carving in the area so the making of the various parts did not present any special problems. It was a wall hung, weight driven clock made primarily of wood and iron wire. Metals were scarce so the early clocks had wooden wheels and glass bells but by 1790 Hoffmeyer of Neustadt established a brass foundry and brass wheels mounted on wooden arbors came into general use. By the later part of the 18th century it had developed into a cottage industry with several families specialising in making particular components which were then collected and assembled into a complete clock. These families by this time were probably not principally farmers but more likely the younger sons of farmers who, due to the land inheritance law which favoured the eldest son, were left as small holders needing an alternative source of income.

Having satisfied the local demand they began to sell their clocks in the adjacent countries. They were sold directly to the customer by family members who shipped a case packed with clocks to the selected town and were then assembled and hawked door to door by these itinerant clock sellers. The German clock seller, dressed in knee breeches, a wide brimmed hat and umbrella with a selection of clocks carried in a frame on his back and one on his chest, pinging its bell as he walked the streets, became a folk figure of German culture.

Britain was the most prosperous country in Europe in the late 18th century and soon became their most important market. They sold their clocks in their usual fashion of direct marketing, having family members as agents in England to receive the cases of clocks from the packers in Germany. The weights would have been cast locally and the assembled clocks then distributed to the various towns and villages where the traditional peddlers sold door to door. They penetrated every city, town and village and the German clockseller was as familiar in this country in the late 18th and early 19th centuries as the 'Bettaware man' or the 'Kleeneze man' was to our parents a hundred years later. The word Deutsch (for German), perhaps when uttered with a heavy German accent, was misunderstood and these clocks became universally known as "Dutch Clocks."

The Black Forest clockmakers combined their skills of making carved wooden toys with those of clockmaking and made clocks incorporating a wide range of moving figures or automatons. They also used their knowledge of making table organs to make musical clocks which could play tunes by using mechanically operated bellows to blow miniature organ pipes. The simplest of these had an articulated bird which imitated the call of the cuckoo and so about 1730 the cuckoo clock was born.

Many of these novelty clocks had figures of men striking the bells, others had quite complicated scenes of people playing musical instruments etc. and some had most unusual subjects such as the beheading of John the Baptist!

In 1792 a Mr.

Hoffmeyer, from the Black Forest area of Germany, was touring this country with a collection of these automaton and musical clocks setting up in each town for a night or two and charging admission to view the collection. After Grantham Fair he went on to Boston, then Tattershall Fair followed by the towns of Spalding and Sleaford and thence to Newark Fair on Whit Tuesday. One can imagine they must have aroused quite a lot of interest among the 'Ladies and Gentlemen' who paid their shilling. 'Others', who were let in for sixpence were, no doubt, equally impressed. The primary purpose was, of course, to sell his stock in trade of the cheaper cuckoo and alarm clocks.

The cuckoo clock became universally popular and was, and still is, sold throughout the world. In this country it was thought at one time to be a product of Switzerland but this was a mistaken belief brought about because, after the upheaval of the first world war, they were imported into this country via Switzerland to avoid the prejudice against German goods. We should, however, acknowledge that the village of Brienz in central Switzerland was a centre of wood carving and it is likely that they did supply some of the carved clock cases.

MUSICAL CLOCKS,

To be SEEN, or SOLD.

Mr. HOFFMEYER, from GERMANY,

The Proprietor of those much-admired Pieces of Art,

The Harmonious and Musical Clocks,

RESPECTFULLY informs the Ladies, Gentlemen, and the Public of STAMFORD, that they are now open for Inspection in a commodious Room at the SWAN-AND-TALBOT INN, and will continue till Saturday Evening; when they will proceed to GRANTHAM FAIR.

The universal Satisfaction which these beautiful and unrivalled Pieces have given to all Denominations of People, as well as to the first Artists in the Kingdom, will, the Proprietor hopes, be a better Recommendation to the Notice of the Public, than any Description he can give of them in an Advertisement. Indeed, to describe them in any tolerable Degree, is impossible;—they must be seen to be adequately conceived.

Amongst other PIECES, are,

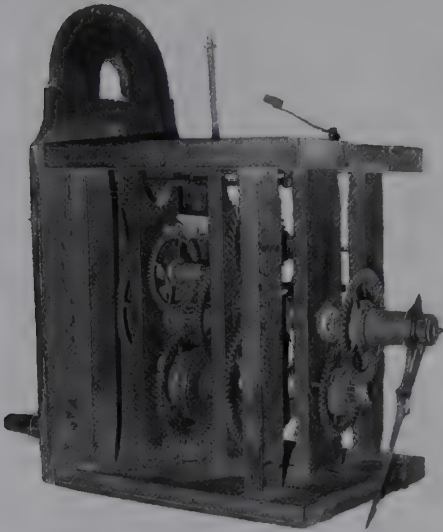
- 1 A Representation of his Majesty's Royal Horse Guards doing Duty at St. James's.
- 2 A Representation of the Foot Guards on Duty at Carlton House.
- 3 A Cock crowing.
- 4 A Sexton ringing a Bell for Divine Service, also shutting the Church Doors.
- 5 A Chimney-sweeper and his Boy at the top of the Chimney, crying out, " Sweep, Sweep;" a most curious Piece of Machinery.
- 6 The Beheading of John the Baptist, with Herodius's Daughter holding the Charger to receive his Head.
- 7 The four Evangelists, Matthew, Mark, Luke, and John, striking the Quarters, with Death and Satan striking the Hour. This Piece of Machinery does Credit to the Inventor.
- 8 A Chime Clock that plays " God save the King;" with several other Tunes.
- 9 A Clock playing several Tunes on an Organ.
- 10 A Blackbird, } Each whistling several favorite Tunes.
- 11 A Thrush, }
- 12 A Clock representing the four Evangelists striking the Quarter, and a Turk striking the Hour.
- 13 A Representation of the Grand Signior meeting an Indian Queen at the Grand Masquerade. This far surpasses any Thing of the Kind ever seen before.
- 14 A Clock with a Figure representing the celebrated Mr. Hoffmeister playing on a Harpichord, with a Lady that claps him, Bravo!
- 15 A Clock representing the celebrated Mr. Handel playing on an Organ, Mr. Fisher and Parks playing on two Hautboys, Mr. Jones on a Harp, and a Lady on a Guittar.
- 16 A Clock representing the celebrated Metastasio playing on an Organ, the two Mr. Millars blowing two Trumpets, and two Attendants, one beating a Kettle Drum, and the other keeping Time. These are perhaps the most curious Pieces of Machinery ever exhibited in this or any other Kingdom.

With several other Clocks equally curious, but too tedious to enumerate.

N. B. He also sells all Sorts of Cuckoo and Larum Clocks, at the lowest Prices.

" * To be seen every Day from Ten in the Morning till Nine at Night.—Admittance, Ladies and Gentlemen 1s. others 6d. which, on a Purchase, will be returned.

Black Forest clocks were sold in large numbers in this country from the late 18th. century until they were eventually challenged by a more sophisticated, but again cheap, type of clock imported from America around the mid 19th. century. Surprisingly, there seems to have been very little objection from the British trade to these imports or their direct marketing system. When William Pitt was introducing a series of taxes in the 1790s to raise money to fund Britain's wars with France, the tax on clocks and watches specifically excluded clocks made principally from wood. This must have been particularly galling to the English clock and watchmakers as this tax very quickly bought their trade to its knees. Thousands of clock and watchmakers were thrown out of work and they had to pawn their tools to buy food. After a year such was the extent of distress caused that the tax was abolished but charities had to be founded to raise money to help the workmen redeem their tools from pawn.

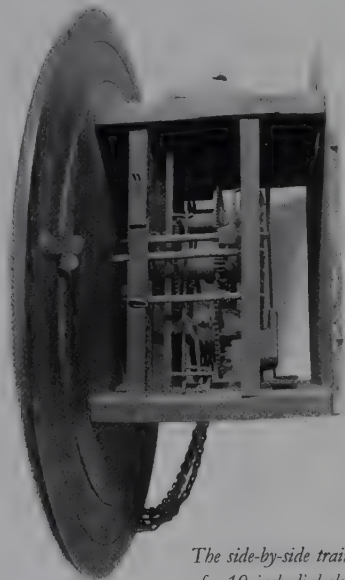


Typical late 18th. early 19th. century Black Forest movement.

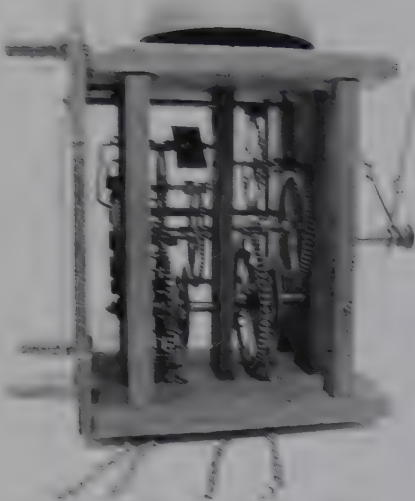
The movement pictured here is typical of the type used for clocks sold in this country. The early movements used cords for the driving weights but the invention of a chain making machine in the early 19th. century encouraged the use of chains. The frame was made of beech wood, the brass wheels were mounted on wooden arbors with iron wire lantern pinions and the pivots provided by pins driven into the ends of the arbors. They ran in rolled brass bushes in the wooden 'plates'. The wheels were arranged vertically between the three wooden plates, with the striking train at the rear and the going train at the front. The movement was provided with side doors made of thin fir wood with wire hinges and latches and usually covered with marbled paper. As well as keeping the wheel work free from dust. They also braced and helped prevent the frame from sagging under the influence of the driving weights.

The movement did undergo some design changes. The two trains were moved to be side-by-side instead of end-to-end which helped reduce the tendency of the frame to sag.

By the mid 19th. century Black Forest clocks were under pressure from the imported American clocks with their all metal brass movements. In an attempt to disguise their still wooden movements, the German makers painted the wooden wheel arbors with metallic paint. A version with a round dial with a mahogany surround in imitation of the English Dial Clock was made specifically for the English market and was popular in the cottage homes of the working classes. It featured frequently in the engravings by Phiz in the novels of Charles Dickens and in contemporary paintings of cottage interiors.



The side-by-side trains of a 10 inch dial clock.



Back view movement with all main structure



The final form of the wooden framed movement of a Postman's alarm clock c. 1900.

The final form of this type of clock was a simple version of the traditional wooden framed wall clock with just a going train and alarm. They were known as 'Postman Alarms' no doubt because they were popular with postmen who needed to be at work very early. These continued to be made up to the time of the First World War. The one pictured here is typical with a 7 inch enamel dial with a pink chapter ring and a surround of stained beech in imitation of mahogany.

They eventually changed to all metal wheelwork as in the movements pictured here. This type of movement was used with a variety of wooden and sometimes reverse painted glass dials. As well as the round dial mentioned previously, a version with an octagonal dial surround sometimes decorated with poker work or with inlay of brass, pewter and mother of pearl was popular. The break arch dial, known as a 'schild dial', painted with flowers in the corners and arch was another style more popular on the Continent. Many examples of this type of dial, being unsupported at the edge, have warped and split. A variant of the arched dial had curves on all its edges. Most of these clocks were of 30 hour duration but key-wound eight day versions were made. All of these types were made in several different frame and dial sizes from miniatures with 4 ins. dials up to those with 12 ins. dials.



Postman Alarm clock c. 1900 imported and marketed by E. Lacey & Co. London



INSTRUCTIONS.

Put the Pendulum and 2 pieces into the case and hang the case up.

Slide the Pendulum into the top of the back of Clock and fasten the same in its place by the screw at the side of the Case. Adjust the same so that the Pendulum hangs the most farthest from the wall.

Put the Pendulum in a perfectly straight and continue to swing.

If the Clock does not swing at the bottom of the Pendulum, put the screw at the other side; if it swings wide it downwards.

TO SET THE ALARM.

Put the small Brass Bar to the right for the same distance as you would wish to set the point at the back of the case and slowly adjust the time on the Brass Bar until the Alarm is set to off.

Place the Lever in the position of going to bed, and take it off when the alarm is to be in the MORNING.

WARRANTY.

This Clock is warranted for 20 years and will be kept in repair free of charge during that time unless damaged by accident or misuse.

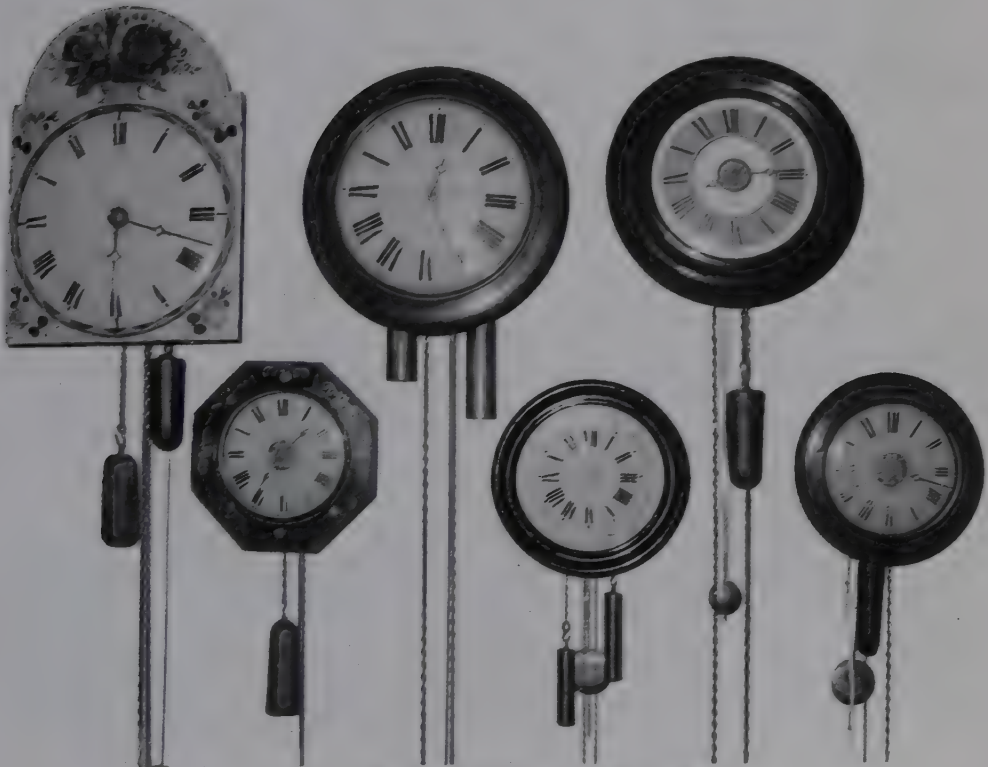
IMPORTANT.

When it is necessary to return the Clock send it by Parcel Post, not by rail, and DO NOT return the Weights and Pendulum.

ORDERS TO BE SENT TO

T. LOVEJOY,
114, Broadway WIMBLEDON, S.W.10.

Typical marbled paper covered side doors and a paper label stuck to the backboard of the Postman alarm clock pictured on the previous page.



A selection of Black Forest wall clocks c.1800 to c.1900

In the early half of the 19th. century Germany was heading towards serious political upheaval. The country was in fact a collection of independent kingdoms which, after the revolution in France, had been brought into a loose confederation of 38 States by the Congress of Vienna of 1815 with a view to preventing events such as had happened in France. There were 35 ruling Princes under the leadership of the Prince of Austria. But it was a repressive regime and unpopular from the start.

Eventually growing discontent with the political and social order resulted in the revolution of March 1848 which involved all the German States. An armed uprising in Baden, which included the Black Forest area, was ruthlessly suppressed by the Prussian army and the leaders either executed or imprisoned. Up to a third of the population left the area many, going to America. Some of the clockmakers who had spent most of their working lives in England decided to settle there and become British citizens.

Finally, after years of further unrest the German Empire was established in 1871, this time without Austria, with the Prussian King Wilhelm 1st. as Emperor, and more settled conditions prevailed. All this was happening whilst their British market was facing intense competition from the imported clocks from America resulting in the German suppliers losing most of their British market. In the following years they devised several strategies to reclaim their market share.

What was previously a cottage industry was reorganised to become factory based. To compete directly with the Americans, some of the Black Forest makers, particularly Junghans, went to America to study their factory system of making clocks with brass movements. Suitable machinery was purchased and set up in purpose built factories which made clocks virtually identical to the American models. They were not shy about this and, in fact, referred to them as "American Clock Factories".

The carved cuckoo clock was a unique product and had continued to sell well. To maintain these skills a School of Wood Carving was founded at Furtwangen and several families specialised in the production of these types of clocks.

The weight driven wooden framed movement continued to be made, albeit in lesser numbers, in the form of the Postman's Alarm which continued to sell in this country. A miniature model with a porcelain dial, known as a Jockele after its maker, was introduced. Other models, more popular on the Continent than here, used the wooden framed movement housed in a larger case, some with a reverse painted glass picture dial or with an ebonised case with an enamel dial flanked by porcelain pillars in what was known as the Biedermeier style. A spring driven version of the movement was made which, for the English market, was housed in a drop-dial case probably made in this country.

Some of the German makers identified that there was a market, with an increasingly prosperous Middle Class customer in England, for a good quality mantle clock to adorn the Victorian mantelpiece. Taking an English fusée bracket clock movement as a model they produced a high quality, but factory-made version. Knowing the English preference of using a fusee for all spring clocks they incorporated this feature in many clocks for the English market including some of their cuckoo clocks. Because of their production methods they were able to undercut the English clock, still virtually handmade. Winterhalder and Hoffmeyer were particularly prolific in this field.

By the 1870s they had re-established a substantial share of the British market which they retained until the upheaval of the First World War. Their clocks were part of the stock in trade of the English clockmakers as well as being sold by the German clockmakers now resident in this country.



A selection of musical clocks with automaton of the type which featured in Mr. Hoffmeyer's travelling exhibition at Grantham in March 1792.



Clocks in packing cases at the clockmakers Joseph Meyer in Schonenbach being loaded to be sent to England.

Courtesy Deutsches Uhrenmuseum



A group of 'schild dial' wall clocks of various shapes and from 11 inches and smaller.



A picture clock with a reverse painted glass dial, a wall clock with repoussé brass dial surround and a Biedermeier style wall clock.



A collection of miniature porcelain dial wall clocks known as 'Jockeles'.

One of the most successful clocks of the later Black Forest era was the so called 'Vienna Regulator' which was a wall clock based on an Austrian design. These were made in several different specifications. Many of the weight driven clocks were worthy of the name Regulator and made to a high standard with dead beat escapement and maintaining power with a 3/4 second wooden pendulum rod to reduce temperature error. They often had a subsidiary seconds dial which although divided to 60 seconds in fact rotated in 45 seconds! Similar looking but cheaper spring-driven versions were made and sold in large numbers up until the time of the First World War.



Black Forest made, single weight,
Vienna-style regulator c.1880

C. H. BAUMANN,
(LATE BEHA),
CHRONOMETER AND WATCH MANUFACTURER,
9, CARRINGTON STREET, NOTTINGHAM.

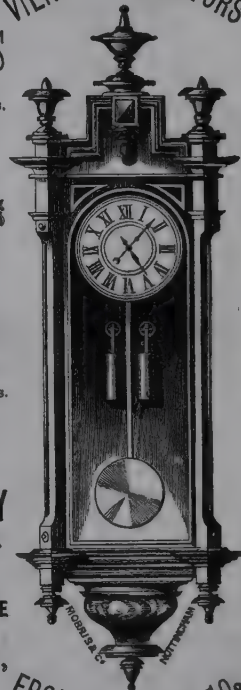
GOLD VIENNA REGULATORS **GOLD**
WATCHES **CHAINS**
FROM 55s. to 30 Guineas.

SILVER
WATCHES
From 25s. to 28s.

Clocks
Of every description,
From the best makers.

A CONSTANT SUPPLY
OF
JEWELLERY
In the newest designs.

THE BEST PRICE
ALLOWED FOR
WATCHES,
Old Gold, & Silver.



ALBERTS
IN GREAT VARIETY.

Electro-Plated
GOODS.

BAROMETERS,
Thermometers, &c.

WEDDING & KEEPER
RINGS.

REPAIRS
OF ALL KINDS
Are undertaken.

WATCH REPAIRS
Receive the particular atten-
tion of the Principal.

FROM £3 TO £6 10s.
The Vienna Regulator Clocks are excellent Time-Keepers, are elegant in design, and suitable for the Hall, Drawing-room, or Parlour.

An advert' of Baumann late Beha, both from
Black Forest clockmaking families, who had settled in England.
From Morris's Nottingham Directory of 1864.

The Cuckoo Clock

The Cuckoo Clock was one of the most successful models made by the Black Forest makers. The earliest date from the mid 18th. century and they are still made and exported world-wide today. The very early clocks were adaptations of the wooden arch dial or shield dial, wall clock but with a hinged door in the arch which opened on striking to reveal the cuckoo which bobbed up and down, opened its beak and flapped its wings whilst imitating the call of the cuckoo. The weight driven wooden-framed movement produced the cuckoo sound by two small organ pipes, tuned (A and F) and blown by bellows actuated by the striking train. When the other types of clocks from the region began to suffer with competition from the American clockmakers the cuckoo clock remained popular. Some makers began to specialise in this type of clock and their apprentices served some time in the school of wood carving which had been established in 1850.



An unrestored cuckoo wall clock with wooden-framed movement c. 1850.



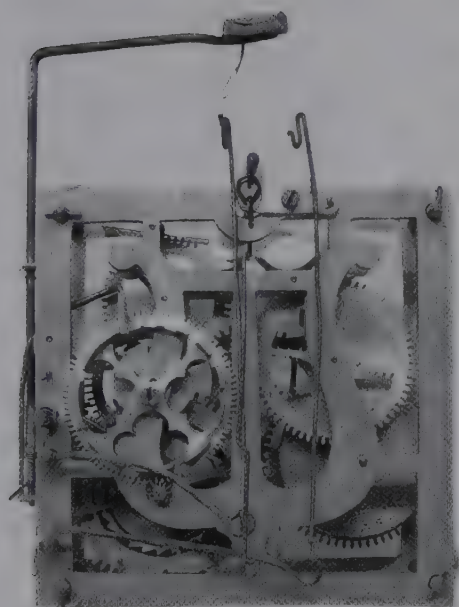
Wooden framed movement of the clock on the left, note the bellows and organ pipes.

The wooden-framed movement was eventually replaced by an all metal one with cast brass plates, usually skeletonised. A wide variety of different case designs evolved, some as picture clocks, some in the Biedermeier style but the carved wooden case proved ever popular. Some with carved birds and foliage, some with hunting themes and, after the introduction of the railways, one of the popular case designs was based on the track-side crossing keepers house with a pitched roof. The numerals and hands were traditionally made of carved bone.

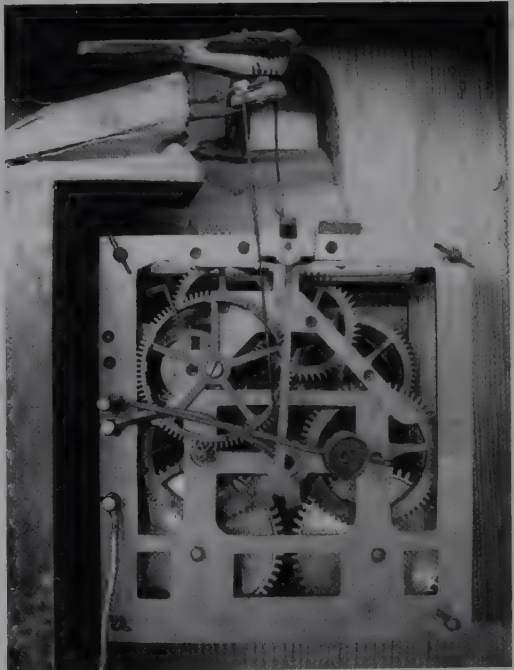
These clocks were eventually made as spring driven mantel or shelf clocks as well as the familiar chain driven wall clock with fir-cone weights. Various elaborations were made some with both cuckoo on the hours and quail calls at the quarters, some makers produced trumpeter clocks where the cuckoo was replaced by a man who sounded the hours with a bugle. The clock with the automaton of the man pouring wine and drinking from the glass illustrated in the section about the Grantham clockmaker Henry Pearce has its origins in the Black Forest.



Cuckoo wall clocks with carved cases c.1850-1900.



Weight driven cuckoo clock movement with cast brass, lyre-shaped, skeletonised plates c.1890.

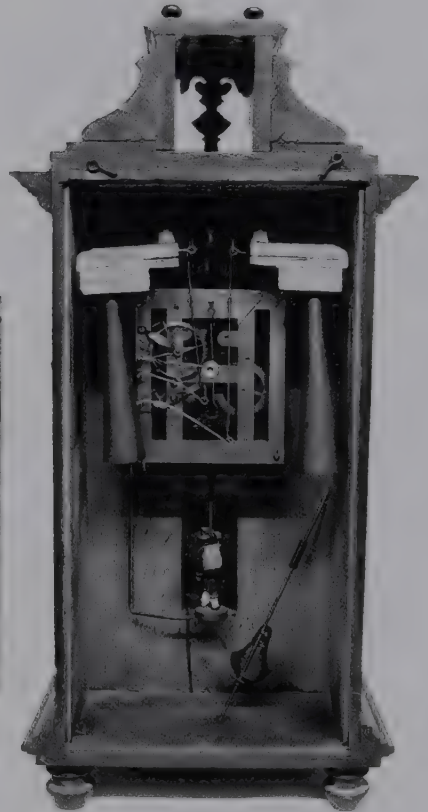


Spring driven cuckoo movement with cast brass skeletonised plates c.1890.



A spring driven mantel cuckoo clock c.1880

Literally hundreds of designs of cuckoo clocks were made in the region for export and for souvenirs for the emerging tourist trade to the area. The wooden framed movement gave way to one using cast brass plates and wheelwork and eventually, c.1900, rolled brass was used with the plates fastened by screwed nuts instead of pins. Around this time the carved case began to be decorated using coloured paints and the bone hands and numerals replaced by an early form of plastic.



*A trumpet clock c.1890 the movement stamped

G	H	S
F		

 the mark of Gordian Hettich Son of Furtwagen (24" x 11", 610x280mm)*

The most expensive variant of the cuckoo clock was the Trumpeter clock made by several makers in the Furtwagen area. Instead of using organ pipes they used organ reeds with metal horns to imitate the sound of the bugle or trumpet call. Some developed into organ clocks using multiple horns to play a tune.

French Clocks

After the French Revolution of 1789 and the years of turmoil following much of the furniture of their aristocracy came on the market. It was very different from the rather plain brown furniture of the Georgian period of this country and became popular with our upper classes. As the style became better known and appreciated, some provincial clockmakers began to import French furniture and clocks. Bellatti of Grantham advertised that he was buying fashionable clocks from Paris.

Much of the French furniture found in our stately homes and country houses dates from this period. The clocks were usually 18th century examples, many in cases of gilded bronze (ormolu) and marble. Designed by sculptors with allegorical themes, they were expensive works of art. Their movements were finely made but of secondary importance to their casework. During Victorian times cheaper versions of this style were made using gilded zinc alloy (spelter) in imitation of ormolu and these did find popularity with the developing English middle-classes.



A bracket clock of c.1730, the case veneered with brass and turtle shell, a technique developed by Andre Charles Boulle.



A reclining figure of Urania, Muse of Astronomy, c.1770

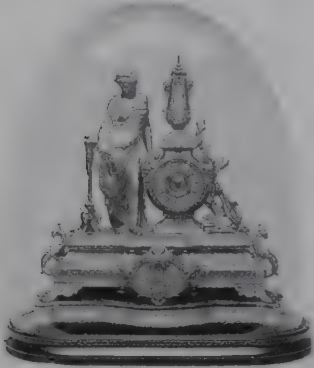


A winged cupid and chariot, late 18th century



The Three Graces, gilt bronze and marble c.1800.

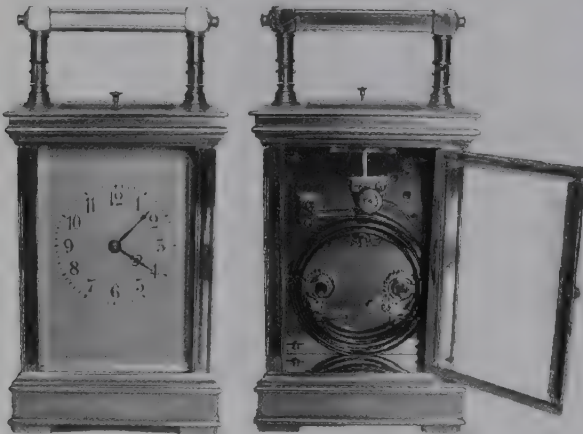
The principal imported French clock was however as a result of the period of mourning following the death of Prince Albert in 1861 which resulted in a fashion for all things black. The French produced a mantel clock in black 'marble' (actually polished Belgian slate). Their eight day movements were of high quality, usually with circular plates and fine wheel work striking on a delicate sounding bell or later a gong. These clocks became very popular; they suited the Victorian slate and cast-iron fireplaces of the period and were often made en-suite with flanking candelabras or urns. The style developed with various complications such as calendar work, visible escapements, compensated pendulums etc.. They were frequently used as presentation gifts for deserving persons. They competed successfully with the German and American clocks imported into Britain. So popular were they that the Americans copied the style, but in black painted wooden or sheet metal cases.



A 19th century ormolu clock, but made of spelter, was popular and often kept under a glass dome, much loved by the Victorians



French black marble clock with visible escapement and compensated pendulum c.1880. (Courtesy Barrie Fitton)



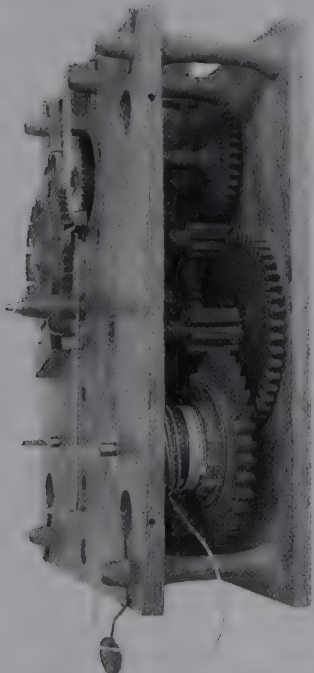
A typical striking and repeating French carriage clock c.1890. (Courtesy Barrie Fitton)

Another clock from France which sold well in this country was the carriage clock, with a balance wheel and either lever or cylinder escapement, it was originally supplied with a travelling case. The type is still manufactured today. High quality versions were taken up by the 19th century English makers and are much sort after by collectors today.

American Clocks

Before the War of Independence of 1776 the clocks of the American settlers were made in the tradition of the English trade by immigrant clockmakers, using imported materials and dials from this country and housed in cases made of local timbers. The political upheaval of the Revolution and further European unrest disrupted the Atlantic trade and by 1800 the Americans had realised that whatever they needed they would have to provide for themselves. One of the pioneers of American clockmaking was Joseph Ives, who established a clockmaking business at Bristol in Connecticut making brass movements. Brass was expensive so these were reserved for their 8 day longcase, (or "Tall Clocks" as they called them), which cost perhaps \$50 each 200 years ago. Only the well-to-do could afford them.

The Wooden Movement. Eli Terry, a joiner turned clockmaker, devised a 30 hour movement made almost entirely of wood as a cheaper alternative for the tall clock. This movement proved so popular with clockmakers that in 1807 he bought a water powered mill and spent a year planning and building machinery to enable many of the processes to be carried out by machines. The following year he produced a thousand wooden movements. These clocks were made of components which were identical and interchangeable and could be assembled without individual fitting by a workman who was not necessarily an experienced clockmaker. Although batch production had been used before in a limited way for the manufacture of muskets this system was to revolutionise clockmaking and reduced the unit cost dramatically. The resulting clocks could be sold for as little as \$6 each.



An Eli Terry wooden shelf clock movement

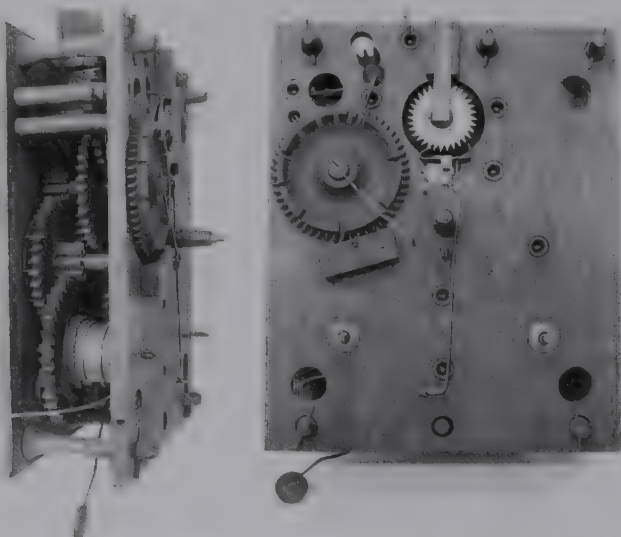
After the success of this venture he realised that what was needed by the expanding population, many of whom were in rural locations, was a smaller more transportable clock than the awkward-to-carry tall clock. He sold his mill to two of his employees, Seth Thomas and Silas Hoadley, who continued to make wooden movements for tall clocks. For his new project he designed a complete clock, much smaller and suitable to stand on a shelf. It used a wooden 30 hour movement, only the escape wheel was made of brass. The movement plates were made of oak, the wheels of cherry and the pinions of laurel. The driving weights were hung inside the case from pulleys at the top. He obtained a patent for the design in 1816 and bought another mill and equipped it for its production. Known as a "Shelf Clock" it proved to be very successful and was soon making the tall clock old fashioned. As well as making these clocks himself he licenced Seth Thomas to make the movements in his original factory. The wooden movement shelf clock was made in several case styles by other manufacturers for the next 20 years or so.

The wooden movement did have its disadvantages. In order to maintain sufficient tooth strength the number of teeth of the wheels was limited, making them rather large in diameter resulting in quite a large movement. Another problem was that the timbers had to be selected very carefully and seasoned for probably at least a year before they could be used. Movements of this type were vulnerable to high humidity so were not suitable for a long sea journey and it is unlikely that many found their way to this country.

Clockmaking then, from being a 17th. century craft-based trade in this country, had changed to a cottage industry in the Black Forest and then to a manufacturing industry in the United States. The implications were far reaching, not only for clockmaking, but they provided a model which was adopted for many other manufacturing processes world wide.



*A 30 hr. Mirror clock by Eliada Tuttle c.1832,
16 1/2" x 35".*



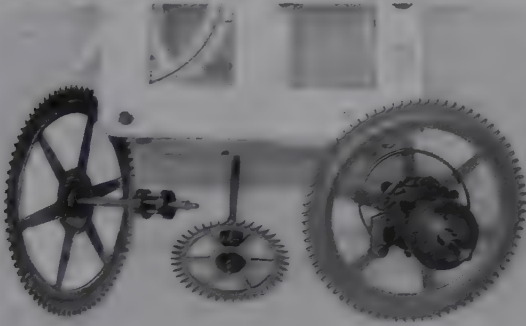
*The wooden movement of Tuttle's clock probably made by Eli Terry.
The plates measure 6 1/2" x 8" and the movement weighs 18 oz.*

The clock pictured here by Eliada Tuttle was referred to as a shelf clock although it could be wall hung. It uses a wooden movement (only the escape wheel is brass) with a painted wooden dial. It is weight driven, the lines passing over pulleys at the top corners and descending inside each side of the case. Note that the escape wheel and pallets are in front of the movement, not between the plates, and this is a feature of all American clocks. The lower door was sometimes fitted with a mirror, as with this example, but many had glass with a polychrome reverse-painted scene, a feature again unique to American clockmaking. This was often achieved by using a transfer printed line engraving on the inside of the glass coloured from the back.

These wooden movements were used in a variety of case styles from the Tall Clock to some very elegant styles including a Pillar and Scroll shelf clock unique to America. Eventually the wooden movement gave way to an all brass movement which quickly became very popular.

The Patent Brass Clock

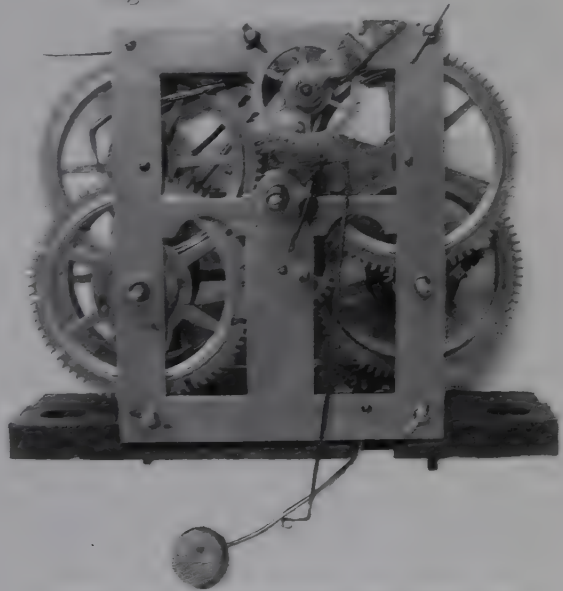
The development of rolled brass (as an alternative to cast brass) in the 1830s enabled sheet brass to be manufactured economically. Another Connecticut clockmaker, Chauncey Jerome, realised the opportunity that this new material offered for clockmaking. His brother Noble designed a 30 hour all-brass weight driven movement and this, together with a suitable clock case, was patented by Chauncey in 1842. The case was known as the "OG" from the ogive or 'S' shaped moulding used for its rectangular frame. Again this was a shelf clock with the weights contained within the case. It was not high quality cabinet work (indeed they were sometimes called kipper boxes!) but the use of well figured mahogany or rosewood veneers were able to conceal the shortcomings in the joinery. The clock, when manufactured in quantity, could be made at a competitive price and offered advantages over the wooden movement shelf clocks.



Typical wheelwork of an OG movement.

The movement with its skeletonised plates and wheels stamped from brass sheet was economical in the use of brass, weighing about 1 lb. (an English 30hr. movement weighs about 3 3/4 lbs.). It employed a count wheel striking system with a spiral wire gong and a front plate mounted escapement, with the pallets formed from bent steel strip pivoted on a pin which was adjustable for depth. The movement pictured here was made in Jerome's factory in Bristol and stamped, "Made by C. Jerome Bristol Conn. USA". The factory burnt down in 1842 but he built another in the nearby town of New Haven. Sometimes he used bought-in movements made to his specification by other factories. Some are stamped with the maker's name on the front plate.

The plates were made from 16 gauge (.064") and wheels from 19 gauge (.040") rolled brass. Note the strengthening rib round the rim of the wheel. The lantern pinions, made from iron wire with brass ends, were simple to make but efficient, not too critical in depth and capable of running in quite adverse and dirty conditions. The wheel blanks were stamped, complete with crossings (the spokes) and then a stack of blanks had the teeth cut by a wheel cutting engine.



An OG movement as patented by the Jerome brothers c.1842.

The resulting clock was reliable and stylish. Being weight driven it was a good time-keeper and capable of lasting a lifetime; many are still working 150 years later. It was a masterpiece of applied engineering design and became the basis for all future American designs, adopted by all the other Connecticut makers and eventually copied by the Black Forest factories in Germany.

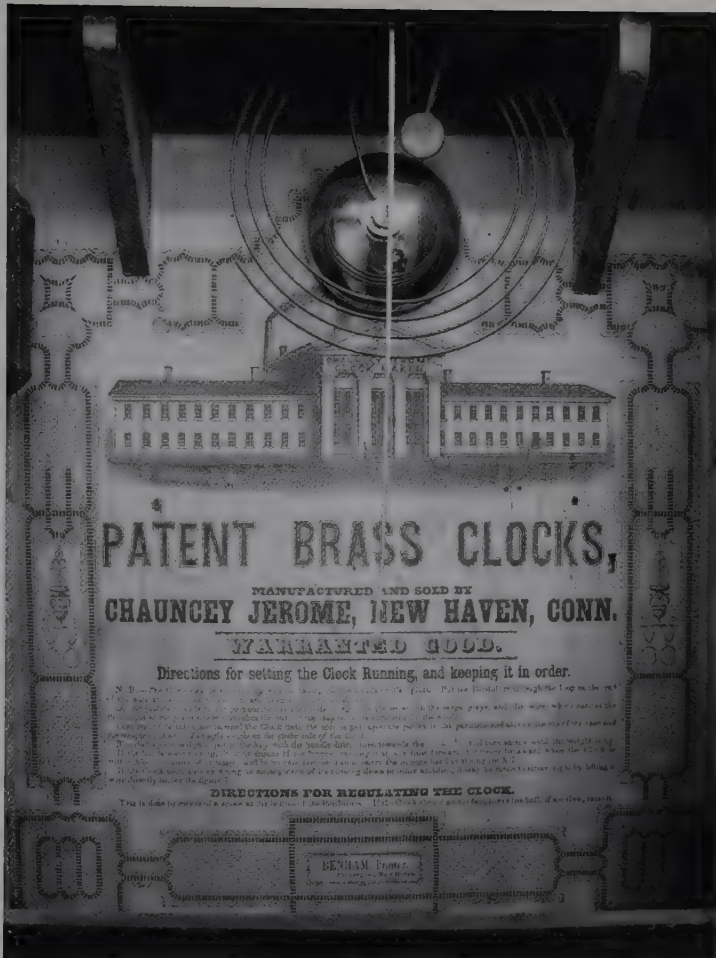


An American 30 hour OG made by Jerome in his Bristol factory c.1842. It is unusual as the case has a painted marble finish instead of the normal mahogany veneers. 25 1/2" X 15".

One of the disadvantages of the batch production system was that it had to run large quantities to be efficient. Any change in market conditions or failure of capital provision lead to large quantities of unfinished or unsold clocks. America experienced a depression in the late 1830s and early 40s and Chauncey Jerome found himself with a large quantity of unsold brass clocks. He decided to send a batch to England to test the market. When they were landed the Customs Authorities, on looking at the valuation of the Loading Bill, decided that they were being dumped on our market at below cost. They decided to exercise their option of purchasing the entire cargo at cost plus ten per cent and not releasing them into the market, with the intention of protecting the English trade. Jerome was pleased to have sold his clocks so promptly and sent another consignment. Eventually the English Customs accepted the valuation of about \$1.50 (less than £1 each) was genuine and American clocks were released into the British market. At this period an English 30hr. clock sold for about £3 to £4. It was an opportune time as there was an increasing demand for a cheap domestic clock for the workers in the industrial towns which the English clockmakers were not really interested in making.

Unlike the clocks sold on the American home market (which were sold door-to-door by clock pedlars), in this country they were marketed by London-based importers and wholesale agents who produced illustrated catalogues. They were sold to the established provincial clockmakers and became a profitable item of their stock-in-trade. In a newspaper advertisement of 1853 W. H. Young, a clock and watchmaker in the Market Place at Boston, was advertising "Thirty hour American striking clocks, 16s (80 pence); eight day ditto, 25s (£1.25).

A common feature of most American clocks was the printed paper pasted inside the case which usually had an explanation of the setting up and maintenance instructions and often an engraving of the maker's factory. The lower part of the rectangular door contained a glass panel sometimes with an etched pattern or a mirror, but more often a transfer engraving reverse-painted with colours. The 8 1/2 inch square dial of the OG made of painted wood, or later zinc, usually had a large centre hole through which the escapement could be seen and, when necessary, oiled.



A typical paper in an OG clock by Chauncey Jerome of New Haven c.1860 and the setting instructions below

Directions for setting the Clock Running, and keeping it in order.

N. B.—The Clock can be set running without taking off the hands or dial plate. Put the Pendulum through the loop on the end of the wire at the bottom of the dial and hang it on the stud above.
 Oil the pallets or ends of the part commonly called the verge, the pin on which the verge plays, and the wire which carries the Pendulum at the place where it touches the rod. One drop of oil is sufficient for the whole.
 Care should be taken not to wind the Clock until the cord is put upon the pulley in the partition and also on the top of the case and the weights put on. *The light weights on the strike side of the Clock.*
 To wind up the weights, put on the key with the handle down, turn towards the figure 6, and turn steady until the weight is up.
 If the hands want moving, do it by means of the longest, turning it at any time forward, but never backward when the Clock is within fifteen minutes of striking; and in no case farther than to carry the minute hand to the figure XII.
 If the Clock should strike wrong in consequence of its running down or other accident, it may be made to strike right by lifting a wire directly under the figure 7.

DIRECTIONS FOR REGULATING THE CLOCK.

This is done by means of a screw at the bottom of the Pendulum. If the Clock should go too fast, lower the ball, if too slow, raise it.

The majority of these American clocks struck the hour on a spiral wire gong used as a cheaper alternative to a cast brass bell. The spiral steel gong was first used by the clockmakers of Vienna around 1800 but not introduced by the American or German makers until the 1840s. It never found favour with the English clock trade.

In England, the availability of reliable watch and clock springs had been resolved in the mid-18th century by the experimental work into steels by Benjamin Huntsman, a clockmaker from Doncaster. He eventually gave up clockmaking to develop the production of the crucible steel he had invented. The factory he built in Sheffield for its production established the world-wide reputation of the town for its steel industry. This steel was mainly used for edge tools but was also ideal for spring making and greatly improved their reliability. The fact that it was expensive was not a serious problem to the English clockmakers as they were used mainly for the fashionable, and relatively expensive, bracket clocks of the period for which the cost of the springs could easily be absorbed. To the American clock industry their cost was a problem, as they were making clocks which sold for less than the cost of two English springs. Experiments had been made using brass springs and even cantilevered leaf springs but these were not a commercial success. It was not until the early 1860s that cheap, good quality, steel springs were produced in America. Two factories for their production were built in the Connecticut Valley.

The spring driven clock was an immediate success. No longer was the case size governed by the need to provide sufficient weight drop. The case makers and marketing men had a field day and soon convinced the public that the new 'Spring Clock' was the thing to have. Small shelf clocks and wall clocks of a multitude of designs were made. In America clocks were sold directly to the customer by clock peddlars selling door-to-door. They must have been delighted by these smaller and lighter products. All these clocks shared a movement based on an adaptation of the brass OG but now made in several sizes of 30 hour and 8 day duration. Most struck the hours or had an alarm facility. They were sold into this country in huge numbers. There must have been few artisan households in this country which did not have an American clock of one type or another.

ILLUSTRATED CATALOGUE
OF SETH THOMAS

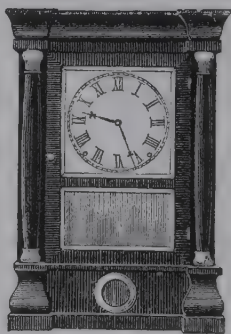
Clocks, Regulators
AND
TIME PIECES,

MANUFACTURED AND SOLD BY THE

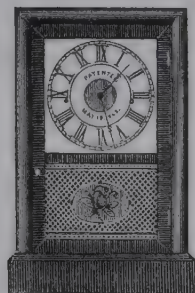
Seth Thomas Clock Company

Plymouth Hollow, Conn.

New York:
FRANCIS & LOUTREL, PRINTERS, 45 MAIDEN LANE,
1863.

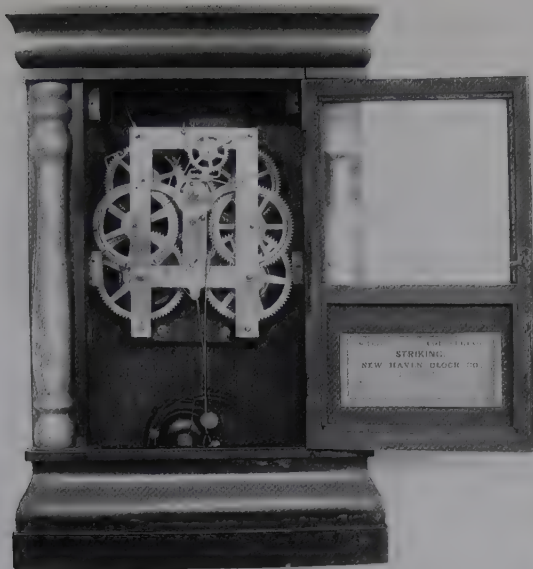


8 DAY.
COLUMN—SPRING—STRIKE.
Height of Clock 16 inches.

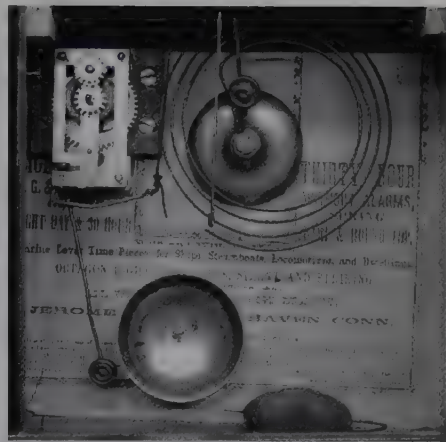


8 DAY OR 30 HOUR.
COTTAGE—SPRING—STRIKE.
Height of Clock 14 inches.

Pages from Seth Thomas's Catalogue of 1863.



A typical 8 day spring driven movement c.1870 by the New Haven Clock Co. (Note the open springs).



A 30hr. hour striking clock by Jerome & Co. with additional alarm mechanism

American spring clocks used an open spring, unlike the English who always contained it in a barrel. A few clocks were made using a fusee, presumably to satisfy English buyers, but these were soon discontinued. Striking 30 hr. clocks were offered with an alarm facility which used a separately mounted spring driven mechanism and bell.

Several companies in London imported just the American movements and cased them locally. The Anglo American Clock Company and Hollaway & Co. were both prominent in this practice. As a general rule, in the absence of a label, the American case makers used fine veneers but did not use inlays. Those cases, particularly the wall clocks, with marquetry inlay cases were usually made in London, albeit by immigrant Italian craftsmen.



An inlaid case attributed to Hollaway & Co. London c. 1890.



Another inventive American was Edward Baird, who had at one time worked for Seth Thomas. He pioneered the use of clocks for advertising and sold thousands to American companies. Their cases were made of moulded papier-mâché, or in some examples pressed zinc, and fitted with Seth Thomas eight day movements. Several English companies used his clocks. 'Molliscorium' was a product used by saddlers and harness makers to soften leather. The ironmongers, Collards in Watergate, Grantham had one similar one advertising "Aspinall's Enamel".



Two advertising clocks by the Baird Clock Co. of Plattsburgh, N. Y. both fitted with movements made by the British United Clock Co.



Papier-mâché wall clock decorated with gilding and inlaid with abalone shell fitted with an imported American movement c. 1870

The clock shown on the left has an American movement housed in a papier-mâché case decorated with gilt work and inlaid with mother-of-pearl, a fashion for many items of small furniture during the 1870s.

Towards the end of the 19th. century intense competition developed from German makers who had adopted the American factory system of manufacture. Also, at least one company in this country, The British United Clock Company of Birmingham, made clocks of the American type from 1885 until c. 1905.

The upheaval of the 1st. World War brought an end to the imported clock trade.

Although the cheap American clock was demeaned in many quarters, both then and now, it was an important step not only in the history of clockmaking but also in the development of manufacturing industries world wide.

Some typical imported American weight driven 30hr. clocks.

A selection of 30 hr. weight clocks based on the original OG design. All measure about 25 x 15 x 4 inches deep.



*A 30hr. OG by Jerome, New Haven Conn.
(The dial lettered for Cartwright of Horncastle).*



A column style clock by Seth Thomas of Thomaston.



Clock by E.N. Welsh of Forestville Conn.



*Clock by Seth Thomas, the label over-pasted
by one of a retailer, P. Wehrle of Cambridge.*

Some typical imported American spring driven clocks

A selection of imported American clocks which vary from 9 to 19 inches in height.



"Column" style by New Haven Clock Co.



"Bee Hive" style by E.N. Welsh



*"Sharp Gothic" style
by Brewster and Ingraham.*



Seth Thomas 8 day spring clock



*8 day spring clock by The
New Haven Clock Co.*



*Small "OG style" 8 day spring clock
by Seth Thomas.*



Jerome 30 hr. strike plus alarm



Jerome 30 hr. alarm



*Small "Cottage No.2"
30 hr. alarm by Seth Thomas.*

Skeleton Clocks

Another design which became popular in this country was the skeleton clock. This type of clock was made with the movement plates replaced by a frame which exposed most of the mechanism to view. The wheel work etc. was carried out to a high degree of finish so it was an opportunity for the clockmaker to show off his skill in making the clock instead of it being hidden inside a case. It also appealed to customers who at the period were becoming increasingly interested in scientific and mechanical engineering. Of course, the Victorians were very fond of glass domes using them to show stuffed animals, birds, etc. No doubt they were suitable for these but as far as clocks were concerned they must have been something of a hazard as the dome needed to be removed weekly to wind the clock and many must have been broken during the process. The wheel work was usually finely done with six-spoked wheels, sometimes with just a passing strike but some were made with quarter chiming on multiple bells and fancy escapements with large balance wheels.



An English skeleton clock with passing strike c.1870.

The French also made this type of clock, a pretty miniature one, sometimes with a comb musical box in the base, which sold well in this country. There was also a model with a huge great wheel. They are much collected today and reproductions are being made, complete with domes, in China.



*A miniature French skeleton clock c.1820.
From the Ray Collection, Museum Society,
the Victoria Gallery, London*

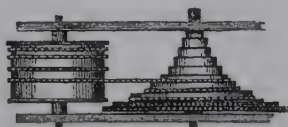


*A modern reproduction of a French skeleton clock
with a large great wheel and pin wheel escapement
and gear ring.*

Watches

The earliest references we can find to small portable clocks which could be worn on the person (i.e. a watch) date from the mid 16th. century. Up to this period clocks were weight driven with a verge escapement and either a foliot or balance wheel; the pendulum had not yet been introduced to the escapement. Around this time the coil spring evolved as a driving force instead of a weight, which enabled clocks to be more portable and even small enough to be carried on the person; so the watch evolved.

These early watches were worn suspended round the neck by a chain or cord and used a scaled down verge and balance of the clock mechanism. They were much poorer time keepers than the clocks owing to the constant movement during wear which disturbed the balance wheel action; the driving force of a coiled spring diminished as the spring unwound which again affected the time keeping. This was also true of spring driven clocks and several solutions were tried to make the driving force more constant. Eventually, in this country, the fusée was adopted for both clocks and watches, the action of which is described elsewhere in this book.



The fusee drive as used in the English watch. The spring contained in the barrel on the left drives, via gut or later a very small chain, the tapered grooved pulley on the increasing diameter as the spring unwinds.

Early watches were really an additional item of jewellery worn at the time by both sexes, a demonstration of a person's wealth and status. Their cases were made in a variety of precious materials, gold or silver, enamelled, gilded, pierced, engraved and jewelled with a pendant at the top for a neck chain. They were made in a variety of shapes, with a single hour hand, sometimes with a hinged cover sometimes pierced or glazed with rock crystal.



*This watch incorporates a sundial and compass to enable it to be set to time.
German made c. 1590*



The French were masters of enamelling techniques and produced many beautiful watches. This one made c.1640.

One group of case styles is known as “form watches”, which were made in the shape of a bird or animal or in the shape of a crucifix. Some cases were carved entirely of rock crystal.



A watch in the form of a crucifix and another both in cases of carved rock crystal c.1630.



A pair-cased watch by Bushman of London c.1720 the outer case of tortoise shell inlaid with silver.

A significant technical development occurred about 1675 when a spring was applied to the balance wheel. Prior to this, the balance was pushed backwards and forwards by the action of the verge at a speed which was to some degree dependant on the driving force, but also disturbed by the movements of the wearer. The balance spring imposed a more consistent action and the time keeping was considerably improved to the extent that a minute hand could be justified. Another benefit was that rate could be adjusted by lengthening or shortening the balance spring and several methods were developed to enable this to be achieved without stopping the watch.

The improvement in timekeeping brought a greater demand for watches which were now seen not only as clockwork jewels but as a useful accessory. The fashion of 18th century gentlemen wearing short waistcoats with pockets soon produced a watch which we would recognise today as a “pocket watch”. Instead of being worn on a chain round the neck it was carried in the waistcoat pocket with a ribbon or chain fastened to a button hole.

In England this type was usually in the form of a pair-cased watch. The movement was housed in an inner case with a pendant at the top and a glazed hinged bezel covering the dial and a hole in the domed back through which the watch could be wound by a small key. The outer case protected the movement from the ingress of dust and dirt via the key hole and was often embellished in a variety of ways, sometimes by coloured enamelled scenes, sometimes by raised repousse designs or covered in tortoise shell decorated with inlay of gold or silver. The early dials were often of silver and engraved with the makers name with applied Roman numerals and blued steel hands. This was a golden age of watchmaking with a wide variety of beautifully decorated cases. A white enamel dial with black roman numerals and five minute numbering became popular in the mid 18th century and gold or blued steel hands made it very legible. There is a fine collection of 18th century pocket watches in the Usher Gallery at Lincoln.

Many early watches were made on the continent of Europe and sold in London which was the centre of all fashionable things marketed in this country. There was already a community of clockmakers established in the Clerkenwell area of London so it was natural that watch making would develop in this area. The making of a watch required many specialist skills. Unlike clockmaking where it was possible for one man to make a clock movement and dial in its entirety, watches needed the work of many highly skilled workmen who each produced one or more of the various component in their own small workshops. These parts were eventually brought together and assembled into a complete watch.

Clerkenwell was not the only centre of watchmaking. During the 18th century Lancashire had developed a tool making tradition particularly in the area of Prescot, near Liverpool, initially using water driven power and later the local access to the coal fields allowed the use of steam power. As well as the tool making business a cottage industry making watch movements soon became established. A particular speciality was the manufacture of "rough movements" with all the essential components assembled into a basic movement which was then sold on to be completed by "Watch Finishers" in Liverpool and London. These rough movements required much further work to complete. They would be stripped down and the wheels and pinions polished and the plates engraved in the traditional way with the name of the 'maker' (more correctly the retailer) before being sent to be gilded. A suitable dial and hands would be fitted, the escapement, balance and its hairspring fitted and timed and then sent to the case maker. The completed watch was then sold to a factor or wholesaler, or directly to the clockmaker who had commissioned it and who now styled himself as a "watchmaker" although he had played no part in its manufacture!

By the end of the 18th century this method of manufacture enabled all provincial clockmakers to sell watches. The aristocracy, with their London houses, bought from fashionable suppliers there but the new middle classes with locally based businesses needed to buy locally. It became a very important part of a clockmakers trade. Not only was the initial sale profitable, but once a watch was sold he was assured of a continuing stream of income from repairs. Unlike a clock which would keep going for many years without professional attention the watch needed specialist service or repair. Being portable it was subject to accidental damage. Dropping it or breaking the glass needed his attention and watch mainsprings were still unreliable. Lubricating oils were much inferior to those of today and the movement needed cleaning and re-oiling every 2 or 3 years, all providing additional work for the clockmaker who, if he did not have the necessary skills for watch repairing himself was able to employ suitably skilled journeymen to do the work. The local papers contained numerous advertisements for these tradesmen.



A watchmaker at his bench.

G. JOHNSON, WATCH and CLOCK MAKER,
G. Westgate, GRANTHAM, returns his grateful acknowledgments to the nobility, gentry, and the public in by an unremitting attention to their commands, to merit general, for favours already conferred upon him, and hopes, their patronage and support.
N. B. A Journeyman Watch-maker, and a Journeyman Clock-maker (good hands), may meet with constant employ and good wages, by applying as above.
GRANTHAM, April 25th, 1805.

LR&SM Apl.26th. 1805

Throughout the 18th century the watch movement remained substantially unchanged. It continued to be decorated by engraving with a carefully pierced and engraved balance cock, and the use of the fusee driven verge escapement continued. It was robust and straight forward to service and repair. Its time keeping to within a few minutes per day, was quite adequate for most customers..



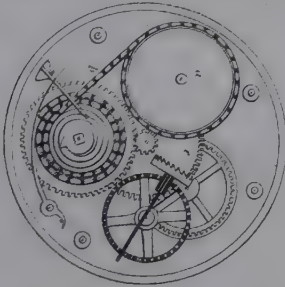
A typical mid 18th century watch movement. The pierced broad foot of the balance cock is typical of the period.



The verge, or vertical, watch escapement

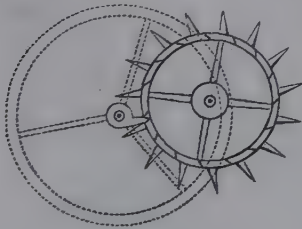


A typical 19th century verge movement. Note that the plate with the makers name secured by two screws and enables the spring barrel to be removed to replace the main-spring without having to dismantle the complete watch.

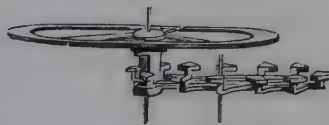


The layout and wheel-work of a verge movement

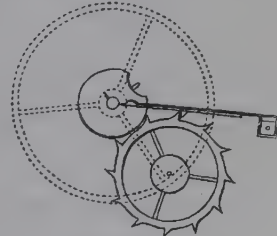
Navigation at sea however required a very accurate time keeper and the huge prize for the development of a suitable time keeper offered by the Board of Longitude in 1714 stimulated an interest in alternative escapements. The duplex escapement and the cylinder escapement, (sometimes called the horizontal escapement), were better timekeepers but expensive to make and repair and did not find much favour with the English makers at the time although they were employed by the Swiss and the Americans much later.



The duplex escapement.



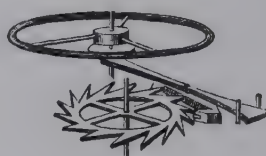
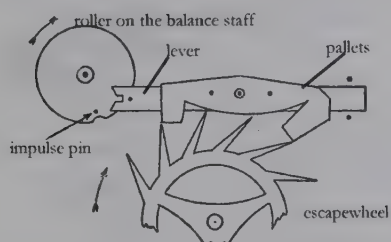
The cylinder or horizontal escapement.



The detent escapement.

John Harrison, a Lincolnshire clockmaker who moved to London, devoted his life to the development of the marine chronometer. After many designs of 'sea clocks' his final time-keeper of c.1770 was in the form of a large watch which employed a detent escapement and fully met the stringent specification. Although it performed well when carefully mounted on gimbals in the captain's cabin, it did not prove suitable for the constant and erratic movement of a watch worn on the person.

However, a significant leap forward did occur in 1791 when Peter Liverland patented the rack lever escapement. This was essentially an adaptation of the anchor clock escapement used to impulse the balance wheel of a watch. The pointed tooth escape wheel and anchor shaped pallets operated a short lever on the end of which was a segment of a toothed wheel, or rack, which engaged with a small pinion on the balance wheel arbor. It was soon realised that the balance wheel and its hairspring was much more accurate when working freely and the rack of teeth could be reduced to just two so it became a fork and the pinion on the balance could be just one leaf, or a pin. Now, the balance received only a brief impulse as the lever flicked across and the majority of the rotation was completely detached. As the balance returned, under the influence of the hairspring, the pin picked up the fork and received an impulse in the other direction. During the next 20 years or so this escapement underwent further development under patents, many by the Massey family of watchmakers.



The detached lever escapement.

The movements of these watches are often engraved ‘Patent Lever’, ‘Detached Lever’ or sometimes ‘Improved Lever’ to indicate they were of the latest design. Another advantage of the lever escapement was that all the wheel work was in the same plane unlike the verge, which required a vertical escape wheel with the movement plates widely spaced to accommodate this. With a lever escapement the movement could be made much thinner. Also during this period jewelling was introduced for better quality movements. Watch jewels were not an ornament but a method of overcoming wear of the pivot holes and reducing friction. These jewels were industrial quality stones used for their hardness. Rubies, sapphires, crystalite, garnets and rock crystal were used and sometimes diamond for the end stones of the balance. Jewelling was used to a limited extent for the balance wheel bearings of verge watches and became standard for the balances of lever watches. The impulse pin on the balance was usually a ruby pin and the acting faces of the pallets were soon jewelled. Additional jewelling of pairs of holes was dependant on the quality of movement, which extended the life of the watch. Full jewelling was often provided for the more expensive gold cased watches.

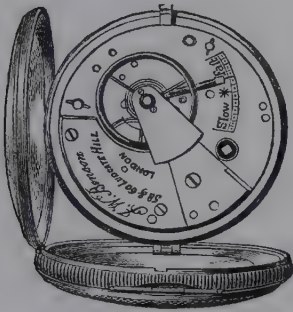
The Liverpool finishers had a reputation for finishing their movements more decoratively than the more restrained work of the London trade, which was certainly true of some of the Liverpool jewelling which was unnecessarily large to make sure it was noticed. These huge rock crystal jewels were mounted in separate cups or sinks as was the English custom (in this case of blued steel to contrast with the gilded plates) which were then fastened in the plates by small screws. They were referred to in a derogatory manner by the London trade as “Liverpool Windows”.



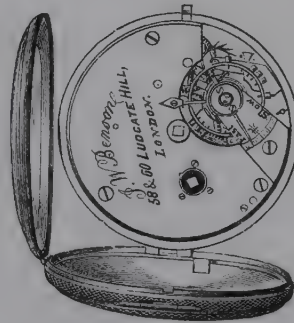
A lever movement with full Liverpool jewelling. Note that the balance cock is now much smaller and has a diamond end stone.

As the industrial revolution continued to grow into the 19th century demand for watches increased and this resulted in a further centre for watchmaking which was based in Coventry. Here the industry was more planned. Streets of terraced house were built for the workers with purpose built workshops, and north facing windows, where possible, to take advantage of uniform natural light. The workers were directly employed by master watchmakers who produced a complete watch to sell to the trade. They relied heavily on the apprenticed workers, considered by some to be an abuse of the apprentice system, but there was no shortage of volunteers as most provincial clockmakers were keen to apprentice their sons into the watchmaking trade. They could return after their 7 years of experience in the various specialities to work in the family business.

In a further redesign of the movement the balance wheel was moved from on top of the back plate and re-positioned on a separate cock between the plates to become the three quarter or half plate movement. The pair case was replaced by a single case with a double back, which reduced the thickness still further.



A full-plate English lever movement.



A three-quarter plate English movement with cut bi-metallic balance wheel.

Although the time keeping of the detached lever was much improved, a further refinement was the compensation balance. The steel balance spring was affected by temperature changes which with a watch could be considerable, between being worn close to the body and then left overnight in a cold bedroom. There were many inventions to tackle this error, the most frequently encountered being the ‘cut bi-metallic balance’. This used a steel and brass strip for the rim of the wheel with the brass bonded on the outside. The rim was cut in two places each adjacent to the two spokes of the wheel. The different expansion rates of the two metals caused the effective diameter of the balance to change according to the temperature and compensate for the change in elasticity of the spring. It proved to be very effective in reducing timekeeping errors still further.

All this development resulted in the English fusee lever watch achieving a world wide reputation for accuracy and quality, a reputation which they retained for the next 100 years. The watch and chain became part of the “Sunday Best” dress for the working man and a gold watch became the usual retirement gift for someone who had given fifty years of faithful service to a firm. It was the most valuable possession of a working class family and could be handed down as an heirloom. It was a useful item of portable wealth which could be used to raise some cash at the pawn brokers, an important facility of short term credit in the days before credit cards. Unfortunately, for travellers it was a frequent target for highway robbers in much the same way as the mobile phone has become in recent years. Contemporary local papers provide many accounts of this type of crime.

WATCH STOLEN.

STOLEN, on Tuesday the 10th of March last, between Two and Three o'clock in the Afternoon, from a Basket in Mr. Musson's Field in the parish of Caythorpe, near Grantham, a SILVER WATCH; maker's name Saltby, Grantham, No. 157; with a brass and steel chain, brass key, and steel key affixed. The face of the watch is white, and is a very peculiar one from its having the owner's name "Thomas Sharpe" written upon it in a circle, a letter being placed under each hour. It has also a smaller circle containing the days of the month. —Whoever will discover the offender or offenders, shall, on his or their conviction, receive a reward of One Guinea from THOMAS SHARPE, the owner, at Caythorpe aforesaid.

ISAAC FRANKLIN and HENRY HOLLAND were charged with stealing 10s from the person of Thomas Evison, at Fishtoft, on the 21st of June —Mr. Bean prosecuted; the prisoners were undefended. —The prosecutor, on his way from Boston market on Wednesday evening the 21st inst., called at the Wellington inn, near Vauxhall, Skirbeck, for a glass of beer. While there the prisoners entered and asked if there was anybody in the house going to Freiston. Prosecutor replied that he was, and having treated them to a glass of ale each all three set off towards Freiston. When they got two miles on the road the prisoners knocked him into the dyke and robbed him. They took his money from his purse, and replaced the latter in his pocket again. They also took his watch from him, but finding that his name served the place of figures on the dial-plate they returned it. —The jury found the prisoners guilty, & they were each sentenced to 9 months' hard labour.

LR&SM 27th March 1835

LR&SM 30th June 1871

These were lawless times. The advertisements above are typical of almost weekly accounts of highway robberies not confined to the cities but taking place in country towns and villages also. They are not typical in as far as these watches had personalised hour marks in place of the usual Roman or Arabic numerals which in the later example proved to be of benefit.



Roman hour numerals were popular throughout all periods.



Arabic hour numerals enjoyed popularity during the 1790-1820 period.



Personalised dials such as this were occasionally used. This one was for SAMUEL RAWSON



Dial with an enameled polychrome scene were provided to customers requirements. This one "God speed the plough" was popular with farmers.



The hour numerals symbolise the signs of the Zodiac, sometimes used by Freemasons.



A gilt and enamel dial "KEEP ME CLEAN AND USE ME WELL AND I TO YOU THE TRUTH WILL TELL" c.1850



A silver and gold dial of a lever watch b.m. 1873



The lever watch was accurate enough to warrant a seconds dial.

Unlike clock dials the dial of a watch is not such a datable feature. Here is a selection of dials used from c.1770 to 1870.

T DICKINSON, Silversmith, Market-place, Boston, feels particularly obliged to Mr. JAMES STORER in cautioning the public, that all Watches made by him in the name of S. Roberts, London, have also Storer engraved on them.

T. D. therefore informs his friends and the public, that he is in possession of a very large stock of the Genuine Watches, made by Mr. J. STORER, with "S. Roberts, London, Storer," engraved on them, and that T. D. is disposing of the same, at the low price of 70s. each, for ready money — As usual, best polished new Silver Plate, at 8s. 6d. per oz., including duty and fashion.

LR&SM 25th Feb. 1820

This advertisement of Thos. Dickinson illustrates the complexities of who made and who sold watches. He did not consider it necessary to have his name on the watch despite the fact that he was an old established business in Boston. Note also that his silver watches were 70 shillings, (£3.50) quite expensive at the time. One could buy one of his eight day clocks for about the same price.

The development of the railway companies provided more customers. The timings of station stops were shorter and more precise than those of the coaching system and the companies bought watches for their employees. Those who used the railways really needed a watch and many watchmakers offered "Railway Timekeepers" aimed at this market both here and abroad.



A 'Railway watch' movement with cut bi-metallic balance by Thos. Wheeler of Preston c.1870.

Whilst English makers were producing some of the best timekeepers in the world they were to a large extent hand made and relatively expensive. Typically, English watchmakers were not interested in providing for the cheaper end of the market; they were quite busy enough making quality watches for the rest of the world! Some peoples were interested in this market, namely the Americans and the Swiss.

Aaron Dennison, living in America, had seen factory-based clock manufacturers adopt machine made parts. Dennison devised machinery to make watch parts. He studied the English lever watch and redesigned it to be made largely by machine made parts. This had many advantages. As the parts were identical they could be built into a watch without any skilled fitting, repair was easier as interchangeable replacement parts could be supplied which would fit without further work, everything took place under one roof, raw materials came in and finished watches went out. The improvement in mainspring quality and the adoption of the detached lever escapement meant that the fusee and chain drive could be dispensed with which further reduced the unit cost. The resulting watches were made in several standards of finish, depending on the amount of jewellery and case material, but were all quality watches which were still not exactly cheap, but acquired a high reputation for reliability and accuracy both here and abroad. Dennison's company was named the American Watch Company, later renamed as the Waltham Watch Company. The success of his trade with this country led to him building a factory in London to produce his watches, but the local trade saw it as a threat to their jobs and destroyed the machinery and set fire to the building. He did however build a factory in Manchester to manufacture watch cases by machine methods which proved very successful.



**WALTHAM
WATCHES.**



When you buy a Watch, buy as good a case as you can afford, but first get a movement which will be accurate.

**Waltham
Watches**

are the best time-keepers made in the world.

Movements bearing the names
 "RIVERSIDE MAXIMUS," "VANGUARD,"
 "RIVERSIDE," and "ROYAL,"
 Especially Recommended.

OUR INTERESTING BOOK SENT POST FREE UPON REQUEST
 For our catalogue please mention this paper.

ROBBINS & APPLETON (Wholesale to the Trade only)
 125 High Holborn, LONDON, W.C.
Only Address of the Waltham Watch Co.

Key-wound Waltham full plate movement housed in an English silver case h.m. 1893.



The Elgin National Watch Company in Illinois was another company which also manufactured quality watches under a similar system.

A stem-wound high quality watch made by The Elgin National Watch Company in a nickel screw-bezel and glazed back case, marketed under the name R.W. Raymond.

Late 19th century English society was changing from a rural to an industrial base. Factories needed workers to arrive and finish at fixed times and it was now desirable that people had a clock to regulate their working lives sold at prices they could afford. As hourly piece work became more common it was desirable for the worker to have a watch also and although the tradesman may have aspired to a silver pocket watch for Sunday dress it was not suitable for the rough and tumble of factory conditions.

As seen with their manufacture of clocks, the Americans were not averse to making things really cheap. In the 1880s The Waterbury Watch Company made a cheap robust watch specifically designed for its components to be made by automatic machines and they found a ready market in this country.



A series I Waterbury, marketed as "The Trump" c.1890

These Waterbury watches were unusual as they used a duplex escapement, normally not an easily made escapement, but achieved by using press tools. The firm was eventually taken over by Ingersoll.



An Ansonia watch c.1888

The Ansonia Clock Company of New York was another company, among several others, who also got into the business with an economically designed watch which they patented in 1888.

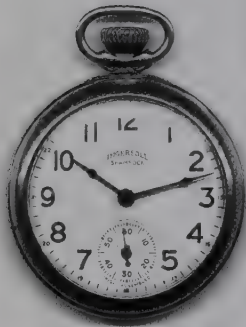
Perhaps the most well known of the American watches was the Ingersoll which was mass produced from 1892 and eventually sold there for one dollar. Robert Ingersoll came to London in 1905 to promote their sale. He was very successful with his marketing strategy and their "five-bob" (25p) watch was sold with a one year written guarantee. From 1911 they were assembled in London and Ireland from imported parts and eventually manufactured in a factory in Wales. They were truly the working man's watch and sold in their millions.



An Ingersoll 'Crown' with it' guarantee written in 1915




An Ingersoll movement 'assembled in Ireland'



Ingersoll 'Shamrock', the dial marked "Irish Assembled".




A selection of the range of smaller, post war, Ingersoll watches




Ingersoll

WATCH CO. LTD.

Ingersoll House, Kingsway London W.C.2



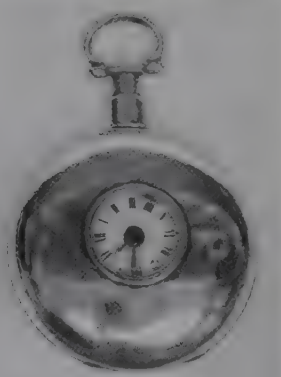
rem. 1£. via Reg. Post.	SALESMAN (Gen.) Robert. CASE 1441. DATE 1. DATE 16th Aug. 1928.	
Messrs. G.H. & J.G. Tate, Market Street, Winterton, Via. Southorpe, Lincs.	2. Cartons of Crown Watches (in Cartons of 6)	22/6 ££. 5. 0.
OVER 75,000,000  WATCHES MADE AND SOLD		

This invoice of 1928, prices the Ingersoll Crown at less than 4 shillings (20p) each.

For the sporting or military man the 'full hunter' case was available to protect the glass. The cover sprung open by pressing a button on top of the pendant. An alternative was the 'half-hunter' said to have been invented by Napoleon who, on the field of battle, became frustrated by the failure of his hunter to open so he gouged a hole in the cover with his pocket knife!



A full hunter by Feltham of Harlston h.m. 1850



A silver cased half hunter verge watch by Richard Roe, Midhurst h.m.1807.

As hourly piece work became more common in industry, wearing a watch whilst at work became desirable and in the case of heavy manual jobs it required some additional protection.



A variety of cases and pouches was available to give added protection to the watch whilst at work.



An Ingersoll 'Triumph' with its box.



A counter display of the Ingersoll range c. 1926.



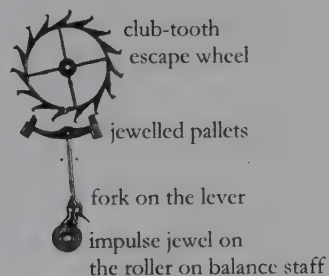
The Victorians had an established fashion for those in mourning and this watch was specifically for that purpose.

The Swiss had a watching tradition similar to that of England and in the 18th century specialised in high quality decorative gold watches with enamelled cases and dials, some with automaton, which were sold all over the world to rich clients. In the 19th century, like the Americans, they were more open to mechanisation and saw the advantages of making watch movements in factories. They evolved a basic movement design adopting initially the cylinder escapement. Although the English had invented this, and it was superior to the verge escapement, it was difficult to make, particularly the escape wheel, and was not popular. The Swiss however found they could mass produce these components accurately by machinery and made key-wound pocket watch movements. The industry was based in Geneva and their factories specialised in making rough movements or 'ebauches' which were then sold on to other makers to be developed, finished and cased either at home or abroad. Small watches became popular, now to be worn by ladies on a fob, and many hundreds of thousands of these with pretty silver or enamelled dials in engraved silver cases were sold in this country.



Two ladies fob watches with Swiss cylinder escapements, the one on the left has a London h.m. of 1884.

The cylinder escapement was subject to wear and the Swiss, later in the 19th century, adopted the lever escapement in a slightly modified form. Their 15 jewelled lever movement was a superb example of precision and accuracy. Many of the London manufacturers imported these movements, generally referred to as "Genevas" in this country, and incorporated them in their watches. The Swiss eventually dominated the world watch trade and they became synonymous with precision efficiency. "It runs like a Swiss watch"



A classic Swiss 15 jewelled movement which was made in many sizes for pocket or wrist watches.

The Swiss style lever escapement

The development of another cheap watch evolved independently in Geneva. Watchmaker, G.R. Roskopf, realized that the working class market was not being catered for. He designed a movement as early as 1867 which, by reducing the number of components, could be mass produced by automatic machines and would enable a watch to be made which was affordable by the working man. Unfortunately he had difficulty in getting the watch factories interested in manufacturing it. They were much too busy making quality watches and so it was the end of the century before they were made in any quantity. The most significant component of this, and of all other cheap watches which followed, was a variant of the lever escapement known as the 'pin pallet escapement'. The lever escapement in conventional designs by English and Swiss makers needed to be very accurately made and adjusted with the acting faces usually jewelled. In the pin pallet version the acting faces were steel pins which were readily adjusted in situ by bending.



*Roskopf's Pin Pallet watch in a full-hunter style case
c.1900.*

The Roskopf watch was made of good quality materials with an enamel dial and nickel case. The example illustrated above is in a full hunter case with glazed front and back but it was also made as an open face watch. The hands are set by the pendant button and a finger nail nib adjacent to the pendant which was a common method at this time. Eventually hand setting of all watches was achieved by pulling out or pressing in the winding button.

Watch design now fell into two categories, the quality fully jewelled lever movement or the cheap pin-pallet watch. A similar division also became the basis of small portable clocks. The jewelled lever for the travelling classes or the pin-pallet bedside alarm for the working classes.

The move to smaller ladies watches and stem winding, which evolved towards the end of the century, led to a fashion of wearing a fob watch in a leather pouch strapped to the wrist. It was a short step to provide the case with two lugs to pass a strap through and so the wrist watch was born. The wrist was a convenient way to wear a watch but the glass was much more vulnerable to breakage and so needed to be fairly thick.

The development of 'aeroplane glass' (or Perspex) during the First World war provided an answer and the thin 'unbreakable watch glass' became universally used. Wrist watches were initially considered to be very feminine and not worn by men but the usefulness of it became apparent during wartime, particularly whilst flying aeroplanes and they gradually became more acceptable. The wrist watch however belongs to the 20th century, beyond the scope of this book, so we will leave it there.



Some early wrist watches, the upper one is a small pocket type watch in a leather pouch, the one below is a silver cased full hunter style case to protect the glass h.m. 1907, the one below has a protective cover and the other two are purpose-made wrist watches by the Ingersoll company.



A selection of English verge watches c.1750–1850



A selection of English lever watches c.1850 -1900

Watch-Clocks also known as Sedan Chair Clocks

There are some small domestic clocks made in the first part of the nineteenth century which we should mention. They form a group of clocks powered by watch-type movements.

Apart from some correspondence during the 1970s in the pages of the Journal of the Antiquarian Horological Society, referring to what they called "Sedan Chair Clocks", there does not seem to be any mention of the type in horological literature. The Sedan Chair Clock referred to a miniature dial clock. The group, however comprises clocks in a wide variety of case styles. The name Watch-Clock would be a more appropriate term which can be defined as a clock using a watch movement as its driving power. (This should not be confused with 'Clock Watch' or 'Coach Watch' which was a giant sized watch made in the 18th century).

Clearly there was a need for a small clock, perhaps for bedroom use. A watch stand was often used to park ones watch at night but the small dial would have been a disadvantage. The watch-clock offered an alternative with an enamel or silvered dial usually between 2 1/2 to 4 inches in diameter. No conventional clock movements of small enough size were made at the time so watch type movements were adopted. In many cases, these were re-used verge pocket watch movements. That they came from watches is usually obvious, as many still retain the hinge and catch from when they were fitted in a watch case. These clocks can be dated more accurately by the case style and material as many movements came from eighteenth century watches. Most of the watchmakers would have had a plentiful supply of suitable movements as the more fashionable slimmer lever pocket watch was making the bulky pair-cased verge unfashionable, resulting in numerous verge movements, removed from gold and silver cases, becoming available. In some cases they may have been new but unused movements already in stock.

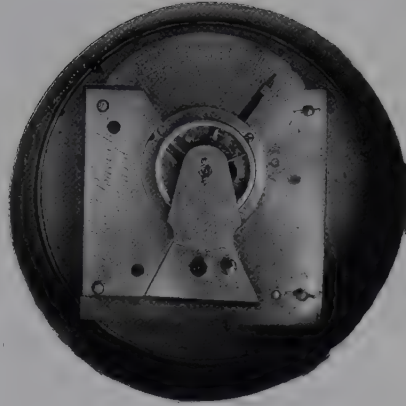
Some of the clocks, however, have a small square or rectangular plate movements, clearly made for the purpose, using pocket watch components. Like the watch movements, they were usually carefully finished and retained the decorative pierced balance cocks and were engraved with the maker's (or retailers) name, a serial number and in some instances a date.

Their cases varied in style and material. Many were individual miniature models of current bracket or dial clocks, clearly the work of professional cabinet makers. Others seem to have been made in a quantity of a variety of materials for sale to clockmakers to make up into complete clocks using their surplus movements. Usually these clocks had verge escapements but some were made with the newly popular lever escapement

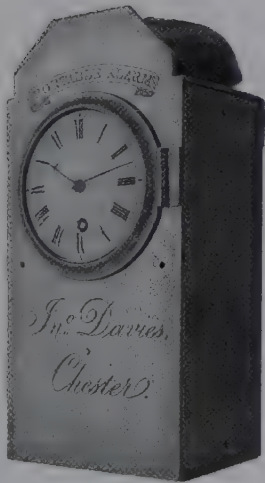
These little clocks appear to date from the first part of the 19th century. The availability of small French round-plate movements later in the century eventually made these watch based clocks redundant. Later these French movements were made with a balance wheel and cylinder escapement mounted on a separate platform which could be fixed either on the movement base-plate or across the plates.



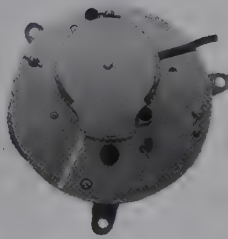
A small purpose made movement by Jas. & Jno. Weston of Newark (movement plates 2" x 2 1/2").



A purpose made movement with fusee and lever escapement (plates 2" x 2 1/4")



A travelling alarm clock by Jno. Davies of Chester with its verge movement c.1850



A mahogany veneered case inlaid with mother-of-pearl and brass, 9" high.

Unfortunately many of the original clocks have had their movements replaced by these more convenient 8 day French movements or ones from more modern travel alarms with the result that their true origins of many go unrecognised. The following pages illustrate the variety of case styles and movement forms during their brief spell of popularity.



"Seden" type wall clock now fitted with a later 8 day movement



"Seden" clock with its original rectangular plate movement by S. Watson of London



Watch-clock and movement by Jas. Roberts of London c.1820



Papier-mâché and gilt brass now fitted with a later movement



Black marble watch-clock with purpose made circular plate movement by Wm. Partington of London c.1815-1844



Watch-clock with the re-used verge watch movement by Robt. Bartliff of Malton c.1823-1855

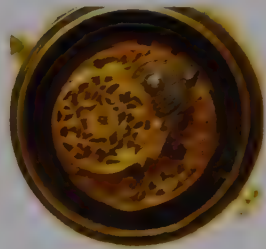




A French "sedan" type clock with its watch-type movement by le Roy of Paris



A rosewood veneered watch-clock with a purpose-made lever movement c.1830



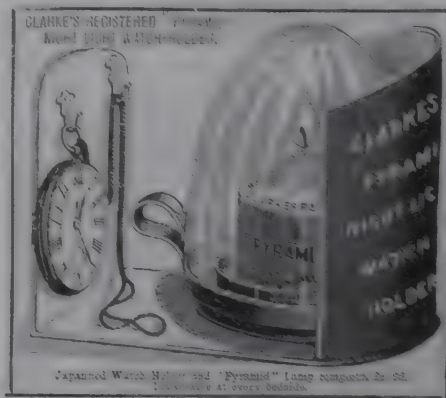
A night clock made in the early 1800s with a re-used watch movement by Platt, Best of London of nearly a 100 years earlier



This group of clocks, with rosewood veneered cases, of a style popular around the 1830s, have all had their original movements replaced.

Watchstands

As pocket watches became more commonly worn the question arose as to where to put them for safekeeping whilst not in use. The watchstand or watch-pocket was the solution. Apart from an advertisement of John Waite Barston of Grantham in the LR&SM of 1827 and an advertisement of a design by Clarke's, a maker of night lights, in c.1900 there is little documentary evidence of their manufacture but it is clear, from surviving examples that they were made from the late 18th century onwards. There is a huge variety of designs in many different materials. Some were made to individual requirements and many were mass produced in the 19th and 20th centuries often as tourist souvenirs from resorts both home and abroad.



An individually made carved oak watchstand, probably late 18th century.

A bedside watchstand advertised by Clarke's a maker of a range of night light accessories c.1900.



A cast iron lamp post model with a night light

A later battery illuminated stand with a magnifying lens for bed side use.

Another battery model, this one featuring Lawrence of Arabia, a popular personality of the day.

Telling the time at night was resolved by having an illuminated watchstand, initially by candle and later by battery power.



A collection of pocket watches.



An ethnic stand decorated with bone.



A fancy wooden stand with gilded detailing, dated 1831.



A mabonary stand dated 1794 from Frieston House nr. Grantham.



A selection of 19th century wooden, or tree, stands.



A classic architectural stand with mirror.



A selection of stands of various materials including mother-of-pearl, horn, leather and ivorine.



A stand of coloured marbles.



An alternative to a stand was a pocket and these were traditionally tied to the post of a four-poster bed. These are bead work which was popular 19th century form of decoration.



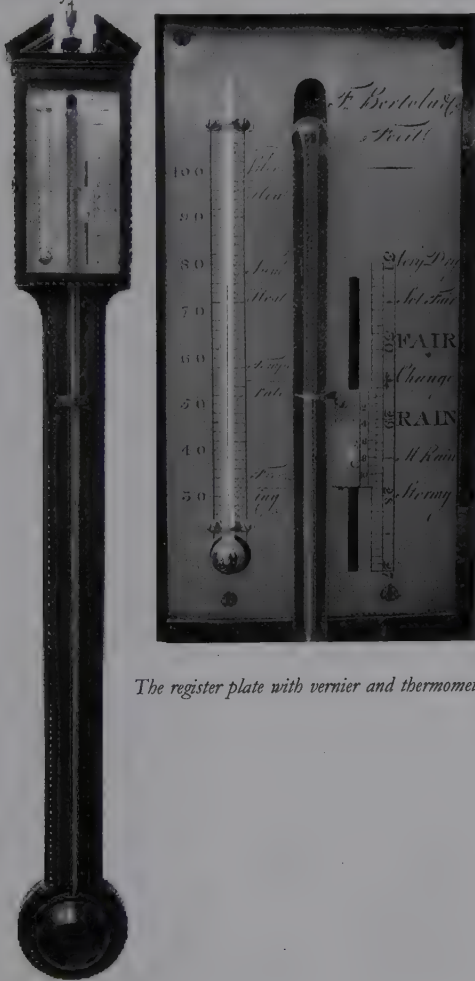


A selection of Staffordshire watchstands c.1850-70.

Barometers

The invention of the mercury column barometer is attributed to the Italian Torricelli in about 1643. He had carried out what is now known as the Torrecelli experiment which many of us will remember from our school physics lessons. This involved filling a glass tube with mercury and with a finger held over the open end whilst submerging it in a dish of mercury. On removing the finger the mercury descends only part-way down the tube maintaining a column about 28 or 31 inches above the surface of the dish. Torricelli deduced that this height was dependant on the weight of the atmosphere.

In England Robert Boyle repeated this experiment in the late 17th century with a measuring scale towards the top of the tube to enable accurate measurements to be recorded of the changes in height. He found that the measurements were associated with changes in the weather and although other factors such as wind direction and temperature were also significant the changes either up or down could give a rough forecast of the forthcoming weather, a drop warned of imminent unsettled or rainy, conditions, a rise indicated more settled dry weather and so the domestic barometer evolved around 1675.



The register plate with vernier and thermometer.

These barometers used a glass tube with a mercury filled cistern at the bottom and engraved brass or paper scales at the top 3 or 4 inches. They are known as “stick barometers”. The reading, in inches of mercury, was made by an adjustable pointer. The change in air pressure was sometimes quite small but significant and often a vernier was provided to enable readings to be taken to two decimal places of an inch. The measurement was also affected by the temperature and a thermometer was usually incorporated to allow a correction to be made.

It was also realised that the pressure varied with altitude and some models were specifically designed to be portable for use as altimeters by mountaineers and in hot air balloon ascents.

An alternative was to angle the top part of the glass tube which extended the top 3 inches of vertical height to a length of about 15 inches enabling a much more accurate reading. This type is known as a “sigh-post or angle” barometer. Being asymmetrical they did not fit in with furnishing tastes at the time but were sometimes built in the frame of a rectangular mirror and there is an example in the entrance hall of Belgrave Hall at Leicester. They are not common but examples from this area by Bellatti of Grantham and Whitehouse of Derby have been recorded.



An early 19th century angle barometer by Bellatti of Grantham.

The rear view of a wheel barometer showing the arrangement of the pulley and counter-balanced glass weight resting on the mercury in the U tube

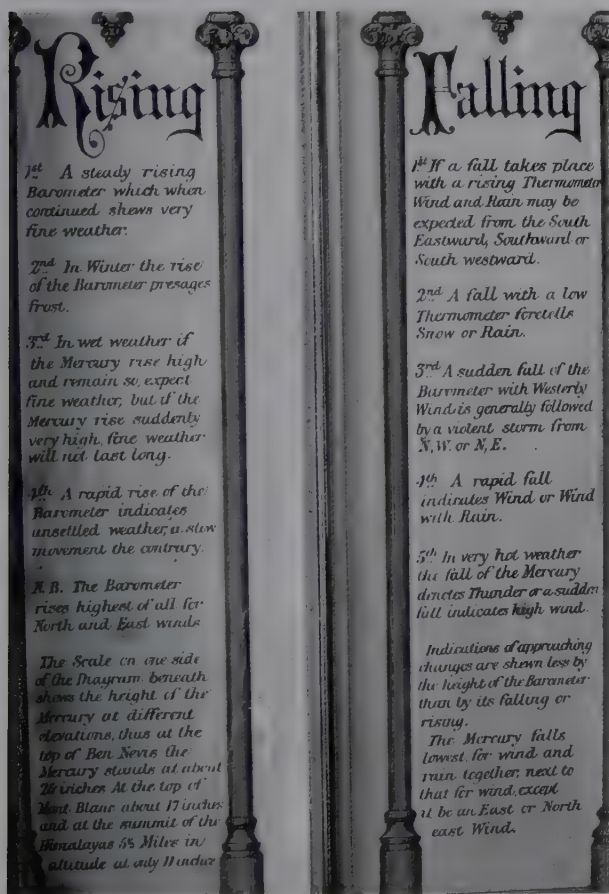


A typical early 19th century wheel barometer.

A significant development was the adoption of the wheel barometer which used a U tube with a pulley system to display the vertical changes in the height of the mercury column on a round dial with a hand with a further, manually set, hand to show the previous reading. The constantly changing weather in this country had led to a preoccupation with the subject and there was a considerable amount of weather lore based on seasons, winds etc. Naturally the additional component of the barometer readings was readily appreciated and the barometer, particularly the easily read wheel barometer (often called a banjo barometer), soon became a common feature of domestic furniture.

The early barometers were made by established clockmakers but the wheel barometer was a particular favourite of immigrant Italian makers. It is difficult to explain why so many Italian barometer makers came to this country (apart from the fact that it had been invented there some two hundred years previously) but by the middle of the 19th century they had established themselves in virtually every town and city in Britain. Perhaps in two hundred years time it will be difficult to explain why every town in this country has numerous Chinese restaurants! Most of these tradesmen came from the Lake Como region and usually combined several trades associated with glass making, often as opticians and looking glass makers. This type of barometer underwent some changes but the similarity of styles suggests that they were made centrally by well organised trade suppliers. It would, of course, be difficult to transport the mercury-filled tube but probably all the various other components were bought as a kit of parts to be assembled locally. This enabled other craftsmen, previously unconnected with the trade, to sell barometers. Some of the barometer makers, like Bellati, also moved into watch and clock making.

The subject of the weather was further advanced by the work of Admiral Robert Fitzroy who made a study of barometric pressure and the prevailing weather conditions over many years. He was appointed to the newly founded Meteorological Office in 1854 and started a weather forecasting service in Britain. He realised its importance to inshore fishermen and was instrumental in the provision of barometers in the coastal towns and villages of this country. He also helped to design an affordable domestic instrument which became associated with his name.



This mercury tube barometer had paper scales with weather predictions. They usually included a thermometer and also 'storm glass' which was a sealed glass tube filled with a mixture of water, alcohol and various salts. In this tube crystals mysteriously appeared and disappeared which was supposed to indicate the approach of storm conditions but it did not seem to have had any scientific basis. Some models had a device which enabled the bottom of the tube to be plugged so that the instrument could be easily transported. Fitzroy type barometers were mass produced and within reach of most of the workers. Reproductions of Fitzroy's barometer are still made today.



A typical Fitzroy domestic barometer with his weather predictions c.1880

Not all stick barometers followed the usual styles; the one illustrated on the next page by John Illingworth of Halifax was a regional style peculiar to the area. An industrial style was also made especially for the mining industry after it was established that explosions in mines were linked to periods of low atmospheric pressure. An Act of Parliament of 1872 required that daily records of barometric pressure were kept.

The next significant development was the invention of the aneroid barometer in 1843. This used a different principle and comprised of a shallow metal drum the inside of which was evacuated of air. One end of this drum was corrugated to allow it to become a diaphragm that flexed in and out according to the outside air pressure. The centre of the diaphragm was linked by a system of levers to magnify this deflection and operate an indicating hand with a circular scale. This device was truly portable and could be made in various sizes eventually to make possible one as small as a pocket watch. Further development enabled, by the use of bi-metallic components, it to be automatically temperature compensated.

As barometers became more popular towards the end of the 19th century they began to be mass produced in factories and eventually the aneroid replaced the mercury tube instruments.



An aneroid barometer, note the corrugated drum used as the pressure sensing element



A pocket barometer, sold by Mansells of Lincoln, the outer scale of which is divided as an altimeter 0 -10,000 feet.



A stick barometer by Bertola & Co. c.1820



A barometer by John Illingworth of Halifax c.1830



A mining barometer by Townson & Mercer c.1860



A stick barometer by H. Furniss of Derby c.18880



A wheel barometer by Bellatti of Grantham c.1830



A '5 dial barometer' by Cusa of Gainsborough c.1850



A mahogany barometer by Bothamley of Boston c.1870



A Fitzroy' barometer c.1900

Illustrations from our Catalogues of Aneroids & Mercurial Barometers.



DETAILED ILLUSTRATED CATALOGUE POST FREE ON APPLICATION.

DISCOUNTS ON APPLICATION.

Sundials

The movement of a shadow cast by the sun as a method of dividing the day into convenient periods has been used since ancient times. The ancient civilisations of the Greeks and the Romans were well versed in sundial construction. In this country the art of dialling was well developed by the 16th century and was the principal method of telling the time of day together with the sand-glass used for measuring shorter intervals of time.

The problem was, of course, that they only worked whilst the sun was shining so the development of the mechanical clock was a great advance.



A scratch or mass dial on the wall of the porch at Marston church near Grantham.

The church was an organisation which needed to know the time to arrange times of worship and most churches had a sundial to show times of mass. Many of these were quite primitive and can still be found on many churches comprising a hole in which was placed a wooden or iron peg to provide what is called the gnomon, or style, and one or two radiating scratched lines where the shadow lay at the times of mass. They are often called 'mass dials' or 'scratch dials'.

The development of the mechanical clock did not render the dial obsolete; in fact it was more necessary, because once a clock had been provided a sundial was needed to set the clock to time. Church and public clocks were normally striking clocks so once set to time they would enable people living within earshot of the church to set their domestic clocks to time but for those in the country or out of earshot many clocks were supplied together with a sundial to be set up in the garden.

A typical horizontal dial supplied by Bellatti of Grantham, most probably for the old Manor house which was demolished in 1841. (Courtesy Mr. John Baxter).



At this point it became apparent that the clock and the sundial did not always indicate the same time. This arose because the hours shown by the mechanical clock were of constant length whereas the hours indicated by the dial vary by several minutes at different times of the year. This is due to the fact that whilst the earth is rotating on its axis once in 24 hours it is itself travelling around the sun at a more or less constant speed, taking a year to complete its orbit. The trouble is that its orbit is elliptical which results in the 'hours' cast by the sundial varying when compared with those of the clock. This difference is known as the 'equation of time'. In the early months of the year the sun's time is up to 14 minutes slow compared with the clock and later in the year up to 16 minutes fast. If one were living by sun time alone it would be of little consequence but if one were setting up a mechanical clock it would be necessary to know the date and the time difference at that date. Because the equation of time was predictable, tables showing the variance were published and some sundials have a table or graph engraved on the dial plate. Clock and sundial times do agree four times a year: on April 16th, June 14th, September 2nd. and December 25th.

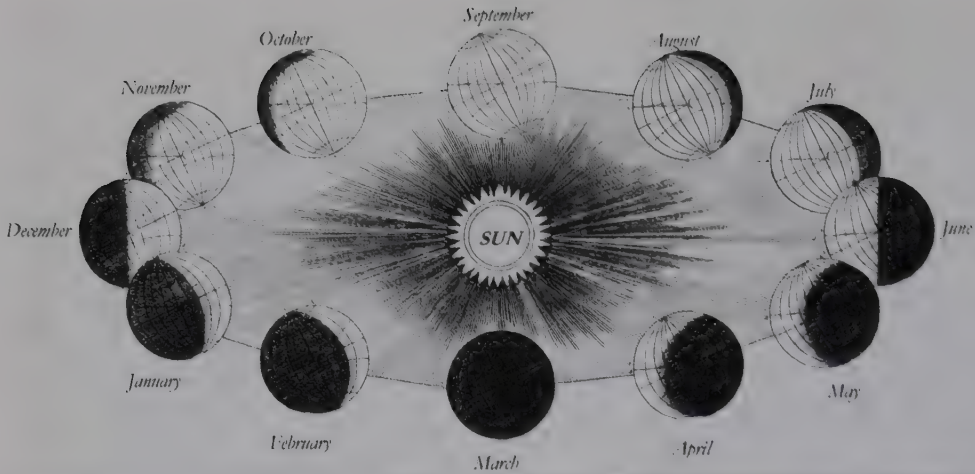
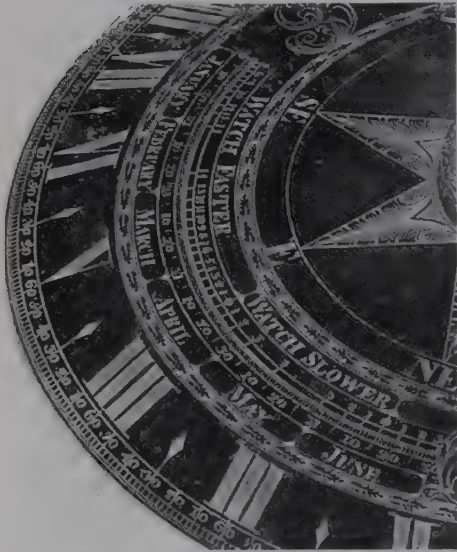
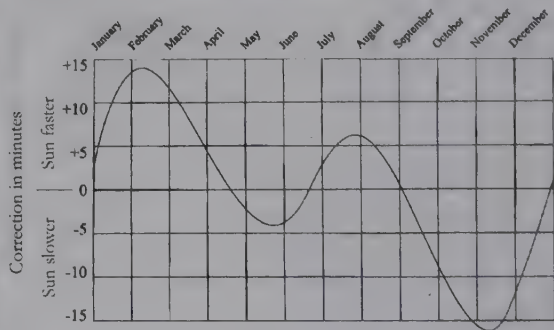


Diagram showing the earth rotating around on its inclined axis whilst making an elliptical orbit around the sun. This results in the discrepancy of time between the solar time and the mean time of the clock. It also produces our yearly seasons.



To enable a clock to be set accurately this dial is engraved with the equation of time tables. Note on June 15th the correction is zero and the hours are divided into minutes, such was the accuracy of a correctly set up sundial.

Graph of the equation of time



An alternative was to print the equation of time graphically; occasionally some clocks, like the one made by Benjamin Parr of Grantham and illustrated elsewhere, incorporated a subsidiary scale on the clock dial to show the difference.

Another complication arose in the 19th century in that most places used 'local time'. 12 noon occurs when the sun is at its highest point in the sky (that is when any shadow cast is at its shortest). Due to the rotation of the earth, noon occurs at say Dover somewhat earlier than at say Penzance. This fact would not be apparent unless one were travelling and comparing departure time and arrival time with journey time when there would be a discrepancy of several minutes. In the days of coach travel when regular stops were necessary to change horses etc., it would be of little importance. But the advent of much faster rail travel when stops at stations were less frequent and only needed to discharge and pick up passengers a fairly accurate time table could be printed and it became essential to adopt a standard time. This became known as 'Railway time' based on the time in London which we now know as Greenwich mean today.

The Minutes of Grantham Corporation of February 1851 formalised this arrangement. "Resolved that the clock at the Guildhall be kept regulated according to the clock at the Grantham Station of the Ambergate railway."

Payments Henry Pearce £5 - 6s. - 0d.
John Saltby £2 - 12s - 0d.

The invention of the electric telegraph enabled the clocks at all the railway stations along the line to be synchronised with the Railway Mean time at London. For a number of years Henry Pearce had been paid an annual sum for the maintenance of the Guildhall clock and he continued with this duty but from this date onwards, for many years, John Saltby was also paid an annual sum of £2-12--0., probably for regularly carrying the 'Railway time' from the station. It can be assumed that the clock in St. Wulfram's was also kept at railway time and the rest of the clocks in Grantham could be set from its striking. At this time then, certainly for town dwellers, the sun dial would have become redundant.

The two most usual sundials are horizontal and vertical. The art or science of dialling is much different to that of clock making requiring some knowledge of the planetary arrangements of the sun and earth in the universe, mathematical competency and knowledge of practical geometry. The horizontal dial was the easiest to set up as only the latitude of the location was needed (as the acting edge of the gnomon had to be at the same angle) and the dial plate could be rotated to point the gnomon and 12 o'clock line due south.



Bellatti's dial is engraved for the latitude, 52° 57', that of its intended location at Harlaxton old hall.

Vertical wall dials can be designed for any aspect but, apart from the walls of churches, those of most buildings do not precisely face any of the cardinal points of the compass which makes their construction more complicated and work for a specialist dialist.



Vertical dial in Wide Westgate, Grantham, previously the premises of Webster's bakery.

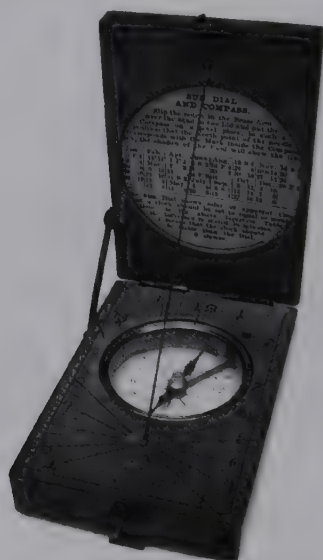


The sculptural sundial at Belton House near Grantham. (Courtesy The National Trust).



An unusual pillar dial in the churchyard of Marston near Grantham with south, east and west facing dials.

Sundials continued to be made in a wide variety of designs more as decorative items for the house and garden. No rose garden was complete without a sundial. There was a fashion for engraving the plate with a motto, usually of a rather sombre nature, reminding us of the eternity of time and brevity of our life on earth! A Mrs. Gatty in the mid 19th century published a collection of several hundreds of these mottoes. There has been a resurgence of interest in dial design and many clever and artistic examples have been produced for both buildings and gardens.



Boxwood folding dial with thread gnomon

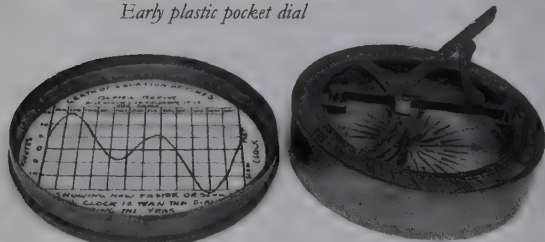
Portable sundials were also made from early times for explorers and people remote from other methods of obtaining the time.. Useful, no doubt, to anyone who could not afford a watch or if a traveller had let his watch run down.



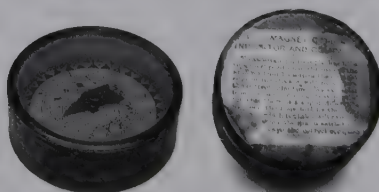
Early plastic pocket dial



Boxwood compass dial with domed glass



Brass dial with folding gnomon



Brass pocket dial

A selection of portable compass sundials, small enough to be carried in the pocket. Many had the gnomon and card printed dial attached to the magnetic compass needle and so automatically aligned the dial. Equation tables were often printed in the lid.

A DIRECTORY
OF THE
WATCH AND CLOCKMAKERS
IN
THE TOWN OF GRANTHAM

IN THE COUNTY OF LINCOLNSHIRE
AND
THE PRINCIPAL PLACES IN THE VICINITY

For the years from 1700 until 1900

BY

H.F.WATSON



Inauguration of the statue of Sir Isaac Newton at Grantham in 1859.



Documentary sources used.

Where reference is made to "the Directories" the following Trade Directories have been searched:--

The Universal British Directory compiled 1793-1798

Pigot & Co's National & Commercial Directory, Lincolnshire
for the years 1830 and 1840.

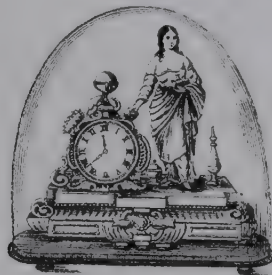
The Post office Directory of Lincolnshire
for the years 1849, 1855, 1861 & 1864.

White's Directory of Lincolnshire
for the years 1826, 1842, 1856, 1872, 1882 & 1892.

Slater's Directory of Lincolnshire for 1857

Kelly's Directory of Lincolnshire
for the years 1876, 1885, 1889, 1892, 1896, 1900,
1905, 1909, 1913, 1919, 1922, 1926, 1933, & 1937.

Relevant advertisements from c.1760 onwards have been taken from the newspaper the Lincoln, Rutland and Stamford Mercury which was published weekly on Fridays. These extracts are noted as "LR&SM" with the appropriate date.



All photographs have been taken by the author unless otherwise stated.

ABLE William, T.

Bllingborough

c.1840-51

William is listed in the 1849 Post Office directory as a clockmaker at Billingborough together with his wife Jane who was a school teacher aged 23 and a 17 year old apprentice, George Bell. In the 1851 census he is included as a 26 year old clockmaker having been born at Scot Willoughby near Sleaford.

An advertisement in the LR&SM of Oct. 3rd. 1851 reads "To Watch and Clockmakers &c. To be disposed of An Old Established Business in the above line at Billingborough, near Folkingham. Apply Mr. W. Able Billingborough." It is not known where he went to from here as he does not seem to be listed in any of the later directories..

Several longcase clocks by William have been seen of the 1840-50 period including an eight day arch dial clock in an oak and mahogany cross-banded case with the label of J. Wilcox clock case maker of Dyke (near Bourne).

ANDREW, Charles 91 Westgate and later 7 Westgate.

Charles Andrew was born at Welby near Grantham in 1827 and, at the age of 14, was apprenticed, for 7 years, to William Green who at the time was in business in the Market place. By 1851, having completed his apprenticeship, he was working as a journeyman and assistant to John Taylor who also had a shop in the Market place.

The census of 1861 finds him in business on his own account at 91 Westgate with his wife Sarah and their son Charles aged 6. From 1863 he is listed in the Directories as a Watch and Clockmaker at number 7 Westgate where he remained until his death in 1899.

There was a family connection with the Taylors as in the census of 1881 a William Taylor, nephew, was included in the household aged 18 as an apprentice watchmaker. William continued to work for Charles and eventually succeeded to the business.

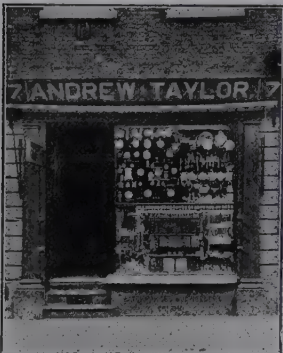
A watchpaper of C Andrews in a watch by Wm. Hall has been noted together with silver pocket watches bearing his name. His name has also been noted on the dial of an 8 day English dial clock.

ANDREW and TAYLOR 7 Westgate

1899 - c.1925

See also Taylor also Son

After the death of his uncle, Charles Andrew, William Taylor continued the business in the same premises initially trading as Andrew and Taylor probably as his aunt still had an interest in the business.



The shop front from a publication by W T Pike c.1909

Watchpaper of Andrew & Taylor

ANDREW & TAYLOR, Silversmiths, makers, 7, Westgate, Grantham.—This business was established by the late Mr. Charles Andrew in 1845. Upon his decease, ten years ago, his nephew, Mr. William Taylor, who had been with Mr. Andrew all his life, succeeded to the business, in which, in turn, his son, Mr. Charles Andrew Taylor, is being trained. It is a successful small concern, and Mr. Taylor has recently (1909) acquired the freehold of the premises. There is always a good window display, and a great variety of stock, and a special feature of the business is the attention given to repairs.



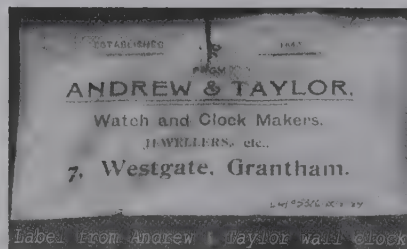
12 inch 8 day fusee dial clock c.1870

The wall clock on the right is lettered for Andrew and Taylor but again would have been 'bought in' from the Anglo American Clock Co. who were based in London. They used imported American movements housed in cases of their own manufacture. These clocks were very popular, being much cheaper than the English made equivalents and struck the hours which was not normally the case with the English dial clocks.

This dial clock, although it is lettered for Andrews and Taylor, would have been 'bought in' from an English manufacturer.



This is another style of Anglo American wall clock sold by Andrew and Taylor; although the dial is not lettered it has their label stuck to the back board behind the pendulum.



By 1925 the business was known as Taylor and Son and continued until William's son, Charles Andrew Taylor, succeeded to the shop c.1938. He continued in there for a further 30 years finally closing in the late 1960s, bringing to an end a family business which had occupied the same Westgate premises for over one hundred years.

An advertisement in the Lincoln, Rutland and Stamford Mercury of 10th March 1826 describes John Waite Barston as Jeweller, Silversmith and dealer in Watches, Market Place, Grantham.

JOHN WAITE BARSTON, Jeweller, Silversmith, Dealer in Watches, &c., *Market-place, GRANTHAM*, begs leave to inform the nobility, gentry, and inhabitants of Grantham and its vicinity, that (since the calamity by fire) he has purchased an entire new Stock of the best and most fashionable London Jewellery and Fancy Goods; also a new stock of Silver Goods, consisting of Tea-pots, Sugar-basons, Cream-ewers, Soup, Sauce, and Sugar Ladles, Spoons, Forks, Marrow-spoons, &c. &c., together with a choice selection of Plated Goods, of the best Sheffield manufacture, which he offers upon liberal terms.

Grantham, March 4th. 1826.

LR&SM 10th. March 1826

A year later there is a similar advertisement and he lists a wide range of articles including musical boxes, watch stands, guns and pistols. It certainly sounds to be an interesting stock-in-trade but he doesn't profess to be anything more than a dealer in watches and none has been recorded bearing his name.

The inclusion of "watch stands" in his stock is an interesting reference to these once-common articles.

GRANTHAM FAIR.

JOHN WAITE BARSTON, Silversmith & Jeweller, Dealer in Watches, Fancy Articles, &c., with much respect tenders his grateful acknowledgments to his numerous friends for their liberal support, and at the same time begs to solicit their attention to a new and elegant stock of the best London Jewellery, consisting of fine gold chains, seals, keys, rings, brooches, pins, &c.; together with a variety of Gold and Silver Watches; and a new and superb assortment of Silver Goods, comprising teapots, sugar basins, cream ewers, soup, sauce, and sugar ladles, spoons, forks, marrow spoons, &c.; and a choice selection of Plated Goods of the best Sheffield manufacture. Also musical boxes, Scotch and other snuff-boxes, coral negligees and other beads, bracelets, turtle and tortoise shell caddies, bronze lustres, tapers, inkstands, watchstands, &c., and a collection of French Fancy Goods, Guns and Pistols; the whole of which will be offered on the most liberal terms.

Full value given for Coins, old Gold and Silver, &c. Seals, &c. engraved with Arms, Crests, Cyphers, &c.

Market-place, Grantham, March 28, 1827.

LR&SM 28th. March 1827

At some time between 1830 and 1835 he moved from the Market Place to the High Street but in March 1838 he went into liquidation and assigned all his personal estate in trust for his creditors.

BARSTON Thomas and family Grantham and Sleaford

Thomas was essentially a Silversmith and Ironmonger but he is included here because he did have connections with the clock and watch making trade in that he sold gold and silver watches as well as watchmaker's tools.

Thomas Barston,

Silversmith, Cutler, and Ironmonger, at his Shop next Door to the Cross Swords, Grantham,

HAS just laid in a complete and entire new Stock of Silver Smith's, Cutlery, and Ironmongery Goods in all these various Branches, where Gentlemen, Tradesmen, Shopkeepers, Travellers, &c. may be supplied with any Articles in the above Branches, Wholesale and Retail, at the most reasonable Rates, Mats and Matting, and Mansfield Stone Troughs. Ready Money for Old Gold, Silver, Brass, Pewter, Iron, Horse-Hair, and Old Rags. He likewise sells all the above Articles at his Shop in Sleaford every Monday.

LR&SM March 13th. 1766

The business seems to have been founded by Thomas Barston and an early advertisement in 1766 tells us that he had a shop in Grantham next to the Cross Swords in the High Street where he stocked everything from Silver goods to Mansfield Stone troughs. He also had a similar shop in Sleaford.

By 1787 he had moved to a shop and wholesale warehouse in the Market place in Grantham where he kept a very wide range of ironmongery as well as selling coals and imported timber. Tools for various trades were stocked including specialist tools for the watch and clock making trades (known as Lancashire tools). The Grantham Museum has a 'Lancashire engine', which was a hand-driven watchmakers lathe, from a local watchmaker's workshop in their collection which is illustrated below. It may well have been supplied by Barston.



Watchmakers lathe
Grantham Museum

B A R S T O N,
WHOLESALE and RETAIL IRONMONGER,
In the MARKET-PLACE, *GRANTHAM,*

RETURNS his sincere Thanks for the Favors he has received from his Friends and the Public, in general, and begs to inform them that he has laid in an entire new Assortment of London, Birmingham, and Sheffield Goods, viz. Japan'd Tea Trays, Waiters and Decanters, Plated Buckles and Spurs upon a new Construction, Tea and Coffee Urns, Green Chinese Ivory Table and Defant Knives and Forks in Cases, Kitchen Windup Ranges, side and back Ovens, Bath and Pantheon Stove Grates, fine Steel polish'd Ditto, Wire and open-work'd polish'd Steel Fenders, Case-hardent'd and polish'd Fire Shovels Tongs and Pokers, Mahogany Tea Trays Boards and Caddies, Pier Glasses in Mahogany and Gilt Frames, Swing Ditto, Patent Socket Princess Metal and Plated Caudlesticks and Snuffers; Mortice, Brass and Iron rimb'd Locks and Hinges; Steel Malt Mills, and Mills for splitting Beans, &c. Corn Screens and Chaff Cutters, with every Article for Husbandry. English and Dutch Toys, Gentlemen's Chests of Tools, with all Sorts of Smith's Carpenter's, Joiner's, and Clockmaker's (Lancashire) Tools, &c.

The Public may depend on being served with the very best Articles, on the lowest Terms, and their Favors gratefully acknowledg'd, by

Their obedient humble Servant

THOMAS BARSTON.

P. S. Coach and Waggon Tyre and Nails made at his Forge Shop in Grantham, as usual.

Likewise he imports the Newcastle and Sunderland Coal, and sells Yorkshire Coals for Smith's Use; House Burning and large Coal from the best Pits.

Memel Timber, Riga Oak, and Mahogany in Planks, Fir Poles, Deals and Battens, on the lowest Terms.

Lawn and Silk Umbrellas fold.

LR&SM 7th. March 1787

Thomas died in 1789 aged 52 and a flat stone in the North aisle of St. Wulfram's commemorates his death.

ECONOMY & CLEANLINESS in COOKING.

By his Majesty's Royal Letters Patent.—The new-improved Steam Kitchen and Roaster.

JOHNS & THOMAS BARSTON, Furnishing Ironmongers & Silversmiths, take this opportunity of recommending to the public the above Kitchen Apparatus, the utility of which has been proved by several respectable families, to whom references can be given.

N. B. It is only necessary to inspect the steam kitchen and roaster, in order to understand the mode of using them.—Orders directed to J. and T. Barston, in Grantham, or at their warehouse in Sleaford, will be duly attended to.

LR&SM 10th. December 1813

In 1826 a fire in their premises in the Market Place caused some excitement luckily extinguished before too much damage had been done. At this time the son of Thomas II, John Waite Barston was involved in the business. He specialised in the Silversmith and Jewellery side initially from the Market Place shop but later from his own shop on the High Street. (see separate entry for John Waite Barston).

John and Thomas continue to be listed in the directories through the 1830s expanding their business to include Brass and Iron founding. In the Pigot's Directory of 1840 George Gregory Barston (another son of Thomas II) is running the business but by the time of the 1849 Directory, the business is no longer included.

ALARMING FIRE AT GRANTHAM.—On Thursday morning the 19th inst. at about seven o'clock, the extensive premises of Messrs. John and Thomas Barston; ironmongers and jewellers, in the Market-place, Grantham, were discovered to be on fire. The family, who reside in the house at the back of the warehouse, were all in bed, and in consequence of its not being generally known where they slept, some few minutes were lost in arousing them to a sense of their danger. So alarming, however, was the appearance from without, that it was deemed necessary, before the arrival of the proprietors, to force open the shop door; on accomplishing which, the whole interior of the shop seemed to be enveloped in flames. The engines having by this time arrived, the most active and meritorious exertions were made in bringing them into play; and as they were plentifully supplied with water, the devouring element was speedily subdued, without extending its ravages further than the shop, although it is supposed that, had the discovery of the fire been delayed for half an hour longer, no human means could have prevented the destruction of the entire premises and their valuable contents.—As Messrs. Barston were dealers in gunpowder, some anxiety was evinced on that account; and it is perhaps owing to the ignorance of the public as to the situation of that article that some dreadful explosion did not occur. Had it been known that, independently of the stock of powder in the upper part of the warehouse, about 24lbs were in the shop in paper packets, and in a drawer the exterior of which was quite warm, whilst the adjoining ones were actually on fire, it is probable that fear would have predominated, and induced the majority of those assembled to consult their personal safety.—The conflagration originated in the room under the shop, where the descending flue of the stove, becoming over-heated, set fire to the beam and boarded floor under which it passed. The end of the beam was burnt through, and it was a most providential circumstance that the floor, which sunk a few inches, did not fall in. The loss, we fear, is likely to be very serious (1000*l.* is mentioned), as both buildings and stock were uninsured.—Independently of the destruction of the goods in the shop, almost the whole of the articles in the upper rooms are more or less damaged by the smoke.

LR&SM 27th. January 1826

In an advertisement in the Grantham Journal in 1910 Charles Basker and Son offer Ingersoll and John Bull watches and others for sale for 5 shillings, also clocks. They claim to have been established for 70 years.

Certainly there were Baskers in business in the 1840s but they were bakers and confectioners. The first mention we have of Charles Basker is in the Post Office directory of 1855 when he was in business with a John Basker, perhaps his brother, as millers, bakers and agents for the Midland Counties Fire Insurance Co. at an address in Westgate. By 1861 he is in business on his own as a baker in Westgate (John was by now a miller at Spittlegate mill).

In 1868 Charles is trading as a pawnbroker and baker and by 1876 he has two shops, his bakery business is at no. 3 Westgate and his pawnbroker and jewellery business is at no. 76. He continues, taking his son as a partner in 1892, and eventually, around 1896, takes also the shop next door at no.75. The business finally disappears from the directories after 1938.

This is how the shop looked in 1900. It was situated on wide Westgate to the left of what was Neales (now Bottoms Up).



He looks to have a window full of watches and clocks. A silver, open faced, pocket watch with the dial lettered "Chas. Basker & Son, Grantham" has been noted although it is unlikely that Charles was anything more than a dealer in these articles both second hand and new. The growing interest in antique furniture is catered for and in January 1910 he is advertising "an elegant Grandfather clock in an oak case, a bargain at £4-10-0".

Many of Grantham's antique watches and clocks must have passed through his hands.

C. Basker and Son
 Dealers in the Antique
 75 and 76 Westgate, Grantham

Advertisement c1920

BELLATTI Louis and family, Westgate, later in High Street, Grantham and later at Lincoln

Louis Bellatti came from the Lake Como region of Italy. It is not clear exactly when he arrived in Grantham but his marriage to Sarah Stokes is recorded in the registers of St. Wulfram's on 7th. November 1810.

Like many who came to this country in the late 18th. and early 19th. centuries he was an Optician and Barometer maker, Carver, Gilder and Looking glass maker. As he became established he widened his scope to include fashionable goods from London and an interesting range of imported stock from Europe. He eventually took on the shop next door and went into the clock, watch and jewellery business and bought and sold old master paintings. His must have been a fascinating shop selling as he claimed "goods not normally seen in Grantham"

He also involved himself in politics supporting the Whig and later Liberal parliamentary candidates. He was clearly something of an entrepreneur and at one stage he contracted to build ten new houses in Bluegate.

It seems that his rather affected Italian manners were not entirely admired by his fellow tradesmen but Bellatti understood the value of publicity and relished the controversy he created. He advertised in the Lincoln, Rutland and Stamford Mercury in quite provocative terms. After the ensuing responses from his rivals had created a public interest he replied with long advertisements detailing his very extensive and eclectic stock. That of his competitors must have seemed rather mundane in comparison.

He first started in business in Westgate but, by 1821, he had moved to a shop in the High Street, "opposite the George Hotel", which would probably place it on the site presently occupied by Marks and Spencers. He later extended his premises by acquiring the shop next door. Here he stayed until 1834 when he announced in the newspaper that "BELLATTI was leaving the Country and all his stock in trade to be Sold by Auction". There followed a six day sale of all his stock and household goods "including his well-known Chestnut Mare, Gig, Harness etc."

Quite whether he returned to Italy is not clear but he reappears a year later in 1835 with a similar business in Lincoln. It seems probable that his eldest son, also Louis, who had trained as a watchmaker in Coventry and London, joined him at this time in Lincoln.

The shop was initially on the High Street in Lincoln, opposite the Cornhill but he soon moved to other premises on Silver Street. Here he continued advertising occasionally with typical Bellatti flair for some years. Louis Bellatti senior died about 1839. His wife Sarah returned to Grantham to live in one of the newly built houses in Union Street. She is recorded in the 1841 census as being "of independent means". The burial register of St Wulfram's records "Sarah Bellatti, widow of Little Gonerby, was buried aged 55 on 7th. March 1842.

Louis and Sarah had six children baptised in Grantham but of these only the three boys survived to adulthood. The eldest, also named Louis was baptised in 1813, was brought up in the watch making trade and probably apprenticed in Coventry which was a centre for this trade at the time. After his father's death he worked for a while with William Chapman, another Lincoln clock and watchmaker but, by the time of the 1851 census, he is listed as a master Watchmaker living with his wife Charlotte at 43, Steep Hill Lincoln. He continues to be listed in the Directories until 1892 but disappears thereafter.

William their second son was baptised in 1818 and eventually became a printer with a business in Lincoln. He was clearly a man of some regard in the city as, when his health began to fail in 1855, a public subscription was raised to send him to a warmer climate, Nice, where he died aged 40 years in 1858.

Their first son James Henry, baptised in 1820, was apprenticed to Innocenti Tara an Italian barometer maker in Louth. He eventually established himself as a brazier, bell hanger and gas fitter in Louth and is listed in the Directories from the 1850s through to the 1870s.

There is also a Charles Bellatti, in a similar line of business to Louis, at nearby Newark who was established there in c.1800. It is likely that Louis and Charles were brothers.

As Louis Bellatti was primarily a barometer maker it is mainly these that have survived but several clocks bearing his name have been recorded. He made barometers in various forms. The most commonly seen today are his wheel barometers (or banjo barometers as they are sometimes called). He also made stick barometers and angle barometers (sometimes known as diagonal barometers) similar to the one illustrated here. These are quite rare. He often refers to the thermometers he made but it is unusual to find surviving examples of these by any makers of the period. A sundial of his manufacture has also been recorded.

As his newspaper advertisements make clear he was very involved in importing fashionable clocks from the major cities of Europe but these would probably not bear his name.

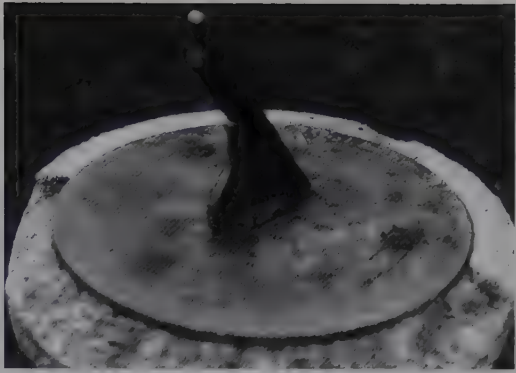
His advertisements in the Lincoln, Rutland & Stamford Mercury show a fair command of the English language and a good understanding of the value of publicity. The selection of his newspaper advertisements throws an interesting light on what was available to the public in Grantham at this period. It is surprisingly varied and cosmopolitan. The advertisements also give a good insight into the character of this ebullient Italian!



*Angle barometer by L. Bellatti Grantham c1825
height 33 ins. width 24 ins.*



*A stick barometer by Bellatti of Grantham
with architectural top and silvered brass scales
c.1815. (Photo courtesy B.Fitton)*



Horizontal sundial by Bellatti of Grantham

The sundial, far from being made redundant by the mechanical clock, was a necessary accessory to enable the clock to be set to time. It was often sold together with a clock.

The barometer pictured here is veneered with mahogany and has the edges double strung with boxwood and ebony. The upper dial is a hygrometer to register humidity and the matching lower dial, engraved with the maker's name, is a spirit level to ensure it is hung vertically. The long thermometer and the 8 inch barometer dial are typical of the early 19th. century.



Wheel barometer by Bellatti of Grantham c.1830



The level plate of Bellatti's wheel barometer



Moon dial with 'four seasons spandrels' of Bellatti longcase clock



A label pasted inside the case records that the clock was 'cleaned & repaired by T.H. Hyde 7th. Oct. 1948 and bushed in seven holes, new suspension & new lines'. (Hyde was in business in Sleaford)



Longcase clock by Bellatti in an oak case with mahogany details c.1830

The first mention we have of Louis being in business is the following advertisement from the Lincoln, Rutland and Stamford Mercury of March 5th. 1819.

OPTICIAN

L. BELLATTI, Barometer and Thermometer Maker, *Westgate*, GRANTHAM, informs the public that he has fitted up a new Machine which will enable him to execute all orders in the above branch, either manufacturing or repairing, or for blowing glass for different experiments, on the shortest notice. — He sells and repairs all sorts of Spectacles, Telescopes, &c., and new silvers Looking Glasses.

L. B. will attend every week at Mr. MANTON'S, gunmaker, Ironmonger-street, Stamford, where all orders from that neighbourhood are requested to be sent, and will have prompt attention.

LR&SM 5th. March 1819



A bracket clock for Bellatti of Grantham, mahogany veneers with brass inlay, 15 inches high.

OPTICIAN.

L. BELLATTI, Barometer and Thermometer Maker, GRANTHAM, begs leave to inform the public, that he warrants all Wheel Barometers purchased of him at or above the price of 2*l.* 2*s.*, and other Barometers at or above 10*s.* 6*d.*

L. B. has formed a connection in London, from whence he is supplied with every article in his line of the very best quality; and begs to inform the nobility and gentry, that he will attend at their own houses for the purpose of repairing Barometers, Thermometers, and Optical Instruments of every description. Looking Glasses re-silvered, framed, and re-gilt; new Plates put in old Frames, and new Frames of every description made.

Address L. Bellatti, Grantham; or at Mr. Manton's, gunmaker, Stamford.

LR&SM 16th. April 1819

OPTICIAN.

L. BELLATTI, opposite the *George Inn*, GRANTHAM, begs to inform the nobility, gentry, and the public, that he has on sale an assortment of Barometers and Thermometers of every description, and warrants all those bearing his name. Barometers from 1*l.* 1*s.* to 5*l.* 5*s.* and upwards; Thermometers from 10*s.* 6*d.* to 5*l.* 3*s.* and upwards; also an assortment of Spectacles to suit all ages: magnifying and diminishing Glasses of all sorts kept, and fitted to Microscopes, Telescopes, Spectacles, &c.

L. B. having a regular correspondence with some of the first Opticians in London, is enabled to execute all orders for Optical, Mathematical, and Philosophical Instruments, on the shortest notice. — Barometers and Thermometers repaired, &c., and Glass blown for different experiments.

N. B. All sorts of Jewellery, Watches, &c.

LR&SM 9th. March 1821

His attendance every week at Stamford must have been quite an effort as it would involve at least two hours travelling each way. This association with Mr. Manton suggests that there was no one in his line of business in Stamford at this period.

Louis also had connections in London as an advertisement the following month shows and he is also styling himself as an Optician.

By March 1821 he has moved his business to a shop opposite the *George Inn* on the High Street, the prime retail position in Grantham, where he was also including Jewellery and Watches in his stock in trade.

BELLATTY, Optician and Jeweller, opposite the George and Blue Boar Inn, GRANTHAM, returns his sincere thanks to the nobility and the public in general for past favours, and is desirous of informing them that his Stock of Goods is very much increased, and comprises a variety of articles which cannot, in point of quality, be excelled in Europe, being of the best English manufacture. He particularly offers to their notice an assortment of ladies' and gentlemen's gold and silver watches, much superior to any that can be met with in Grantham; gold chronometers, or real time-keepers, with repeaters, English make; ditto, with music, French make, and with gold and silver patent levers; ladies' gold neck-chains, gentlemen's chains, gold seals, keys, diamond and other rings, ladies' gold locketts, ear-rings, brooches, and other jewels, with a great variety of bracelets, &c. &c.

Among his Optical Instruments they will find a good assortment of ladies' and gentlemen's silver and tortoise-shell spectacles, particularly of the blue cast, so much recommended by Harris, one of the first opticians in London, as being better adapted for preserving the eye than any other colour; also pebbles and other sorts of glasses.

LR&SM 10th. March 1826

LBELLATTY, the Blue Spectacles, opposite the George and Blue Boar Inn, GRANTHAM, has for sale, at very reduced prices, five Cylinder Electrical Machines, packed in cases convenient for travelling with safety to any distance; they are adapted for medical purposes, or for different experiments, and afford an opportunity for selection not to be met with in England. Also an assortment of Apparatus for different experiments, of the best manufacture, which are well worth notice. He has likewise on sale, a good stock of Optical, Mathematical, and Philosophical Instruments, Chimney, Pier, and Swing Glasses, Barometers, Thermometers, Hydrometers, and Sacchrometers, such as are not to be met with out of London.

Bellatty's Shop, for those who want Spectacles, is the only one to be suited at; as he keeps Blue, Green, Grey, Concave and Convex, Pebble, and all sorts of Spectacles, to suit all ages.

Bellatty has always on sale a great variety of Ladies' and Gentlemen's Gold and Silver Patent Lever and other Watches, Jewellery, Wedding and other Rings, Music Boxes, Ladies' Work Boxes &c. &c.

N. B. Repairing of the above articles executed on the shortest notice.

LR&SM 26th. Jan. 1827

Notice here that the name of the George Inn has changed to the "George and Blue Boar". This was as a result of the Parliamentary elections held that year. The two seats were normally filled by nominees of the Cust and Manners families but this year there was a challenge and as a result there was some fairly robust electioneering. The Manners family owned a number of public houses in the town and had incorporated their Campaigning colour, blue, into their names, hence the Blue Pig, Blue Ram, Blue Lion etc.

The Duke of Rutland was a member of the Manners family of Belvoir Castle, Lord of the Manor and owner of a major part of the town. Bellatti was not shy of declaring his allegiance with this powerful family and as we see here adopted the "Blue Spectacles" as his shop sign! He was perhaps also influenced by the fact that F.J. Tollemache (later to become Lord Huntingtower) was the Liberal nominee of the Manners family and his Landlord. He was also moving into the business of not only selling watches but repairing them. No doubt the existing Clock and Watchmakers were somewhat annoyed by him poaching what they considered was properly their work.

L. BELLATTY, (opposite the George and Blue Boar Inn, GRANTHAM,) informs the public that they will find at his Shop such articles as are not to be met with in this town for choice, quality, and reasonable charges—particularly a good assortment of Gold and Silver Ladies' and Gentlemen's patent Lever and other Watches, Gold from 4l. to 40l., and Silver from 2l. 10s. to 10l.; a good stock of Jewellery, of the first manufacture. Nobody can excell him in quality or cheapness.—An assortment of Optical, Mathematical, and Philosophical Instruments, such as is not to be had out of London.

L. B. wishes to inform those who may like to intrust him with their watches to be repaired, they shall be done with correctness and punctuality; also optical instruments properly doctored on short notice.

LR&SM 30th. March 1827

L. BELLATTY, opposite the George and Blue Boar Inn, wishes to inform those who may please to intrust him with their Watches or Clocks for repairing &c. that he has taken a Shop next door to his own, and opposite the George and Blue Boar Inn, adjoining Mr. Hall's butcher's shop, where he intends carrying on the watch and clock business with proper attention and punctuality, and pledges himself to give every reasonable satisfaction to those who may trust him with their property. They shall not come time after time, and complain of their watches being unfinished; they shall at all times be at their call, and be delivered to the owner, if so requested, without any excuse of not being quite ready, or any other pretext for keeping them to hang up in his window to make a show. L. B. is always glad to get rid of his jobs to the owners as soon as they are done.—All repairs of Jewellery, Mathematical, Optical, and Philosophical Instruments, &c. &c.—He always has a good assortment of ladies' and gentlemen's Gold and Silver Watches, Seals, Chains, Keys, Jewellery, with a variety of other articles, on sale. LR&SM 20th. April 1827

JAMES SWINGLER, Clock and Watch Maker, Westgate, GRANTHAM, returns his sincere thanks to his friends and the public for the many favours he has received, and begs leave to inform them that he has reduced the prices of his Clocks and Gold and Silver Watches full 50 per Cent. under Doctor Quack. *£. s. d.*

30-hour Clock, in waincot case, in-laid with mahogany...	3	13	6
Arch ditto	4	4	0
Arch ditto, 8-days	5	5	0
Arch ditto, swelled dial, extra cases	5	15	6
12-inch Arch, mahogany case, swelled dial	7	7	0
14-inch Arch, ditto, ditto, quarter clocks	10	10	0
New Watches	3	3	0

Gold and Silver Watches, Clocks, &c. warranted 12 months; and if not approved of, will be exchanged.

Clocks and Watches repaired at reduced prices.

A Caution to the Public.—All persons who may want their Clocks and Watches repairing, are recommended to apply to some person who has been regularly brought up to the trade, and not to Quack Doctors; or else, as soon as the watch is opened, it will want either a warge or a mainspring.—*N. B.* Advice: *Italian Puffs* and *Physic* must be paid for—*Quack! Quack! Quack!*

LR&SM 4th. May 1827

On the 30th. of March he was advertising that he would undertake watch repair with punctuality and correctness. Notice also his term of "doctored". He is often referred to as "Doctor Bellatti" after this, a title he adopts quite happily!

In April 1827 he caused something of a stir by announcing that he had extended his shop and was moving into the Watch and Clock repairing business. He placed this advertisement in the LRSM of 20th. April 1827.

James Swingler, an old established watch and clock maker in the town, was first to reply to the challenge with an advertisement on 4th. May 1827 in which he claims to have reduced his prices by 50%. He advises against using Quack Doctors and calls Bellatti an "Italian Puff"! (In Victorian times a Puff meant a person with an "exaggerated commendation")

F HEBDEN, Clock and Watch Maker, Jeweller, &c., tenders his thanks to the inhabitants of GRANTHAM and its vicinity for the liberal support he has hitherto met with, and trusts that by a strict attention to business, and moderate prices, he shall ensure their continued support. F. H., like a certain pettifogging foreigner, wishes to impress on the minds of the public that watches shall not hang in his window by way of ornament, but those who are pleased to entrust him with either clock, watch, or any other article to repair, shall have it done speedily and properly.

The beautiful motto which lies at the basis of Christianity, F. H. claims as his own. No man shall ever have to say that he was either immured in an *Italian convent*, or that he went to a *British jail* to the injury of British industry. F. H. does not shrink from avowing that he has a perfect knowledge of his mechanical profession: he can give momentary decision whether or no the *vorg* is broken, which must be a matter of doubt on the part of the prime minister of the Blues. Question the *Italian* as regards either clock or watch, and to each question he must say *Non mi ricordo*; unless he adopts his country's custom, which is proverbial for *lying*. *Majest* has ticketed articles at a low rate, but that does not say they are cheap: watches, like every other article, can be bought and sold at almost any price.

N. B. Scouts, out-casts of all nations, I'll tell you how to thrive! Land in Britain; you will be fed, though other men starve. Imitate the Italian; crouch, fawn, flatter, ignobly sue,—tell noble Lords this, that, all—more than all,—a sure way to pre-eminence.

LR&SM 18th. May 1827

LONDON, May 9th, 1827.

L BELLATTY wishes to inform the public of L. GRANTHAM and its vicinity that he is at this time purchasing an assortment of English, French, Swiss, and German Clocks, and handsome ornamental Time Pieces, with and without additional music to them, at from half-a-guinea to 60 guineas each; also, in addition to his stock at home, an assortment of the best Musical Boxes that can be manufactured, and a new assortment of Ladies' Bracelets, just imported from Paris; and a new assortment of English Jewellery of the best quality, Ladies' Parasols of the newest fashion, &c.

N. B. Such a choice of Clocks, Time Pieces, and Watches as was never before offered for sale in GrantHAM, will be found at his shop opposite the George and Blue Boar Inn, where the watch and clock business is carried on, and a man kept for that purpose who has regularly served his apprenticeship to the watch and clock business in the borough of GrantHAM, and has since worked in one of the best and most respectable shops in Lincolnshire.

L. B. also informs those who may chuse to intrust him with their watches, or any other jobs, that he can undertake that they shall be properly done, to the satisfaction of any reasonable customer, as he will employ the best workmen that can be found in the metropolis, either English, French, German, Swiss, or Italian; and they shall have their watches or jobs again when called for that are put into his care for repairing, and punctually done, as he is determined not to employ bad workmen or tinkers.

LR&SM 11th. May 1827

Francis Hebden, a relative newcomer to the town, had his say with an advertisement in the edition of May 18th 1827 in which he refuted the practice of retaining customers' watches, questioned Bellatti's ability to diagnose what was wrong with them and implied that all Italians were liars anyway! His final paragraph reveals that anti-immigration attitudes were not features only of modern politics.

Bellatti was a clever publicist and realised that these exchanges were catching the attention of the public, so he responded the following week with a long advertisement detailing his extensive and varied stock. He answered his critics quite cleverly by explaining that he employed a time-served apprentice, in fact one who had served his time in the town, to carry out his repairs. He also made quite frequent visits to London to buy his stock which was sourced from all the major manufacturers in Europe. As he claimed some of this had never been previously seen in GrantHAM, his shop must have aroused considerable curiosity.

Halloo!—More Clocks strike at a Distance.

LBELLATTY has just received from Paris such Clocks and Pictures as were never before seen in this part of the country, in addition to his superior stock of Clocks and Watches, at his Shop opposite the George and Blue Boar Inn, GRANTHAM; where will be found such a collection of Clocks as for choice and quality cannot be met with out of London. He keeps English Clocks, French Clocks, and German Clocks; also Watches of the best manufacture.—The greatest attention is also paid to the repairing of the above articles; and another good Workman is immediately wanted.

N.B. Clocks from 10s. 6d. to 100 Guineas each; Gold Watches from 4l. 4s. to 60l. and upwards; good Farmer's Silver Watches as low as 2l. 12s. 6d., warranted.

An assortment of Jewellery, Wedding Rings, &c.; Barometers, Thermometers, and all sorts of Optical Instruments, &c. &c.—*The Truth.*

LR&SM 17th. August 1827

He now has a 'Clock Shop' stocked with a vast range of items to suit every pocket. The Electrical Machines are interesting and represent the very latest technology of the time.

These clocks "which strike at a distance" that he refers to several times in his advertisements are something of a mystery but may be some type of French picture clock which could be made to strike remotely by pulling a cord.

THERE!!

SUCH CLOCKS are to be seen at BELLATTY'S Clock-Shop, opposite the George and Blue Boar, as are not to be met with in any other shop in Grantham. There are picture clocks that strike at a distance, music clocks, English clocks, French clocks, German clocks, and all sorts of clocks, from 10s. 6d. to 100 guineas each: time-pieces, and gold and silver watches of all kinds; gold ones as low as 4l. and new silver ones as low as 2l. 12s. 6d. each.—Every article sold out of his clock-shop will be warranted.

L. B. has a good assortment of Jewellery, Bracelets, &c. &c.; Optical, Mathematical, and Philosophical Instruments; three large Electrical Machines, packed in cases, complete, and calculated either for medical purposes or for different experiments, which he offers at very reduced prices at his other shop, also opposite the George and Blue Boar, where are kept all kinds of Spectacles calculated to suit all ages, with convex, concave and pescopic glasses.

Repairing of all kinds connected with the above businesses executed with attention, by experienced workmen.

N.B. Bellatty thinks of opening a shop at Skellington. Grantham, Oct. 3, 1827.

LR&SM 3rd. October 1827

Doctor BELLATTY versus CHOLMELEY.

DOCTOR BELLATTY, of Grantham, has ten Houses to build by Contract, on the South side vacant frontage of Blue-gate, on the plan of the other 24 new built houses in Blue-gate, it being the Doctor's determination at another Election to trot in Cust with flying colours as a proper Member for Grantham, and to trot out CHOLMELEY with a flea in his ear, as an adventurer, without the smallest pretensions at Grantham, where, or within six miles of that borough, neither he nor his father owns a cabbage garden, and as a disturber of the harmony between landlord and tenants, as in the cases of Basker, Smith, Clay, Sutcliffe, Poole, and many others, who by misrepresentations were prevailed on to give this adventurer their second votes, without his possessing the smallest means of recompensing them.

But the Doctor expects these ten houses to be built more substantially than Mr. Wm. Newbatt built Stringer's Barn by contract for 100l., which tumbled down in six years, and in its fall nearly killed Bill Bushby and Kit Moulding, John Brewin and George Cook, who were thrashing in the barn.

In November 1827 he is in an entrepreneurial mood building cottages on Bluegate for the Cust Family; we don't know how substantially they were built but they were more recently demolished to be replaced by the Dorothy Brownlow Alms houses.

He was also involving himself in the political issues of the day as well as making some critical observations of the efforts on one of the local builders.

LR&SM 23rd. November 1827

AYE! AYE!

L. BELLATTI, Clock and Watch-maker, opposite the George and Blue Boat, GRANTHAM, wishes to inform his neighbours and the public that the Bazaar is the only place where they will hear Clocks that strike at a distance, just arrived from Paris, and upon an improved principle, amongst his other superior stock of Clocks, Watches, Jewellery, Optical, Mathematical, and Philosophical Instruments, &c., and he warrants them of superior manufacture.

¶ L. B.'s collection of choice old Paintings, some of which are pronounced decidedly by the artist at the Birmingham Institution for promoting the Fine Arts to be originals, and warranted painted by P. P. Rubens, Guido, Vandyck, Tenuera, Brougell, G. Henthurst, Hogarth, Vandeveld, Stovin, Serros, Ostade, Neafe, Cuype, Julio Romano, Borgonone, Wauvermen, Monomy, King, &c. &c. &c., were challenged by Philip Perigoldi, artist from Rome, S. Lynes Jinken, Botman, Rome, Lea, Unct, Coria, &c. &c., are at this time for sale, with an addition from the Royal Hotel. The Exhibition being closed, they will be removed.—Bellatti returns on Friday evening next, by Diligence, when will take place Signor Perigoldi's first view at Bellatti's old picture of Sant John quella Testa e originale di Guido è Molto Bella.

Birmingham Institution, Dec. 16, 1828.

— LR&SM 19th. December 1828 —

There! and "Every Dog has his day!"

BELLATTI leaving the Country! and all his **STOCK** in **TRADE** to be **SOLD** by **AUCTION**.

A Superior assortment of Jewellery, Clocks, Watches, and Silver Goods, Optical, Mathematical, and Philosophical Instruments, Electrical Machines, Pier, Cheval, Chimney, Swing, and other Looking Glasses, Convex and Concave Mirrors, those Clocks that strike at a distance, and a new-improved selection of ornamental French, English, and other Clocks, with and without Music; all his valuable and rare Paintings, purchased of the late Sir John Thorold, amongst which are several warranted Originals—two have been proved at Christie's Great Room, No. 8, King-street, St. James's-square, to be a Hogarth and a Hignore; two were sold for a large sum, and they were bought for doubtful by L. Bellatti; a real Guido (valued at five hundred pounds), and several others, of the first Masters, are now to be sold, and may be seen at any time opposite the George.

Also for Sale, all his **HOUSEHOLD FURNITURE**, his well-known Chestnut Mare, Gig, Harness, &c. &c.; and the whole will be sold by that rather a superior auctioneer, Mr. W. WOOD, on the premises opposite the George Inn, GRANTHAM, in the second week in June, 1834, without Reserve.

The particulars will appear in catalogues, to be had on the premises; of the Auctioneer; Bellatti & Sons, carvers and gilders, Newark; Drakard, Stamford; and North-house, Lincoln.

N.B. The excellent Shop and Premises, being the best situation on the North Road for business, just opposite one of the first post-houses in Europe, will be Let by L. Bellatti, he having permission so to do by Ld. Huntingtower.

¶ All just demands against BELLATTI are to be sent to him, so that they may be examined and discharged; also all those that are indebted to him, are requested to pay immediately.

— LR&SM 23rd. May 1834 —

Another line in his stock-in-trade is old master paintings and Bellatti, as energetic as ever, is in Birmingham at an exhibition with his paintings and he plans to return to Grantham by the coach Diligence.

We then hear very little of Bellatti for a few years until his announcement in May 1834. Exactly what prompted this course is not clear, but "Every dog has his day". He would only have been in his late forties or early fifties. Perhaps he had family business back in Italy or maybe had some health problems and, having made sufficient money, wanted to retire.

Aye! Aye!

BELLATTI'S SALE by AUCTION will take place on the 9th of June and five following days, and no finching! The whole of his GOODS and CHATTELS, PAINTINGS, &c. &c., will be Sold on the premises opposite the George Inn, GRAFFHAM, by that rather a superior auctioneer, Mr. Wm. WOOD.

N.B. All demands against L. B. are requested to be sent in so as they may be examined and discharged; those indebted to Bellatti are requested to pay also.

Catalogues may be had, on the premises; of the Auctioneer; Bellatti and Sons, carvers and gilders, Newark; Drakard, Stamford; and Northouse, Lincoln.

LR&SM 30th. May 1834

BELLATTI in LINCOLN

FOR THE FAIR.

BELLATTI'S SHOP is opposite the *Corn-market*, LINCOLN, where you will find a good selection of Gold and Silver Watches, Jewellery, Optical, Mathematical, and Philosophical Instruments, Cheval, Chimney, and other Looking Glasses, all sorts of Clocks and Time Pieces, Musical Boxes, &c. &c.

Spectacles and all sorts of Glasses are kept, and you may be suited at Bellatti's equal to any house in London.

N.B. The Sacchrometer and Hydrometer according to Act of Parliament kept, and sold at the London prices.

Lincoln, April 14, 1835.

LR&SM 14th. April 1835

His stock must have been fairly extensive to have occupied that "rather superior auctioneer Mr. Wm. Wood" for six days. Mention is also made of the Newark based Bellatti's, probably his brother and sons

As mentioned earlier he did not stay abroad very long but set up in business again in Lincoln. The following is a selection from his advertisements whilst there.

THERE!!

CHEAP Bargains for Christmas Presents, now to be had at L. BELLATTI'S Shop for Novelty, opposite the *Corn-hill*, in the city of LINCOLN; which Shop is to be Let, with immediate possession, if required.

It is the best situation for a Watchmaker or a Draper; it possesses extensive premises for either of the above trades, no watch and clock makers, &c. being near it, and there being now a good trade in that line.—Application, if by letter, must be post paid. Personal application would be preferable, and haste must be made, as it will be like the barber's shop, "first come, first served."

N.B. Now Selling off, under prime cost, all Bellatti's splendid Stock of Novelty, such as is not to be met with out of London, and there will not be a chance again when Bellatti is gone. Purchasers may be admitted to the exhibition of the Chinese Juggler, that splendid Painting of the death of Buonaparté surrounded by his suite, &c. Bellatti's Exhibition has given satisfaction to all that have seen it. No puff! The best choice of Gold and Silver Watches, Clocks, and Time-pieces, Jewellery, Optical and Mathematical Instruments, Spectacles, &c. &c., that is to be met with in Lincoln. Dec. 16th, 1835.

LR&SM 25th. December 1835

Just returned from London.—THERE! WHAT NEXT?

ON Exhibition at BELLATTI'S SHOP, at LINCOLN, such novelty as was never before seen.

Amongst the splendid variety will be found a *Chinese Conjuror*, worked by mechanism, which performs several extraordinary feats; a *Picture Clock*, the sound when striking appearing at a distance, and which plays music, the painting representing the Death of Buonaparte, surrounded by his suite, and Dr. Arnold and Captain Crocket, the English officers, every one a striking likeness and well displayed, *extrait de M. Marchand, premier Valet de Chambre de l'Empereur*, just imported from Paris; also a variety of ancient and modern Paintings, Time Pieces, and Clocks, of the manufacture of the three first cities in the world; such as are to be seen no where but at Bellatti's Shop, which is replete with an entirely new stock, and at prices that must command a sale for ready cash.—All his Silver Goods, Optical, Mathematical, and Philosophical Instruments, Watches, Jewellery, &c., will be found equally low.—Repairs quickly done.

Remember! Bellatti's is the shop to be suited with all sorts of Spectacles, as a proof of which he has been patronised by some of the first of the English nobility.

N.B. Admission to the splendid Exhibition of Mechanism, Paintings, &c., Ladies and Gentlemen 1s. each, Tradespeople 6d., Customers above 5s. no charge.

Opposite the Cornhill, Lincoln, Aug. 26, 1835.

LR&SM 28th. August 1835

BELLATTI, *Silver-street, near the Beast Market,*
LINCOLN.

LBELLATTI'S, Optician, &c., is the Shop where those in want of a good Barometer or any other Optical Instruments are to be suited: no comment need be made, as he is already well known for the accuracy of his Barometers, as also for his skill by long experience in suiting those that are in need of Spectacles or Glasses (either concave or convex), Preservers, &c., as Glasses and Pebbles of the best quality are kept equal à Londra; and those that will favour Bellatti with their custom may rely on his recommending the most proper for the preservation of sight.

N.B. The remaining part of his superior stock of Gold and Silver Watches, Jewellery, Clocks, &c. still selling off cheap, as he is declining that part of the business.

Lincoln, Feb. 28, 1838.

LR&SM 2nd. March 1838

He is obviously still his energetic self travelling to London to buy exotic stock for his Exhibition.

It seems unlikely that his son had joined him at this stage as having been formally trained in the watchmaking trade, he would have been able to continue that side of the business.

BELLATTI on the BAROMETER.

The only place where the Self-registered Thermometer is to be had at Lincoln.

FARMERS, and those who make observation on the Weather, and are unprovided with a good Barometer, (which is the only *Murphy* that can foretell the Weather or any thing else discovered up to the present time,) can be supplied at BELLATTI'S at LINCOLN (late of Grantham), where explanation can be had respecting the various alterations of the weather foretold by a good Barometer, and it is only by a strict attention to the motion of the Mercury and the points to which the wind changes, that an idea of the weather can be formed. Bellatti, having made particular observations for upwards of 40 years, is fully convinced that *no Murphy*, nor any other pretender, can command the weather, and Bellatti says "*not fitten they should*;"—the weight of the air affects the Mercury before its appearance, and a Barometer is the only "*Strologo*" that can tell us of these changes.

N.B. SPECTACLES.—There are great *Solomons*, *Morrises*, and other names transmogrified into English names from *Moses-Terrace* and other great streets in London, and Spectacle dealers with "*Bills and Calls again*" to supply those in need of Spectacles, and they tell you they are such as no one else can produce, &c. &c., which is all a gull: at Bellatti's shop at Lincoln you can be supplied with all sorts, and with such as are most adapted, he having had sufficient experience in that business, and he is always furnished from London with the most approved and newest invention. Any one furnished by Bellatti with Spectacles, &c., will have them exchanged, if they are not suited.

Repairing in the above branches expeditiously done, and at moderate charges.

Lincoln, Aug. 23, 1838.

LR&SM 23rd. August 1838

This is the last advertisement that has been found of Louis Bellatti senior and he probably died the following year. His eldest son and namesake, worked briefly for William Chapman at Lincoln before working independently.

WILLIAM CHAPMAN, Clock and Watch Maker, Jeweller, and Dealer in Barometers, Thermometers, &c. &c., No. 135, High-street, LINCOLN, in again returning grateful acknowledgments to the inhabitants of this city, and particularly to his numerous friends in the adjacent villages, begs leave to inform them that he has enlarged his premises, and that he is now enabled to undertake the speedy execution of all orders in the above departments. He has also lately made a very extensive and splendid addition to his stock of Gold and Silver Watches in great variety, Eight-day Clocks, Time Pieces, Skeleton ditto, and every other article connected with the trade, which for superiority of workmanship, and the very low price he is enabled to offer them at, cannot fail to give satisfaction to all who favour him with their support.

Patent Levers, Horizontal, Duplex, and Repeating Watches Cleaned and Repaired.


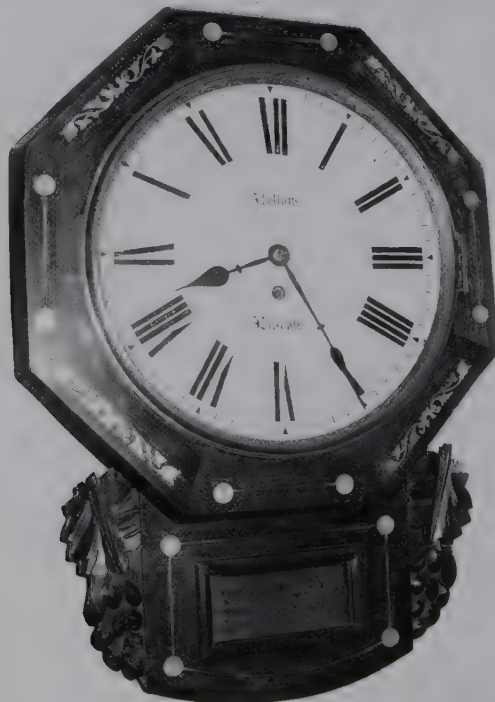
In order that he may be able to carry out to the fullest extent the manufacturing and repairing of every description of Barometers, Thermometers, &c., he has made an engagement with Mr. Louis Bellatti, eldest son of the late Mr. L. Bellatti, whose experience for several years in the Watch Manufactories of London, Coventry, and other parts, and the instruction he has received in the Optical and Philosophical department with his late Father, will enable W. C. to execute all these branches: he will call on his friends in the country with Mr. L. Bellatti, to receive any orders or make any repairs.— Gold Wedding Rings.

Plate and Jewellery repaired in the neatest manner.

W. C. will continue as usual to visit his friends in the county, to clean or renovate Clocks of every description, and hopes the satisfaction he has already given to so many, will entitle him to their future commands.
Lincoln, August, 1840.

This advertisement is one of William Chapman's for whom Louis jnr. worked for a period after his father's death. He mentions Louis' extensive experience in the watch-making manufacturing centres of London and Coventry. He had no doubt been apprenticed in the industry as many clockmakers around this period, when watches were becoming more affordable and popular, chose to apprentice their sons in one of the watchmaking centres in the Clerkenwell district of London, in Prescott in Lancashire or later in Coventry.

LR&SM 7th. August 1840



Eight day 12 inch fusee drop dial clock by Bellatti of Lincoln in a rosewood veneered case inlaid with mother-of-pearl with brass stringing c.1840.

This business is listed in Kelly's Directory of 1896 as Arthur William Bettle but by the time of Cooke's Directory of the following year an Ernest Horace Bettle has taken over the shop, perhaps his son?. His advertisement in that publication details a comprehensive range of goods and practical skills in jewellery and watch making.

By 1905 they have disappeared from the Directories, although a Mrs. Eleanor Bettle is living at 80 Dudley Road, and W.A.Todd has taken over the business. The premises of 41 St. Peters Hill were on the corner with the High Street and were demolished to build Lloyd's Bank now the Abbey National Bank .

GILDING,
LACQUERING,
PLATING,
BRONZING,
ENGRAVING.

E. H. BETTLE

PRECIOUS
STONES SET
AND
REMOVED
TO ORDER.

PRACTICAL

*Sketches and Estimates
submitted free.*

Watchmaker, Jeweller & Optician,

41, ST. PETER'S HILL, GRANTHAM.



English and Foreign Watches and Clocks,
By the best makers.

▲ SPECIAL LINE ▲

GENT.'S ENGLISH LEVER WATCH,
CAPPED and JEWELLED. } 45/-

Splendidly finished throughout and warranted 5 years

🔑 Swiss Watches in Hall-marked Silver Cases,
from 10/6 upwards. Gold Ditto from 30/-

Latest Novelties in Gold & Silver Jewellery.

BAROMETERS, THERMOMETERS, OPERA and FIELD GLASSES.

Spectacles and Folders of all kinds to suit all sights.

Gen Rings, Wedding Rings, ... Keepers.	Fancy Clocks —: in :— Great Variety.	PRIZES FOR SPORTS— Cups, Medals, Badges, &c.
--	--	--

🔧 Special Attention given to the Repairing Department.

From Cooke's Directory of 1897

[107B

The Bird Family took over the premises and business of Windsor Bishop in 1897 trading initially as H & W Bird but by 1900 as R & W Bird. The shop continued in this style until 1913 when the name changed again to that of W.H. Bird. Walter Henry continued here until 1930 when he relocated his business to the shop attached to the Westgate Hall in Westgate where he is still listed in the 1937 directory.

✦ **Cutlery and Plate Lent on Hire.** ✦

Large and Choice Stock of **Presents**
WEDDING, BIRTHDAY, AND CHRISTENING
In Silver, Silver-plate, Brass, and other useful Goods.
SPECIAL DESIGNS and QUOTATIONS for PRESENTATION MEDALS, ETC.


H. AND W. BIRD,
LATE WINDSOR BISHOP,
OPTICIANS,
GOLDSMITHS, WATCHMAKERS,
AND JEWELLERS, SILVERSMITHS,
62, High Street, Grantham.

Specially selected Stock of **THELMOBUSTERS** for Indoor and Outdoor Use.
CLOCKS, BAROMETERS, BRONZES &c.
GOLD, SILVER, and GUN METAL WATCHES.
Spectacles and Eyeglasses of the BEST MAKE - from 1/- per pair.
✦ **Cutlery, Repairs, Re-plating, Engraving.** ✦
✦ Old Gold and Silver Bought or Taken in Exchange. ✦
5 PER CENT. DISCOUNT FOR CASH.

✦ **Cutlery and Plate Lent on Hire.** ✦

From Cooke's Directory of 1897

✦ ESTABLISHED 1838. ✦



62, HIGH STREET, GRANTHAM.

**Goldsmiths, Jewellers
and Silversmiths. . .**

Choice Selection of Goods suitable for
**BIRTHDAY AND WEDDING PRESENTS,
PRESENTATIONS AND PRIZES.** ✦ ✦

**Repairs in all branches promptly executed on the
premises.**

From The Homeland Guide of 1909



*An American 8 day dial clock by Seth Thomas,
the dial lettered for R & W BIRD.*

An advertisement of 1909 shows the premises much the same as when Henry Pearce sold them to Windsor Bishop. The statement that the business was “Established in 1838” must refer to that of Henry Pearce who started in that year in premises on the opposite side of the road, moving to number 62 around 1885. They remain substantially unchanged today and are at present occupied by the ASK restaurant.

Several dial clocks have been recorded including one lettered R & W Bird in a mahogany case with a fusee movement that hangs in St. Wulfram’s vestry and another similar one used to be in Chambers’ shop in the High Street. They also sold imported American clocks. One made by Seth Thomas of Connecticut but lettered for R & W Bird is illustrated here.

R. & W. BIRD,

62 High Street,
 Grantham.

SPECIAL VALUE IN ALL KINDS OF
 GOLD AND SILVER ARTICLES.

Watch and :
 Clock Makers,
 Gold and : :
 Silversmiths, :
 Jewellers, : :
 Opticians, &c.

Very fine Stock of
 Ladies' Gem Rings,
 Keepers, Wedding
 Rings, and Gent's
 Signets. * * *

Splendid Selection
 of the Newest and
 most choice designs
 of 9ct. and 15ct.
 Brooches, Bangles,
 Scarf Pins, and
 similar Goods. *

Ladies' Long Gold
 Chains in 9ct. and
 15ct., also Gent's
 Alberts in 9ct.,
 15ct., and 18ct. *

Fine Stock of Gold
 and Silver English
 Lever and Swiss
 Watches. Every
 Watch Warranted

REPAIRS OF EVERY DESCRIPTION
 DONE ON THE PREMISES.

CLOCKS WOUND AND KEPT BY THE YEAR.
 PROMPT ATTENTION GIVEN.

Advertisement of 1911

TELEPHONE-GRANTHAM 168

62-HIGH STREET
GRANTHAM.

19

IN ACCOUNT WITH **W. H. BIRD,**

Watch & Clock Maker
 Jeweller, GOLD & SILVERSMITH, OPTICIAN, &c.

BEST PRICES GIVEN FOR OLD GOLD & SILVER

*Solid Gold Gents 17 Jewel Lever.
 Pocket Watch
 9ct gold albert*

£ 7-10-0

Richard Bishop took over the High Street business of Henry Pearce and is listed in the directories from 1887 until 1896. He is included in the census return of 1891 as a 29 year old jeweller and watchmaker, born at Sherborne in Dorset, together with his wife Edith and their one-year-old daughter. Also living with them is his father-in-law Francis Gaydon, aged 58, also a watchmaker and jeweller who was born at Swimbridge in Devon.

An eight day English wall clock with its dial lettered "Winsor Bishop Grantham" used to hang in the Westgate Hall. The large fusee movement has a gear driven counterpoise for the minute hand. It now keeps time in the saleroom of Marilyn Swain at the Old Barracks.



12 inch English dial clock by R.W. Bishop, Grantham c. 1890

An eight day English dial of the more usual size of 12 inch is illustrated here. A silver cased pocket watch, H M for 1890 with a key wound movement engraved "R.W. Bishop" has also been recorded.

He later moved to Norwich where the business still continues, the shop front is a replica of the shop in Grantham High Street (now the ASK restaurant).

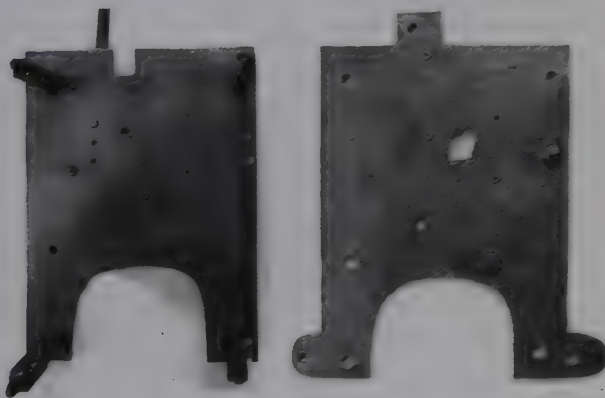
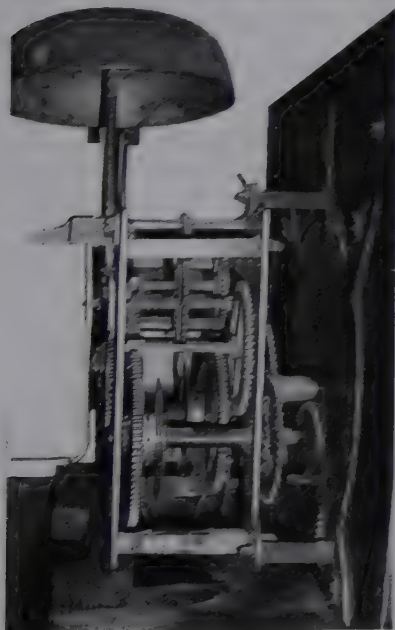
BOYNE Richard

1841

The 1841 census records Richard Boyne, a watchmaker aged 20, in the house of Chas. Windover who kept the Angel Inn on the High Street. He was probably a journeyman working for one of the watchmakers in the town. There is no further record of him in Grantham.

George Bishop was baptised in 1733 in the village of Hose not far from Redmile which is in the vale of Belvoir in the county of Leicestershire but close to the borders with Nottinghamshire and Lincolnshire. George now with his wife Mary moved, with a settlement certificate, to the village of Redmile in 1762 and had several children one of which John, born in 1775, also became a clockmaker. George died in 1805 and the business was carried on by John until his death in 1809.

It is not known where George learnt his clockmaking skills but his work shows a resourceful inventiveness which suggests he was perhaps not formally apprenticed in the trade. It is clear that his movements were built to reduce cost as he was selling to village customers to whom price was an important consideration. He managed this by reducing the amount of expensive brass by making the movement plates smaller and using square iron bar for the movement and dial pillars instead of the normally used turned brass. It may be that he was influenced in this by some of the Newark makers, (Barnard for instance), who are also known to have used iron pillars. He evidently engraved his own dials as his work was not quite up to the standards of the specialist engravers who normally did this work. A result of making the movement plates smaller was that the front plate had to be provided with projecting lugs to enable the dial pillars to be positioned to make their attachment behind the chapter ring. One sometimes sees this method used when a replacement movement is fitted to an existing dial and lugs have been riveted to the front plate to accommodate the dial pillars but in George's clocks the method was obviously planned with this in mind as the front plate is cast with projecting lugs suitably spaced for the attachment of the dial. These economies did not result in an inferior product; he was merely using a well thought out strategy to supply a less affluent market. The clocks recorded by George are mostly clocks with brass dials but one or two of his later clocks have square painted dials which are lettered 'Bishop' as is one in the collection of Leicestershire County Council Museum Services, in the style of the early 1800s.



Left is a view of the movement of one of George Bishop's 30 hr. clocks. Above are the typical back and front plates of his movement showing the projecting lugs for dial attachment and the square iron pillars characteristic of his work.



A 30hr. oak cased clock by George Bishop of Redmile c.1780.

Local historians Linda and Ken Brockway, who live in the village of Redmile, have done considerable research into the Bishop family and have published a booklet detailing their results. I am much indebted to them for this genealogical information and access to details of the eleven 30hr. and seven 8 day examples of these interesting clocks that they have so far recorded.



The dial plate of one of George Bishop's 30 hr. clocks. Note the cut away segments behind the chapter ring a feature used by many northern clockmakers to reduce the weight of brass.



The dial of one of George Bishop's 8 day clocks c.1770.

BRIGGS George E. and Sarah initially at Gonerby, then High Street, Grantham, later Wharf Road and finally in Welby Street. C. 1840 - 60

George B. Briggs (which is probably an error and should read George E. Briggs) is listed in the Directory of 1842 as a watchmaker living in Middle Gonerby. In the Directory of 1849 he is in the High Street of Grantham at Wood Hill (now St. Peters Hill). By 1856 he is at Wharf Road and in 1863 at 13 Welby Street.

The census return of 1851 includes him in Wharf Road, aged 51 yrs., having been born at Holbeach, together with his wife Rebecca and his daughter Sarah, aged 27 yrs., also described as a watchmaker, who was born at Wisbeach; possibly George served his apprenticeship in the town. Clearly he had moved around and presumably is the person who is listed in Pigot's Directory of 1819/20 at Holbeach. He may be the son of a Luke Briggs who was a watchmaker there in the early 19th. century. In the next census of 1861 the family is living at Bradley's Yard off Welby Street, Grantham. His daughter is unmarried and still working with her father. (Female watchmakers, although no doubt well suited to the work are unusual but there is no evidence that she worked independently).

By the time of the census of 1871 George, now retired is living on his own as a lodger in the house of Thos. Winter in Witham Place, Grantham.

BUUD George

Brook Street

1900-13

George Budd is listed in the Directory of 1900 as a watchmaker in premises in Brook Street which he initially shared with his son, also George, who had been established there since 1893 as a cycle agent. George junior gave up the cycle business and became a beer retailer in Castlegate and later on St. Peter's Hill whilst his father continued with his watch business at Brook Street until 1913 after which he disappears from the Directories.

BURNETT William

1838

The baptism registers of St. Wulframs in the early 1880s usefully gives the occupation of the father. On 24th. May 1839 Henry, the son of William and Mary Burnett, was baptised, the father's occupation was given as Watchmaker. A year later, was similarly described on the birth of a daughter. In 1841 when another daughter was baptised, he is described as a 'victualler' and continues to be listed in the directories as 'Eating House Keeper and Beer House' in Butchers Row in the Market Place and later, in 1868, at the 'Globe Inn and Eating House', Butchers Row. By 1876 William appears to have died but his wife is listed at the same address. It seems then that William started his career as a watchmaker working as a Journey man for one of the established businesses in the town but later went into the catering trade.

CAWTHORNE William

Vine Street and later Watergate

c. 1833 - 1863

The first mention we have of William Cawthorne is his marriage at St. Wulfram's on the 18th. September 1831. The poll book of that year also records his vote in the Parliamentary elections and at the time he was occupying a house on Swinegate. There are daughters of William and Mary baptised in St. Wulfram's in 1832, 1835 and 1837 and a son William in 1840.

He is listed as a watchmaker in Pigot's Directory of 1834 in Vine Street and continues to be listed there until 1849 when he moved to Watergate (or Walkergate as it was known at that time). Here he remains until disappearing from the Directories after 1863.

The census returns tell us that he was born at Balderton near Newark and was aged 54 in 1851 (i.e. Born 1796/7) and at this time had a 10 year old son William.

Bearing in mind that he was in business for over 30 years little of his work has been recorded; indeed the only references so far found is in some old correspondence in the Grantham Museum which refers to "a longcase clock by him in a very fine case by a Lincoln cabinet maker; the movement had a scratched repairers mark of C. Andrew 3st. Dec. 1862".

Two watchpapers of his have been recorded with his Vine Street address noting repair dates of 1845 and 1848.

The first mention we have of Dazio Ceppi is his listing in Pigot's Directory of 1840 as a jeweller in the Market Place at Grantham. The parish registers records his marriage to Mary Ann Swingler (a daughter of local clockmaker James Swingler) in July 1834. The census return of 1841 includes him as a 45 year old jeweller living with his wife Mary, a bonnet maker, together with nine other young lady bonnet makers. The census of 1851 tells us that he was born in Switzerland c.1796 and was now described as retired and living at 5A High Street, Spittlegate Grantham.

Two 8 inch dial wheel barometers have been recorded typical of the 5-dial mid 19th mid century style (i.e. hygrometer, short thermometer, convex mirror, an 8 inch dial and a level plate in a mahogany veneered case with double stringing to the edge).



5 dial wheel barometer by D. Ceppi



CEPPI and SHELBOURN

The Market Place

C.1840

Dazio Ceppi and William Shelbourn both married daughters of clockmaker James Swingler. The two sisters Mary Ann and Sarah continued their mother's business as straw hat and bonnet manufacturers in the Market Place trading initially as Ceppi and Swingler and after Sarah's marriage as Ceppi and Shelbourn.

It appears to have been a family business and included some of their father's stock in trade as two wheel barometers have been recorded engraved "Ceppi and Shelbourn". One has an 8 inch dial with long thermometer and level plate only, the other a standard mid 19th. century 5-dial barometer.



Five dial barometer by Ceppi and Shelbourn



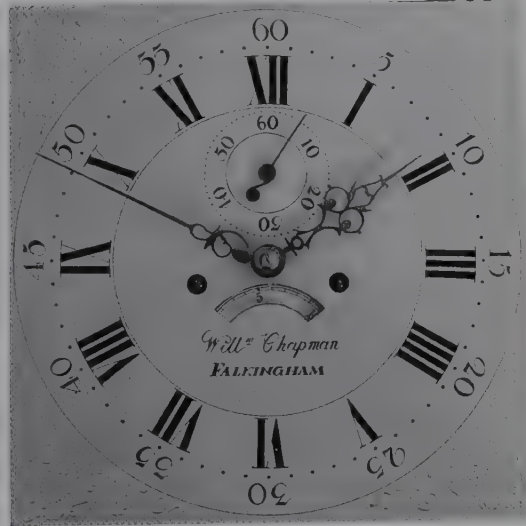
M. CEPPI and S. SWINGLER, Straw, Leghorn, Tuscan, and Fancy Bonnet Manufacturers, Market-place, GRANTHAM, most respectfully beg to inform the nobility, ladies, and the public, that the following articles of their extensive Stock in Trade, assorted in the greatest variety, are offered on terms in accordance with the times, and from their long experience in business, they will be enabled to offer such goods to the public as no other house either in town or county can surpass. They have ready for inspection from one thousand to fifteen hundred Bonnets:—Vellam Bonnets, 6d. each and upwards; Coloured Dunstables, 1s. ditto; Straw Bonnets, 1s. 6d. ditto; good Dunstables, 7s. ditto; Tuscans, 12s. ditto; Burlings and fancy Bonnets as low in proportion, according to quality.
Old Bonnets cleaned and altered to the newest tastes and fashions, and got up to look equal to new.
Country orders executed on the lowest terms and shortest notice.—Two Apprentices wanted immediately, and will be taken without any premium.

April 17th. 1835

STRAW HAT and BONNET MANUFACTORY,
Market-place, GRANTHAM.
M. CEPPI and S. SHELBOURN are in immediate want of Two Journeywomen, who may meet with constant employ; but none need apply who are not fully competent in the business. Also two Apprentices wanted, who will be taken without any Premium. All letters post paid.
Grantham, Jan. 18, 1838.

William Chapman started in business in Falkingham (later spelt Folkingham) around 1780. He was the earliest full time clockmaker in the town which at that time was a market town and staging post on the northern coaching route. It is not known where he came from but several longcase clocks have survived made during his time at Folkingham, the movements of which are high quality work and it is clear he had served a formal apprenticeship in the business.

Three painted dial clocks have been recorded from his time in Folkingham, two with arched dials and one with a square dial. They all have dials of the early Wilson style which had a curved calendar aperture with "square" ends.



The square dial clock pictured here again has an oak case with a caddy top to the hood and a plain rectangular door.

8 day clock and dial by William Chapman of Falkingham c.1780.



*Arch dial 8 day clock by William Chapman of Folkingham with it's
Wilson of Birmingham dial c.1780.*

The hood of this oak case has an arch top matching the shape of the dial. The trunk door top is in the shape of an ogee arch which was popular with the local case makers at this period.

After some ten years in the town of Folkingham William moved to Lincoln where his sons eventually continued the business.



*Oak cased 8 day clock by William Chapman of
Folkingham c.1780.*

By 1791 William had moved to Lincoln where he took a Benjamin Read as an apprentice in May of that year. He spent the rest of his time in Lincoln with a shop on the High Street. Longcase clocks by William in cases by the Lincoln cabinet makers both Usher and Henry Blow have been seen. William had two sons, James and George who both became clockmakers.

James was apprenticed to his father in 1805, married in 1817 and later had his own shop at St. Peter's at Gowts also in the High Street. He advertised for a Journeyman in Oct. 1838. Several longcase clocks by James have been recorded in cases by the cabinet maker Henry Blow of Lincoln. His son William II was born in 1818 and continued the business in the High Street but is listed at 7, Asylum Road from 1876 until 1885.

George was apprenticed in 1809 to another Lincoln clockmaker, James Simpson,. He married Elizabeth Snowden in 1823 and, after working for Jas. Simpson, eventually set up in business on his own account at 43 Steep Hill, Lincoln where he is listed from 1826. He appears to have died after 1835 as his wife, Elizabeth is listed in the directories from 1840-42. Longcase clocks by both George and Elizabeth have been recorded.

There is another William Chapman listed in the directories as a watch and clockmaker at Metheringham from 1868 through to 1889 but it is not known if he was related to the other Lincoln Chapmans.



An 8 day clock by William Chapman of Lincoln in a case by the Lincoln cabinet maker James Usher c.1840. (Photo. Courtesy Brian Loomes)

Ancient clock comes home

FOR decades it has kept the time, faithfully chiming out the hours as world was came and went, and as we moved from the age of horse-drawn carts to space travel.

But now, the elegant clock manufactured in Lincoln something like 160 years ago - has returned to the city.

And, by a strange twist of fate, it is actually back in the building where it was constructed in the early part of the 1840s.

The discovery of the rare coincidence sent a tingle down the spine of clock restorer Roy Ellis.

Roy is a partner in a business called Timepiece Repairs not far from the top of Steep Hill.

And he bought the clock from Derbyshire towards the end of last year, completely unaware that he was taking it back to the very building where it had been made.

The coincidence didn't come to light until he started researching the history of the timepiece.

He knew that it had been made by Elizabeth Chapman.

But what he didn't know at first, was that Elizabeth and her husband George had their business in the same ancient building that he now occupies.

"We have more than our fair share of Lincoln clocks, but this is the first Elizabeth Chapman clock we have had," he tells me.

"The clock wasn't in too bad a condition.

"It had been reasonably well looked



HOME AGAIN: The Elizabeth Chapman clock which by coincidence has returned to its birthplace.

after but it wasn't in working order.

"We have had to do between a month and six weeks' work on it to restore it to its former glory."

Now Roy has put the clock up for sale with an asking price of £3,250.

And because of the Lincoln

connection and its strange fate surrounding it, the clock is set to sell at a very high price before the clock has a new owner.

Standing just a little bit short of seven feet, the clock is what they term a long case clock.

It is constructed of oak and mahogany.

Just what has earned it the name it has been given and its whereabouts on Steep Hill, get a picture.

Roy says he doesn't know a lot about its history over the past 160 years, and it is quite probable that the tall case may have to survive until the 21st century.

But it is a clock that should add lustre to the clock and its resting place, when he would be delighted to hear about it.

Of Elizabeth Chapman, Roy's research has shown she was born Elizabeth Standish.

She married George Chapman in 1825.

George worked on Steep Hill with James Simson for about 16 years, before setting up on his own.

After their marriage, George and Elizabeth worked together and when George died, sometime between 1850 and 1860, Elizabeth made the decision to carry on clock-making in her own right.

But her solo career may not have lasted for very many years.

Roy tells me it seems that only one family in the town across examples of her work these days.

Roy has issued an advertisement in the local press and several people have been able to see the Elizabeth Chapman clock as among the early years of the 1840s.

Courtesy The Lincolnshire Echo 2001

Clock dealer and repairer Roy Ellis of Timepiece Repairs now occupies the same Steep Hill premises as George and Elizabeth and recently (2001) a clock by Elizabeth returned to its birthplace to be restored and resold. The Lincolnshire Echo featured this coincidence in the article above.

CREITE Joseph

16 Castlegate, Grantham

1871

Census of 1871.

16 Castlegate, Joseph Creite age 65 Clock cleaner b. Germany, a boarder in the house of Samuel Colman, moulder.

Probably one of the many itinerant clock makers who came to this country from the Black Forest area of Germany in the early 19th. century presumably working for one of the clockmakers in the town.

DAWSON George E.

70 Grantley Street, Grantham

1871

Census of 1871.

70 Grantley Street, George E Dawson age 23 Watchmaker, journeyman b. Swineshead with his wife Sarah age 26 Dressmaker b. Bourne.

Presumably working for one of the watchmakers in the town.

DAY John.

Butchers row

c1797 - 1824

John Day was primarily a Silversmith and Jeweller but like many others included watches in his stock in trade. No examples of his work have been recorded but he is known through his advertisements in the Lincoln, Rutland and Stamford Mercury.

Advertised:-

L.R.&S.M. March 26th. 1813

"John Day Silversmith Jeweller etc. for some years past"

L.R.&S.M. March 21st. 1817

"John Day, Silversmith, cutler and toyman offers his gratitude etc. for support for more than 20 yrs."

L.R.&S.M. Feb. 25th. 1818

L.R.&S.M. Dec. 24th. 1824

"the business to be disposed of in a street adjoining the Market Place elegant assortment of watches, chains etc. offered at under prime cost"

L.R.&S.M. 1st. April 1825 *"died 23rd March Mrs. Day, wife of Mr. John Day, aged 56.*

J. Day whose distress has been heightened by the loss of use of one side of his body and by an embarrassment of his pecuniary circumstances"

A reminder that life was difficult for some before the advent of the Welfare State.

DAY John

15 Spring Gardens

1896

Listed in Kelly's Directory of 1896 as a watch and clock repairer. No other references.

DRURY William

7 London Road

1909-37

Took over the business of Wm. Green and is listed in the Directories from 1909 into the 1930s.

Advert in Grantham Journal July 27th. 1937 " Watch and clockmaker and also Optician, F.B.O.A. and F.I.O."

The FOSTER FAMILY

This dynasty of Clockmakers was founded by **John Foster** a clockmaker of Woburn in Bedfordshire. He is recorded as attending to the Church clock there from c.1760 until his death in 1787; he was also the master of Woburn Free School.

John II, his son, was born in 1758 and baptised at Woburn on 25th. January 1761. He was apprenticed in 1773 to a clockmaker, William Emmerton of Wooton in Bedfordshire, at a premium of £20 and when he was made free in 1780 set up in business there. In 1786, now married with a son, he moved to Peterborough in Northampton where he remained in business in Cowgate until his death c.1825.

Three of his sons, John III, William and James all became clockmakers.



Period one dial with an Osborn falseplate for John Foster of Peterborough.

This clock by John II is in the collection at the Peterborough Museum. The oak case has been shortened at the base, a commonly found repair as a result of standing on damp floors. The unrestored dial is by Osborn of Birmingham and retains the original steel hands although the seconds hand is now missing c.1790

John III the eldest was born in 1782 at Wooton and was most probably trained by his father at Peterborough. In 1813 he bought the business of the recently deceased Henry Bunyan at Lincoln where he continued until c.1830. Longcase clocks and silver verge watches are recorded by him including a gold cased verge watch hall marked 1813 with a polychrome enamel "God speed the Plough" dial plate.

James born in 1800 at Peterborough appears to have carried on his fathers business at Cowgate into the 1830s.

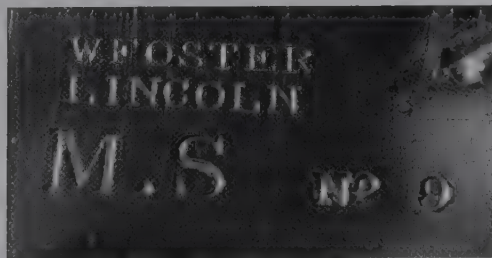
FOSTER William Folkingham, Conningsby, Grantham, and Lincoln 1789-d.c.1844

William Foster was born in 1789 the son of a Peterborough clockmaker also John. He probably was trained and worked for his father but in 1815 at the age of 26 he took over the business of John Tasker of Falkingham (later spelt Folkingham) a small town on the London to York stage coach route. He did not stay long in the town as in December 1817 he was advertising in the LR&SM from newly opened premises in Lincoln where he stayed for the rest of his life. Whilst in Folkingham he repaired the church clock which was a very old single handed wooden framed clock which survives, although it is no longer in use, and bears a small brass plate engraved "Wm. Foster repaired this clock AD 1816. Wm. Ward Churchwarden."

The most important surviving evidence of his business is one of his Day Books for the period August 1841 to April 1844 which has been preserved by his great great grandson the late G.J.Foster. He had done considerable research into his family and had extracted much information from the book and provided the author with much of the following information.

The book contains all the daily work taken into his workshop which consisted of watch and clock repairs, repairs to a wide variety of jewellery and silver goods and engraving, mending spectacles etc. etc. Much of the work was in repairs to watches and each job is entered with the maker's name and movement number. Over 1000 watches were taken in for repair during the period which illustrates what an important source of income the popularity of pocket watches had become. The largest proportion was from London makers but some 25% were engraved with local makers' names. Among these were four watches engraved "Wm. Foster Grantham." There is no evidence that he ever had premises in Grantham so it seems likely that he regularly attended the market there and had his watches lettered accordingly. This was probably whilst he was at Folkingham as it was within daily riding reach. Three watches were engraved "Wm. Foster Coningsby" and would refer to watches sold by his nephew William II.

Another interesting side to his business was the provision of sets of 8 day clock wheels for at least six other members of the trade who did not have a wheel cutting engine of their own. This is important evidence because it has been suggested that by the 1840s all movements were supplied by specialist Birmingham workshops. Here is evidence to disprove that. Wm. Foster was not only making his own movements but cutting wheels for other country clockmakers to do the same. He probably supplied complete movements if required. Some of Fosters movements are engraved with his name on the movement front plate behind the dial and some are stamped with a punch as shown below recorded on a clock of c.1840; the significance of the capitals M.S is not known.



Name stamp on the movement of a clock by Wm.Foster c.1840

William and his wife Ann had twin sons John and William born in 1820 at Lincoln. They both became clockmakers.

357		Ms Dec	1842	
May 28 th	East Miss Motherly	Mild Brooch rep ^d	X	6
Ms Dec 30 th	Reynard W. Coy.	Gold - repaired with piece of gold had soldered to center to receive the top.	1	6
	Garfit M.	a large Braulet snap made into a brooch with gold tongue, joints, catch & piece put on to hide the bolt hole	X	3 6
	Matthews Miss	a silver Broken alarm	X	6
	Kirk M Waterman	Watch Set L rectified	X	6
	Bywater M, Lever	Watch 8 ^o Inman Manchester 1002 Main Spring fresh hooked in & chain	X	6
Ms Dec	Summerscales M W ^m	Lever Watch G Bishop		
	Line 5890	Chain hook 8 ^o pieced (hook to pieces)	2	0
	Brown Miss	Beaumont Jee Gilt Watch R. Kaynolds		
	Line 725	catchet work rep ^d new clock, 3 ^o pivot rep ^d & new hole, verge pivots rep ^d cleaned & Key	X	4
31 st	Library	Time piece rectified	X	1
Ms Dec	Slator Miss	Carlton Jet Brooch rep ^d		9
	Wilson Spalding	3 sets 8 Day wheels & Barrels cut	X	11 6
	Hyde Sleaford	3 sets 8 (Day wheels cut	X	3 9
	Hewingsham's Son	Seathorn 2 Ear. ring tops rep ^d	1	
	Cocter M Eastgate	1 D ^o D ^o	X	6
	East Miss	Fiskerton Ear Drop & Brooch	X	1
Ms Dec	Dudding M	Laxby Set Slide 8 ^o		9

A page from the Day Book of William Foster of Lincoln May 1842.

The page above is from William's Day Book; on 31st. May 1842 he cut three sets of 8 day wheels and barrels for Wilson of Spalding at a cost of 4s.-6d. and another 3 sets of wheels for Hyde of Sleaford for 3s.-9d. as well as rectifying a Library Time piece, repaired four watches and four items of jewellery.

John IV was in business in the Lincolnshire town of Market Rasen initially in 1849 but the next year emigrated, with his wife Ann, to America. He returned some years later to Market Rasen and traded as a Photographic artist, later moved to Sheffield c.1870 where he died in 1890. One of his sons, yet another John, continued the Sheffield business until 1897, dying in 1918.

William II twin brother of the above established a business at Coningsby in 1842 until c.1849 when it is believed that he moved to Upwell in Cambridgeshire.

The earliest mention we have of John Fox is in the Grantham Corporation minute book of March 7th. 1701.

“At this Court came John Fox a Whitesmith & desired to be sworne a Freeman of this Corpn. & upon offering to give security for keeping of the Church Clock & Chymes there & the Town Clock in Good Order for Seven yeares it is ordered that soe soone as he hath given Security as aforesaid he shall be Sworne a Freeman.”

Clearly the town was in want of someone to maintain their two public clocks and on the 25th. July 1701 having given this undertaking John Fox was admitted a Freeman. Subsequently the minute books record various offices he held with the Corporation e.g.

30th. Oct. 1702 Constable of Castlegate

29th. Oct. 1703 Constable of Swinegate

Oct 1709 he was one of the Chamberlains

March 1711 he presented his accounts as Chamberlain.

In 1725 he recorded his vote in the Parliamentary elections.

14th. July 1727 he “was unanimously elected a Comburgess of the Corporation and nominated Alderman for the next ensuing according to ancient custom”.

The Comburgesses were the twelve elected freemen who governed the running of the town. They were headed by the Alderman who was elected each year and acted as chief Magistrate. These people held considerable power and could control who was able to ply their trade in the town and of course were able to protect their own interests.

There are three baptisms of children of John and Elizabeth Fox in the parish registers but their sons William and John both died in infancy. The remaining daughter Mary married Benjamin Twigg, a saddler in Grantham.

John Fox died in 1751 aged 81. His wife Elizabeth had pre-deceased him in 1743. Both are buried in St. Wulfram’s churchyard with a double slate headstone. John’s will of 1751 is in the archives office at Lincoln. In this Will he describes himself as a gunsmith and leaves bequests to Mary Twigg and her husband Mr. Benjamin Twigg, saddler and his grandson John Fox Twigg. There are several people of the name of John Fox in Grantham in the 18th. century so it is not always easy to differentiate between them, but the deeds of a property in Vine street clarify things. (I am indebted to Dr. John Manterfield, who made a study of property deeds in Grantham, for this information.)

These deeds refer to the conveyance to John Fox of Grantham, whitesmith, and Elizabeth his wife, of a property in Vine Street in 1709. The property is described as being abutting a tenement in the tenure of William Wing on the S. W. and another in the tenure of James Dawson (late in the tenure of Elizabeth Moore, widow) on the N. E. Together with this document is a copy of the probate of the will of John Fox dated 22nd. June 1751 which as previously mentioned referred to him as a gunsmith. The property was probably immediately to the N.E. of what was the Cross Swords (now demolished and replaced by what is now a video rental store). It used to be, for many years, Willoughby’s the Florists shop but it is now a Café.

A 'whitesmith' is a general term for one who worked in metal but did not use a forge as a blacksmith would. We know that John Fox was capable of maintaining the town's clocks but at this period there would have been insufficient work for him to earn a living as a clock-maker. During his career however he did make some domestic clocks and a number of them have survived.

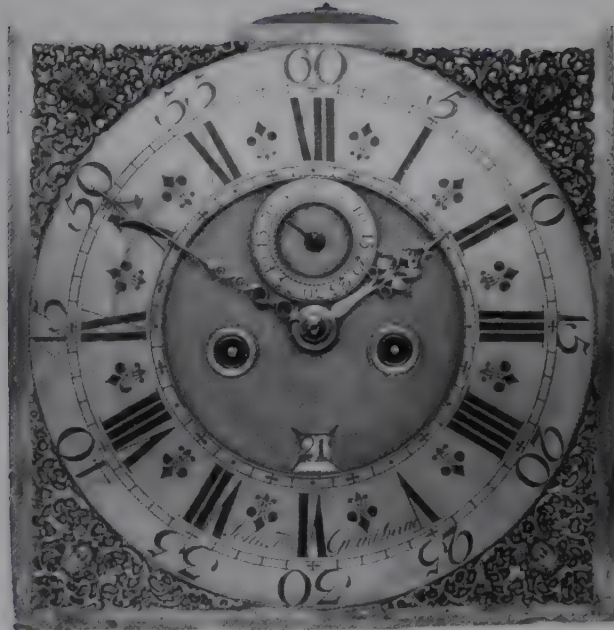
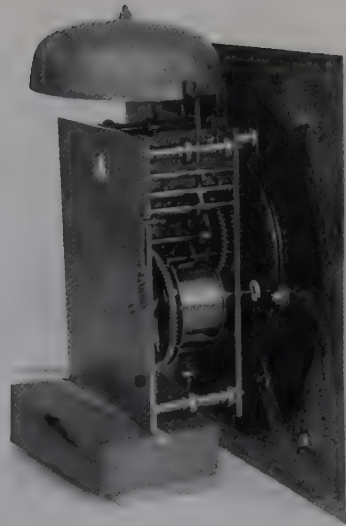


12 inch brass dial of a clock by John Fox of Grantham c.1705.

Unfortunately the case of this clock has not survived although the owner has had a suitable one made.

The dial has many early features. The spandrels are of an early pattern, the engraved dial centre with ringed winding holes together with the makers name John Fox Grantham engraved along the lower edge of the dial plate all point to a date in the early years of the 18th. century.

This is the movement of the clock on the previous page. It shows the inside count wheel of the striking system mounted on the strike-side great wheel together with the externally mounted hammer stop on the rear movement plate. Note also the cut-outs behind the chapter ring on the dial plate. (*This illustration was taken during restoration and before the back-cock and crutch had been refitted*)



The clock shown above has survived complete although only by a lucky chance. About fifteen years ago it had been put outside by the dustbin for collection. It was noticed by a passer-by and mentioned to the local clock restorer Robert Woodhouse who managed to convince the old lady owner that it was worth saving. He bought it, restored it, and it now continues to tell the time for a new owner.

The case has been reduced in height at some time by sawing off part of the base. This was the fate of many clocks at one time as they became unfashionable and ownership moved down the social scale to be housed in cottages with low ceilings.

The stylistic features of the dial, the matted dial centre and bold minute numbering on the chapter ring, would date it a little later than the previous clock, say about 1720. The hands are probably not original.



*Eight day longcase clock by
John Fox of Grantham c.1725*



This is another clock by John Fox which dates from c.1725 after the introduction of the arch dial. There are other stylistic changes. It still retains the ringed winding holes and similar spandrels to those of the of the previous clock but the minute numbering is smaller and the maker's name is now prominently displayed on a convex roundel in the arch.

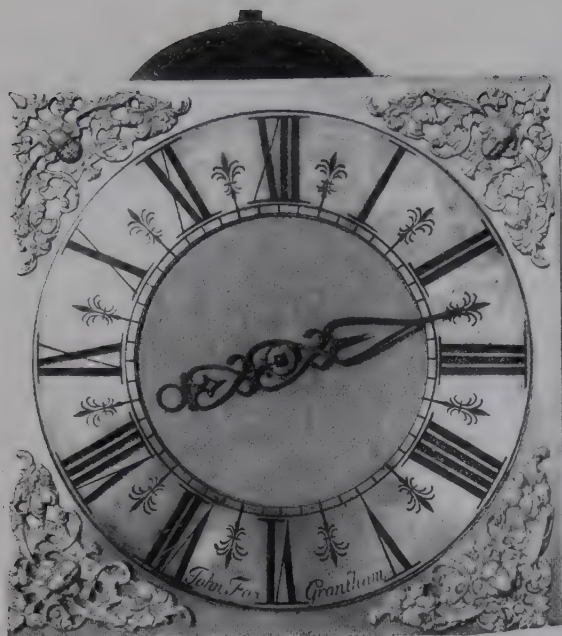
The curly scrolls on the top of the hood are peculiar to East Anglian casemaking which suggests that the clock, in common with many of these early examples, has been rehoused albeit in an old case, but of rather inappropriate style.



This clock by John Fox has survived complete with its fine lacquer case. The dial features date it to about 1740. This would have been an expensive clock in its day. The case would almost certainly have been supplied by a specialist London case maker. The clock was part of the collection formed by Sid Exton of Branston. He was a guard on the railway and the author remembers him telling him that he bought it in London and brought it back in his guards van. After his death in 1995 his clocks were sold by Thos. Mawer & Sons in their Lincoln saleroom.

Various other clocks have been recorded by this maker including another arch dialled clock in a lacquer case. A clock sold in Sotheby's sale room in Chester in 1980 also had his name on a roundel in the arch and was housed in an oak case which was carved all over. The carving might have been executed later as this was fashionable in the late Victorian period.

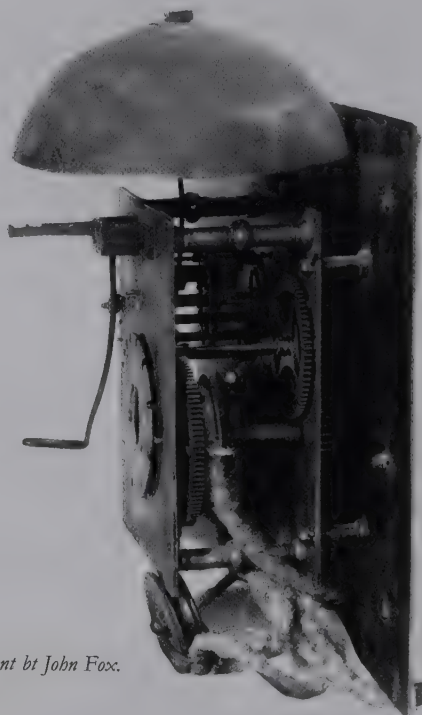
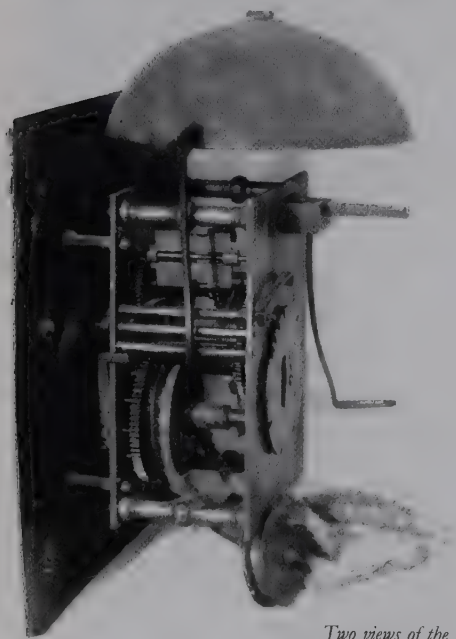
The John Fox clocks we have looked at so far have all been expensive 8 day clocks but this does not mean that he did not make cheaper 30 hour clocks. The survival rate of the more valuable 8 day clocks is much higher so what we find today is not a true reflection of his output. Forty or fifty years ago 30 hour clocks were just not saleable and many thousands were destroyed for the value of their brass as scrap.



Single handed 30 hr. dial by John Fox c. 1715

There is at least one 30 hour survivor which is pictured here although its case was burnt some years ago as it was extensively worm eaten.

This 9 inch brass dialled single handed 30 hour clock by John Fox would have been the cheapest type of cased clock he would have made. Its single hand is of a very unusual design and it is doubtful that it is the original one. The spandrels suggest it dates from the first quarter of the 18th. century.



Two views of the 30 hr. movement by John Fox.

The rope driven movement is substantially made. It has a hammer stop externally mounted on the front plate which is an unusual feature which is also used on the eight day movement. It may be unique to clocks from John Fox.

The business was founded by A.J.Godfrey in March 1881. The property, No. 2 Watergate, was owned by the Kings School and had previously been a bookshop but was bought at this time by Mr. Godfrey.

A.J. Godfrey died in 1943 at the age of 87 and his son, A.J.B. Godfrey who had been working many years with his father, took over the business.

A.J.B.Godfrey had served a seven year apprenticeship with Henry Pearce and Son of Bond Street Leeds. They were watchmakers, silversmiths and jewellers who had originally started in business on the High Street in Grantham and were no doubt well known. He then served a further two years as a watch finisher with Ramey's of Dundee.

A.J.B.'s son was the final owner of the business. He had been apprenticed to his father and was taught clock repairing, watch repairing and eventually the gold and silver-smithing side of the business.

He was also a motor sport enthusiast and at times owned several Ferrari sports /racing cars. In 1989 when the motor sport market was at its peak one of his Ferraris, which he had bought in the 60s, was sold by Sotheby's in Monaco for 1.3 million pounds. He retired shortly afterwards and the shop was bought by Hoppers and still trades as a similar business.

A. J. GODFREY

WATCHMAKER Gold and Silver Keyless and Key-winding CHRONOGRAPHS, CHRONOMETERS and STOP WATCHES. In all the Leading English and Foreign makes, always in stock. Waltham and Waterbury Watches from 10.6.

JEWELLER Gold, Silver and Gem Jewellery in all the latest Designs. Gems recut, polished and mounted to order. ENGRAVING ON METAL OR PRECIOUS STONES.

SILVERSMITH A Choice Selection of every Table Requisite, suitable for Wedding Presents, Presentations, or Household use. SPOONS AND FORKS A SPECIALITY.

SILVER CUTLER Table and Dessert Knives, Fish and Dessert Knives and Forks and Carvers, always in stock.

CLOCKMAKER English, French, and American Clocks in great variety, for Hall, Kitchen, Reception & Bed Rooms. CHIME AND CARRIAGE CLOCKS.

OPTICIAN Microscopes, Telescopes, Field, Marine, and Opera Glasses. Spectacles and Eye Prescriptions to suit all sights. **OCULISTS' PRESCRIPTIONS** Accurately made up. Thermometers and Barometers.

2, WATERGATE, GRANTHAM.

A. J. Godfrey & Son
Established 1881
Watchmakers, Jewellers, Silversmiths and Opticians

Watches in all the latest shapes by well-known makers. Grantham Souvenir Spoons in Silver & Enamelled in correct Heraldic colours. Necklets in real and imitation stones in all the newest shapes. Designs for Presentation Plate, etc., submitted. Period Pewter. Watch, Clock, Silver and Jewellery Repairs carefully done on the premises. Optical Prescriptions filled.

WATERGATE - GRANTHAM

A 12 inch 8 day English dial clock has been recorded lettered "GODFREY & SON GRANTHAM" and the French black marble clock pictured overleaf.

From Cookes Directory 1897


This French black marble clock is typical of many similar ones which adorned Victorian mantel pieces. They became very popular after the death of prince Albert when black became very fashionable and were often used for presentation pieces as this one was.



Presented to Mr C. R. Lysons
 IN RECOGNITION OF HIS SERVICES AS HON SEC TO THE
 GRANTHAM DISTRICT CART HORSE SOCIETY.
 OCTOBER 1886

They were, strictly speaking, made from polished Belgian slate with veined marble detailing and were fitted with good quality French movements striking on a bell or a gong. Although it is lettered with his name, Mr. Godfrey would have bought it in from an importer of French clocks.

So after over a hundred years of trading at the same premises, and regarded as Grantham's premier jewellers, the business finally closed its doors.



A. J. GODFREY & SON
 11 WATERGATE
 GRANTHAM

Goldsmiths & Silversmiths

A. J. GODFREY & SON
 Jewellers & Silversmiths since 1881

CLOSING DOWN SALE
 Commences Monday, 2nd October
25% off all new goods
*A unique opportunity to acquire
 quality Jewellery at bargain prices*

11 WATERGATE, GRANTHAM
 Tel: (0476) 63053

Will customers please collect their
 repairs before 28th October.

TELEPHONE (0476) 63053 ESTABLISHED 1881

From the Grantham Journal 29th. September 1989.

GOODACRE

The Goodacre family of watch and clockmakers
at Billingham, Donington and Gosberton.

1841- 1937 and later.

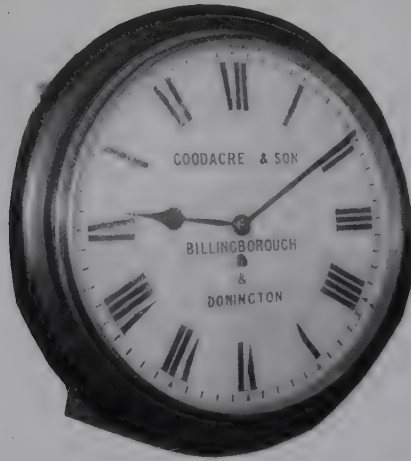
The Goodacres were members of an old established family in the village of Billingham. The first mention we have of this family involvement with the horological trade is a Thomas Goodacre who is included in the 1841 census of Sleaford as a 14 year old apprentice living in the house of the Sleaford clockmaker John Hall. John Hall died in 1844 but his wife continued the business until about 1849, so Thomas probably completed his apprenticeship with her. There is no record of Thomas working on his own account, so he might have worked for other clockmakers as a journeyman. The next member of the family is Edwin who, it is suggested served an apprenticeship in Lincoln and is later listed in White's 1856 directory as a watch and clockmaker at Billingham. Later directories tell us that he was also a "bird and animal preserver" or "taxidermist and naturalist", but quite where he learnt these other skills is not clear. Although the Shaw family were long established clockmakers in this village. There was apparently sufficient work for them both, Edwin Goodacre in Vine Street and Samuel Barwise Shaw on the High Street as both continue to be listed into the 1870s when the Shaw business finished trading.



Edwin Goodacre's premises in Vine Street Billingham.

In 1892 the business is listed as Edwin and Son and by the 1896 directory they also have a shop in nearby Donington and continue at both shops until 1913 when E. Goodacre and Sons are at Vine Street and an Abel Goodacre is now listed at Donington. Sometime after 1913 Edwin and Sons moved from Vine Street to a shop on the High Street where they continued to be listed until 1926 after which a Zachariah Goodacre (b. c.1893) is included at the High Street shop as a watch and clockmaker. In the 1930, 1933 and 1937 directories and Abel Goodacre and Son now have premises at Gosberton, (near Spalding), as well as at Donington. In more recent times Edwin's grandson Reginald Goodacre, continued the family clockmaking tradition in the High Street shop after a career as a professional footballer, playing for West Ham in the 1930s.

The surviving clocks by the Goodacre family have so far been wall clocks although it is possible that some late-style longcase clocks might have been made. A silver-cased pocket watch has also been recorded.



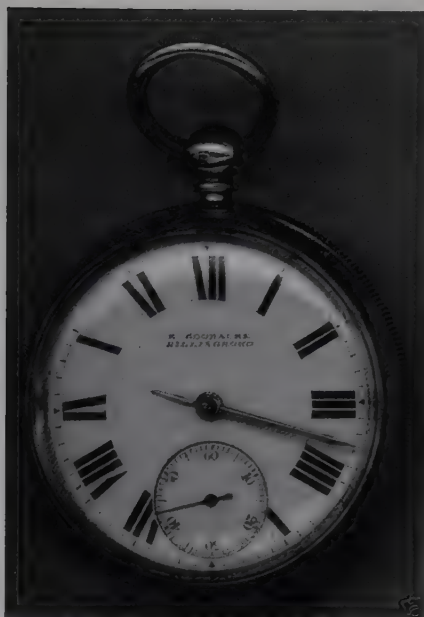
12 inch 8 day English dial clock by Goodacre & Son of Billingborough & Donington c.1880.



Two American 8 day striking wall clocks, lettered for Goodacre and Sons, the left hand one supplied by The Anglo American Clock Co. c.1890.



Watchpaper of Edwin Goodacre



A silver cased pocket watch the dial lettered E. Goodacre, Billingborough.



A Goodacre family group, Edwin (seated) and his two sons and daughter with their spouses c. 1905.

Other members of the Goodacre family in Billingborough

By the 1850s Billingborough was a thriving town, larger than nearby Folkingham which had declined with the passing of the stage-coach trade. At this period there were several other Goodacres, presumably related, engaged in various businesses in Billingborough. Morris's directory of 1863 includes a Mrs. Elizabeth Goodacre as a shop keeper, Francis also a shopkeeper, James as a farmer and butcher, John a saddler and harness maker and Bothamley and Goodacre who were photographers. By 1872 there were also John jnr. as a butcher in the High Street and Francis Wm. a shopkeeper and shoemaker so, together with the clock and watch-making side of the family, they were an important commercial family in the vicinity.

GOODSON Robert

Wharf Road

1851-1900

The first mention we have of Robert Goodson is in the 1851 census where he is listed in Blue Lane (later renamed Welby Street) in the home of his widowed mother. He was aged 18 and gave his trade as Clock and Watch Jobber. The term "Jobber" implies that he was paid by the job and perhaps working for more than one of the local clockmakers. He was not old enough to have served an apprenticeship in the trade but might have been trained informally.

There is no further mention of him until 1889 when he appears in Kelly's Directory of that year listed at 27 Wharf Road as a clock and watchmaker. He continues to be listed, although now at 36 Wharf Road, until 1900 but disappears thereafter.

GOULSON John

25 Westgate

1889-1892

John Goulson appears only briefly in Grantham. He is listed in Kelly's Directories of 1889 and 1892 as a watchmaker until the premises were taken over in the same year, by another watchmaker Frederick Newton.

Ann was the daughter of Joseph and Charlotte Partridge and was baptised at St. Wulfram's church Grantham on 26th. June 1806. She was married to William in June 1827 and had nine children during the next 20 years.

As we have seen Ann's husband William had got into financial difficulties in December 1850 and died in May of the following year. He must have been able to satisfy his creditors because Ann and her family were able to continue at the High Street premises next to the Angel Inn after his death and remained in business for the next 13 years or so with her son William acting as foreman in the High Street shop.

In Morris's directory of 1864 her address is given as 48 High Street, but this may be a renumbering of the properties, and her son William II is now listed with a shop at 15 Norton Street. About this time she seems to have retired and given up her High Street shop. She died in April 1876.

It has not been possible to identify any clocks which can be firmly attributed to her time in business but a stick barometer has been reported engraved "A. Green Grantham".



From the Post Office Directory of 1855

It is possible to see a glimpse of the Green's High Street shop to the left of the Angel Inn in this engraving; the 'REEN' lettering of the shop sign just visible and on the right is a photo of the shop after Mrs. Green had left and it became known as "Noah's Arc"; it is now part of the Angel Inn.



"Noah's Arc" shop High Street, -Grantham c.1880.

GREEN Charles Edwin I

Vine Street

1868

This man is something of a mystery but was a watchmaker and, no doubt, related to the other Greens in Grantham. When he married an Elizabeth Ann Spreckley in June 1865 he is described as a watchmaker, the witnesses were a William Green, watchmaker and George Spreckley, farmer. In the Grantham Journal of 25th. April 1868 he is announced as being "bankrupt and to surrender on the 4th. May 1868".

GREEN Charles Edwin II

47 Churchgate, Leicester

1885-date

Charles Edwin was the second son of William II and Alice born in 1863. He was also brought up as a watch and clockmaker at the London Road premises. In 1885 he left Grantham to found his own business in Leicester. He married Annie Codd there in 1887 and the shop is still owned by their descendants and continues to trade at 47 Churchgate, Leicester.

GREEN Charles

Long Bennington

1885-1892

The Kelly's Directories of 1885, 1889 and 1892 list Charles Green as a watch and clockmaker who may well be a further member of the clockmaking Greens although any relationship is not yet established.

GREEN John

31 Watergate

1868-76

John was William and Ann's eldest son born in 1830. He was trained as a watch and clockmaker and set up in business at 31 Watergate c.1868 in a shop which, in 1851, had been occupied by another clockmaker William Cawthorne. He is included, with his wife Ann, in the 1871 census at this address until 1876 after which he disappears from the directories.

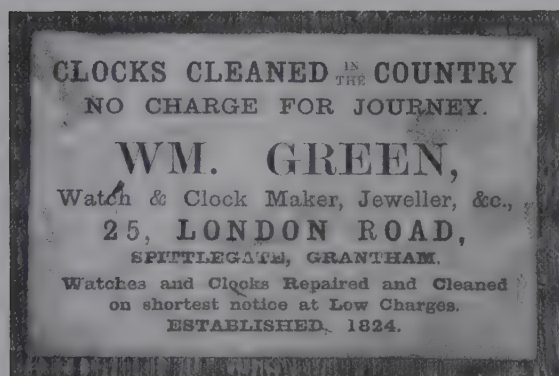
GREEN William II

Norton St. and later 15 London Rd. Spittlegate 1866-1899

William II, the second son of William and Ann, was born in December 1831 and was apprenticed to his father for seven years in 1846. After his father's death he continued in the High Street business as his mother's foreman. He married c. 1858 Alice Palmer and in 1861 they were living in James Street, Little Gonerby with their two year old daughter. In 1864 he is listed in Morris's directory as a watch and clockmaker at 15 Norton Street, Spittlegate and an advertisement in the Grantham Journal in July 1866 states he was "for thirteen years foreman with Mrs. Ann Green, High Street".

By 1869 he has moved to High Street Spittlegate (later to become London Rd. Grantham). William and Alice had six children, three of them boys. The eldest boy William III, born 1861, was trained as a watch and clockmaker. In 1891 William II retired and moved to Skegness together with his son John and daughter Alice. They had a boot and shoe shop there for some years; William died in 1899.

William III continued the London Road shop in Grantham until 1905.



Trade card of William II.

His trade card claims that the business was established in 1824 which presumably refers to the foundation of his father's shop but the date is a slight exaggeration, not uncommon in these matters. William snr. in fact started the business in 1828.

The offer to travel into the country was not an idle promise as in the diary of George Bird, the wheelwright and carpenter of Corby, he notes "22nd. Jan. 1868, Mr Green came and cleaned our eight day clock & found one line, charged 3/-".

GREEN William III

25 London Road, Spittlegate, Grantham 1891-1905

William III the eldest son of William II and Alice was born in 1861 and was brought up in his father's trade. He took over the London Road shop when his parents moved to Skegness c.1891.

In 1901 he took an additional shop at 20 Wharf Road but shortly after 1905 he sold up and moved to 243 Cleethorpes Road, Grimsby where he continued until the 1920s. The London Road, Grantham shop, now numbered no.7, was taken over by William Drury who traded as a watch and clockmaker into the 1930s. The premises are now used as a furniture and interior design shop.

From Cook's Directory 1902

FOR
WATCHES, CLOCKS & JEWELLERY,
TRY . . .
W. GREEN,
25, London Road and 20, Wharf Road,
GRANTHAM.
Established 1824.
SPECIALITY—WEDDING AND GEM RINGS.

William Palethorpe and William Green were friends from the same village of Great Ponton a mile or so south of Grantham. William had been best man at William Green's wedding in 1827. Their partnership in business came to an end however after a few years and William Green had moved to his own shop in the Market Place.

No clocks bearing their joint names have come to light as yet and this advertisement is the only evidence of their partnership. William Palethorpe remained in the shop opposite Guildhall Street in business on his own account.

W GREEN, Watch and Clock Maker, Silversmith and Jeweller, *Market-place, GRANTHAM*, is in immediate want of a respectable Youth as an Apprentice. Terms known on application: if by letter, post paid.

LR&SM 17th. 1834

GREEN and PALETHORPE, Watch and Clock Makers, Silversmiths, &c., opposite the *Guildhall, GRANTHAM*, respectfully acquaint their friends and the public that they have now for sale an excellent assortment of new Watches, particularly those on the lever principle, which cannot be surpassed for accuracy. The satisfaction these Watches have given their numerous friends, has induced them to lay in a large stock, which will be offered at unprecedented low prices.

G. and P. have also to offer a neat and modern selection of Jewellery, Silver Goods, Bracelets and Snaps, Musical Boxes, Seed and other Beads, with a variety of Gilt and Plated Goods; also eight-day Weight or Spring Plain or Quarter Clocks.

G. & P. assure those ladies and gentlemen who honor them with their custom, that every exertion shall be used to give entire satisfaction, and hope that a strict attention to their commands will entitle them to a continuance of that patronage and support which has been so liberally extended towards them, and for which they return their sincere and grateful acknowledgments.

N.B. Watches and Clocks sold by G. and P. are warranted for 12 months, or exchanged free of expense.

✂ A Youth of respectable connexions wanted as an Apprentice, who, at the expiration of his time, will be entitled to the Freedom of the Borough.—Paid letters will be attended to.

LR&SM 5th. Sept. 1828

GREEN William

Market Place and later No.1 High Street d. 1851

William was born in 1805 at Great Ponton the son of Jane and John Green. In 1819 he was apprenticed for 7 years, initially to the Grantham clockmaker Joseph Tunnard but was transferred, owing to Tunnard's death in 1821, to the Grantham clockmaker George Johnson. After the completion of his time he was made a Freeman in January 1827 and was married the same year to a local girl, Ann Partridge. He started in business in partnership with William Palethorpe in 1828 in a shop on the High Street opposite the Guildhall. This partnership had come to an end by 1834 as William Green was advertising for an apprentice from an address in the Market Place.

By 1838 he was advertising as a Watch and Clockmaker, Silversmith, Jeweller and Engraver with a vast range of stock which he claimed to be the largest ever offered in Grantham.

The reference to Dutch clocks is interesting as they did not come from Holland, they were in fact made in the Black Forest area of Germany but the term Deutsch (i.e. German) was misunderstood and they became universally known as "Dutch clocks".

WM. GREEN, Watch and Clock Maker, Silversmith, Jeweller, and Engraver, near the Angel Inn, *Market-place, GRANTHAM*, impressed with gratitude for the many favours conferred upon him by the nobility, clergy, and gentry for the last ten years, kindly solicits their attention to an increased Stock, which on inspection will be found decidedly larger than ever kept by the trade in Grantham: the quality cannot be excelled, and they are offered at such prices as he has no doubt will insure him an extension of patronage. The Stock consists of the most modern and fashionable articles in Gold and Silver, Patent Lever and other Watches, English and French Clocks and Time-pieces, best London Jewellery, Silver Goods; Sheffield Plate, (Gilt Jewellery, Mourning Goods; Coral, Cornelian, Pearl, and common Beads; Tortoiseshell and other Combs; Silk and Bead Pursea; fine Cutlery, Snuff Boxes, Tea Caddies; Hair, Tooth, and Nail Brushes; Barometers, Thermometers, Microscopes, Guns, Dutch Clocks and Time-pieces, with a variety of other fancy articles.

A large assortment of Spectacles with Pebbles and common Glasses, mounted in Silver, Tortoiseshell, Steel, Buffalo, and Horn, to suit all ages; Spectacle Glasses fitted.

A Magic Lantern for sale or to let out.

The following articles are repaired on the premises, in the best manner and with the utmost dispatch: Repeating, Duplex, and flat Geneva Watches, French Clocks with or without music, English Clocks of every description, Church Clocks, Musical Boxes, Bottle Jacks, Barometers, Thermometers, all sorts of Silver and Plated Articles, Gold and Gilt Jewellery, Spectacles, Combs, and every other article connected with the trade.

Hair Guards and Rings made of human hair to order; Hair plaited and neatly set in Rings, Pins, Brooches, and Locketts; Plate and Seals engraved with Crests or Initials; Door Plates made and engraved.—The utmost value given for old Gold and Silver, Coins, &c.—Gold and Silver Watches purchased or taken in exchange.—Clocks repaired in the country.

A catalogue of stock may be had gratis.

LR&SM 30th. March 1838

He appears regularly in the Corporation Minute Books receiving payments for the maintenance of the Town hall clock. These payments, usually of between £2 and £4 annually from 1839 until 1848 when it was resolved "that Mr. Henry Pearce shall have the regulation of the clock on the Guildhall instead of Mr. William Green it having been so badly regulated". Perhaps we should feel some sympathy for William. The clock was probably about two hundred years old at this time, no doubt well worn and incapable of accurate regulation.

In 1842 Directory he is still at an address in the Market Place but by 1849 he has moved to the High Street. It would seem that his business was soon in difficulties because in December 1850 he was forced to go into receivership and the following advertisement appeared in the LR&SM. This is before the days of 'limited liability' so his household effects were not excluded from his estate and the following week he had a sale of his stock-in-trade.

NOTICE is hereby given that WILLIAM

GREEN, of Grantham, in the county of Lincoln watchmaker and silversmith, hath, by Indenture of Assignment bearing the date the Ninth day of December now instant, made between the said WILLIAM GREEN of the first part, CHARLES MILLER, of Grantham aforesaid, draper, and MARK WARD, of the same place, draper, of the second part, and the several other persons whose names and seals are hereunto subscribed and set, being Creditors of the said William Green, and who, by themselves or their respective Partners, Attorneys or Agents or other persons by them respectively authorised, shall execute the same Indenture, of the third part, assigned and transferred, in manner therein mentioned, all his stock and trade, household furniture, and all other his estate and effects, for the equal benefit of all the Creditors of the said William Green who shall come in and execute the said Indenture within three calendar months from the date thereof. *And Notice is hereby further given, that the said Deed of Assignment is lodged at the office of Mr. JOHN POORE KING, solicitor, in Westgate in Grantham.* For the inspection and signature of the said several Creditors, and such of them as shall not execute the same, or signify their intention of so doing, within the period aforesaid, will be excluded from all benefit thereof.

All persons indebted to the said William Green, are requested to pay the amount of their respective debts to the said Trustees, or to the undersigned, forthwith.

Dated this tenth day of December, 1850.

By order, Jno. P. KING, Solicitor to
Grantham the said Estate.

LR&SM December 13th. 1850.

For SALE (by order of Trustees under Deed of Assignment for the benefit of Creditors.)

THE valuable STOCK IN TRADE of Mr. WILLIAM GREEN, Watchmaker and Silversmith is now Selling off and will continue to be sold at *cost price* at his Shop in *High street*, GRANTHAM. It consists of Gold and Silver Watches, English, French, and American Clocks superior Regulator and eight day Time-pieces of various sorts, large and small Musical Boxes, playing from two to six tunes, Gold Albert Chains, Steel and Silver ditto, Ladies and Gentleman's Gold Guards, Barometers, Thermometers, Gold and Silver Reading Glasses, a large stock of Sheffield Plate and Silver Goods, London Jewellery in Brooches, Rings, Pins, Bracelets, Pencil cases, Tooth-Picks, &c. with a variety of other articles too numerous to insert. The whole will be marked in plain figures at cost price, from which no abatement will be made.
Grantham, 11th. December, 1850.

LR&SM December 20th. 1850.

It seems as if he was able to satisfy his creditors without selling all his possessions and on Census night, early in 1851 he is still at home with his family.

From this census of 1851 we can locate his shop between the Cross Swords and the Angel Inn. (These premises have now been absorbed by the Angel Inn). William and Ann had eight children; the eldest Charlotte had left home. Of the others, all boys, the two eldest, John aged 21 and William aged 19 were both listed as watchmakers and Henry aged 13 was a cabinet maker.

No doubt some of his business problems were due to his failing health because in May he died of consumption at the age of 45 and was buried in his home village of Great Ponton on the 28th. May 1851. After his death his wife, who had a large family to support, was able to remain in the premises and continue trading as Mrs. Ann Green with the help of her son William.

Many clocks and watches by William have survived and some are illustrated in the following pages.



A 30 hr. clock by William Green with arch painted dial c.1830.

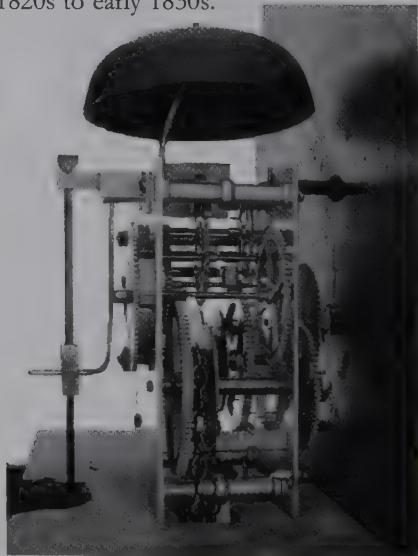
(Courtesy Castlegate Clocks, Grantham)



Arch painted dial for 30hr. clock by William Green of Grantham c.1830.

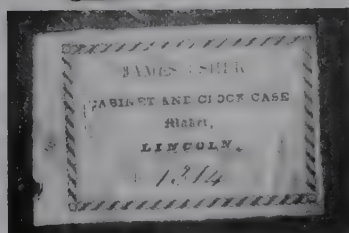
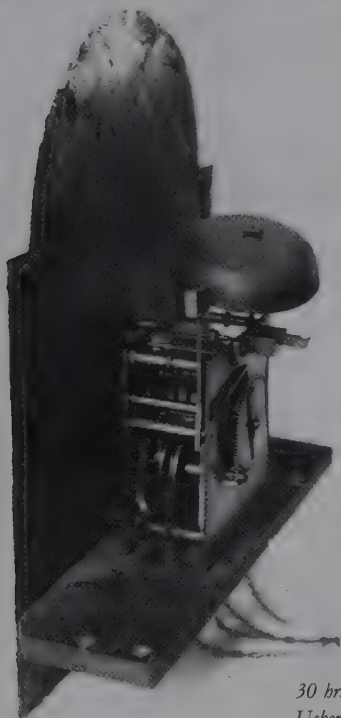
His clocks all belong to the painted dial period. The one shown here is an arch dial 30 hr. clock in an oak case with mahogany cross banding typical of the period and region.

The dial is unmarked, but probably by the Birmingham dial makers Finnimore & Son, has Arabic hour numerals and fifteen minute numbering inset into the minute circle suggesting a date of the late 1820s to early 1830s.



The 30 hr. chain driven movement of the Wm. Green clock

This is a 30hr. clock by William Green which is in the collection of the Grantham Museum. It is particularly interesting because it still has the case maker's label stuck on the backboard inside the case. The arch dial with tumbling arabic hour numerals and a hunting scene in the arch is typical of dials of the 1820-30 period.



30 hr. clock by William Green of Grantham together with its dial, movement and Usher case maker's label c. 1820-30. (Grantham Museum)



Square dialled 8 day clock by William Green in an oak case with mahogany cross banding c.1840.

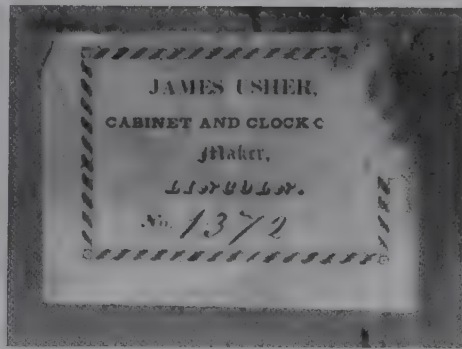


Square dial clock by Wm. Green c.1850.

The two square dialled 8 day clocks illustrated here show the changes taking place in case design. The right-hand clock is somewhat later, note the columns each side of the hood which instead of being reeded or plain are decoratively turned. This is a feature used from the 1840s onwards. These cases have no maker's label or stamp so we don't know where they were made but there are clocks by William Green in cases labelled by James Usher and Henry Blow both Lincoln cabinet makers. Square dials are a little less usual with 8 day clocks but in this area they seem to have been quite popular. The dial itself and also the case would have been less expensive than that of an arch dialled clock and the overall height would have been reduced. They are often called "cottage clocks".



*The dial is stamped WRIGHT BIRM.
and the false plate similarly lettered.*



*The pendulum of this clock is a little unusual in that
it is cast with a sun flower decoration.*



This 8 day clock by William Green is in a labelled case by James Usher of Lincoln. The number 1372 suggests that it is of a similar date to the 30 hr. clock in the Grantham Museum. The fact that this an 8 day clock warrants it being housed in a somewhat more expensive case, as is evidenced by the reeded quarter columns of the trunk and additional panels with mahogany cross banding below the door and another on the base. The dial has a raised centre which was a feature of some painted dials of the 1830-50 period



Bracket clock by Wm. Green Grantham c. 1840.

The bracket clock on the left has a twin fusee movement in a mahogany veneered case and still retains its original wall bracket. The 8 inch painted dial, with blued steel hands, is lettered 'Wm. Green, Grantham.'



Wheel or dial barometer, the dial engraved "Green Grantham" c.1850. (Grantham museum)

Wheel barometers were another fashionable line of this period. This mahogany veneered example with a long thermometer and an 8 inch dial engraved 'Green Grantham' is typical of the early 19th. century and is in a collection at the Grantham Museum.

There is a square dialled 30hr. longcase clock by William Green in the National Trust property of Plas-yn-Rhiw in North Wales. Its presence there seemed surprising but is probably explained by the fact that the Keating sisters, who gave the house and gardens to the Trust, originally came from Nottingham where their father was an architect. The clock is in rather a distressed condition and appears to have spent many years in a damp barn before being brought into the house.

As watches became more affordable for an increasing number of people as the 19th. century progressed they provided an additional income for the town's watchmakers. Not only were they another sales opportunity but also, as they were prone to accidental damage, they produced a steady stream of repair work.

The watch featured here is in a silver pair cased half-hunter which is hall marked London 1834 (the outer case and minute hand are missing).



Silver cased half hunter watch by William Green HM 1834 in the collection of Grantham Museum.



Watch movement no.57283 with verge escapement by William Green.

Both these watches have similar and typical key wound verge escapement movements of the period. Notice the finely pierced and engraved balance cocks which provide some protection to the balance wheel below.

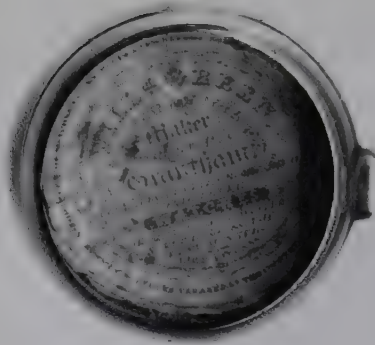


Watch movement no.15913 with verge escapement by William Green.



Silver pair cased watch by William Green HM 1833.

This open faced watch has Roman numerals and the smaller chapter ring suggests that it was originally intended for a half hunter case. However the inner and outer cases have the same hall marks and maker's marks (JH) so it would appear that the dial has been replaced at some time.



A pair cased silver pocket watch the dial with the arms of the Oddfellows Society.

WEDDING
Mourning
&
Rings
ENGRAVING
neatly
executed

Half Pearl Plated and Set in Rings Brooches &c.

Market Place
Miss Lunn **Grantham** 1841

Hough

TO WILL^m. GREEN,
Watch & Clock Maker
SILVERSMITH & JEWELLER,

ALL SORTS OF CLOCKS WATCHES, PLATE & JEWELLERY ACCURATELY REPAIRED, &c.

<i>Oct 14</i>	New Garnet to Ring	1 3
<i>21</i>	Buckle making no 2 extra	1 9
	New foot to saddle stand	2 6
	2 Gold Pins to brooches	2 0
<i>Nov 2</i>	New gold setting on Wedding Ring	3 0
	Engraving Flower on D ^r	2 0
		12 6

Bill Head of Wm. Green for jewellery repairs for a Miss Lunn of Hough in 1841

HAGUE George

1849

The baptism register of St. Wulfram's records the christening, on 27th. June 1841, of Mary Ann the daughter of Mary and George Hague, watchmaker. No further reference to him has been found so we assume that he was working as a journeyman for one of the watchmakers in the town.

We know that William was in business in Grantham in 1807 as a silver cased watch by him, hall marked with that date, is in the collection of the Castle Museum, Nottingham.

The first documentary mention we have is an announcement in the LR&SM of the marriage of William Hall, clockmaker, to the widow Ann Tunnard "mistress of the Flying Horse" (a beer house in Watergate) on 12th. February 1810.

A rather curious report appeared in the LR&SM of the 17th. August 1810 referring to whom we would today call the step-son of Wm. Hall but at this time was known as his "son in law". The concept of child safety was clearly not so well developed but, no doubt as now, boys have always had the ability to find mischief!

On Tuesday last, as a boy, son in law to Mr. Hall, watch-maker, of Grantham, was amusing himself by striking two flints together a spark accidentally communicated to some gunpowder that was near, and immediately caused an explosion, which broke the window into pieces, and forced many articles some distance into the street. The boy was very seriously scorched, but is not considered to be in any danger.

This boy was probably Joseph Tunnard, the son of Ann by her first marriage to Esau Tunnard, and baptised in 1794. He later became a clockmaker in the town perhaps trained by his stepfather William. (See entry under Tunnard).

William is listed in Holden's directory of 1811 as a Publican and Watchmaker and in the LR&SM of 17th. 1817 he announced that he had "taken the Blue Lion (formally the White Lion) in the Market place - it is now undergoing thorough repairs etc., etc." (these substantial premises still exist although no longer a public house). The White Lion had acquired the "Blue" prefix, as had many of the Grantham public houses, after being bought by the Duke of Rutland and renamed to match his electioneering colour.

As only his wife Ann is listed in the later directories at the Blue Lion (up to White's of 1842) it seems likely that William had died by this date. The St. Wulfram's Burial Registers record the burial of a William Hall aged 80 in October 1825 and another William aged 73 in August 1847. It is not apparent which of these was the clockmaker but probably the earlier one.

It is not known where William was trained as there is no record of him in the Apprentice Registers in the Public Record Office at Kew. There are several other clockmakers of this name around at this period so he may have been trained by a family member without a premium and as these apprenticeships were not liable for tax they were not registered. He might also have worked as a journeyman in Grantham, perhaps for John Wood, prior to setting up on his own.

Among other clockmakers of this name in business during the late 18th and early 19th century were John Hall, both senior and junior, of Grimsby and another John traded in Sleaford until 1846. William Hall of Louth was making clocks in the early part of the 18th century followed later by a Leonard Hall in the same town. A Joseph Hall of Alford and Jesse of Wainfleet have also been recorded. Another William Hall was apprenticed to William Unwin of Newark in 1791. He may be the William who is recorded as a clock maker in Nottingham and was enrolled as a burgess there 1806. Records tell us he maintained the Guildhall clock in Nottingham until he was declared bankrupt in 1832 and his account "for winding and repairs to the Town clock" was paid to his assigns.

No family connection has, as yet, been established between William of Grantham and any of these other clockmaking Halls.

Several clocks, both 30hr. and eight day, by William have been recorded, all of the early 19th century style together with the two surviving watches illustrated in these pages.



*Oak and mahogany longcase clock by
Wm. Hall of Grantham, c.1810*



Dial of longcase clock by W. Hall

The 13 inch dial was made by the Birmingham dial maker B. Hipkiss and was probably made for a farming customer. The spandrels show the four farming seasons, clockwise from the top right-hand one, ploughing, sowing, reaping and threshing and in the arch a farmer leading his horse with a windmill in the background. These features, highlighted in gold leaf against a black ground make it quite a striking dial. The Roman hour numerals are, unusually, horizontally disposed.

The clock pictured on this page has an oak case with mahogany cross banding and shell inlays to the door and base. The trunk with a mahogany band, or impost, above the door has canted corners. The hood is provided with a mahogany veneered pagoda-shaped top, not a pagoda top in full depth, but a cresting again with a shell inlay. There are mahogany hood columns with ring turning and the hood door frame is fully veneered in mahogany.



Three train movement by Hanley and Moore of the William Hall clock. (Front plate 7X8ins).

This fine three train chiming clock by William Hall is housed in a well figured mahogany veneered case. The case with its pagoda top to the hood and turned columns is clearly from the same cabinet maker as the clock on the previous page. Interestingly it retains the original turned feet. The dial is quite plain and has no spandrel decoration; just a Strike/Silent feature in the arch and a seconds dial below the XII. The movement chimes Westminster quarters on eight bells and was bought in by William from the London makers Handley and Moore whose stamp and number 2463 it bears on the front plate. This clock has been in the collection of the Dukes of Rutland at Belvoir Castle since it was made about 1815. It was probably supplied after the great fire there in 1816 by William who was at the time a publican and clockmaker and in fact a tenant of the Duke who owned the Blue Lion in the Market Place. It was a thoughtful gesture to order from one of his tenants at a time when the aristocracy normally only bought from the fashionable London makers.



Mahogany cased quarter chiming clock by William Hall of Grantham c.1815. (Courtesy the Duke of Rutland)



The unrestored painted dial of William Hall's quarter chiming clock c.1815

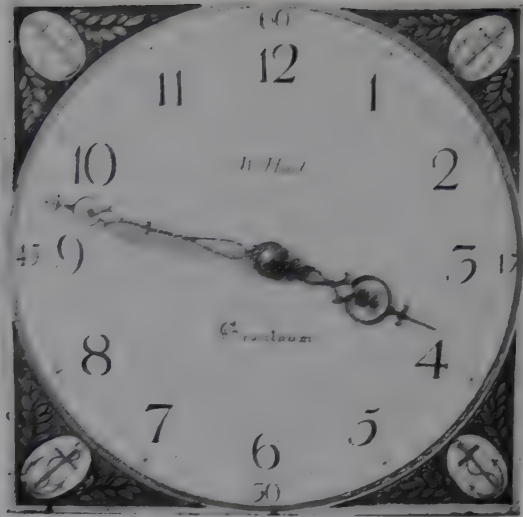


*The dial after restoration
(Dial restored by Cliffs Freeman of Custigate Clocks, Grantham)*



The rear of the Hall dial showing how the two dial plates are fastened together by many small pinned pillars.

The 13 inch dial of Wm. Hall's quarter chiming clock is of unusual construction in that it is composed of two iron sheets of similar size, but thinner than a normal gauge, fastened together. Because the quarter chiming movement has such large plates the usual size of cast iron false plate would have been too small, so in this case the rear plate is used for the dial pillar attachment and is then covered by the painted front plate (which incidentally is made of tinned iron sheet) and is fastened to the back plate by over a dozen small pinned pillars which must have been riveted prior to painting. This unconventional construction suggests that the dial was not supplied by the usual Birmingham dial makers but provided by the makers of the movement or perhaps by William Hall here in Grantham.



Detail of the painted number on the back of the dial.



30hr. clock, dial and movement by Wm. Hall of Grantham. Note the punched up pivot hole on the movement back-plate.

(Courtesy Castlegate Clocks Grantham)

This 30hr. clock is housed in an oak case which has simple elliptical inlay on the door and at the top of the hood. The 12 inch dial is unnamed but has a painted number (141) on the rear of the dial plate. The chain driven movement has pin locking count wheel strike. Note the punched-up pivot hole on the backplate of the movement, a common but shoddy repair instead of re-bushing the hole, no doubt done when these clocks were of little value. The seat board fastening is by threaded studs screwed to the centre lower edge of the plates in the manner used by John Wood.



Verge watch movement by Wm. Hall c.1805.

Only the movement of the verge watch by William Hall of Grantham survives in the collection of the Usher Gallery, Lincoln. The balance cock incorporates a church with a very tall steeple probably alluding to that of St. Wulfram's which at the time was claimed to be the tallest in the county.



*Silver pair-cased verge watch by William Hall of Grantham which is hall marked for the year 1807 and the movement numbered 9665.
(From the collection of the Castle Museum, Nottingham).*



This pair-cased silver watch has a verge escapement, the small silvered dial to the right of the balance cock is to adjust the timekeeping and turned by using the winding key. This type of adjuster is known as a 'Tompion regulator' from its inventor Thomas Tompion.

It is possible to trace some of the history of ownership of this watch from the five watchpapers which are contained between the inner and outer cases. They are of different makers and some have ink inscriptions on the back.

- 1) Wm. Cawthorne, Vine St. Grantham has repair dates on the back in ink of 'July 10, '45 and Feby , 11 '48.
- 2) John Taylor, Corn Market, Grantham and on the reverse in ink 'Mr. Wass, Ropsley'.
- 3) Sixty, next Corn Exchange, Grantham with 'Mr. Wass, Ropsley' on the rear in ink.
- 4) C. Andrew, 7 Westgate, Grantham.
- 5) J.D.Fisher, 228 High St. Lincoln with 'Mr. Doughty' written in ink on the reverse.

The Hebdens were an old established family based in Halifax, Yorkshire although Francis was born in 1800 at Ballymena, Ireland, where his army-officer father was serving at the time. Quite what brought him to Grantham is not clear; he could possibly have served an apprenticeship here, but the first reference we have is his listing in Whites directory of 1826 in business as a watch and clockmaker on Westgate. The only other evidence of his time here is his advertisement in the LR&SM of the 18th. May 1827. It is in response to an advertisement by Louis Bellatti of a few weeks earlier in which he accused the other watch repairers in the town of devious practices. Francis refuted these allegations, questioned Bellatti's ability to diagnose what was wrong with a watch and implied that all Italians were liars anyway! His final paragraph reveals that attitudes to immigration are not just a feature of modern politics.

F HEBDEN, Clock and Watch Maker, Jeweller, &c., tenders his thanks to the inhabitants of GRANTHAM and its vicinity for the liberal support he has hitherto met with, and trusts that by a strict attention to business, and moderate prices, he shall ensure their continued support. F. H., like a certain pettifogging foreigner, wishes to impress on the minds of the public that watches shall not hang in his window by way of ornament, but those who are pleased to entrust him with either clock, watch, or any other article to repair, shall have it done speedily and properly.

The beautiful motto which lies at the basis of Christianity, F. H. claims as his own. No man shall ever have to say that he was either immured in an *Italian convent*, or that he went to a *British jail* to the injury of British industry. F. H. does not shrink from avowing that he has a perfect knowledge of his mechanical profession: he can give momentary decision whether or no the *vange* is broken, which must be a matter of doubt on the part of the prime minister of the Blues. Question the *Italian* as regards either clock or watch, and to each question he must say *Non mi ricordo*; unless he adopts his country's custom, which is proverbial for *lying*. *Majocchi* has ticketed articles at a low rate, but that does not say they are cheap: watches, like every other article, can be bought and sold at almost any price.

N. B. Scouts, out-casts of all nations, I'll tell you how to thrive! Land in Britain; you will be fed, though other men starve. Imitate the Italian; crouch, fawn, flatter, ignobly sue,—tell noble Lords this, that, all—more than all,—a sure way to pre-eminence.

LR&SM 18th. May 1827

After this verbal skirmish we hear no more of Francis in Grantham. No examples of his work here have been reported and by 1830 he had left the town probably to work with his elder brother James in Halifax who was already established there as a clock and watchmaker. By the time of the 1851 census James had moved to London leaving Francis in Halifax, now married with a family, where he continued until his death in 1884. Two of his sons became clockmakers, Francis II (b.1842) later became involved in the electric telegraph business and is listed in the Halifax directories of the 1870s as "Telegraphic Engineer and Contractor"; he later emigrated to Australia. The other clockmaker son John (b.1843) emigrated to New Zealand together with his sisters and another brother.

The 1891 census includes an Arthur Hollis a 25 year old goldsmith born in Birmingham and his wife and two children at the above address. He was presumably employed in one of the businesses in the town.

HUBBARD Thomas

Granby Yard and Blue Lion Lane

1841-51

The 1841 census includes Thomas, a 41 year old watchmaker, living with his 78 year old mother and 40 year old brother William, a wheelwright. Ten years later he is again listed as a clockmaker, unmarried still living with his mother, although their address is now given as "Blue Lion Lane". No doubt he was employed by one of the watchmakers in the town.

INGERSON Thomas

early 19th. century

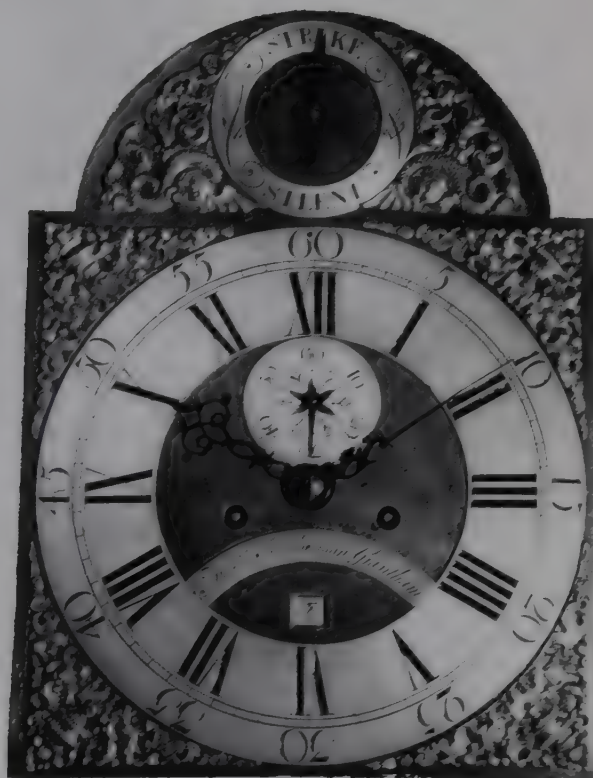
The Apprentice records at Kew tell us that a "Thomas Ingerson, son of Catherine, was apprenticed to William Barnard, Watchmaker of Newark in July 1744 for 7 years. The only evidence of him working in Grantham is the watch pictured below. It is a typical verge watch of the late 18th., early 19th. century. The distinguishing feature however is the enamel dial which, instead of the usual hour numerals, has symbols which are representative of the signs of the Zodiac. These features were sometimes used by members of the craft of Freemasonry so it was probably commissioned by a member of one of the local Lodges. The outer of the silver pair case is hall marked London in 1801 and the inner case is engraved "George Barker Hough 1889"; in view of the date he was clearly not the original owner.



Silver pair cased watch by Thomas Ingerson, Grantham c.1801 (Grantham Museum collection).

Morley Jenkinson was a Nottingham watch and clockmaker born there in 1718 and married a Susanna Hobson in 1743. Shortly after his marriage he moved to Grantham. Little more is known of his time here; he subscribed to the bells and chimes appeal in 1753 and a watch by him, no. 808, was reported lost in the Daily Advertiser of 15th. May 1755.

Two 8 day longcase clocks by him have been recorded. The one illustrated here has a brass dial with Strike/Silent in the arch which suggests a date of c. 1760-70 and the oak case has, as so often happens, had some repairs to the base but overall it is a quite handsome clock. What happened to Jenkinson is not clear as nothing further is heard of him after this date.



*Oak cased 8 day longcase clock and dial by
Morley Jenkinson of Grantham c. 1760.*

(Courtesy Grantham Clocks)



450

A 19th Century Oak Longcase Clock

M. Jenkinson, Grantham

the overhanging arched hood on two plain brass mounted columns above a shaped trunk door and raised on a plinth base with later plinth, the 12 inch brass dial surmounted by a strike/ silent dial above a roman and arabic silvered chapter ring, matt centre containing a subsidiary seconds, date aperture and signed to an applied plaque, the five pillar movement with anchor escapement and striking on a bell
202cm

Another example of Morley Jenkinson's work appeared in auction recently, again an oak cased clock with an arch brass dial which was mistakenly catalogued as 19th. century but appears to date around 1760-70.

George Johnson, at the age of 14, was apprenticed to the Grantham clockmaker John Wood for a period of 7 years; the indenture is dated 31st. January 1791. The baptism register of St. Wulfram's records the christening of Lavinia, the daughter of George and Emily Johnson, on the 27th. March 1813 where George is described as a Watchmaker.

From the evidence of his surviving clocks he seems to have started in business on his own account about 1800. His first shop was in the "Sheep Market" or what we today would call Wide Westgate. He advertised from time to time in the local newspaper, usually when he wanted to recruit an apprentice or a journeyman. The following appeared in the Linclon, Rutland and Stamford Mercury in April 1805.

G. JOHNSON, WATCH and CLOCK MAKER, Westgate, GRANTHAM, returns his grateful acknowledgments to the nobility, gentry, and the public in by an unremitting attention to their commands, to merit general, for favours already conferred upon him, and hopes, their patronage and support.
N. B. A Journeyman Watch-maker, and a Journeyman Clock-maker (good hands), may meet with constant employ and good wages, by applying as above.
GRANTHAM, April 25th, 1805.

LR&SM Apl.26th. 1805

Clearly his trade was increasing and in September of the following year he again advertised for a watchmaker. The Corporation minute books also for 1806 record the apprenticeship indenture of a Brownlow North to Geoge Johnson, clock and watchmaker.

In 1809 he moved to a new position in the High Street opposite the George Hotel which at the time would have been a premier retail situation. These advertisements indicate that he had sufficient trade to support quite a large workshop and employed journeyman watch and clockmakers as well as apprentices.

G. JOHNSON, Watch and Clock-maker, Jeweller and Silversmith, GRANTHAM, respectfully informs his friends, and the public in general, that he has removed to an eligible situation, opposite the George Inn, where he hopes to experience a continuance of their favours, which he will endeavour to merit by a strict attention to their commands.—He has on sale an assortment of elegant Gold and Silver Watches, with vertical, horizontal, lever, duplex, and other most approved scopments; also plain, musical, and astronomical Clocks, on the best principles, and most reasonable terms.
N. B. Two Journeyman Clock-makers will meet with constant employ and London prices by applying as above.
Grantham, Dec. 4, 1809.

LR&SM Dec. 8th. 1809

G. JOHNSON, Watch and Clock-maker, (late Apprentice to Mr. Woon, deceased,) takes this early opportunity of solishing the patronage of the friends of his late master in the above business, and assures them that he will exert himself to give them the satisfaction they have been accustomed to receive,—his experience in the business, and length of residence in the town, enabling him with confidence to accomplish what he asserts. His friends and the public are respectfully informed that he has selected a variety of new Watches, upon the most approved principles, which he can warrant, and will sell on the lowest terms. Grantham, May 29, 1811.

LR&SM May 24th. 1811

He was not slow to canvas for the trade of John Wood who had been in business, also on the High Street, for 50 years and had died the previous week.

GEORGE JOHNSON, Watch and Clock-manufacturer, opposite the GEORGE INN, GRANTHAM, returns grateful acknowledgments to his numerous friends for favors already conferred upon him, and, by a strict attention to their commands, hopes to merit a continuance of the same.—He also begs leave to say, he has now on sale a well-selected assortment of watches and clocks, at very reduced prices, viz. good eight-day clocks at 5*l.* 15*s.* 6*d.* in neat dark or inlaid cases; astronomical, musical, quarter, and spring clocks, proportionably low; repeating, Leatherland's patent, horizontal, duplex, detach, and vertical watches, sold or repaired on the lowest terms.—An Apprentice wanted, who, at the expiration of his time, will be entitled to the freedom of the borough of Grantham.

L.R. & V.M. Nov. 19th 1813

He was advertising for an apprentice again in 1813 and detailing a good selection of watches including those with the recently developed lever escapement.

These references to various types of watches tells us he was up to date with the latest in watch escapement development. Leatherland's was an early type of lever escapement which led to the "detached" lever escapement which was only recently invented at this time. It became the standard escapement for quality watches

for the next 150 years; that is until the development of the quartz watch. The "vertical" refers to what we would today call a verge escapement, the oldest of all escapements but still in use up to the 1850s. The "horizontal" is what today is called a cylinder escapement. This had an improved timekeeping ability but was more difficult and expensive to make as was the "duplex" which was reserved for expensive high-grade movements.

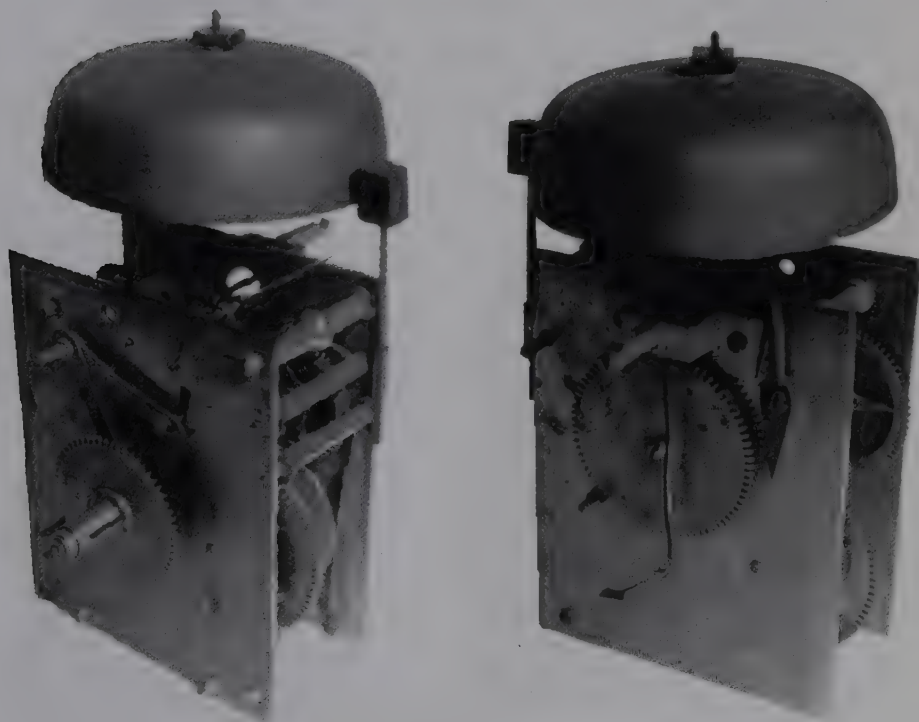
In 1821 he took on the apprenticeship of William Green whose previous master Joseph Tunnard had died. He eventually moved from the High Street premises as the 1826 White's Directory lists him in Swinegate and Pigot's of 1828 at Church Hill (which might have been the same premises). Ill health could have brought about this move as he died in 1828 aged 52 yrs.

Another George Johnson (b. 1807 at Grantham) is recorded as a clockmaker in Leighton Buzzard 1833-69 and might have been a son or relative.

Numerous longcase clocks have been recorded both 30 hr. and 8 day but no watches bearing his name have, as yet, been noted.



*Longcase clock by Geo. Johnson of Grantham c.1810
(The hands are probably not original).*



Dial and movement of 30 hr. longcase clock by Geo. Johnson of Grantham c.1800.

(N.B. the countwheel hook is missing from this movement)



An 8 day longcase clock by Geo. Johnson in an oak case with mahogany cross banding as offered in his advertisement of 1813 for £5-15s-6d.



An elegant 8 day clock c.1820 by Geo. Johnson in a more expensive mahogany veneered case.

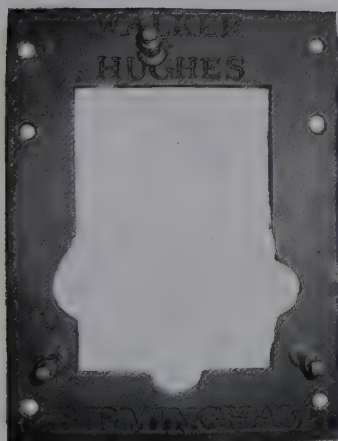


*Eight day movement of clock by
Geo. Johnson of Grantham c1830*

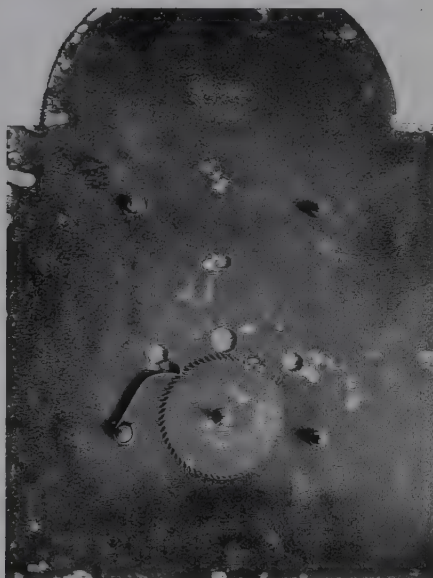


The Walker and Hughes dial for Johnson of Grantham c. 1828.

The movement of this clock by George Johnson has distinctive rounded tops to the plates. The arched painted period three dial is attached by a false plate lettered "WALKER & HUGHES BIRMINGHAM" and the rear of the dial plate itself is stamped W&H.



The Walker & Hughes falseplate.



The rear of the dialplate stamped W&H in the arch.

JONES Ashton J.S.

29 Watergate

1871

He is listed in the 1871 census as a 27 year old watchmaker, born in Oundle, living with his wife and two children; presumably working for one of the watchmakers in the town.

KEELING Joseph

47 Swinegate

1891

He is listed in the census of 1891 as a 27 year old watchmaker, born in Lincoln, in the house of Jane Collishaw a confectioner in Swinegate.

KRENTZ Joseph

69 Westgate

1861

Listed in the 1861 census as a 47 year old Clockmaker, born in Germany, a lodger in the house of Francis Hill, a shoe maker.

As explained elsewhere in this book imported clocks from the Black Forest area of Germany supplied the domestic demand for cheap timekeepers in the first half of the 19th. Century. Joseph Krentz was probably one of the itinerant salesmen.

LEE Francis William

41 St. Peters Hill

913-47

He took over the business and premises of W.A. Todd about 1913 and continued to be listed in the directories until 1947. An English fusee 12 inch dial clock is typical of the period and a watch of French manufacture with a cylinder escapement, the enamel dial lettered FRANK W. LEE has been recorded.



French made pocket watch with the dial lettered FRANK W. LEE, GRANTHAM



An 8 day English dial clock lettered for F. W. LEE of GRANTHAM.

LOVELACE R. C.

8 North Parade, Grantham

1891

Included in the census returns of 1891, in the home of his father Henry Lovelace, is his 14 year old son, a watchmaker's apprentice.



This rather poor photograph shows a longcase clock by Edward Manton of Grantham. It is housed in a lacquer case with a dark green background with chinoiserie decoration in gilt, red and black; quite an impressive clock. It is somewhat difficult to date this clock. The brass dial has a strike/silent control in the arch which was a popular feature for a relatively short period around the 1770s. The dial centre is matted with some engraving around the square date aperture, the chapter ring is divided quarterly on its inner edge and has prominent half-hour markings, there is also wheat-ear engraving along the outer edge of the dial plate. These are all design elements of the early half of the 18th. century so in this respect the dial is somewhat old fashioned for the 1770s.

No other clocks by him have been recorded and the only reference to him is the following advertisement in the local paper of 1787.

**To JOURNEYMEN WHITESMITHS.
WANTED IMMEDIATELY,
A Sober steady MAN, as a Journeyman WHITE-
SMITH. One who is a good Hand, may hear of Employ
and Wages according to Merit, by applying to Messrs. LANG-
WORTH and MANTON, Machine Makers, Grantham, Lin-
colnshire. Letters (Post paid) duly answered.**

LR&SM 30th. March 1787

It seems unlikely that he was a regular clockmaker or if he was he made very few. Perhaps he produced this as a special commission for a customer or maybe for his own personal use. The lacquer case would have been supplied by a London specialist and he might have bought in the other components locally.

It is tempting to connect this man with the famous Grantham Gunmakers John and his brother Joseph Manton but they belong to one or two generations later and no connection has been made.

Joseph Manton was born in Grantham in 1766 of an old-established local family of farmers and millers. He was apprenticed to the Grantham gunsmith Edward Newton and later to his elder brother John Manton, also a gunsmith, who had become established in London. Although trading separately both became famous makers and were Gunmakers to George III and George IV with a wide following of both noblemen and gentlemen. Joseph was perhaps the more inventive man and patented dozens of improvements in the designs of guns.

In 1807 he turned his attention towards clocks and particularly Chronometers, with a view to claiming the prize on offer by the Board of Longitude for the discovery of the longitude at sea for which an accurate chronometer was essential. Other people had attempted to reduce errors by compensating for atmospheric changes. Manton's idea was to contain the mechanism under vacuum and so insulate it from changes in temperature and atmospheric pressure making compensation unnecessary. He wrote to the Board of Longitude in 1807 outlining his ideas:--

*To The Rt. Honorable and Honorable
Commissioners of Longitude.
Gentlemen,*

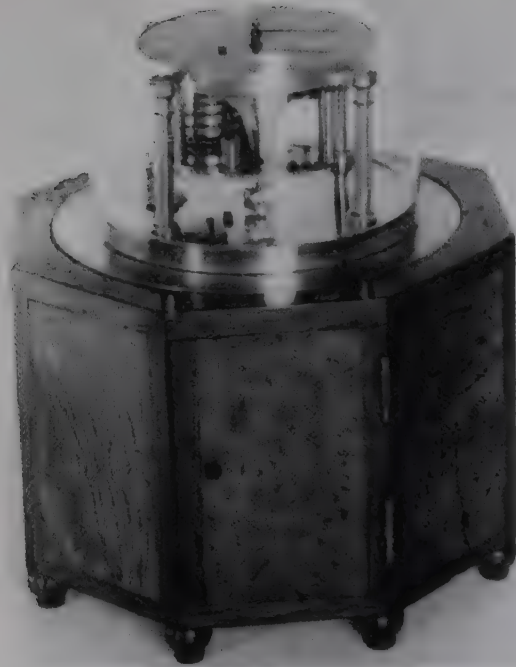
I beg leave to lay before you my invention to discover the Longitude at Sea by means of an improvement in Time-Keepers, by making them act more correct.--It is impossible for any Timekeeper hitherto constructed to go accurate, because they are exposed to the variation of the Atmosphere, the Air being some days heavy, and at other times light; When the Air is heavy the Balance or Pendulum of the Timekeeper is more opposed, and its motion is quickened, therefore it cannot be uniform and keep true time.

My invention is to put the whole of the Time-keeper into a Vacuum, so constructed that it may be wound up when required without admitting the external Air. The advantages of having the Time-Keeper in a Vacuum, are, the Vibration of the Balance or Pendulum will be more uniform, and act with less friction--the Sea Air, Damps and Dust will be excluded, which are so injurious in rusting, and corroding the movements of Time-Keepers in long Voyages; and the Oil will be in more uniform fluid State, by not having being exposed to the alteration of the Atmosphere, which must have the effect of making the Time-keeper go much truer and nearer perfection than any hitherto constructed.

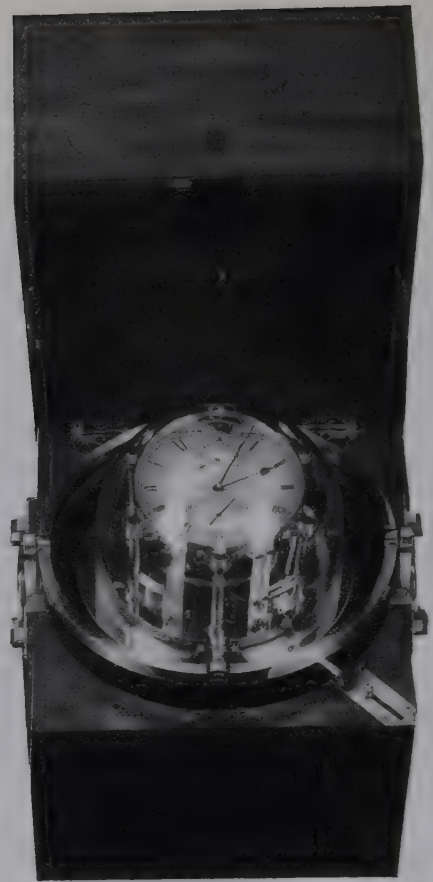
The purport of this is to beg that your Honors will order an experiment to be made by placing one of your most correct Time-keepers (the rate of which has been ascertained) into a Vacuum, so constructed that it may be wound up without admitting the external Air and allow me to superintend the construction of it. The honor of an answer will oblige.

*Rt. Honorable and Honorable Gentlemen
Your most obedient
Humble servant
Joseph Manton.*

*Davies Street,
Berkeley Square,
March 4, 1807*



Manton's Chronometer in the Institute of Applied Sciences Australia



One of Manton's Chronometers boxed with gimbals for use on board ship

The Board did not take up his request but undeterred Manton had two clocks made to his specification by Robert Pennington and obtained a Patent (No. 3295 Dec.5th. 1807) to protect his invention. The mechanism was contained under a glass bell jar with an airtight opening so that the air could be exhausted by a pump. It worked well and he took it weekly to the Royal Observatory to have its rate checked and after providing evidence of its performance the Board was eventually persuaded to accept it for trial at Greenwich in 1811. It appeared to perform well and at least one of them was used successfully at sea by a Capt. Beaufort in the Mediterranean but the Board of Longitude was almost impossible to satisfy and nothing further is heard of it. The prize was eventually won by a design of another Lincolnshire-born Horologist, John Harrison, but only after intervention by George III himself.

Manton died in 1835 after various financial misfortunes, his epitaph written by the sporting author Col. Hawker reads:--

"In memory of Mr. Joseph Manton, who died, universally regretted, on the 29th. day of June, 1835, aged 69. This humble tablet is placed here by his afflicted family, merely to mark where are deposited his mortal remains. But an everlasting monument to his unrivalled genius is already established in every quarter of the globe, by his celebrity as the greatest artist in firearms that ever the world produced, as founder and the father of the modern gun-trade, and as a most scientific inventor in other departments, not only for the benefit of his friends and the sporting world, but for the good of his King and country."

One of his chronometers is in the collection of the Institute of Applied Sciences in Victoria, Australia and another was sold in one of the London salesrooms in the 1960s.

The census of 1851 includes William in his father's house on Swinegate as a 14 year old Apprentice Watchmaker. By 1861 he is listed together with his widowed mother on Commercial Road as a "Watchmaker general jobber". Also in the house is a younger brother, Robert G. Marshall aged 18 described as an Apprentice watchmaker.

By 1863 he is included in the Directories as being in business on his own account at No. 28 High Street (next door but one to the Red Lion). Here he remains listed until 1919. He advertised in the Grantham Journal in Jan. 1874 for an "Outdoor Apprentice" (i.e. not to live in as was the usual practice up to this period). He also appears in the Churchwarden's accounts after the retirement of John Saltby in 1867 for winding the Church clock.

The fusee dial clock pictured here has survived. An American Ogee clock by Brewster & Co. with Wm. Marshall's trade label has been recorded.



An 8 day English dial clock by Marshall c.1890.

This bill was written for John Edwards who kept the Red Lion Hotel next door but one to William's shop on the High Street. It details the jobs he undertook for him during the year of 1878 including :-

- May 7 Lever Watch Rep. & cnd. (repaired & cleaned) 2s. 6d.
- May 25 French clock Rep. & cnd. 3s 6d.
- June 20 Spring dial new line & cnd. 3s. 6d.
(this would be an eight day fusee dial clock similar to the one illustrated)
- Sept. 3 Watch Glass 6d.
- Oct. 26 Watch Rep. & cnd. & New key 2s. 10d.
- Nov. 14 Timepiece Glass & cnd. 3s.
- Dec.. 5 Clocks Winding 1878 (the amount is not clear)

There are other 'Marshall clockmakers' in the late 18th. and 19th. centuries in the towns of Newark, Lincoln, Sleaford, Louth, Boston and Horncastle, as well as several Lincolnshire villages, some of whom may be related.

29 HIGH-STREET, Grantham		3028
Mr. Edwards 1/49		
D. to W. Marshall,		
WATCH MAKER AND JEWELLER.		
WATCHES, CLOCKS, &c. CAREFULLY REPAIRED and TIMED.		
JEWELLERY DONE: NEATLY EXECUTED: GLASSES BOUND IN THE YEAR		
1878		
Jan 4	Sept. 1st Glass	4 6
9	Sept. 1st Glass	4 6
12	Brick up 11 11 11 11 11 11	5
Nov 5	French clock Rep. & cnd. 3 Watches	1 6
12 13	1st Plated sugar Kew	3 6
28	Brick up 3 1/2 1/2 1/2 1/2 1/2 1/2	2 6
May 7	But Watch Rep. & cnd.	3 6
25	French clock Rep. & cnd.	10
June 1	Oct. 1st 15 1/2 1/2 1/2 1/2 1/2 1/2	3 6
20	Spring dial new line & cnd.	4 6
Aug 24	But Watch Rep. & cnd.	9
Oct 3	Watch Glass 6d.	9
23	Watch Rep. & cnd. & New key	6 9 4
Oct 26	Watch Rep. & cnd. & New key	2 10
Nov 14	Timepiece Glass & cnd.	14
Dec 5	Clocks Winding 1878	3
1878		
Jan 4	Sept. 1st Glass	4 6
9	Sept. 1st Glass	4 6
12	Brick up 11 11 11 11 11 11	5
Nov 5	French clock Rep. & cnd. 3 Watches	1 6
12 13	1st Plated sugar Kew	3 6
28	Brick up 3 1/2 1/2 1/2 1/2 1/2 1/2	2 6
May 7	But Watch Rep. & cnd.	3 6
25	French clock Rep. & cnd.	10
June 1	Oct. 1st 15 1/2 1/2 1/2 1/2 1/2 1/2	3 6
20	Spring dial new line & cnd.	4 6
Aug 24	But Watch Rep. & cnd.	9
Oct 3	Watch Glass 6d.	9
23	Watch Rep. & cnd. & New key	6 9 4
Oct 26	Watch Rep. & cnd. & New key	2 10
Nov 14	Timepiece Glass & cnd.	14
Dec 5	Clocks Winding 1878	3

MARSHALL John William

5 Brook Street

1891

The 1891 census includes the above 24 year old watchmaker who was born in Grantham together with his wife Alice who was born in Banbury in Oxfordshire. No relationship with the previous Wm. Marshall has been established.

MYERS John

Little Gonerby

1825-31

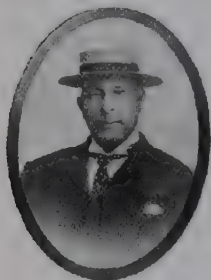
St. Wulfram's parish registers record the baptism of two children, John in 1825 and Lucy in 1831, of parents John Myers, Clockmaker and his wife Mary. No evidence of his work has been recorded so he probably worked as a journeyman for other clockmakers in the town.

NEW & Co.

32 Union Street later at 3 North Street

1893-1913

W.T.Pike & Co. give an account of this business in their publication "Grantham with Bottesford and Bourne" of c.1900.



THE LATE
MR. CHARLES NEW.

NEW & COMPANY, Furniture Dealers, Cabinet Makers, and General Warehousemen, 3, North Street, Grantham - This business has been established for forty years. The late Mr. Charles New came to Grantham in 1869 as an assistant to Mr. Hannett, in Westgate, whom he afterwards joined in partnership. After serving as an assistant for six years he was eighteen years a partner—half the period trading as Hannett, Cammack and New, and half as Hannett, Kellam and New. He later started on his own account in Union Street, and after his decease three years ago, his widow and son, Mr. F. C. New, moved the business to more prominent premises at the junction of Watergate and North Street.

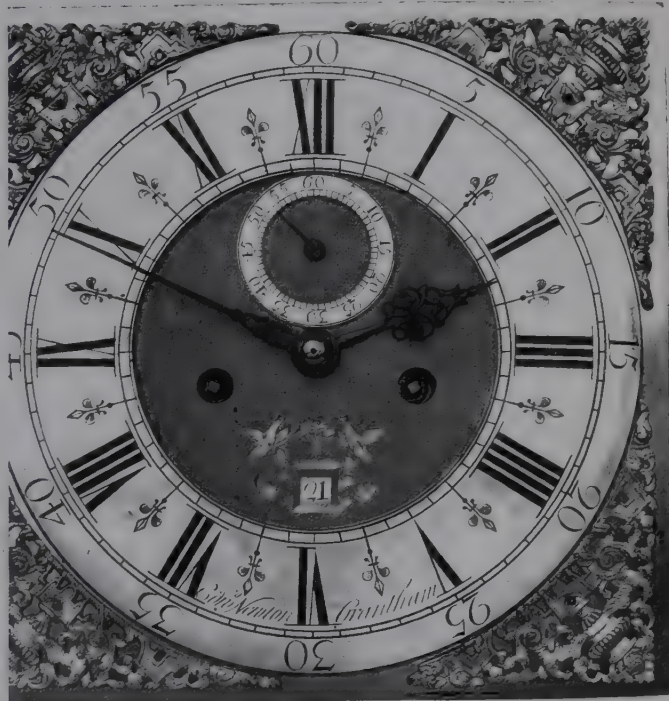
Kelly's directory of 1896 lists Mrs. Maria New trading as a Furniture Dealer at 32 Union Street and later as New & Co. until 1913 after which they are no longer included. They apparently included clocks in their repertoire of house furnishings. This wall clock is labelled by the "Anglo American Clock Co. Standard movement for home and abroad, slow strike" and uses an American made movement in an English-made inlaid case and was probably bought directly from the manufacturers.



*An eight day wall clock by The Anglo American Clock Co.
c.1900 retailed by New & Co.*

Edward Newton was a Grantham man who as well as making guns is known to have made clocks. He was a man of some standing in the town and as a Comburgess he played his part in the running of the town. He was chosen as the town Alderman (the equivalent of being the Council leader today) in 1736 and again in 1753 when he was also recorded as a contributor to the church bells and chimes. He married Catherine Bacon in 1739.

Only two clocks by him have been recorded and both are of high quality workmanship, which raises the question as to how much of these clocks were made in Edward's workshop or they were bought in from trade contacts. It is difficult to say, although the production of both guns and clocks was not an uncommon feature of many of the early provincial metal workers.



The clock pictured here is in a plain oak case with a 11 3/4 inch square brass dial with design elements which suggest a date of c.1740.

This is a high quality movement made by someone very used to the work. The fifth pillar gives increased rigidity to the frame and is typical of London-made movements.

The movement has rack striking and has a repeat lever on the right hand side of the front plate; this would enable the last hour to be repeated by pulling an attached cord, a slightly unusual feature but in the days of poor lighting a practical feature.

Three views of the same movement are illustrated here.

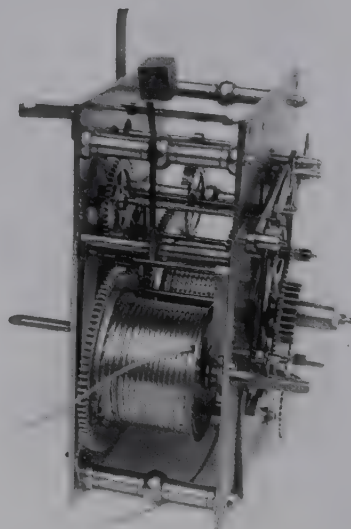
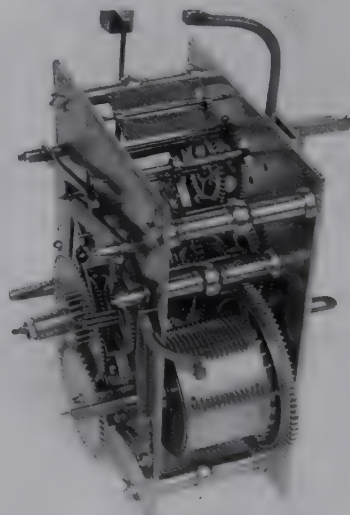


One other clock has been recorded by this maker. It has not been personally examined but the following is a description of it by its owner.

“Brass arch dial longcase clock in a walnut case with marquetry panels on the arch topped trunk door. The dial has a centre sweep seconds hand and an engraved ‘father time’ in the arch flanked by dolphin spandrels; a matted dial centre with a square calendar aperture below the XII numeral and the name cartouche engraved ‘Edw. Newton Grantham’ above the VI with lady’s head mask and foliage spandrels. The case has a caddy topped hood and attached reeded pillars, the lower reeds filled with brass rods. The trunk door has two panels of flower and foliage marquetry and the sides are veneered in walnut with feather cross banding. The base has ogee bracket feet which are considered to be later replacements”.

This is clearly a high quality clock in an expensive London-made case. The provision of a centre sweep seconds feature is an unusual sophistication at this period.

N.B With the name of Newton it is tempting to connect him with the illustrious Grantham scientist Isaac but no connection has been made, although Edward does have some claim to fame in that he was the Master and mentor of Joseph Manton who became the country’s most celebrated gunmaker.



I am indebted to Mr. Jeff Darken for permission to reproduce these photographs of this clock by Edward Newton.

Several guns by him have been recorded including the one featured here in the Grantham Journal of 7 Nov.1986.



A BRASS-BARRELLED blunderbuss which was on sale at a dealer's in London has come to rest in the Grantham area. It was made by a man named Newton, who was a gunmaker in Grantham in the 18th Century. The weapon, in almost new condition, was bought by a local dealer in antique guns and swords Gareth Vincent, of Allington, for £1,100. Newton is said to have trained one of the greatest English gunsmiths, Joseph Manton, known as "The King of English Gunmakers," who was born in Grantham and christened at St Wulfram's church. Picture: Gareth with his latest prized possession.

In 1981 at a sale in Louth, lot 1236, was "a pair of single barrel percussion side lock cannon barrel holster pistols with steel barrel and action and silver mounts with walnut stocks, engraved 'converted E. Newton Grantham' c.1770". (Presumably the reference to 'converted' indicates they were converted from flintlock to percussion by Newton).

Another pair of pistols were described in 1983 as follows:- "A good pair of 20 bore box lock cannon barrelled silver mounted Queen Anne style flint lock holster pistols by E. Newton circa 1770, turn off barrel London proved, dogtooth border engraved frames with E. Newton on top of the breeches and Grantham beneath L shaped frizzen springs, sliding trigger guard safety catches, rounded walnut butts with silver grotesque mask butt cups and foliate bordered escutcheon; est. £1000".

The fact that these guns had silver mounts suggest they were high quality products of his workshop.

NEWTON Fredrick Victor

25 Westgate

1892

Kelly's and White's directories of 1892 both record him as a clock and watchmaker but no more is known of him.

The first notice we have of Rasin Orson is in Pigot's directory of 1822/23 at an address in Watergate, Grantham. He married Sarah Wood daughter of Thomas Wood, a joiner, on the 18th. February 1823. An advertisement of his in the LR&SM of March 1825 has him in the High Street and another of March 1827 locates his shop "opposite the Guildhall" (at this time the Guildhall was on the corner of Guildhall St. and High St.). His shop would have been only a few doors away from that of Bellatti who at this time was opposite the George Inn.

RORSON, Watch and Clock Maker, Silversmith, Jeweller, and Toyman, *High Street, GRANTHAM*, begs to return his most grateful acknowledgements to the nobility, gentry, and inhabitants of Grantham and its vicinity for the liberal encouragement he has received since his commencement in the above business, and takes this opportunity of informing them, that he is now in London selecting a fashionable assortment of Jewellery, Toys &c., which he intends offering on the most liberal terms, and hopes, by unremitting attention to business, to merit their future favors. March 10th. 1825



Watchpaper from a watch by Rasin Orson in the collection of Leicester Museums.

RASIN ORSON, Clock and Watch Maker, Silversmith, &c., opposite the Guildhall, GRANTHAM, impressed with gratitude, returns his sincere thanks to the nobility, gentry, and public for the favors conferred upon him since his commencement in business, and humbly solicits a continuance of their support, which it shall be his study to merit by personal attention, dispatch, and moderate charges.

LR&SM 30th. March 1827

There is a reference to an oak cased painted dial longcase clock in the journal of the Antiquarian Horological Society of June 1974 (Vol.8 p.780). This clock has a painted dial, unusually with a pale green background, and is lettered "ORTON GRANTHAM" which is likely to be a mis spelling of "ORSON" and a watch engraved R. Orson Grantham was reported lost in an advertisement in the LR&SM in 1872.

At some time after 1846 Rasin Orson moved to Melton Mowbray and is listed there, at the Cornhill, in White's directory of 1863.

A wall clock, the dial lettered ORSON MELTON MOWBRAY, was sold in a Newcastle saleroom in May 1992. It was catalogued as "A good early Victorian Mother of Pearl inlaid Coramandel Wall Clock, 72cm. overall the painted dial with octagonal border above a glazed pendulum aperture and bowed case - 8 day fusee movement with anchor escapement within shaped plates. Estimated at £400-600".

A John Orson a Cabinet maker at Newark advertised in the LR&SM of Aug. 10th. 1821 and in a later advertisement, as an Auctioneer with a sale of household furniture at Long Bennington, advised that "catalogues were obtainable at his office in Newark or at Mr. Orsan's Watchmaker, Grantham". Pigot's Directory of 1828/29 includes a John Orson as an auctioneer at Bargate Newark. Presumably he was a relation, perhaps father or brother of Rasin?

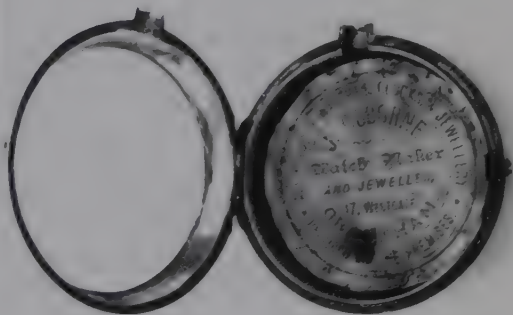
The earliest mention we have of John Osborne is in the census of 1871 when he is lodging in a house in Grantley Street and is described as a 24 year old unmarried journeyman watchmaker from Bristol. Presumably he was working for one of the established watchmakers in the town. By the time of the next census in 1881 he was in business on his own account at 17 Westgate living with his wife Elizabeth and four children. Their eldest son, also John, was apprenticed to his father and continued the business after his father's death. The following advertisement appeared in the Grantham Journal of 19th. January 1900 :-

The Central Watch and Clock Establishment.
Mrs. Osborne 17 Westgate Grantham thanks friends and customers during the last 22yrs. of her late husbands business. The business will now be under the direction of her son (and competent assistants) who had been apprenticed to her late husband and also had several years in London and Provincial Houses etc. etc

The shop continued at this address and is listed in the Directories until 1939 when it was taken over by S.G.Graves who continues the business at the same address up to the present day.

Silver pocket watches have been recorded engraved with his name together with wall clocks. The example pictured here is an American import made by the Ansonia Clock Company of c. 1890.

Watches were an important part of the trade at this period; he had his own watch keys made and watch-papers printed.



Two watch keys made for J. Osborne, the right-hand key bears the Grantham coat of arms.

J. OSBORNE,
Watch & Clock Maker,
17, Westgate, Grantham.

A LARGE ASSORTMENT OF

GOLD AND SILVER

J+E+W+E+L+L+E+R+Y

Suitable for Christmas Presents.

SPECTACLES

From 6d. to 10s. 6d. per pair.

Hall-marked Gold Keepers from

4s. 6d. each.

◁ 9-CARAT WEDDING RINGS ▷

From 4s. 6d. each.

All other Goods at the LOWEST POSSIBLE PRICES.

Every Description of REPAIRS done on the Premises,
17, WESTGATE.

WALTHAM WATCH AGENT.

Agent for the Waterbury Watch at 10/6 and 17/6.

from Palmer's Almanack of 1892

J. OSBORNE,
WATCH AND CLOCK MAKER,
17, WESTGATE, GRANTHAM.

A LARGE ASSORTMENT OF

GOLD & SILVER JEWELLERY suitable for Christmas Presents.

Spectacles from 6d. to 10s. 6d. per pair.

Hall-marked **GOLD KEEPERS** from 4/6 each.

ALL OTHER GOODS AT THE LOWEST POSSIBLE PRICES.

17, WESTGATE, GRANTHAM.


from Bushb's Almanack of 1883

Osborne & Co.

**WATCHMAKERS, JEWELLERS
 SILVERSMITHS & OPTICIANS**

A good selection of Gold
and Gold-filled Bracelet
Watches always in stock.

Lowest Possible Prices.
Best Possible Value



ALWAYS on view, an
excellent stock of
the latest styles and
newest designs in...

Wedding & Engagement
Rings in great variety.

**17, WESTGATE.
 GRANTHAM.**

Palmer's Directory 1925

PAGE John

1817

The baptism registers of St. Wulfram's record the christening on the 27th. August 1817 of Elizabeth the daughter of John and Elizabeth Page of Grantham, watchmaker. There are several generations of Page clockmakers working in Lincolnshire in the 19th. century and at this time he was probably working as a journeyman in the town. He is likely to be the same man who was born in Sleaford in 1791 and married Elizabeth there in 1813. He eventually established himself as a watch and clockmaker in Market Rasen for many years. By the time of the 1851 census is living with his son George, a clock and watchmaker, at Navenby near Lincoln.

William Palethorpe started business initially c.1828 in partnership with William Green (see GREEN and PALETHORPE). He had been best man at William Green's wedding at Great Ponton, two miles south of Grantham in 1827. By 1834 Wm. Green had moved to his own shop leaving William Palethorpe in the shop opposite the Guildhall.

GREEN and PALETHORPE, Watch and Clock Makers, Silversmiths, &c., opposite the Guildhall, GRANTHAM, respectfully acquaint their friends and the public that they have now for sale an excellent assortment of new Watches, particularly those on the lever principle, which cannot be surpassed for accuracy. The satisfaction these Watches have given their numerous friends, has induced them to lay in a large stock, which will be offered at unprecedented low prices.

G. and P. have also to offer a neat and modern selection of Jewellery, Silver Goods, Bracelets and Snaps, Musical Boxes, Seed and other Beads, with a variety of Gilt and Plated Goods; also eight-day Weight or Spring Plain or Quarter Clocks.

G. & P. assure those ladies and gentlemen who honor them with their custom, that every exertion shall be used to give entire satisfaction, and hope that a strict attention to their commands will entitle them to a continuance of that patronage and support which has been so liberally extended towards them, and for which they return their sincere and grateful acknowledgments.

N.B. Watches and Clocks sold by G. and P. are warranted for 12 months, or exchanged free of expense.

↪ A Youth of respectable connexions wanted as an Apprentice, who, at the expiration of his time, will be entitled to the Freedom of the Borough.—Paid letters will be attended to.

LR&SM 5th. Sept. 1828



WPALETHORPE, Clock & Watch Maker, High Street, GRANTHAM, is in immediate want of a steady Man in the above line. None but experienced hands need apply. Letters to be post paid.

LR&SM 30th. Oct. 1835

Unfortunately William Palethorpe died on Feb.17th. 1837. In his will, dated the day before he died, he left all his estate to his wife Ann. This early death (he was only 33years old) was clearly a tragedy for his wife but an advertisement of May 1838 tells us that she had formed some sort of partnership with another Grantham clockmaker Henry Pearce and had moved to the shop "lately occupied by J.W. Barston near the George Inn".

MESSRS. PEARCE and PALETHORPE, Clock and Watch-makers, Silversmiths, Jewellers, &c. return their most sincere thanks to the nobility, gentry, and inhabitants of GRANTHAM and its vicinity for the distinguished patronage conferred on them since their commencement in business, and assure those who may hereafter favor them with orders that the utmost exertions shall be used to merit a continuance of the same.

Messrs. P. and P. having Removed to the Shop and Premises lately occupied by Mr. J. W. BARSTON, silversmith, &c., near the George Inn, beg leave to state that they have made extensive additions to their stock of Goods, consisting of a variety of the best-manufactured English and French Spring Clocks, Time-pieces, Carriage Clocks, &c., Ladies' and Gentlemen's Gold and Silver Watches, Plate, Jewellery, &c.; a large assortment of Barometers and Thermometers, warranted of the best quality and at reduced prices; Cutlery from the warehouses of Messrs. Rogers and Son, Sheffield; and also a great variety of Britannia-metal Tea Pots and Coffee Biggins, from Dixon and Son's Sheffield, being of the best manufacture.

Clocks, &c. cleaned and repaired in the country.

N.B. An Apprentice wanted: applications made by letters to be post paid.

Grantham, May 2 1838.

LR&SM 4th. May 1838

The partnership between Pearce and Palethorpe does not seem to have lasted very long as entries in the Directories of 1840 onwards make no further mention of Palethorpe.

Two longcase clocks by William have been recorded. This one has a 13inch painted arch dial, the centre 'raised', in an oak case with mahogany veneers and cross-banding.

J.P.Paley was a clock and watch repairer and jeweller in the village of Caythorpe mid-way between Grantham and Lincoln. Although no clocks or watches have been recorded by him his name is often found as a scratch mark on clocks he repaired. He is listed in the directories from 1885 until 1926 and repair dates have been noted up to 1929. He clearly provided a local service for over 40 years and his marks have been found on clocks from Sleaford and Grantham. A watch paper, used as a label, stuck inside the case of an American ogee clock, no doubt when he repaired it, has been noted.



A watch paper of J P Paley

Benjamin Parr was working in Grantham at least as early as 1814 as a church clock survives with the setting dial engraved "B. Parr Grantham AD 1814". The first documentary mention of him is in Pigot's Directory of 1819/20 at an address in Vine Street. In May 1825 he advertised in the LR&SM for a journeyman watchmaker and he continues to be listed in the Directories until 1830 when the parish registers tell us he died at the age of 66. Little is known of his earlier life although he is probably the Benjamin Parr baptised in 1767 at Lowdham in Nottinghamshire.

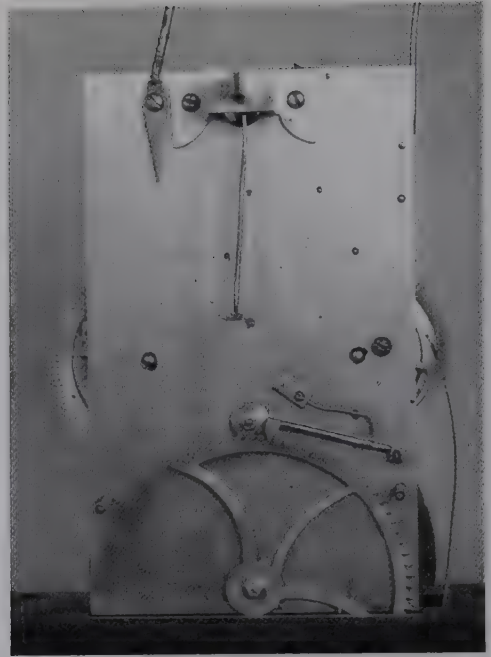
Surviving clocks by him include this magnificent painted dial clock which was sold by the well known antique clock dealer and author Derek Roberts of Tonbridge, Kent and who considers it one of the most interesting and original of its type he has seen. I am indebted to Mr. Roberts for permission to reproduce the following illustrations and description from his book "British Longcase Clocks".



As well as the phases of the moon displayed on a star-spangled disc in the arch the dial also indicates the equation of time and has a year calendar together with the date indicated by a fly-back hand above the six o'clock. The Sheraton style case has the label of "J. Usher Cabinet and Clock case maker of Lincoln" and uses the highest quality mahogany veneers. An interesting detail is the inlaid fish beneath each finial of the hood and under the canted corners of the trunk, a punning reference to the clockmakers name of Parr.



Front plate of Parr movement



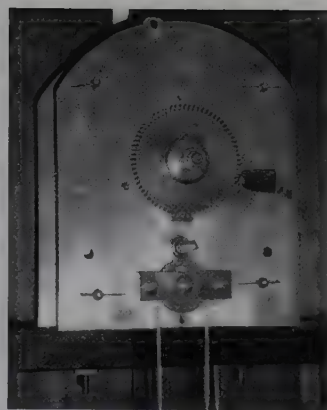
Back plate of Parr movement

The front view of the ingenious five pillar movement shows the engraved and silvered year calendar disc, the outer edge of which serves as the cam to actuate the equation of time feature via a roller and lever, visible above the engraved 'July' segment of the disc. The end of the longer lever is connected by a fine chain to a pulley which operates the equation hand to indicate the *Sun slower* and *Sun faster* in respect to clock time on the curved segmental dial below the 12 o'clock. The rear view of the movement shows the toothed curved rack which operates the fly-back date hand. This is clock making of a very high standard and must have been commissioned for a special client or possibly made for his own use and perhaps displayed in his shop.

A much more modest clock has been recorded which has a rope driven 30hr. movement and a square painted dial with Arabic hour numerals and spandrels of painted flowers on a powder-gilt background and a mansion house painted above the dial centre. The good quality oak case has urn and flower inlay on the trunk door and inlaid details on the canted corners and above the door. A similar square dial by Walker and Hughes is illustrated in *Clocks*, March 1993 p.41.

As mentioned earlier there is a surviving turret clock by Benjamin Parr dated 1814, now installed in the parish church of Rattray in Perthshire. An article describing the overhaul of this clock is in *Clocks* magazine of Nov.1989 p.20. Of bird cage frame type construction the clock was originally quarter striking but the wheel work of the third train is now missing. The church was rebuilt in 1820 and it is supposed that the clock was not installed until a later date. It was clearly not designed for this church as its tower was built with three dials and this clock had only provision for two. It seems likely that the clock was located elsewhere, presumably in the Grantham area, before being moved to Scotland.

An interesting clock by Parr has recently (October 2004) come to light; it is a month-going wall clock of the type sometimes referred to as a Norwich clock as the style was popular in that area. The oak case with a mahogany band above the shaped and cross-banded door has a case maker's label "J. Usber, Cabinet & Clockcase Maker, Lincoln."



The additional fixed pulley mounted on the movement front-plate.

Weight driven wall clock by Benjamin Parr of Grantham c.1820.

Note the large driving weight and pulley arrangement necessary to obtain the month-going duration.

(Courtesy Castlegate Clocks, Grantham)

Month going is achieved by using a double-bucket pulley arrangement with an additional pulley mounted on the front plate of the movement and the line terminated on the weight pulley. Month going of course requires a larger driving weight and the 28lb. rectangular shaped lead weight can be seen in the photograph above.

It is usual to find the bottom of the case of weight driven wall clocks to show signs of damage because if the gut line breaks, which inevitably they do after a couple of hundred years, the falling weight smashes through the bottom of the case. Surprisingly this clock has so far avoided this damage and has now been fitted with a steel line to reduce the chances of this happening.

A Regency style bracket clock by this maker has been seen with a twin fusee movement and a 7 inch painted dial in an arch top mahogany veneered case with brass inlay.

In the Post Office Directory of 1868 and Whites of 1872 John Payne is listed as a watch and clockmaker and jeweller at Colsterworth (a village 8 miles south of Grantham with a population of about 1000) but is not included thereafter.

PEARCE Henry (later Henry Pearce and Sons) 10 & 11 High street and later 62 High street 1838-85

Henry Pearce was born in Stratford upon Avon in 1814, the son of John Pearce, a clockmaker and Susannah his wife and was baptised at Rother Street Independent Chapel on the 16th. Oct. 1814. It is likely that he was apprenticed to his father. His first appearance in Grantham is in an advertisement in the LR&SM of May 1838 as a partner with Ann Palethorpe, the recently widowed wife of William Palethorpe, who had been in business as a watch and clockmaker with a shop on the High Street. This partnership does not seem to have lasted very long as his listing in Pigot's directory of 1840 makes no mention of Palethorpe. He continues to be listed in the Directories on the East side of the High Street (from 1863 numbered as 10 & 11 High St.) until 1882 when he had moved across the road to no.62 High Street. The fine shop front still remains and is at present the "A.S.K. Restaurant".

In the Census of 1841 he was married and living with his wife Mary and a 1 year old daughter Susannah, together with a journeyman watchmaker, Alfred Stainton aged 21, and two apprentices, Frederick Bull and John Perfect. It seems likely that Henry, like his father, was a non-conformist as the baptisms of Susannah and those of his later children do not appear in the registers of St. Wulframs. At the time of the census of 1851 his family has increased to include Thomas aged 5 and John aged 10 months and he is employing 3 men. Henry's father, John of Stratford, died in 1855 and the returns of 1861 show his mother Susannah living in Grantham with Henry and his family which now includes another son William aged 8, together with John now aged 10, his daughter Susannah aged 21 and his wife Mary. His eldest son Edward, who would be 15 years old, is not at home and was probably apprenticed elsewhere. At this time Henry is employing two men and two boys.

By 1875 the business was trading as Henry Pearce and Sons and they had opened a shop at 15 Commercial Street, Leeds followed by another in New Street, Huddersfield and in 1883 a shop in Gallowtree Gate, Leicester, was opened with his son William in charge. They had grown into a substantial undertaking trading as gold and silversmiths and diamond merchants. By 1889 the Grantham shop had been sold to R.W. Bishop (possibly Henry had died around this time). William left the Leicester shop in 1890 to manage the Leeds shop as his brother Thomas had died. William himself died in 1906 and the businesses were amalgamated and became a public limited company with the surviving son John as chairman. Advertisements at this period claimed they were 'watch manufacturers' which suggests that their workshops were capable of finishing watches and casing them ready for retailing. A branch in York was opened in 1911 with John jnr. as manager. The Pearce family eventually left the business and Charles Brook, who had been the assistant and later manager of the Leicester shop, became the director, still trading as H. Pearce and Sons. In 1923 the Leicester shop moved to 7&9 Market Place where they remain to this day with the grandson of Charles Brook, Mr. T.M. Brook, as chairman. Also at this time the old established business of W. Mansell of Lincoln was acquired but continued to trade, and still does, as W. Mansell and in 1969 the similarly old established business of Bowley & Co. of Melton Mowbray was purchased.



8 Day longcase clock by Henry Pearce of Grantham c. 1850

The 13 inch arched dial has a painted scene of a milk maid with a churn and a farmhouse in the background with diagonally similar spandrels of rural scenes. There are bold Roman hour numerals and matching brass hands. The dial is fixed directly to the movement without the use of a false plate. The case is completely veneered with mahogany of finely figured grain and colour.

The scroll topped hood has shaped turned columns. A short trunk door has a fancy three pointed shaped top and a lozenge shaped bone key escutcheon. Above the door is a horizontal band, or impost, and beneath the door a separate fielded panel. The sides of the trunk have canted corners, the same length as the door, with turned acorn terminations. The base is veneered with flame mahogany with cross banded edges.

The somewhat wider proportions are typical of clock case design of this period and represent its final form in this area. The choice of finely figured mahogany is in keeping with mid-Victorian furniture tradition although oak cases of similar proportions with mahogany cross banding were commonly used as a somewhat cheaper alternative.



Longcase clock by Henry Pearce with a 'raised' dial in an oak case with mahogany detailing c.1850.

The case of this clock is unmarked but its design is very similar to that of the mahogany clock also by Pearce and also to the case of the clock by Sexty, stamped by the Nottingham casemaker John Hill and illustrated elsewhere. The doors of the trunks of these clocks with the three points appear to have come from the same template and they can probably be attributed to the same workshop.

Other longcase clocks have been recorded all of a similar style and date but they were at this period falling out of fashion and being replaced by wall and mantel clocks of English and foreign manufacture.

In an advertisement in the Grantham Journal of 15th. Jan. 1876 he states he has "just received a consignment of the choicest French Bronzes, Clocks etc. by the the first Paris manufactures" and again advertising in the Journal a couple of years later he was having "a sale of Black marble and Gilt clocks in the Westgate Hall".



The arms of The Independent Order of Oddfellows in the arch of the dial of a clock by H.Pearce of Grantham c.1850.



This is the dial of another Pearce clock which is housed in an oak case with mahogany detailing. The arch painting is interesting as it depicts the coat of arms of The Independent Order of Oddfellows, the Manchester Unity Friendly Society. It would have been specially commissioned for a member or an official of that society or perhaps for the landlord of the beer house of that name which was situated on North Parade, Grantham. The main shield is quartered and incorporates a sand glass, crossed keys, a bee hive and a lamb and flag and the supporter on the left is a woman in a black gown with a baby in her arms and two small children at her side, representing a widow with her family. Like many clock and watchmakers at the period Pearce's bill-head also includes 'opticians' with his trades.

38
*Mrs Parker
 Swingate*

High-street, Grantham: *Wm. 1856*

TO HENRY PEARCE,
 WATCH & CLOCK MANUFACTURER,
 WORKING JEWELLER, SILVERSMITH, AND OPTICIAN.

Agent for John Graham's Patent Pantoscopic Spectacles and Eye Preservers.—A large quantity of Electro-plated articles always in stock.

11/12/56 - Spectacles repaired -

Wm. July 13 1856
Henry Pearce

Bill written for Mrs.
 Parker, Swingate, for
 "repairing spectacles",
 Xmas 1856.



*Weight driven wall clock by Pearse Grantham c.1840.
Courtesy the Duke of Rutland.*

The weight driven wall clock above hangs in the old kitchen at Belvoir Castle and the one on the right is a two train striking clock of somewhat less usual style with a 14 inch dial again made for a country house kitchen or perhaps an inn.

A 12inch round eight day spring dial clock by the same maker also keeps the time in the butler's pantry at Belton House.



8 day English drop dial clock by Henry Pearse.

The wall clock above has an 8 day fusee movement and 12 inch dial was supplied to hang on the gallery of the Calvinistic chapel in Castlegate, Grantham (the building is at present used as a nursery school). The carved mahogany case has a gothic look about it and was probably specially commissioned for the location.



An 8 day weight driven striking wall clock by Pearse Grantham in an oak case c.1850.

This is an automated figure clock. The figure on the top appears to be a king and on the hour he moves his left hand, which is holding a wine bottle, to pour a drink in a glass held in his right hand. The glass is then raised to his mouth. The performance can be repeated by pulling the cord at the side of the case.



Mantel clock with automaton 14 inches high, the dial engraved 'Pearce Grantham' c.1870. (Courtesy of the B.H.I. Upton Hall)



The movement of the Pearce clock.

The case is veneered in burr walnut with brass line inlay. Although the silvered brass dial is engraved Pearce Grantham the clock was actually made in the Black Forest area of Germany and the present dial would have been a replacement of the original enamel dial. It is one of a variety of automaton clocks made c.1870 which were a development of the cuckoo clocks made in that area. The rear view shows the square plate brass movement and the levers and wires which operate the arms through the hollow figure. The clock can be wound from either the front or the rear. Probably this clock was displayed in the window of the High Street shop where, no doubt, it would have been quite an attraction.

In common with other clock sellers at the time Pearce also included imported clocks from America such as the one on the right supplied by the Anglo-American Clock Company

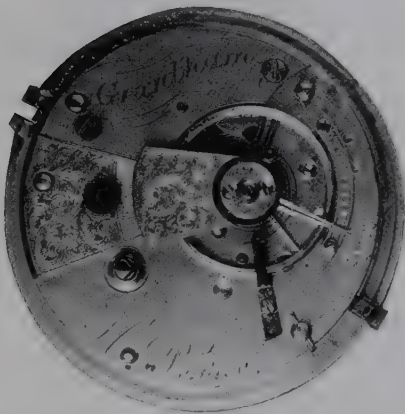


An Anglo American wall clock lettered for Pearce and Son c.1880

Watches also at this period had become more affordable and were an important part of the business of sales and repair and examples have been noted in gold and silver cases with the movements engraved for Henry Pearce. In later advertisements Pearce states that he was a “watch manufacturer” which suggests that his workshop employed workmen who were skilled in watch finishing and it is probable that at least one of his sons had been apprenticed in one of the watch making centres of Clerkenwell or Prescot. Verge watches by Pearce have been recorded; one in a silver case hall marked for 1847 and case makers punch J B the typical full plate movement with pierced balance cock and engraved “Henry Pearce Grantham”, the movement and case numbered 23900. Another numbered 26147 has a coloured enamel dial of the type popular with farmers.



A mid 19th. century Farmer's verge watch for Henry Pearce with a "God speed the plough" polychrome enamel dial.



The watch movement on the left is of a slightly later date with a lever escapement which eventually replaced the earlier and less accurate verge escapement. The full plate movement, here engraved “H. Pearce Grantham”, is typical of the period with a plain steel balance and diamond endstone.

Lever watch movement for Henry Pearce of Grantham c.1860.

Henry Pearce is mentioned several times between 1866-73 in “The Diary of George Bird” (the wheelwright and carpenter of Corby Glen). The entry for 25th. May 1868 reads “Mr. Pearce came over yesterday and brought my Watch with him. It is a Patent Lever, price £5-10-0 and I am delighted with it”. George and his father also dealt with Mr. Pearce of Bourne (Henry’s brother Edward).

THE PEARCE FAMILY of Stratford upon Avon, Nottingham, Grantham, Bourne, Leeds, Huddersfield, Leicester and Billingham.

Henry Pearce and Sons of Grantham, later at Leeds and Huddersfield.

Edward Pearce and Co. of Bourne.

William Pearce Billingham

John Pearce of Stratford upon Avon

John Pearce was born in Gloucestershire in 1781 and, although it is not known where he was apprenticed, he started in business as a watchmaker and silversmith at no.2 High Street, Stratford in 1802. He married Susannah Edwards, also of Stratford, in 1801 and they had a daughter Ann and four sons. Ann and sons William, Henry and Thomas were all apprenticed as watchmakers and silversmiths. The sons left Stratford to pursue their trades elsewhere but Ann remained at home to work with her father and when he died in 1855 she continued the business with her mother. Ann died in 1857 and the business was then continued by William Pearce, one of John's grandsons. Painted dial longcase clocks have been recorded by John Pearce of Stratford.

William, Rebecca and George Pearce of Nottingham

ESTABLISHED 1791.

**GEORGE PEARCE,
PRACTICAL WATCH & CLOCK MAKER,**

DIAMOND MERCHANT,
Manufacturing Jeweller and Silversmith,
PELHAM STREET & THURLAND STREET, NOTTINGHAM.

DIAMONDS AND OTHER GEMS
SET IN RINGS, BRACELETS, BROOCHES, EARRINGS, NECKLETS, PINS,
STUDS, &c.

ENGAGEMENT AND WEDDING RINGS.

FANCY AND USEFUL ARTICLES SUITABLE FOR
PRIZES, PRESENTATIONS, AND WEDDING GIFTS.

THE LARGEST SELECTION OUT OF LONDON, INCLUDING EVERY
NOVELTY IN .

SILVER & ELECTRO-PLATED ARTICLES.

DINING ROOM, DRAWING ROOM, OFFICE,
HALL, CHIME AND OTHER CLOCKS.

A FINE COLLECTION OF
BRONZE FIGURES AND ORNAMENTS.

GOLD AND SILVER WATCHES,
ALL WARRANTED GOOD TIMEKEEPERS.

**GEORGE PEARCE,
CORNER OF
PELHAM STREET & THURLAND STREET,
NOTTINGHAM.**

From White's Directory of Nottingham 1891.

William started in business c.1828, initially in partnership with Anthony Shepperly, in premises at 27 Long Row West, Nottingham. He was enrolled a Burgess of Nottingham in 1830. His partnership with Shepperly continued until 1844 when William opened a shop on his own account at 24 Pelham Street, Nottingham. William and his wife Rebecca had a son George who was also brought up in the trade. From 1855 until 1876 they also had premises at 70 St. Peters Street, Derby. William disappears from the Directories after 1864. He probably died about this time and the businesses were continued by his wife and later by his son George who eventually moved, around 1894, to premises at 38 Long Row East.

An example of their work, lot 729, an 8 day longcase clock, the painted dial lettered "Spepperly and Pearce, Long Row, Nottingham", was sold at the Strelley Hall sale in 1978.

The business founded by Henry is documented elsewhere, but the description below is a contemporary history of the firm from the "Industries of Yorkshire" published in 1888, when Henry's son John was running the business.

Pearce & Sons, Goldsmiths and Jewellers, Commercial Street, Leeds.—An exhibition of work well calculated to gratify a refined and educated taste is that contained in the premises of Messrs. Pearce & Sons, goldsmiths and jewellers, at Commercial Street, Leeds, and 4, New Street, Huddersfield. This excellent and high-class business was established upwards of half a century since by Mr. Henry Pearce, and has been conducted by him, in conjunction with his sons, in the present premises and under the existing title for a period of about twenty years. This establishment consists of a large and handsomely appointed shop, with extensive warehouse and workrooms, fitted with special conveniences for the manufacture and repair of jewellery, plate, and watches, the whole building, which has an important frontage and is well lighted, being devoted to the purposes of the business, a staff of watchmakers, with a number of very perfect and delicate machines, being employed in one room; another is occupied by the clockmakers engaged in the construction and repair of clocks, and who examine and test all imported clocks, often adding important improvements to them. Jewellers have another workshop, and here some very choice specimens of the goldsmith's and silversmith's arts are produced, examples of which are worthy of the place they receive in the Municipal Gallery of Art Exhibition, and testify to the true artistic feeling brought to bear on all the productions of Messrs. Pearce & Sons. Engraving and chasing is included in their establishment. The choice classes of goods contained in these premises, on account of their value and extent, are well worthy the special attention of the visitor, and embrace all the recognised departments of a first-class gold and silversmith's establishment, including a stock of finest rated and most improved watches, diamonds, sapphires, pearls and other gems, artistic gold jewellery of original designs, silver plate designed from the antique, and including a large variety of inexpensive articles for presents, silver copies of early English clasps, buckles, brushes, chatelaines, scents, and dressing bags. They are also very extensive makers of spoons and forks, having produced special patterns combining beauty of form along with quality of the most durable wear. In electro-plated wares they have upheld the renown of the old and superior quality, making that their first object, while at the same time they show how good things can be brought within the reach of very moderate prices, and a catalogue is issued free on application giving particulars of their stock. This firm is one of the largest dealers in diamonds and plate suitable for presentation in the North of England; they make a business speciality of diamond work, watches, &c., and their trade extends throughout the entire district of Yorkshire. Mr. John Pearce acts as a director of the Leeds School of Art and Mechanics' Institute; he is further a member of the Board of Overseers, and chairman of the board of directors of the Leeds Mutual Plate Glass Insurance Company. This is without doubt one of the highest-class and best-appointed concerns in the county. It is managed with the utmost ability and courtesy, and in all its aspects is well worthy of a premier position among the superior industries of the country.

Thomas Pearce of Bourne and his sons.

Thomas, the youngest son of John Pearce of Stratford, after his apprenticeship set up in business in Bourne about 1842 and is described in the 1856 directory as a watch and clockmaker and glass dealer etc. in West Street. By 1861 he had moved to premises in North Street combining his trade as a watch and clockmaker with various other retail lines, usually glass and china but, in 1872, also as a boot and shoe dealer and in 1882 as a dyer's agent. Thomas retired in 1890 and sold his business to his son Edward and his two unmarried daughters, Elizabeth and Mary Ann, trading as Edward Pearce and Co., watchmakers, jewellers and wholesale glass and china dealers.



Longcase clock and dial by Thomas Pearce of Bourne, the cabinet work by Wilcox of Dyke.

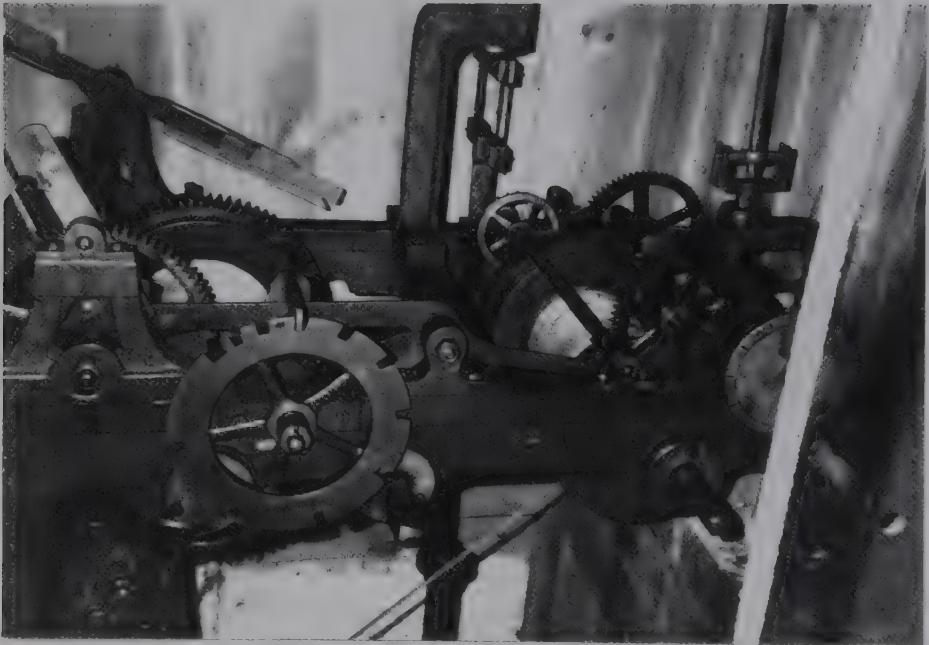
Numerous longcase clocks by Thomas have survived, the one illustrated above is interesting as it has the casemaker's label of 'Wilcox of Dyke' (a village two miles south of Bourne). The clock on the right has a rather fancy and more expensive case.



*Longcase clock by Thomas Pearce of Bourne
(Photo courtesy Brian Loomes)*

Edward and his sisters continued the business from 1890 and in 1933 they became a Public Limited Company and were still listed in the 1937 directory. No clocks bearing his name have been recorded but by 1890 longcase clocks were no longer in fashion. Spring clocks, both English and imported, and watches were the main retail products together with, of course, the repair trade.

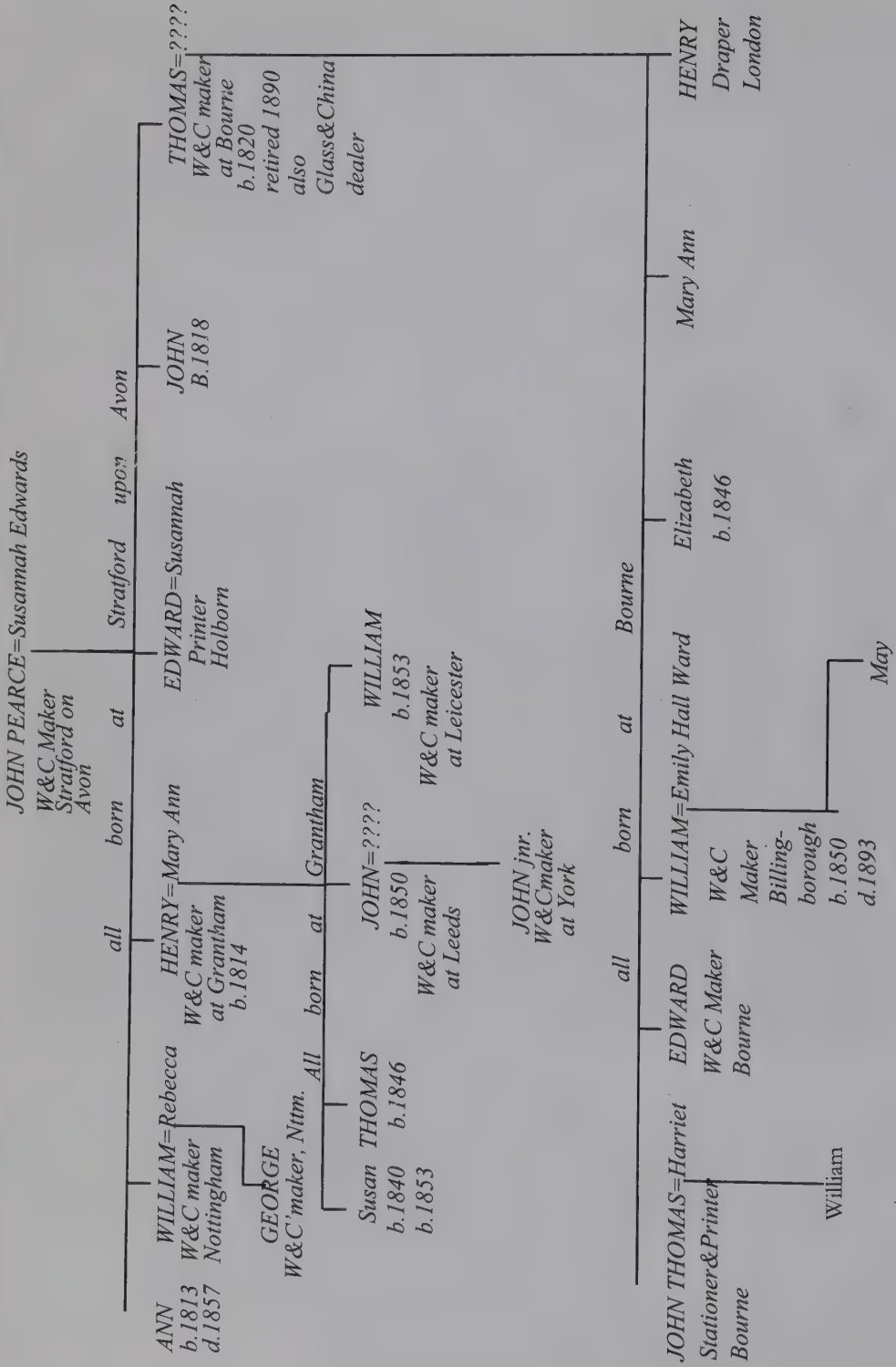
Victoria's diamond jubilee was marked in many towns and villages by the provision, through subscription, of a public clock. The village of Swinstead, a few miles north west of Bourne, was provided with a clock in the church tower by Edward. A notice in the base of the tower records the contributors to a total cost of £65-15-0 paid to "Edward Pearce for making and fixing the Clock". Edward in fact would not have actually made the clock; he would have bought it in from a specialist maker of turret clocks although it does have his name and the date 1897 engraved on the setting dial.



Swinstead church clock 1897.

The clock with a cast iron flat bed, three feet long, is typical of the period, of eight day duration with a pin wheel escapement and the pallets fixed directly to the pendulum rod which beats 48 to the minute (1 1/4 seconds). Time is indicated on a single cast iron dial on the North face of the tower and the hours are struck on one of the existing peal of bells.

THE PEARCE FAMILY of Stratford upon Avon, Nottingham, Grantham, Bourne, Leeds, Huddersfield, Leicester and Billingborough.



The Grantham Corporation Minute Books for the 30th. October 1635, page 27, reads:-

“At this Court by the general Consent of the same Tobias Peirson is hired to set and keep in good plight to goe free the dial at the Guild Hall from time to time and from yeare to yeare for and in Consideration of the Somme of VI^s VIII^d per annum, and the said Tobias Pierson is Consented to recieve of the Chamberlynes for this yeare in consideration of his said worke and so soone as hee shall perfect it, III^s III^d & upon the next accompt daye III^s III^d and soe from yeare to yeare afterwards uppon every Court daye VI^s VIII^d soe long as hee shall well faithfully performe the said work”.

Tobias Peirson was described as “an Armourer” when his apprentice Daniell Cooke was made free on the 8th. August 1635.

Another entry in the same book for the 11th. Dec. 1640 reads:-

“Att this Courte by the generalle consente of the same Tobias Pierson is hired to sett and make the Chymes belonging to the Steeple to goe perfect & true and in good time, and likewise to amend the clocke hammer there and to make ytt goe with a bigger compasse, soe that the sounde of the clocke may thereby bee the better heard. In consideration where of soe soon as hee hath well and trulie finished & peformed the same hee is to be paid foure pounds”.

(NB. I am obliged to Dr. John Manterfield for these two extracts from the Corporation Minute books).

So although Tobias may not have actually made these clocks he was clearly quite capable of repairing and maintaining them. At this time these two public clocks would be the only ones in Grantham and particularly important that the church clock could be heard throughout the town as it is unlikely that many, if any, domestic clocks were in the town at this period. Both these clocks have now disappeared. The Guildhall clock referred to would have been on the old Guildhall which stood on the corner of the High Street and Guildhall Street and was demolished after the present Guildhall was built in 1869 and the present clock in St. Wulframs church is a 19th. Century flat bed replacement.

The reference to him as “an Armourer” is an old fashioned description of his trade as the days of body armour were long gone. In 1628 when the repair of the parish church was proposed the estimate of the necessary work included “Tobias Peirson for Smithwork in general - £100” which would have been an enormous sum at that time. We can conclude then that Tobias was a highly skilled metal worker capable of turning his hand to a variety of tasks.

The parish records tell us that Tobias Pearson and Ellen Hickson were married on April 20th. 1624 and “Ann Pearson dau. of Toby Pearson was baptised 21st. Sept. 1624” and another daughter Jane baptised 8th. Feb. 1627.

William was born in Grantham in 1859 the son of a master builder and contractor, also called William. In the census of 1881 he is described as a 22 year old unmarried Watchmaker living at home with his parents at 8 Grantley Street Spittlegate. It is not known where he had served his apprenticeship although there are, at this period, other Priest watchmakers at Newark and Boston to whom he could be related. In the Directories of 1885-1892 he is listed as a watchmaker in Wharf Road.

" TIME AND TIDE WAIT FOR NO MAN."

Time is Money! Time is Valuable!

Do you know the Time? Particularly in the world of business.
If you have, do Time you did. For particularly, PRIEST'S WATCHES ARE THE BEST.

IF YOU DON'T BELIEVE IT, ASK A POLICEMAN

*PRIEST'S
LADIES
are only
2/6*

If you want to know the time
Ask a Member of the Force,
If he is a sensible chap
He will have a watch - of course;
Not supposing you can't find
The number, which is all the case.
What will you do, take my advice
And buy a watch to suit your taste.

*PRIEST'S
English Lever is
Cheap, and keeps
accurate time,
£3 10s.*

BUT WHERE WILL YOU GET IT? At Priest's, of course, where true value for money is always obtained.

**WM. PRIEST, WATCHMAKER AND JEWELLER,
20, WHARF ROAD, GRANTHAM.**

PRIEST'S WATCHES for correct time.
Priest's System for fair dealing.

Why does PRIEST advertise?
To extend his watchmaker's business.

To make marriage a real success
Watch PRIEST'S WEDDING RINGS & KEYS.

Do not, unless business, don't forget that,
His desire is to suit everybody.

**WATCH EVENTS, AND YOU WILL FIND
OUR WATCHES THE LEADING ARTICLE.**

*Our
CLOCKS
for every home.
They last
a lifetime.*

FOR GOLF, HUNT, AND ELEGANT
PRESENTATION PRIZES
THE PRIEST'S SPECIAL SERIES
for Football, Swimming, Athletics,
and Cricket Clubs.

*Brilliant
and
Useful
Wedding Presents
Ornamental*

WEAR OUR SPECTACLES, and then you won't wear your sight.

PRIEST'S SPECTACLES suit all sights, and combine all the Latest Improvements in
the Optical Branch, Sold at a very Moderate Price.

BOYS' SILVER WATCHES AT 12/6 To encourage Habits of Thrift

REPAIRS: Watches, Clocks, and Jewellery, skilfully Repaired and carefully Cleaned at
the least cost. Full Charges for the skilful care to preserve the cases. All of our
Every kind of Watch SETTING Required at REASONABLE CHARGES.

Please Note the Address, and don't let your mind wander from it.

Hand bill detailing the comprehensive stock and services be offered at the Wharf Road shop.

44

Cauthern W^r New Somerby.

1883		
Aug 21 st	To Silver Geneva.	2.15.0
	Paid on a/c Aug 21 st	2 0
	" " " Nov 13 th	3 0
	" " " Jan ^y . 1884	5 0
	" " " " 24 th	5 0
	" " " March 14 th	5 0
	" " " Sept	5 0
	Balance	1.10.0
Nov 17 th	3 silver chains & ring	14.9
		<u>1.14.9</u>

One of his ledgers detailing his customers' accounts for the period 1883-8 survives. The account illustrated above is for Mr. Cauthern of New Somerby and is for the supply of a silver Swiss watch on credit and the various payments on account.

Typical repair charges in the 1880s were:-

- Silver lever watch cleaned 2s.-6d.*
- Silver verge watch new hand, glass & clnd. 2s.-0d.*
- Silver Geneva new spring & clnd. 4s.-0d.*
- Watch new glass 6d.*
- English 8 day clock (longcase) repaired new lines & cleaned 3s.-6d.*
- English 30hr. Clock, new line 1s.-6d.*
- English spring dial, repaired & cleaned 3s.-0d.*
- French clock striking repaired & cleaned 4s.-0d.*

A fairly regular customer was William White of the 'Pianoforte and Music Warehouse, Wharf Road' for whom he repaired Musical Boxes.

12, WHARF ROAD

GRANTHAM

188

M

BOY OF W. PRIEST,
Watchmaker, Jeweller,
SILVERSMITH AND OPTICIAN.

EVERY DESCRIPTION OF REPAIRS. GUINEA GOLD WEDDING RINGS.

Billhead of Wm. Priest c.1880.

His address in Wharf Road had changed from No.12 to No.20 but this may have been due to the premises being renumbered. In 1896 he moved to a shop at No. 1 Manthorpe Road, next door to the public house, The Three Crowns, where he remained until his death in 1906. Later his daughter ran the shop as a general store until c.1927.



Manthorpe Road, Grantham in 1911.

This photo, taken in 1911, shows the shop on the left during the celebrations for the coronation of George V. The premises still survive although they are now used as a private house.

The 1861 census lists Robert Rawlings as a 15 year old Watchmaker, born in Sleaford; he was at home with his mother and father at No. 1 Haynes Yard, Swinegate, Grantham. Robert was presumably serving an apprenticeship in the town but he did not stay in the trade as in 1901 he is mentioned in the census as a Postmaster living in Dorset.

READ William

Butchers Row in the Market Place

c.1791-1807

William was apprenticed to John Wood clockmaker of Grantham on the 5th. Oct. 1754 and was made a freeman on 22nd. Oct. 1761. He then continued to work as a journeyman for John Wood for many years but had evidentially started in business on his own account by 1791 as in that year he took an apprentice, Geo.A. Jepson, who was bound for seven years from the 24th. June 1791 with a premium of £20. His premises were on Butchers Row in the Market Place. In 1792 he appears to have had some financial problems as the following advertisements appeared in the LR&SM.

The advertisements on the right appeared on the front page of the Mercury but by the time they had set the next page he had satisfied his creditors and the announcement below was printed! Clearly he had managed to raise some money and despite this unfavourable start he continued in business for another fifteen years until his retirement in 1807 due to declining health.

GRANTHAM Lincolnshire.

WILLIAM READ, of GRANTHAM, WATCHMAKER, having settled his Affairs to the Satisfaction of his Creditors, thinks it incumbent on him to give this Notice thereof; and to inform his Friends, and the Public in general, that he intends to carry on the WATCH and CLOCK_MAKING BUSINESS, in all its various branches; Begg to offer his Acknowledgments to his Customers for the Favors already received, and hopes his Conduct has been such as to meet a Continuance.

He has laid in a large Assortment of Silver and plated Goods, Trinkets, &c. of the newest Taste, which he is determined to sell on the lowest Terms.

24th. July, 1792

The order for the above advertisement to appear, instead of those respecting Mr. Read, in the first page did not come to hand till the greater part of the impression was worked off.

The business was advertised for sale in the LR&SM of 26th. July 1807 and in October of the same year it was announced that Thomas Saltby had taken over and intended to "carry on the business in all its branches".

GRANTHAM, LINCOLNSHIRE.

To be S O L D,

On the PREMISES, at PRIME COST,

ALL the ELEGANT and FASHIONABLE STOCK IN TRADE of WILLIAM READ, of Grantham WATCHMAKER; consisting of Silver Table Spoons, Tea and Salt Ditto, Gold and gilt Breast Pins, best Patent plated Tankards; Pints and Half Pints, Shoc and Knee Buckles, Watch Chains, Clock Cases, and a Variety of other Articles.

Also, to be SOLD by AUCTION, at the same Place, on SATURDAY the 28th. of July Instant, All the new and neat HOUSEHOLD FURNITURE of the said WILLIAM READ.

The Furniture to be viewed the Day before the Sale thereof and the Stock to be viewed and disposed of immediately.

18th. July 1792.

To CREDITORS and DEBTORS

WILLIAM READ, of Grantham, in the County of Lincoln, Watchmaker, having made an Assignment of all his effects to Trustees, for the Benefit of his Creditors: such of them, therefore, as have not already sent in an Account of their Demands, are requested immediately to send in the same to Messrs. WHITE and MERRIFIELD, of Grantham, Solicitors under the Trust, and at the same Time to signify their intention of accepting, or not, their proportional Benefit to arise from the Sale of the assigned Effects.

And all those who stand indebted to the said WILLIAM READ, are requested to pay the Sums respectively due from them to the said Messrs. WHITE and MERRIFIELD, on or before MONDAY the 30th. of July Instant, at which Time the Accounts of the Trusts are intended to be finally closed.

18th. July, 1792.

**To WATCH-MAKERS.
To be LET.**

And entered upon immediately, or at Michaelmas next,
A Most desirable SITUATION for a Watch and Clock-
 maker, situate in the Market-place of GRANTHAM, in
 the county of Lincoln, where these businesses have been
 carried on for several years by the present possessor, who
 declines on account of ill health — The Stock in Trade,
 which is very low, and Fixtures, to be taken at a valuation.
 For further particulars and a view of the premises apply
 personally, or by letter, post paid, to William Read,
 watch maker, Grantham. 22d July, 1807

William died at the end of May 1813. His obituary was reported in the LR&SM although his age is wrongly recorded as 52; he was in fact 72.

The shop was actually on what we now know as Butchers Row between the public houses of The Chequers and The Royal Oak. These properties were rebuilt in the 1860s but still retain the sequence of public house-shop-public house.

At Little Gonerby, near Grantham, on Monday last, aged 52, William Read, Gent. formerly a watch-maker of the latter place: his death was very sudden, and proceeded from a mortification which took place in consequence of a very trifling erasure of the skin upon one of his legs, which he accidentally met with a few days before.

LR&SM 4th, June 1813

Two painted dial longcase clocks have been recorded. The one illustrated here is typical of the late 18th. century style. The sheet iron false plate is stamped "W. GILBERT & SON" who may be a previously unrecorded dial maker. The case is interesting as it has the casemaker's stamp of "W. FOSTER BOSTON" inside the top of the trunk door.



The Read dial with rocking ship in the arch.



The Read clock and W.FOSTER BOSTON case.

William Rock had come to Grantham with his family about 1875 and was living at 60 Commercial Rd. He worked as a Railway porter until taking over the business of F.V. Newton at 25 Westgate about 1896 and he continued there until his retirement in 1905. The census of 1901 tells us that he was 67 years old and had been born in Devon.

An Anglo-American wall clock sold by him has been recorded and an advertisement of his appeared in a local Directory in 1897. His bill head illustrates a typical French black marble clock popular at the period.



An Anglo-American inlaid wall clock lettered for W. Rock, Grantham c.1900.

Watch Clubs supplied at Reduced Prices.
Noted English Lever Watches.
Noted Wedding Rings - A Present of Half-dozen Spoons with each.
Chronometers Rated.



W. B. ROCK, JEWELLER & OPTICIAN,
25, WESTGATE, GRANTHAM.

A large and carefully selected Stock of

Watches and Clocks
OF EVERY DESCRIPTION.

A Written Warranty is given to every Purchaser

THE LATEST NOVELTIES IN

GOLD AND SILVER

JEWELLERY

Rings, Brooches, Watches, Chains, &c.

A choice selection of

ELECTRO-PLATED GOODS,

Forks, Spoons, &c.

SHEFFIELD CUTLERY, &c.

From Cooke's Directory of 1897.



25, WESTGATE,

Grantham,

1900



Dr. to Wm. ROCK,

Watchmaker, Jeweller,

Silversmith & Optician.

John Roebuck was apprenticed to Thomas Saltby shortly after he had taken over the business of William Read in 1807. After completing his time it appears that he decided to set up on his own. Saltby placed the following advertisement in the LR&SM in 1814:-

WHEREAS JOHN ROEBUCK, my late Apprentice, being now out of my service, I do hereby caution the public against employing him on my account.— Witness my hand this 27th day of October, 1814.
 THOS. SALTBY,
 Clock and Watch-maker, Grantham.

LR&SM 28th, October 1814

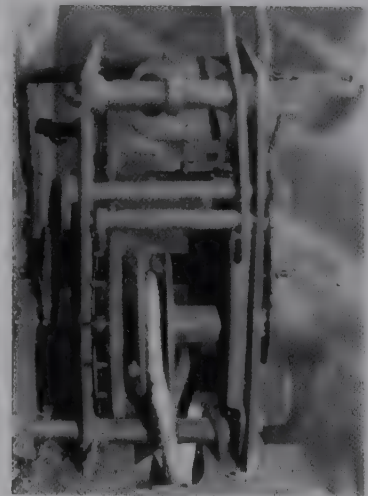
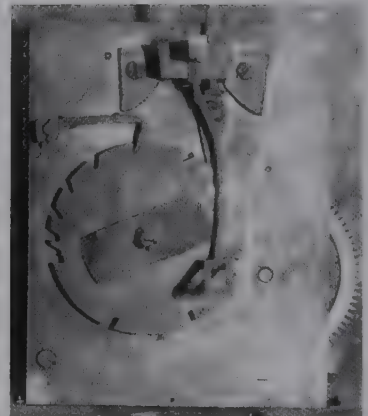
It would seem that Thomas Saltby was none too pleased at his apprentice leaving him and setting up in the same town but of course having served his apprenticeship and being made a Freeman he was entitled to do so and many Grantham apprentices did just the same.

The parish registers show that John Roebuck, watchmaker, and Elizabeth had a son Amos baptised in Jan. 1817 and another John baptised in May 1819. He is listed as a watch & clockmaker in Westgate in Pigot's directory of 1819, but not in any later editions; he may have left the town or perhaps died.

The only example of his work so far recorded is this example of a dial and 30 hour movement in a very distressed state pictured here. The 11 inch painted dial has matching brass hands and the calendar disc is stamped with the Birmingham dial maker's name of Walker & Hughes.



Dial and movement of a 30hr. clock by J.Roebuck GRANTHAM.



Richard Rubins was apprenticed to local clockmaker John Wood on the 9th. Aug. 1760 for a period of 7 years and was made a Freeman on the 3rd. June 1767. It is likely that another Richard Rubins who was the town clerk during this period was his father who would, of course, have known John Wood very well as they were both involved in the running of the town. Richard evidently started in business on his own account as he took an apprentice, John Langston, the indenture being signed on the 1st. April 1773. This apprentice was assigned from Richard Rubins to John Wood on the 7th. June 1779. The Corporation Minute books do not explain why this was done but the most likely explanation is that Richard Rubins had gone out of business or, as we can find no further mention of him, had died.



Brass dial of clock by Richard Rubins.

Both brass and painted dial longcase clocks have been recorded. The painted dial was of the earliest style with gilt scrolls in the spandrels and in the arch together with the maker's name and steel non-matching hands, housed in a mahogany case with break-arch top to the hood.

The brass dialled clock pictured here in an oak case with a break-arch top to the hood has late style rococo spandrels and a fully engraved dial centre and is typical of the final phase of brass dials c. 1770.



Oak cased clock by Richard Rubins c.1770.

John, the son of Thomas and Ann, was baptised in St. Wulfram's church on 24th. September 1807. He was brought up in the watch and clockmaking trade by his father and married Sarah Renly in Oct.1828 although Sarah died, aged 32, in 1832. At this time they were living in Castlegate. He was married for the second time to Eliza Johnson at Welbourn in 1834. After his father's death in 1835 he moved into the Market Place premises in Butchers Row.

John and Eliza had three children, a son Alfred Johnson b. 1835 and two daughters Mary and Eliza. Another son, John Edwin, died in infancy in 1840. Eliza, his second wife, died young in 1847. His son Alfred was brought up in the trade and worked with his father at the Butchers Row premises until they were redeveloped in 1867. It seems as if John retired at this time and Alfred continued the business in Alford, a market town in the Lincolnshire Wolds. .

Several longcase clocks, both eight day and 30 hour, have been seen including an eight day long case clock in an oak and mahogany cross banded case of the 1850s style and a 30hr. clock with a square dial by Finimore. The St. Wulfram's churchwarden's accounts show that he carried on his father's contract for winding and maintaining the church clock, the last entry in his name being in September 1866 for an amount of £3-0-0. After this date payments for clock winding etc. were made to William Marshall.

SALTBY Alfred Butchers Row, the Market Place and later Alford in Lincolnshire 1867-1909

Alfred, the son of John and grandson of Thomas, continued the family tradition in the clock and watchmaking trade. By the time of the census of 1861 he is listed as a 26 year old watchmaker living with his wife Ann at No.4 Barrowby Lane and he continued to work with his father in the Market Place shop until his father's retirement in 1867 after which he left the town and moved to premises in the Market Place at Alford. Some notes from "Alford Industrial Archaeology", p.16, tell us "in South Market Place, Alford was Saltby's Passage and a row of cottages named after Mr. Saltby who also had a shop there and carried on the business as a watch and clockmaker. The shop is now the office of Estate Agents Mawer, Mason and Bell. White's directory of 1872 lists his shop in Park Lane, Alford whilst residing in Dashwood Road. The census of 1901 records him as a watchmaker aged 66 and he continues to be listed in the directories up to 1909.

A green watchpaper of his has been recorded in a pair-cased silver watch by Kelly of Louth.

Thomas Saltby was baptised in Sept. 1783 at Aswardby five miles south of Sleaford and at the age of 14 was apprenticed to Nathan Shaw, clockmaker of New Sleaford, for a period of 6 years and 9 months from 1st. Oct. 1796. After completing his apprenticeship in 1803 he evidently worked on his own account in Sleaford as a longcase clock maker. A painted dial lettered 'Thos. Saltby Sleaford' has been recorded. He married Ann Parker at New Sleaford on 24th. March 1807 and in the same year moved to Grantham to take over the shop and business of William Read in Grantham as an advertisement in the LR&SM announced.

WILLIAM READ, Watchmaker, GRANTHAM, returns thanks to his ~~many~~ liberal support he has so long experienced, and ~~will~~ leave to inform them that he has now declined ~~business~~ in favor of Mr THOMAS SALTBY, whom he recommends ~~to~~ their future favor.

THOMAS SALTBY, Watchmaker, with every sentiment of respect informs the public he has taken and entered upon the ~~business~~ and Situation of Mr. WM. READ, in the Market ~~place~~ Grantham, where he intends to carry on his business ~~in~~ all its various branches. The Stock of Mr. R. being ~~afforded~~ T. S. an opportunity of laying in an entire ~~assortment~~ assortment of Clocks and Watches, of the best and ~~ne~~ construction, with a great variety of Silver, Plated, and ~~other~~ Article connected with the trade, which he is ~~pleas'd~~ to offer on terms the most liberal.

N. B. T. S. is in ~~homed~~ want of an Apprentice.
14th Oct. 1807.

LR&SM 16th. Oct. 1807.

He seems to have had quite a considerable trade as during the following years he advertised for two journeyman clock and watchmakers on several occasions. His shop was on Butchers Row in the Market Place between the Chequers and the Royal Oak public houses. These premises were owned by the wine and spirit merchant William Summerby and Thomas is named as his tenant in Summerby's will of 1845.

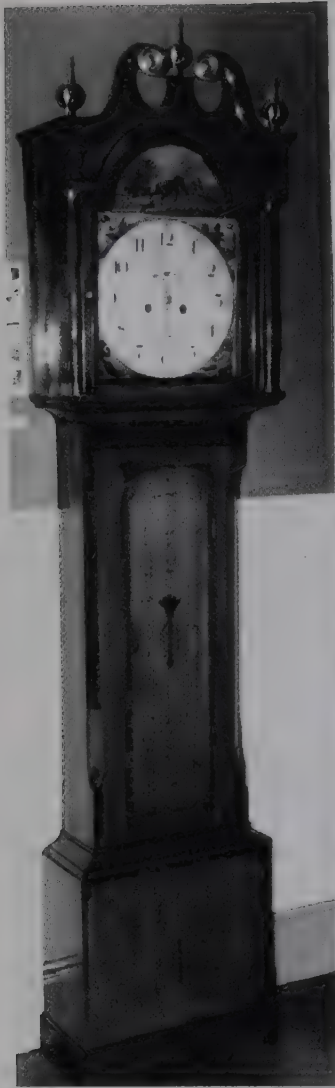
The photograph here shows Saltby's double fronted shop with shuttered windows. The property was rebuilt in 1867 and this picture appears to show the buildings just prior to their demolition.

Thomas and Ann had four children, a son and three daughters. John the eldest was baptised in Sept. 1807 and was brought up in the clock and watchmaking trade, eventually succeeding to the business.

The parish registers remind us that life in the early 19th. century was uncertain as they record the burial of their eldest daughter, Sarah, aged 21 in Feb. 1830 and another of their daughters, Sophia, died in Nov. 1831. Thomas's wife Ann and his son's wife Sarah both died 1832. Thomas himself died in September 1835 at the age of 52 leaving his son John to continue the business. In the space of 5 years John had lost his mother, father, two sisters and his wife.

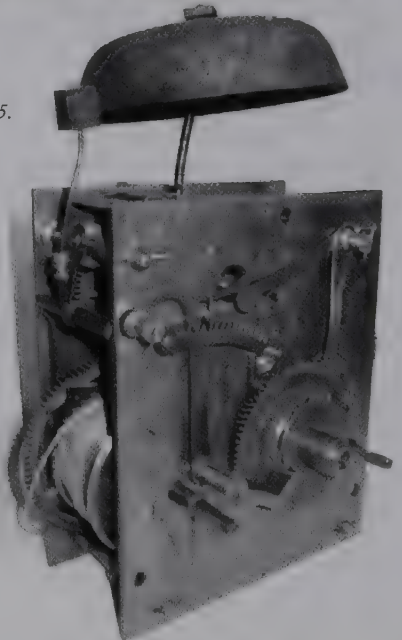


Saltby shop in Butchers Row c.1867



*Clock, dial and movement
by Thomas Saltyby of Grantham c.1825.*

This is an eight day clock by Thomas in an oak case with mahogany cross banding and a Birmingham dial by Walker and Hughes depicting the four continents in the spandrels and a bull baiting scene in the arch. The trident marks at the intermediate 5 minute positions are peculiar to this dial maker. Bull baiting was a topical subject in this area as nearby Stamford maintained this annual tradition, on the 14th. November, until the mid 19th. century despite the attempts of the local authorities to ban what was regarded even then as a barbarous sport. Other eight day and thirty hour clocks have been recorded by this maker. One of the eight day clocks has a fine mahogany case with an elliptical inlay on the door, a scroll top hood and a painted dial with full Arabic hours and minutes and a ship in the arch..





Thirty hour clock by Thomas Saltby of Grantham c.1830.

Some clocks and watches, lettered just “Saltby Grantham” are probably from the period of c.1828-35 when his son John had completed his apprenticeship and was working in the business with his father.

His newspaper advertisements tell us that he also sold watches although no survivors have yet surfaced.

LOST, about a fortnight back, a Silver HUNTING WATCH, with a small Glass in the centre: maker's name, "Thos. Saltby, Grantham," No. 161.—Whoever has found the same, and will bring it to the Crier at Newark, shall receive Two Guineas Reward.

L.R.&S.M 7th Aug. 1818.

WATCH STOLEN.

STOLEN, on Tuesday the 10th of March last, between Two and Three o'clock in the Afternoon, from a Basket in Mr. Musson's Field in the parish of Caythorpe, near Grantham, a SILVER WATCH; maker's name Saltby, Grantham, No. 157; with a brass and steel chain, brass key, and steel key affixed. The face of the watch is white, and is a very peculiar one from its having the owner's name "Thomas Sharpe" written upon it in a circle, a letter being placed under each hour: it has also a smaller circle containing the days of the month.—Whoever will discover the offender or offenders, shall, on his or their conviction, receive a reward of One Guinea from THOMAS SHARPE, the owner, at Caythorpe aforesaid.

L.R.&S.M 27th March 1835

Note the stolen watch had the owner's name, THOMAS SHARPE, in place of the usual hour numerals which of course would have made it difficult to dispose of. The 'low' numbering of these watches suggests that he may have been at least finishing these movements himself.

The Churchwarden's accounts of St. Wulfram's show amounts paid to him from 1831 until his death and later to his son. The smaller accounts were probably for winding the clock but a bill for £7-0-0 in November 1832 and another for £8-10-0 in April 1834 suggest fairly frequent attention or an extensive overhaul.

The large wall clock pictured here is in a fine mahogany veneered case with box wood stringing and profusely inlaid with shell and flower details. It is unusual in that it has a three train movement striking hours and quarters. With its 24 inch dial it was hardly made for a normal domestic situation but probably for a local Inn or Hall or perhaps the lofty kitchen of one of the local stately homes. It presently hangs in the main stairwell of Clifton Park Hall, Rotherham.



*Tavern-style wall clock by
Thomas Saltby of Grantham c.1820.
(Courtesy Clifton Park Museum)*

A wheel barometer with a six inch silvered dial and long thermometer has also been recorded with the level plate engraved "Saltby Grantham".

SEWELL John William

25 Westgate and later at 72 Westgate

1876-92

The first mention we have of John Sewell is in the Post office directory of 1876 when he is listed as a clock and watchmaker at 25 Westgate. By the time of the 1881 census he has moved to 72 Westgate and described as a 39 year old watchmaker, born in Bourne, Lincolnshire, living with his Grantham-born wife Susan. He continues to be listed at this address up until 1892 but disappears thereafter and reappears in the 1901 census living in St. Botolph's, Lincoln, as a 50 year old watch and clock repairer.

An open faced pocket watch with the white enamel dial lettered "J.W. Sewell, Grantham", the silver case hallmarked London 1878 and an American 30hr. ogee clock by The Ansonia Brass & Copper Company of c.1877 with the dial lettered SEWELL GRANTHAM have been recorded.

SEXTY Charles

1,3&4 Brook Street

1891-1901

Charles was the youngest brother of Richard and Henry and appears to have worked in the business with Henry as Sexty Bros. In 1882 his home address was given as 26 Swinegate but probably at this time he was looking after the Westgate shop. In the 1891 census they have given up the Westgate shop and Charles is occupying Nos. 1,3&4 Brook Street as a 40 year old married watchmaker, living with his wife and 4 children and he continues there until 1913 after which time both brothers appear to have retired.

SEXTY Richard William

37 High Street and No.1 Westgate

c1851-63

SEXTY BROS. also SEXTY Henry

1852-c.1913

Richard William Sexty appears in the 1851 census returns for Grantham as a 22 year old watchmaker living in lodgings on Wharf Road and gives his place of birth as London. It is not clear at this time if he is in business on his own account or was working for somebody else. By 1856 he is included in White's directory as a watch and clockmaker in the High Street and in Slater's directory of the following year he had been joined by a younger brother Henry and listed as "Sexty Bros." in the High Street.

At the time of the 1861 census he is at his shop on the High Street as a watchmaker and silversmith employing 3 men and 2 boys. He now gives his place of birth more precisely as Lambeth in Surrey and his household consists of his sister Mary aged 28 as his housekeeper, John Cook, aged 19, an apprentice watchmaker and a younger brother Charles aged 10, a scholar, who had been born at Toynton-all-Saints in Lincolnshire. Also now at No.1 Westgate (previously occupied by the clockmaker John Taylor) was his brother Henry aged 21, also a watchmaker and silversmith, and further brother Alfred aged 15.

Sexty is an unusual surname and they seem to be confined, in the early 19th. century, to the Spilsby, Alford and Horncastle area in Lincolnshire. It is not known where Richard learnt his trade although there is a Richard Sexty listed as a watchmaker in White's 1842 directory at Spilsby; Richard William of Grantham would have been too young for it to have been the same person him but he is likely to have been a relation.

This account of the business given by Henry appeared in a publication by W.T.Pike & Co. of c.1900.

HENRY SIXTY, Watchmaker, Jeweller, and Dealer in Optical Goods, 37, High Street, Grantham.—This business was established by the late Mr. R. W. Sixty, who died in 1863. It was then taken over by his brother, Mr. Henry Sixty, who has carried it on since. Mr. Sixty is a Lincolnshire man, born at Alford. He came to Grantham about 1852. The establishment which he conducts has a very wide reputation for the class of goods here dealt in, Sixty's clocks being known in many parts of the county. He has repaired many of the church and tower clocks of Lincolnshire. Mr. Sixty was for many years an active volunteer, being in the first local enrolment.

The business continued, usually trading as Sixty Bros., for the next 50 years and continued to be listed in the local directories disappearing finally after 1913. The address of their High Street premises varies being nos. 4 & 5 up until 1863 and then Nos. 35 & 36 later No.37 but this may be as a result of renumbering. Their no.1 Westgate address was next to the Westgate Hall. This shop was given up in the early 1890s.

CHURCH TURRET & HOUSE CLOCKS REPAIRED, WOUND
UP AND KEPT IN ORDER BY THE YEAR.

SIXTY BROS.,

PRACTICAL

Watch & Clock Makers,

SILVERSMITHS, JEWELLERS & OPTICIANS,

37, High Street, and 1, Westgate, Grantham.

FINE GOLD JEWELLERY

FINE SILVER JEWELLERY

FANCY JEWELLERY

JET JEWELLERY

ENGLISH & FOREIGN WATCHES & CLOCKS.

KEYLESS WATCHES IN GOLD AND SILVER.

The New Patent Stopwork ENGLISH LEVER

This Watch is beyond doubt the Strongest Watch Made, as it cannot be injured by overwinding. The Strongest Watch in the World.

Sterling Silver and Best Electro Silver Plated Goods, Spoons, Forks, &c., &c. Table Cutlery, Knives and Scissors.

Readers' Eye Glasses, Spectacles, and Eye Preservers,

From the Lowest Price Glass to the Best Polished Pebble. Great care taken to select the proper power and shape to suit the purchaser.

POLISHING POWDER, PLATE BRUSHES,

ARMY AND NAVY, GOODARDS, ETC.

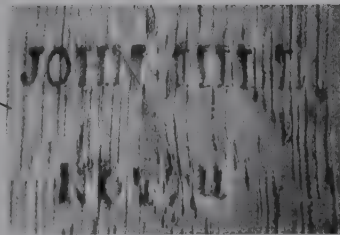
from Bushby's Almanack of 1883



Longcase clock by R.W.Sexty c.1860



The longcase clock by R.W.Sexty pictured here is typical of this, the final style of the longcase clock in this area. The liberal use of mahogany cross banding and inlaid panels, the short trunk door and turned columns are all characteristic of this period. It is interesting as it has the casemaker's stamp JOHN HILL NTTM. on the inside top of the trunk door and also pasted inside the door is the paper delivery label printed "From Sexty's Jeweller Grantham" and written in ink is "Mr. Henry Dennis, Foxes Row, Allington", the original purchaser of the clock. A similar clock, lot 2532, was sold by Sotherby's in their sale of November 1988.



Casemakers stamp and delivery label on the inside of the trunk door.



This postcard c.1905 shows the Sexty shop on the High Street with, presumably, Henry Sexty standing outside. The left-hand window is devoted to the watch and clock side of the business and the right-hand to the silverware, jewellery and optical branch.

By this time the ubiquitous grandfather clock had become unfashionable and Henry's trade would be in English dial clocks and imported mantle and wall clocks and of course watches. A silver open faced pocket watch was sold (lot 312 Golding's Nov. 2002) the dial lettered "Sexty Bros. Grantham" c.1880 and a watch paper has been noted in a pair cased watch by William Hall which reads "Sexty, late Taylor, next Corn Exchange, Westgate, Grantham, Watchmaker, Silversmith & Jeweller. Especial attention paid to all kinds of jobbing, Church, turret and other clocks cleaned and repaired".

A small turret clock has been seen with A-shaped cast iron plates about 16 inches high and 10 wide at the base with dead beat escapement, a time piece only, with a 5ft. pendulum. The silvered setting dial is engraved "Sexty Bros. Grantham 1868".

He would also be selling the popular imported American wall and shelf clocks. An 'ogee' type clock by E.N.Welsh Manufacturing Co. of Connecticut with a label printed "SEXTY BROS. High Street and Westgate" has been recorded.

SEXTY, BROS.
HENRY SEXTY.
Watchmakers. Jewellers and Silversmiths.

Repairs carefully done in Watches. Clocks. Plate and Jewellery.
 Barometers and Thermometers. Pebble Spectacles and Eye Glasses.

Sight Carefully Tested. Comfortable Spectacles Fitted.

✂ 37, HIGH STREET, GRANTHAM. ✂

From The Homland Guide of 1909



Above are two wall clocks; both are eight day English 12 inch drop-dial clocks with fusee movements. The lefthand one is typical of the c.1860s with a mahogany case having a glazed aperture to view the pendulum and carved grape 'ears'.

The righthand clock has the octagonal dial surround and the drop trunk inlaid with elaborately fretted mother of pearl and a brass framed pendulum aperture. The dial appears to have been repainted at some time.

Barometers were very fashionable in the 19th. Century and this one with the dial lettered Sexty Bros., Grantham has the later type of aneroid movement as opposed to the earlier mercury tube wheel of banjo type and dates from c.1880. The 8 inch porcelain dial is calibrated from 26 to 31 inches of mercury and has the usual weather indications of Stormy, Rain, Change, Fair and Very Dry. The initial letter of each is in red. Sexty would have bought this barometer from a specialist manufacturer.

A silver cased pocket watch with a silver dial was sold by local auctioneers Goldings in Nov. 2002, the lever movement engraved "R.W.Sexty Grantham" and the case hall marked in Chester 1854.

Aneroid barometer c.1880 in a carved oak case.

Charles W. Smith aged 17, an apprentice watchmaker in the home of his father Thos. Smith, 43 a tailor at 53 Norton Street, Spittlegate. Thirty years later he is included in the 1901 census as a watch jobber in St. Giles, Northampton.

SMITH Edward

Market Place, Newark

c.1760-1814

In the burial register at Newark Parish Church is the following entry:-

“Edward Smith Watchmaker of Grantham buried 6th. February 1814 aged 80 years”.

Edward Smith was established as a clockmaker in the Market Place, Newark and at his marriage in 1760 he is described as a 24 year old watchmaker. Brass dialled clocks by him have been noted. An eight day clock by him was reported as being at Ossington Hall in 1912. Quite why he is described as “of Grantham” is not clear as we have no record of him working in this town although he may have been born and apprenticed here. A child of his name was baptised, the son of William and Elizabeth Smith, at St. Wulfram’s, Grantham on 12th. April 1732.

SMITH and WARREN

Castlegate and Wharf Road

1892-1953

The partnership of Smith and Warren started around 1892 initially with one shop at 14 Castlegate dealing as pawnbrokers and clothiers. By 1896 they had taken a second shop at 28 Westgate and in 1900 they were trading from Nos.13&14 Castlegate and 9 Wharf Road selling a wide range of goods, including watches and jewellery. It is unlikely they were anything other than retailers of watches and in 1918 they were advertising at Wharf Road a large stock of wristlet and pocket watches. Pocket watches from 7s.-6d. to 39s. luminous or otherwise and wristlet watches guaranteed from 16s.-6d. to 30s.” and at Castlegate “Try our Invectic Pocket Watch 7s.-6d. Post free”. They gave up their Wharf Road shop around 1930 but continued with their Castlegate premises, finally closing in 1953.



←← WHARF ROAD BRANCH. →→

From Grantham Journal 24th. Aug. 1918.

No. 13 Castlegate shop shows the Pawnbroker's sign of the three balls.



FROM
SMITH & WARREN, 13 & 14, Castlegate, GRANTHAM.

Carpets, Clothing, Boots, Jewellery, etc.

Beds, Bedding, Blankets.

Juvenile Outfitting a Speciality.

The Lincolnshire Chronicle of 20th. May 1853 carried an advertisement for the sale of the stock-in-trade of David Stevens, jeweller, clock and watchmaker, at the Exchange Hall, Grantham by auctioneer David Roberts. No further evidence of this business in Grantham has been found although a David Stevens is listed at Boston in the Directories of 1855, 56 and 57. It would appear that he had a shop briefly in Grantham before moving to Boston. There are several other Stevens in the clock and watch trade including Edward at Boston c. 1770, John at West Street, Bourne 1849-61, a John at Billingborough 1855&56, a J. Stevens at Deeping St. James 1868 and a William at West Street, Bourne in 1857. It is likely that they are from the same family.

STEEVENSON William Walkergate(now Watergate), High Street, Vine Street and the Market Place. 1817 - 1857

William Steevenson is listed in the directories from 1826 until 1856 described variously as a jeweller and silversmith, pawnbroker, furniture broker, tailor, clothes and slop seller in the High Street, Vine Street in 1849 and the Market Place in 1855&56. The extent of his involvement in the horological trade was probably only that of dealing in second hand watches and clocks.

Walkergate, Grantham, March 20, 1817.

WILLIAM STEEVENSON, Pawnbroker, Clothier, &c., respectfully solicits the attention of his friends and the public to a large assortment of Clothing, new and second-hand, of every description; likewise Newark Smock Frocks. He wishes particularly to mention that he has on hand, a large collection of Second-hand Household Furniture, Feather-beds, &c.; likewise Goose and Poultry Feathers, at very reduced prices.—Second-hand Plate, Watches, Rings, Wearing Apparel, &c. &c., bought, sold, or exchanged, or money lent thereon.

Wanted immediately, a Youth of respectable connexions, as an Apprentice; who, at the expiration of his time will be entitled to the Freedom of the borough of Grantham.

STEEVENSON William 54 North Parade, Grantham 1871 Census

William Stevenson aged 16 yrs. watchmaker, apprentice, born Great Gonerby in the house of his father George Stevenson, gardener.

SWAN William 1817-24

The LR&SM reports Fri. Jan. 16th. 1824 "Died at Grantham Friday last in the prime of life, Mr. William Swan watchmaker". No surviving work by him recorded. He was probably employed by one of the other businesses in the town.

THE SHAW FAMILY of Billingborough, also Sleaford and possibly members in Spalding, Spilsby and Lincoln.

Billingborough is a village about 10 miles north of Bourne and 3 miles east of the once market town of Folkingham. At least four members of the Shaw family were Clockmakers who aquired a reputation for their workmanship during the late 18th and 19th century. The earliest was:-

Joshua Shaw of Billingborough

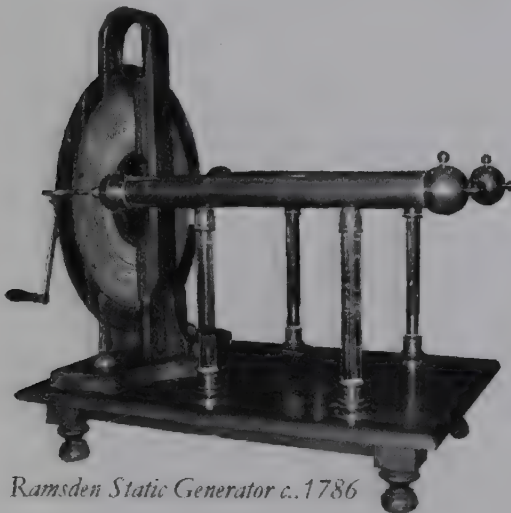
1772-d.1784

Joshua was born in 1750 at Folkingham (a village 3 miles west of Billingborough). It is not known to whom he was apprenticed but it may have been to one of the Grantham clockmakers as there exists a settlement certificate of his from Grantham to Billingborough dated 1772, this about the time he would have completed his apprenticeship. He had married a Billingborough girl in 1771 and presumably set up in business there around 1772. In September 1780 he took an apprentice, Richard Tingle, at a premium of £4-4-0 for 7 years. A month later he was advertising for a journeyman clockmaker and again in 1782.

WANTED, A Journeyman CLOCK-MAKER, to JOSHUA SHAW, Clock and Watch-Maker, Billingborough, near Falkingham, Lincolnshire. One that is a good Hand may have constant Employ and good Wages; no other need apply.

N. B. Likewise makes Electrical Machines. Letters, Post paid, will be answered.

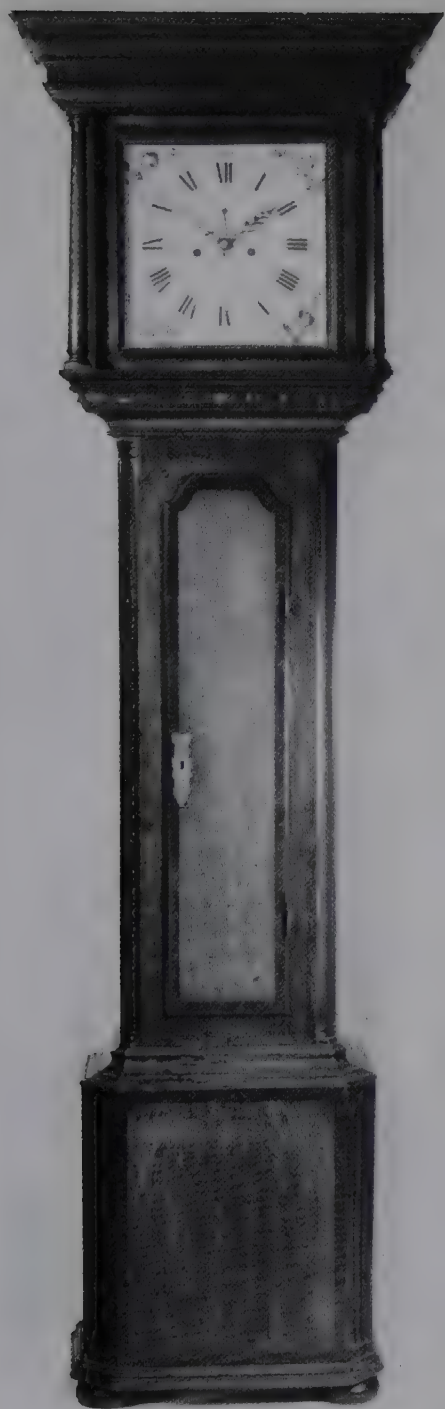
LR&SM 31st October 1782



Ramsden Static Generator c.1786

Interestingly on this occasion he mentioned that he also made “electrical machines”. Electrical machines of this period were not as we understand today. The technology did not extend beyond the knowledge of static electricity and the electrical machine to which he was referring would most probably have been a static generator using a rotating glass disc similar to the one illustrated here. (The Wimshurst machine which some of us may remember from our school physics lessons was a later development of this design). There was considerable interest in these phenomena at the time and clearly Joshua, although only a village clockmaker, was well informed about the scientific developments of the day.

An eight day longcase clock in an oak and mahogany case with quarter columns to the trunk has been recorded and another with a square painted dial in an oak case.



This clock by Joshua is housed in a good quality and well proportioned case of quarter sawn oak with mahogany cross banding, quarter columns to the trunk and canted and fluted corners to the base with bun feet. The dial is a well painted example of the early form of the Birmingham dial. The beautifully pierced steel hands are similar to those he would have used with his brass dials but are probably original. This clock came from the collection of the late Roy Sargeson of Munby Manor who left many of his clocks to the Usher Museum at Lincoln where this clock can now be seen.

Joshua died at the age of 34 in 1784 and the business in Billingborough was continued by his brother Abraham. (His apprentice, Richard Tingle, eventually became a clockmaker in nearby Bourne).

*Square painted dial clock by Joshua Shaw of Billingborough c.1780.
(Photos of this clock are courtesy of Lincolnshire Museum Services)*

Abraham was baptised at Billingborough in 1761, the younger brother of Joshua. Again it is not known to whom he was apprenticed but he probably was trained by his elder brother. They obviously worked together for a while as an eight day oak cased longcase clock of c.1780 has been recorded with the Wilson dial lettered Abr.& J. Shaw Billingborough. After Joshua's death in 1784 he took over the business. In 1796 he advertised for a journeyman clockmaker and in 1802 engaged an apprentice, Thos. Nelson, for 7 years with a premium of £20,

Numerous 8 day longcase clocks by Abraham have been recorded, some of his early ones have brass dials but most are painted arch and square dial eight day clocks some with moon phases in the arch. Many are housed in oak cases probably made in the village. Some of his later ones are in typical Lincoln-style cases with mahogany cross banding and the door-top with convex corners. Whilst the survival rate for 30 hour clocks is not as high as that for eight day clocks it is surprising that at the present time no 30 hour clocks have been recorded.

Although the Birmingham-made painted dial rapidly became popular after its introduction in the early 1770s Abraham provided brass dials for his more conservative customers. The dial centre is confidently engraved with a symmetrical design, the seconds dial is now engraved directly on to the dial plate and the chapter ring is fastened by four small screws from the rear.

**WANTED IMMEDIATELY;
A JOURNEYMAN CLOCK MAKER.—**
A good Hand may have constant Employ, at Eight Day Work for the Year about, and good Wages, by applying to Mr. ABRAHAM SHAW, Clock and Watch-Maker, Billingborough, Lincolnshire.

L.R.&S.M 29th July 1796



Brass dial of clock by Abraham Shaw of Billingborough c.1785
(Courtesy Castlegate Clocks, Grantham)





Note the transitional dial with both minutes and hours in Arabic style numerals. The oak case is typical of those used by Abraham and the same design as that of the brass dialled clock and probably made in the village. The board at the bottom of the base is a later repair.

The movements of Abraham's clocks are the usual pattern for the period with anchor escapement and rack striking. One peculiarity of this movement is that the grooves in the barrels are arranged to wind the gut from the front to the rear (the more usual is the other way round). This has an advantage in that it is possible to replace the gut lines without dismantling the movement.

Whilst he no doubt made his own movements 'in house,' he did, on occasion, buy in movements as one has been recorded with the movement front-plate stamped "H. KNIGHT 1504". (Knight is thought to be a wholesaler who is known to have supplied movements to the trade, some made by the Harlow family of Ashbourn, Derbyshire).

An eight day longcase clock by Abraham Shaw of Billingsborough in a similar oak case to that of his brass dial clock on the previous page.

Abraham died in August 1833 aged 72 years and is buried in the churchyard at Billingsborough. In his will (LCC wills proved 1834) he left his watch and clock tools to his son Samuel. Other children were Mary, David, Rebecca, Abraham, Sarah, Eleanor, Jane, and Elizabeth Blackwood deceased, also James d.1829 aged 18.

Samuel the son of Abraham and Eleanor Shaw continued the business after his fathers death in 1833. He is listed in Pigot's directory of 1835 and in the 1840 edition he also had premises in North Street, Bourne.

He advertised for an apprentice in 1840 and again in 1842. he was also writing a robust defence regarding his care of the Town Hall Clock in Bourne.

In 1849 he appears to have left Billingborough and opened a shop in the larger town of Boston where he is listed with a premises on the High Street. During this period a W.T.Abel is listed as a watch and clockmaker in Billingborough. By 1856 Samuel is back in Billingborough and continues to be listed in the directories, described as a watch and clockmaker, jeweller and silversmith, until his death at the age of 70 in 1876.

A longcase clock by Samuel has been recorded but it was getting to the end of the popularity of this type of clock and wall clocks both English and imported American were becoming a more important part of the trade.

To PARENTS and GUARDIANS.
S. SHAW, Watch and Clock Maker, Silversmith
 and Jeweller, is in immediate want of a respectable
 Youth as an Apprentice, who will be treated as one of
 the family. Billingboro', April 8th, 1840.

To the EDITOR of the MERCURY.

Sir,—Seeing a paragraph in your paper of last week complaining of my not doing my duty to the Town-hall clock at Bourn, in defence of myself, I beg leave to explain the matter. In the spring of 1839, I was appointed by the principal Parish-officers to superintend the clock, the office being vacant by the death of the late Mr. Wilson. On entering upon the same, I found the machinery in a very greasy and dirty state. I named this to the parishioners, and stated that, under such circumstances, I would not be answerable for the clock's performance. Their reply was that they would be obliged to raise a fund to defray the expenses incurred by putting it in a going state. I thought it strange that so well-regulated a parish should regard so trivial an expenditure for so great a convenience, but I had nothing more to say, except I can further state that the clock has been wound up to my order for the last twelve months regularly every week.—What the *Sharppers* have been pleased to say, I have no doubt they will soon forget, deeming that they know more of the occupations to which they have been most accustomed than the minutiae of clocks and watches.

Your's,
 SAM. SHAW.

Billingboro', April 8, 1840.

LR&SM 17th April 1840

Nathan Shaw of Sleaford

b.c.1771-d.1810

It has not been possible to find how Nathan is related to the Billingborough Shaws although Nathan is a name used by them in earlier and later generations. He was born around 1771 and married Mary Fields at Morton, near Bourne, in 1795. Mary died of consumption in 1795. In November the same year he was advertising for both a journeyman clockmaker and an apprentice which resulted in him taking on Thomas Saltby at a premium of £26. Nathan married again in March 1810, a Mary Crowder from Boston. By 1806 his apprentice would be out of his time and he was again advertising in the LR&SM for a replacement. (Thomas Saltby eventually established himself in Grantham).

**WANTED IMMEDIATELY,
A JOURNEYMAN CLOCK-MAKER.—**
 A good Hand may meet with constant Employment, and Wages according to Merit, by making Application to **NATHAN SHAW, Clock and Watch-Maker, Sleaford.**
 A good APPRENTICE Wanted, with whom a Premium will be expected.
 N. Shaw most respectfully begs Leave to return his Sincere Thanks to his Friends, for the repeated Favors he has received since the Commencement of Business; and those who are pleased to honor him with their Commands, may depend upon being served with Accuracy, which for Neatness and Elegance shall give Satisfaction.
Sleaford, Nov. 10, 1795.

LR&SM 16th November 1795

Several longcase clocks have been noted by Nathan, one an eight day with an arch painted dial with Roman hours and full minute numbering in an oak case with quarter reeded columns to the trunk dates c.1790 and another with an arch painted dial with Arabic hours and minutes dates c.1800. Baillie also records a late 18th century musical longcase clock by this maker.

In March 1810 the LR&SM announced the “death of Mr. Nathan Shaw, after a lingering illness, aged 39 at Sleaford”.

In his will he left £10 each to his sons Nathan, Edward, William, Joshua and his daughter Caroline; the residue to his wife Mary. One of the witnesses to his will was George Border who took over the clock and watchmaking business in North Street, Sleaford. George Border had been apprenticed to a John Shaw of Spalding in 1804 who might have been a relation.

Other Shaw Clockmakers in Lincolnshire

The following may have family connections with the Shaw family which are as yet unproved.

John Shaw of Spalding

John Shaw of Spalding was advertising in the LR&SM in 1806 and 1810. In March 1811 he advertised for a replacement for his apprentice Geo. Border who had left him to take over the business of Nathan Shaw at Sleaford. Longcase clocks by John have been recorded, one in an oak case, now carved, with a 12 inch painted dial.

Samuel Shaw of Spilsby

Advertised for an apprentice in the LR&SM of April 1840 and is listed in the directories of 1856, 1863, 1868, 1872, 1876 and finally in 1885 at High Street, Spilsby as a watchmaker, silversmith and jeweller.

Thomas Shaw of Spalding

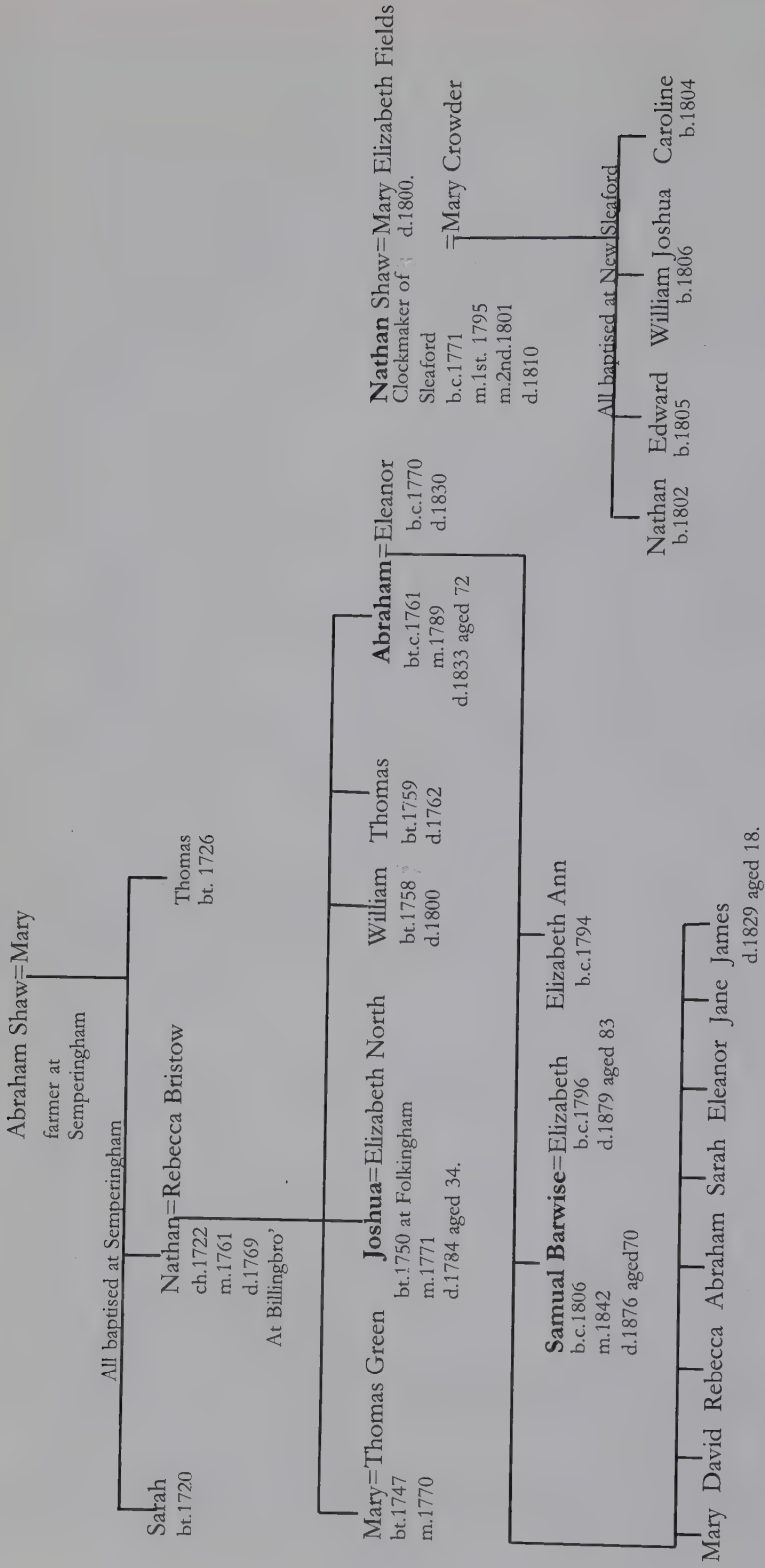
Is recorded as a watchmaker of 11 New Road, Spalding in the directories from 1842 until 1872 and at Gosberton, a village nearby.

William James Shaw of Lincoln

Listed in White's directory, as a watchmaker and silversmith, of 1856 and the Post Office directory of 1868 at 26 The Strait, Lincoln and later in the directories of 1872 and 1876 at 236 High Street.

For other Billingborough clockmakers see W.T. Abel, Goodacre, Pearce and Stevens.

THE SHAW FAMILY



Notes. (1) The clockmakers are shown in bold type.

(2) It has not been possible as yet to connect clockmaker Nathan to the rest of this tree

(3) I am indebted to Stephan Long of Billingborough and Mrs.Robson of Sleaford for help in compiling this tree.

SWINGLER James Bourne, Holbeach, Louth then Grantham, in Vine Street and later Westgate. b.c.1774-d.after 1861

James Swingler was born in Bourne in Lincolnshire about 1774 and was apprenticed to the clockmaker Richard Tingle of Bourne in 1791 for a period of 6 years with a premium of £13. After completing his apprenticeship he moved to Holbeach and married Mary Cooper in 1802. Their two daughters Mary Ann and Sarah were baptised there in 1803 and 1805. He took an apprentice, Valentine Marsh, in 1803. Later in 1805 he moved to Louth in Lincolnshire and formed a partnership with George Atkinson but this arrangement was short-lived. There was an advertisement in the LR&SM of 10th. Oct.1806 stating that they had agreed to dissolve the partnership, followed by an announcement that James was carrying on the business on his own account in the same situation in the Butcher Market. Whilst there, in 1807, he engaged another apprentice Samuel Samuel.

By 1812 he had moved to

Grantham and the next notice we have of him is an advertisement in the LR&SM of May 1812 from a shop in Vine Street, Grantham followed by a further advertisement in October detailing prices from £4-10s. for a thirty hour clock, £6 for an eight day or £8-8s. in a mahogany case and £20 for a quarter chiming longcase clock. This is lot of money at the time and provincial clocks of this type are unusual.

His wife Mary also had a shop in Vine Street where she was in business as a "Straw hat and Bonnet maker both wholesale and retail".

JAMES SWINGLER, Clock and Watchmaker, Silversmith, & Jeweller, VINE-STREET, GRANTHAM, returns thanks for the numerous favors he has already received, and informs his friends and the public that he has laid in a large stock of Gold and Silver Watches, Silver and Plated Goods, and Jewellery of all kinds, and that he has constantly on sale, Clocks of every description, on the very lowest terms.

LR&SM 8th. May 1812

JAMES SWINGLER, Watch and Clock-maker, Silversmith and Jeweller, VINE-STREET, GRANTHAM, returns thanks to his friends for past favors, and solicits a continuance thereof; at the same time begs leave to inform them and the public in general, that he has a large assortment of eight-day Clocks, thirty hour ditto, chime quarter and spring Clocks, fitted up in mahogany, walnut, or fancy cases, and intends selling off his present stock at very reduced prices: eight-day clocks 6*l*.; ditto in mahogany cases 8*l*. 8*s*.; chime clocks 20*l*.; spring clocks 10*l*.; thirty hours 4*l*. 10*s*.; of the best manufactory: if not approved of, to be exchanged within twelve months.—Watches and Jewellery twenty per cent. under the regular trade's prices; clocks and watches repaired in proportion.—Country orders executed on the shortest notice.

LR&SM 16th. Oct. 1812

By October 1817 he has relocated to a shop in Westgate and advertised periodically in the LR&SM for the next 15 years or so from this address. He was evidently keen to compete on price and was not shy to publish his prices for clocks and watches and their repair.

He was also prepared to give a service to his customers and his stated willingness to visit potential customers at their own home was a commitment to this. These advertisements must have influenced the rest of the trade in Grantham. They give us the opportunity to study contemporary prices and the selection printed on the following page shows us that his prices in fact declined during the period.

WATCHES, CLOCKS, &c. at REDUCED PRICES.

J. SWINGLER, Watch and Clock Maker, WEST-GATE, GRANTHAM, respectfully acquaints his friends and the public, that he has laid in a large assortment of Clocks and Watches of every description, warranted of the best quality and workmanship, which he is enabled to dispose of at the following reduced prices: Silver Watches, same as sell for 4*l*. 4*s*. 3 10 0
Ditto 5*l*. 5*s*. 4 10 0
Gold ditto and Jewellery, full thirty per cent. below the usual prices.

Watches cleaning, each	0	1	0
Main Springs putting in	0	3	6
Gold bands, per pair	0	2	6
Glasses, 2 <i>l</i> . and	0	0	4

All Watch-repairs proportionably low
Thirty-hour Clocks, in walnut case, inlaid with mahogany 4 0 0
Eight-day ditto 5 3 0
Ditto 5 15 6
Thirty-hour Clocks cleaned at 1*s*. Eight-day ditto at 1*s*. 6*d*. each, and repaired on moderate terms.

All orders executed with punctuality and dispatch. The goods may be seen at the shop of J. S., or he will wait on any family in the vicinity with an assortment for inspection, at any notice.

Time-pieces, quarter and chime Clocks, in mahogany and fancy cases.
Gold and Silver bought, sold, or exchanged.

LR&SM 24th. Oct. 1817

The subject of 'A Caution to the public' in the advertisement of May 1827 refers to Lois Bellatti the Italian barometre maker and optician who had recently announced that he had started selling and repairing clocks and watches. This was clearly unwanted competition!

Thomas, the only son of James and Mary, died aged 14 in March 1827. Their two daughters were brought up in their mother's trade of straw hat making. The eldest Mary Ann was married in 1834 to Dazzio Ceppi, a jeweller from Switzerland, and Sarah in 1835 to William Shelbourn. When their mother retired they took over the business initially trading in 1834 as Ceppi and Swingler and later as Ceppi and Shelbourn. James is no longer listed as a watchmaker in Pigo's directory of 1835 and seems to have retired about this time. He would have been about 60 years old in 1835, rather young to retire but perhaps having his daughters in a successful family straw bonnet manufacturing business enabled him to give up work.

In the census of 1841 Mary Swingler, aged 76 and of independent means, is in the home of her daughter Mary and son-in-law Dazzio Ceppi although her husband is not at home. Mary senior died in 1844. In the 1851 census James Swingler, aged 77 a retired watchmaker, is in the home of his other daughter Sarah and her husband William Shelbourn, an office clerk, at No. 5 High Street; next door at No. 5a is Dazzio Ceppi, 55, retired jeweller.

The 1861 census includes James, now 86, at No.11 High Street with daughter Mary and husband Dazzio now both described as straw hat manufacturers. James appears to have died by the time of the next census.

J. SWINGLER, Clock and Watch Maker, GRANTHAM, respectfully informs his friends and the public, that he has reduced the price of new Clocks and Watches, and also the prices of cleaning and repairing; and humbly hopes the following list of terms will meet their approbation, and ensure him a continuance of that support he has so long been honored with.

New 30-hour Clocks, square face, wainscot case, in-laid with mahogany	£. s. d.
.....	3 10 0
Eight-day ditto, square face, ditto.....	4 4 0
Ditto, arch face, ditto	4 14 6
Month Clock, ditto	5 15 6
New Watches, in strong cases	3 3 0
Gold and Fancy Watches proportionably low.	
Watches cleaning	0 1 0
Main-springs	0 3 6
Glasses, each	0 0 4
Cleaning 30-hour Clocks	0 1 0
Ditto 8-day ditto	0 1 6
Ditto Spring ditto.....	0 4 0
Ditto Chime ditto.....	0 6 0
Ditto Church ditto	0 10 0

Every other article cleaning & repairing, in proportion.

Country orders executed on the shortest notice.

Clocks and Watches warranted for 12 months; and if not approved, will be exchanged.

Silver and Jewellery neatly repaired.

LR&SM 31st. Jn. 1823

J. Wengate, GRANTHAM, returns his sincere thanks to his friends and the public for the many favours he has received, and begs leave to inform them that he has reduced the prices of his Clocks and Gold and Silver Watches full 50 per Cent under Doctor Quack.

30-hour Clock, in wainscot case, in-laid with mahogany...	£ 13 6
Arch ditto	5 4 0
Arch ditto, 8-days	5 5 0
Arch ditto, swelled dial, extra cases	5 15 6
12-inch Arch, mahogany case, swelled dial	7 7 0
11-inch Arch, ditto, ditto, quarter clocks	10 10 0
New Watches	3 3 0

Gold and Silver Watches, Clocks, &c. warranted 12 months; and if not approved of, will be exchanged.

Clocks and Watches repaired at reduced prices.

A Caution to the Public.—All persons who may want their Clocks and Watches repairing, are recommended to apply to some person who has been regularly brought up to the trade, and not to Quack Doctors; or else, as soon as the watch is opened, it will want either a warge or a mainspring.—N. B. Advice: Italian Puffs and Phisic must be paid for—Quack! Quack! Quack!

LR&SM 4th May 1827

REDUCED PRICES.

JAMES SWINGLER, Clock and Watch Maker, GRANTHAM, returns his sincere thanks to his friends and the public for their favours, and begs to inform them that he has laid in a new assortment of Clocks and Watches of every description, from the best manufacturers, which he will not altogether sell for the sake of ready money, but to let the public see how they have been imposed on.

New 30 hour Clocks	£ 3 10 0
Arched ditto	4 0 0
Eight-day Clocks	5 5 0
Ditto arched swelled dial, extra cases	5 15 6
New Watches, in strong cases	3 3 0

Every Watch above 5*l.* up to 50*l.* J. S. will sell at one guinea in five less than at any shop in Granttham, and warrant them for 12 months from the delivery.

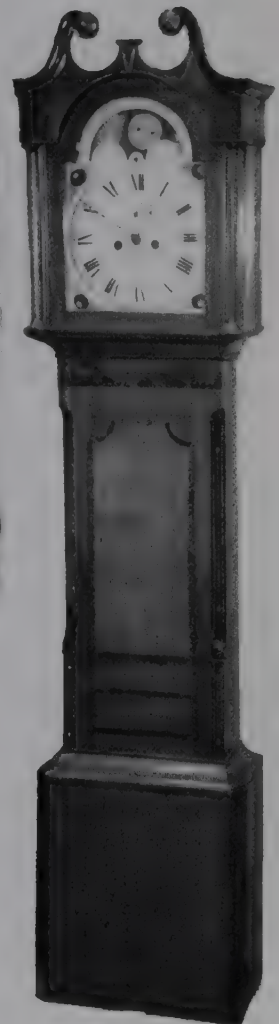
LR&SM 12th. Sept. 1828



*Longcase clock by Jas. Swingler,
Louth c.1810.*



*The arched 'swelled' dial of the clock
by Swingler of Grantham
pictured on the right.*



*Eight-day longcase clock by Swingler of
Grantham c.1835.*

Longcase clocks of most types described in his advertisements have been recorded from his time in Louth and Grantham. The only type not seen is the 'Month Clock' offered in his advertisement of Oct. 1823 for £5-15s-6d but month going clocks by provincial makers are unusual.

The clock on the left has the dial lettered 'Jas. Swingler Louth' and is in an expensive mahogany veneered case with an elliptical inlay on the long trunk door and elegant bracket feet. Notice there are no rear feet provided so the case has to 'lean' against the wall, a feature which is often found on Lincolnshire clock cases.

The right hand clock is as described in his advertisements as an 'eight-day clock in a wainscot (i.e. oak) case inlaid with mahogany with an arch swelled dial'. This one has a more expensive dial with a moon dial in the arch. Note the shorter trunk door with concave corners at the top, the mahogany band or impost above and the panel below the door, all very typical of the style at this period in Lincolnshire.

30-hour clocks with square painted dials in oak and mahogany cases have also been noted.

Various watches by James Swingler have been noted including examples from his time in Holbeach, Louth and Grantham. One is an interesting pair-cased silver watch with a painted polychrome enamel dial showing a garden scene with the gardener, glass house and flowers and plants in urns and tubs. In place of the hour numerals are the letters of the owner's name JOHN PHILLIPS. The verge movement, no. 7719, is typical of the period with a pierced and engraved balance-cock with a grotesque mask. The case bears the case maker's punch T.G. and the hallmark of London 1810, which suggests that it was cased in the period whilst he was in Louth. Another, from his time in Holbeach, is a late 18 century pair cased verge watch in the Usher collection at Lincoln. This has a tortoiseshell veneered outer case and again a coloured enamel dial depicting a river scene with a bridge, a boat and a windmill with revolving sails.



Silver cased half-hunter watch and its movement by Jas. Swingler Grantham c.1830.

The half-hunter verge watch pictured above has a single silver case, hall-marked Birmingham 1830 with case maker's punch mark J.H., and is key wound through a hole in the dial. The movement has an elaborately pierced and engraved balance cock and is numbered 953. The white enamel dial has two chapter rings to enable the time to be read on the smaller one with the front cover closed.

Another silver watch with a pair case by the same case-maker J.H. and H.M. 1830 has a verge movement engraved Jas. Swingler Grantham no. 949. The dial unusually has a small concentric calendar circle numbered 1-31 to indicate the date of the month.



Silver pair-cased watch with calendar by Jas. Swingler Grantham c.1830.

John Tasker was born in Folkingham in 1774 and apprenticed to the Sleaford clock-maker John Hargraves in 1790 for a period of 5 years and 8 months with a premium of £10. After completing his time he then returned to his home town and set up in business on his own account. He advertised in the LR&SM on several occasions firstly in 1798, in 1808 he advertised and thanked his customers "for favours of the last 11 years and informs the public that he purposes attending Tattershall Fair on the 26th and 27th instant with a good selection of new watches". Early in 1814 his health was obviously declining and he placed an advertisement apologising for his indisposition and advising that he had employed "a very excellent assistant" but the following year he disposed of the business to William Foster and died later that year at the age of 41. Whether John Foster was in fact the "very excellent assistant" is not clear.

JOHNS TASKER, Watch and Clock Maker, &c. FALKINGHAM, respectfully informs his friends and the public in general, that he has now on sale a good assortment of new and second watches and clocks, which he is determined to sell on such terms as he hopes will merit future favors.

Jewellery, &c.—J. T. is sorry that ill health prevents his waiting on his friends as usual: he therefore begs leave thus to inform them, that he has an Assistant, a very excellent workman, who is ready to execute any orders on the shortest notice, and who will always be at home on a market-day, ready to do such jobs as his friends may entrust to him; and every attention shall be paid to them to give satisfaction. Any friend wanting clocks cleaned and repairing in the country, by sending orders, shall be attended at their houses in a few days.

Spectacles in silver, tortoise-shell, and steel frames; glasses put in spectacles to suit any sight, and repaired neatly, as well as all kinds of plate.

J. T. wishes to return his friends sincere thanks for their kind support; and every favor during his ill state of health will be thought doubly of at the time, and always acknowledged with the utmost gratitude.

Any friend wanting a watch cleaned and repaired, will have every endeavour used to get it done while they wait on a market-day; and if not done that day, may rely on having it well repaired in the shortest time possible after; and in every case it will be found J. T.'s study to deserve the kind patronage of his friends.

LR&SM 14th February 1814

Several longcase clocks have been recorded by William including an eight day clock with a painted dial by Owen of Birmingham and another 30 hr. square dial clock in an oak and mahogany cross-banded case was sold at Swain's auction in Grantham in 1995, it had apparently come from Stoke Hall near Newark.

A silver pair-cased verge watch by him, hall marked for 1807, has been recorded and also there is a verge watch movement, no. 537 engraved "Tasker Falkingham", (note the earlier spelling with an 'a') in the collection in the Alford Manor House museum.

Folkingham, 17th March, 1815.

JOHNS TASKER, Watch and Clock Maker, Engraver, &c. on account of his long indisposition, having declined business in favor of William Foster, WILLIAM FOSTER respectfully informs the inhabitants of FALKINGHAM and its vicinity, that he has just received a fresh assortment of Jewellery, and other goods in the above line, which he intends offering to the public at reduced prices: those who may please to honor him with their business will have their favors thankfully received.—Clocks in the town and country attended to on the shortest notice.

N. B. W. F. purposes attending Corby market weekly.

LR&SM 17th March 1815

John Taylor was baptised 28th. November 1812 the son of John and Elizabeth Taylor. It has not been established where he served his apprenticeship, possibly in the town of Grantham, and the first mention we have of him in a trade is in the Poll book of 1837 where he is listed as "John Taylor jnr. Watchmaker". In the census of 1841 he is included in the household of his brother, James Taylor a chairmaker, and his family in a house on Wharf Road and John is again described as a watchmaker. The Taylors were a Windsor chairmaking family in business for most of the 19th. century. At this period John was probably working for one of the established watchmakers in the town as he is not listed in White's directory of 1842 but is included in the 1846 edition as a watch and clockmaker on his own account in Westgate. A printed watchpaper of his reads:-

*John Taylor, Watch and Clockmaker, Corn Market, Grantham.
Repeating, Duplex, Horizontal & Lever Watches. Musical Boxes,
Jewellery etc. repaired in the best manner. Gold rings etc. Large
assortment of watches & clocks, plate and jewellery constantly on sale.
Engraving neatly executed. Clocks cleaned in the Country.*

He married in 1846 and the 1851 census includes him, as a 38 year old watchmaker, with his wife and newly born daughter together with a 24 year old assistant Charles Andrews. At this time the Corn Market was included as a Market Place address although later this property was re-designated as Westgate and in the directories of 1856 and 1861 his address is given as Westgate. His assistant Charles Andrews had served an apprenticeship with Grantham clockmaker William Green. By the time of the 1861 census, John and his wife Ann, now with two daughters, are living in a house in North Parade opposite the Catholic church and he is now described as a "Watchmaker retired". It was unusual for a tradesman to be retired by the age of 48 unless he were in ill health but as he is similarly listed 10 years later one must conclude that he was of independent means perhaps by inheritance? He died in 1879.

Both clocks and watches have been recorded by John Taylor. A silver pair cased watch hall-marked 1847 and the movement numbered 360 has been noted.

An eight day regulator type clock in a mahogany case with an arched painted dial with subsidiary dials for hours, minutes and seconds has been reported and was probably his workshop regulator.

Traditional eight day longcase clocks include one with a 13 inch 'raised' dial painted with two camels in the arch and ruins in the spandrels with a Finnemore & Son falseplate. This clock is in an oak and mahogany case stamped J.HILL NTTM. with a three-pointed door top and measures 7ft. 2 1/2 ins. high and the trunk 15 1/2 ins. wide. The movement has repairers' scratch marks of 'J.P. Paley, 15/5/1902, 1903 and 1910'. Paley was a clockmaker at the village of Caythorpe, between Grantham and Lincoln, whose marks have been noted on other clocks from this area.

Another clock but with a dial by WRIGHT BIRM. in a similar but unmarked case is pictured on the next page. This clock has a label of William Green of 25 London Road, Grantham stuck inside the door probably when it was repaired by him. Also pictured is a mahogany bracket clock, sold at auction by Sotherby's at Chester in 1981.

A 30 hr. clock with a 12 inch. square dial in an oak and mahogany cross-banded case was sold by Escritt & Barrell (lot 393) in November 1993.




The dial by Wright of Birmingham lettered for John Taylor of Grantham.



Eight day longcase clock by John Taylor of Grantham c.1850.




588  **An Early Victorian Mahogany Bracket Timepiece**, the 8in white painted dial signed *J. Taylor, Grantham*; the movement with anchor escapement and shouldered plates; the case with a domed cresting, carved with leafage, on a plinth base, 17in.

When John Taylor retired Sixty's took over the Westgate Corn Market shop but his assistant, Charles Andrews, continued to trade under his own name at no. 91 Westgate and later no.7. He took as an apprentice his nephew William Taylor, who was probably a relation of the founder of the business, and they later traded as partners "Andrews and Taylor". William eventually succeeded to the business and with his son, Charles Andrew Taylor, they traded as "Taylor and Son". Their claim to have been established in 1845 must refer to the founding of the original business of John Taylor. Their premises still exist, but with a later shop front, and are at present used as an Indian restaurant.



Watchpaper of Taylor & Son

Est. 1845	TAYLOR & SON	
WATCHES	<i>The Jewellers</i>	CLOCKS
RINGS	7 WESTGATE	ELECTRO-PLATE
We specialize on repairs of all kinds.	GRANTHAM	Over 85 years' sound reputation.

From Palmer's Directory of Grantham 1925.

THORNTON John

High Street, Spittlegate

1846-50

John Thornton is listed in the directories of 1846 and 1849 as a clock and watchmaker in High Street, Spittlegate but no further evidence of his business has been found.

TODD W.A.

41 High Street

1905-9

William Arthur Todd took over the business of E.H. Bettle and is listed in Kelly's directories of 1905 and 1909 as a watchmaker and jeweller at 41 St. Peter's Hill. These premises were on the corner of St. Peter's Hill and the High Street and were rebuilt for Lloyd's bank (now the Abbey Building Society). There is one of his watch keys in the collections of the Grantham Museum. By 1910 the shop had been taken over by another watchmaker and jeweller, J.W.Lee.

Joseph, the son of Esau and Ann Tunnard, was baptised 19th. July 1794. His mother was probably the Ann Tunnard who as a widow married the clockmaker William Hall in 1810. and it is likely that he was trained by his stepfather. There may also have been some relationship with a Joseph Tunnard who was a witness to the will of the clockmaker Nathan Shaw of Sleaford also in 1810. As the eldest son of a Freeman he was made free on the 13th. February 1813 although he would only have been 19 years old at this time. He is included in Pigot's directory of 1819 as a watch and clockmaker in the Market Place and is listed in the Poll books of 1818,1820 and 1826 as a watchmaker.

The Corporation Minute Books tell us that he took William Green as his apprentice in 1819 but he only served two years of his term before being transferred to Geo. Johnson for the remaining five years. The most likely explanation would be that Joseph died during Wm. Green's term.

A longcase clock by Joseph Tunnard has survived with a 12 inch painted dial with a Walker & Hughes falseplate housed in an oak case, with mahogany cross-banding and details, of the style of c.1815-20. The dot and line stringing on the canted corners of the trunk is typical of the Lincolnshire case makers, perhaps Usher of Lincoln, although it is not labelled.



Longcase clock by Joseph Tunnard, Grantham c.1815.



*The dial by Walker & Hughes Birmingham
of clock by Jos. Tunnard Grantham.*

The postcard shown here was posted in Grantham on 30th. May 1915. In an endeavour to find out who it depicted, and where, a copy was sent to the Grantham Journal and published in 1989. This produced several replies, one telling us that the little villa used to stand in the garden of Stone Cottage, Syston near Grantham, the home of the writer's grandfather, and he remembers many boxes of glass photographic negatives were stored there. Another correspondent referred to a similar query in Lincolnshire Life magazine in the 1970s. There was a comprehensive response to this and two of the letters are reproduced on the next page.



Bobbin Villa and John Welbourn, Syston near Grantham c.1915

Owing to a childhood illness John Welbourn had a deformity of the lower legs and was only able to walk on his knees. He was a clever and ingenious mechanic and despite his handicap he supported himself, and his parents in later life, by repairing clocks and watches, bicycles etc. The postcard pictured here is one of him sitting outside Bobbin Villa. This small building was decorated with cotton bobbins and has a clock tower on the roof. The stove pipe suggests it was used all the year round. It has a name board above the door and below the small window in the gable is the date 1873. This small window incidentally was probably used for exposing his half plate photographic negatives because, as well as being the local clock and watch repair man, he was also the village photographer and no doubt the building served as his workshop and darkroom.

John Welbourn was baptised in the village of Syston in 1857 the son of Henry Welbourn a woodman employed by the local Thorold Estate. He is included in the 1901 census and described as a watch and clock repairer aged 44. It is not known where he acquired these skills, perhaps he was self taught, nor when he died. Bobbin Villa was still standing in the 1950s but is no longer there today and much of the garden in which it stood is now occupied by a modern bungalow. It has been suggested that the Villa was moved to a position near the Alms Houses at nearby Barkston after his parents died.

BOBBIN VILLA - SYSTON SCHOOL - BARKSTON RINGERS

SIR, I am enclosing some photos which I hope will be of interest. They are of a wonderful man called John Welbourn with whom I spent a lot of time as a boy. As you will see he walked on his knees. He was like anyone else till 7 years of age and he said it was measles or Scarlet fever that left him a cripple through getting cold. He was a watch and clock repairer, cycle repairer and also a tinker, in fact he could do nearly anything and I spent many happy hours with him.

He did his watch and clock repairs (as shown in the picture I enclose) in a house called Bobbin Villa. You can see the name over the door and it was called Bobbin Villa because there are 3 rows of cotton bobbins down each side and these were painted red, white and blue alternately. He lived with his Father and Mother in their house close by and kept them till they died, when they were both well over 80 years of age, as there was no pension in those days. These photos were taken about 70 years ago and I took them with his camera. He also took photos of weddings, etc, for a living. I do wonder if there is anyone who remembers. This was at Syston, near Grantham. I had forgotten to tell you where it was. Syston and Barkston are only about $\frac{1}{2}$ mile apart. He used to put inside the back of watches he repaired a slip with the notice, 'Dear friends, let me urge you not to get in debt. If the chairs and table are old they will suit you much better than new ones unless they are paid for in gold.' I am enclosing a photo of the school at Syston where I went and can tell you most of the names and also one of the Barkston Bellringers. H. BARNES, The Green Bungalow, Tattershall Road, Woodhall Spa, Nr. Lincoln.



From Lincolnshire Life November 1970.

BOBBIN VILLA

SIR, What delightful memories were stirred when I saw the picture of Bobbin Villa and its owner in this month's magazine. I have treasured a copy of that same photograph for more than 60 years. We were three small sisters who, when our Parents were visiting friends in the village, went along to Bobbin Villa to entertain, and be entertained by Johnnie Welbourn. The villa at that time stood at the south end of the Almshouses, almost opposite the Church, at Barkston. I understood it was moved from Syston at the time of the death of Johnnie's Parents. He usually sat outside Bobbin Villa, which was his workshop, and when we saw him walk inside to get a clock which he had repaired for us, we were speechless with astonishment to see him walk on his knees with his poor crooked legs and feet half-way up his back.

I trust *Lincolnshire Life* will continue to give its readers so much pleasure, by publishing these ancient photographs and records, for "In the garden of happy memories there is always sunshine".

DORA H. PACEY, Welby Gardens, Grantham.

From Lincolnshire Life July 1970

WHARTON John

Grantham and/or Grimsby?

1855-63

Among a collection of watch movements in the Alford Manor House is a verge watch movement engraved 'J. Wharton Grantham' and numbered 8151. Also in this collection is another similar watch movement but engraved 'J. Wharton Grimsby' this one being numbered 8251. A John Wharton is listed in the directories as a watch and clockmaker in the Market Place, Great Grimsby from 1855 until 1863 but no trace can be found of him being in business in Grantham. Possibly he attended Grantham Market prior to opening a shop in Grimsby and had his watches engraved accordingly or perhaps it was a mistake on behalf of the engraver.

WHITE Ernest John

College Street and later 25 Westgate

1896-1938

WHITE Lewis Henry

25 Westgate

1938-68

E. J. WHITE,

PRACTICAL

Watch & Clock Maker,
Jeweller & Silversmith.



Hall-marked
Guinea-gold
Wedding
Rings and
Keepers.

Every description of English and
Foreign Watches and Clocks Cleaned
Repaired and Regulated.



MUSICAL BOXES,
JEWELLERY, &c., REPAIRED.

25, WESTGATE,
GRANTHAM.

The advertisement is from Palmer's Directory of Grantham of 1925.

Ernest John White was apprenticed, for four and a half years, to the Grantham watchmaker John Osbourne in Dec. 1888. By 1893 he had completed his time and set up in business on his own account, initially at 18 College Street and then, by 1905, he had taken over the premises vacated by the watchmaker F.V.Newton at 25 Westgate. Ernest had two sons both brought up in the trade. Lewis Henry who after military service during the 1st. World War succeeded to the business in Grantham and Ernest Cyril who was apprenticed in London to an Albert Senior, a relation and ex apprentice of Ernest's. He eventually had a watch and clockmakers business in Loughborough. Ernest senior and his son Lewis traded in partnership for some years until the father retired in about 1938. The shop in Wide Westgate was quite small and when Lewis took over the shop his mother had died and his father was now living with them, so he bought the cobbler's shop next door and made an access through to its upper bedrooms to accommodate his family. Lewis retired and sold the business to Ken Morfitt around 1968. His father Ernest John died in 1973. The shop continued as a clock and watchmaker's until Ken Morfitt left the trade around 1980. Number 25 is now used as a Taxi office.

N.B. I am indebted to Ernest's granddaughter, Pat Ashton, for details of her family history and permission to reproduce her grandfather's apprenticeship indenture which is reproduced on the next page.

WILKINSON Henry

23 West Parade

Census 1891 & 1901

Henry Wilkinson was included in the census returns for 1891 as a 37 year old watch jobber and born at South Ormsby in Lincolnshire, with his Wife Elizabeth and their three children and is again similarly listed in the returns of 1901.

George Wilson was baptised in Bourne on 16th. Oct. 1787 the son of John and Jane Wilson. He was apprenticed for seven years in 1802 to the Grantham clockmaker John Wood (as his father had been in 1767). It is not known where he worked after he was made free in 1809 but as John Wood died in 1811 he may have returned to Bourne to work with his father. He appears in Pigot's directory of 1830 in business on his own account at an address in Long Causeway, Peterborough and is included in the 1841 and 1851 census returns giving his birth place as Bourne in Lincolnshire and his age in 1851, as 64 years.

WILSON Thomas senior and junior 1798-1817.

Thomas Wilson is listed in the British Universal Directory of 1794/8 as a watchmaker in Grantham and advertised in the LR&SM of February 1st. 1793.

Coal Hill incidentally was the top end of the Market Place, opposite the Angel Inn, where coal was kept at the period when it came via the Great North Road.

He had married, quite well as it transpired, the daughter Ann of Rev. Woodford the rector of nearby Denton in 1783 and their son, also Thomas, was christened at St. Wulfram's in 1789.

In an advertisement in 1811 of the same paper he now has two shops, one on 'Cole Hill', and another on Watergate. It is probable that at this time his son had joined the business and they had a shop each.

THOMAS WILSON,
WATCH-MAKER, SILVERSMITH, AND
JEWELLER,
Facing the COAL-HILL, GRANTHAM,
BEGBEGS Leave to inform his Friends, and the Public, that he intends carrying on the above Branches, with Elegance and Dispatch, on the most reasonable Terms, as he has laid in an Assortment of every useful and ornamental Article of the Silver and plated Manufactories, with a Variety of Watches, Jewellery and Trinkets, Silver and plated Shoe-buckles, &c. &c. Those who please to favour him with their Commands, may know the exact Expence of any Piece of Work or Alteration before it is begun.
N. B. Mourning, Plain, and Fancy Rings, on the shortest Notice; light Gold exchanged; the utmost Value given for old Gold, Silver, Coin, &c. Coats of Arms and Cyphers engraved on Stone, Steel, and Silver.

LR&SM 1st. Feb. 1793.

This was in the same edition that carried the obituary of John Wood. His mention of being a relation of Mr. Wood is interesting but it has not been possible to establish exactly what this relationship was.

It is not clear when his son took over the shop but by 1817 the business was in trouble and an advertisement in the LR&SM announce he had assigned all his personal estate for the benefit of his creditors.

THOMAS WILSON Watch-maker, Silver-smith, and Jeweller, WATER-GATE and COLE-HILL, GRANTHAM, begs a continuance of favors from his friends in particular, and at the same time takes the liberty of soliciting those of his relation—the late Mr. Wood, deceased, on whose friends in his life-time, from a delicate regard, T. W. never before obtruded his solicitations. But to those who please to honor him with their commands, every attention shall be paid, and their favors sincerely acknowledged.
Mourning rings at the shortest notice.—Plate of his selling neatly cyphered without any extra charge.

LR&SM 17th. May 1811.

Mr. THOMAS WILSON'S ASSIGNMENT.

WHEREAS THOMAS WILSON, of Grant-
ham, in the county of Lincoln, watchmaker,
bath, by indenture bearing date the 18th day of this in-
stant June, assigned all his personal estate and effects to
ROBERT CALCROFT, of Great Gonerby, in the said county
of Lincoln, gentleman, and JAMES FERGUSON, of Grant-
ham aforesaid, liquor-merchant, in trust, for the equal
benefit of such of the creditors of the said Thomas Wil-
son as shall execute the same, or signify their consent
thereto, on or before the First day of August next.—
*Notice therefore is hereby given, that the said indenture
of assignment is left at the office of Mr. OSTLER, soli-
citor, Grantham, for the perusal and signature of such
of the creditors of the said Thomas Wilson as may think
proper to take the benefit thereof; and all persons who
stand indebted to the said Thomas Wilson, are desired
forthwith to pay the amount of their respective debts to
me, or actions at law will be commenced against them,
without further notice.* By order of the Assignees,

Wm. OSTLER, their Solicitor.

Grantham, 19th June, 1817.

LR&SM 20th. June 1817.

No examples of the work of the two Thomases have come to light as yet nor has any connection with the other Wilson watch and clockmakers of Grantham been found.

Quite what happened to Thomas jnr. is not clear. The Corporation Minute Books record that "*Thomas Wilson, eldest son of Thomas Wilson deceased, late Freeman -- made free 15th. June 1818*" and the Poll Book of 1826 records the vote of a Thomas Wilson, 'Shopkeeper'. As there are several Wilson families in the town at this time it is difficult to be sure that these refer to the 'Watchmaker Wilson'. In any event he does not appear to have prospered although he and his family were obviously accepted by the local gentry as in his obituary in 1856 he had apparently been kept for many years by 'charitable persons'.

On the 19th instant, at Mount Pleasant, aged 66, Mr. Thomas Wilson, son of the late Mr. Thomas Wilson, watch maker and silversmith, of Walkergate, Grantham, and grandson of the Rev. Mr. Woodford, Rector of Denton. He was maintained many years as his mother had previously been, by a portion of the profit of the Charity Ball, on the first evening of the year; and since the discontinuance of that assembly, by the benevolence of the Vicar, Mrs. Manners of Spittlegate House, and other charitable persons.

The Grantham Journal 23rd. February 1856.

John Wilson was apprenticed to John Wood of Grantham, clock and watchmaker, on the 30th. November 1767 with a premium of £5. After successfully completing his time he was made a Freeman on the 30th. December 1774. He appears to have traded on his own account in Grantham for a while as a clock from this period has been recorded and is illustrated here.

The next documentary evidence we have of him is an advertisement for an apprentice in the LR&SM of the 1st. April 1875 now a clock and watchmaker at Bourne. By this time he was married to Jane and at least one of their children was baptised there.

In the Universal British Directory of 1793-98 he is listed at Bourne and at Peterborough some 15 miles south of Bourne. As a Freeman he was qualified to vote in the Parliamentary elections at Grantham. In the poll books for 1818, 1820 and 1826 John Wilson Snr., and also John Wilson Jnr. (presumably his son) are described as silversmiths and watchmakers resident in Peterborough. Pigot's directories of 1824 & 1830 list them at Narrow Bridge Street, Peterborough.

John senior died in Peterborough in 1827 aged 76 and John Jnr. in 1842 aged 64.

The surviving clocks of John are of unusual quality and individuality. Although none from his time in Bourne has as yet been found an example made whilst he was in Grantham is illustrated here and several fine clocks from his Peterborough business, including one of his musical clocks, are pictured in the following pages.

The 30hr. clock shown here has a single-sheet brass dial engraved and silvered, a style that was popular for a period around the 1770s and used by John for a number of clocks prior to his adoption of the Birmingham painted dial. These single sheet silvered dials had the advantage that they could be done 'in house' probably by John himself and as in this case to a bespoke design. The subsidiary dial numbered to 60 is not in fact a seconds dial but a way of regulating the timekeeping by a 'rise and fall' mechanism adjusting the length of the pendulum suspension spring.



30hr. Longcase clock by John Wilson of Grantham c.1775.

The dial commemorates the battle of Quiberon Bay which took place in 1759. Merchant shipping had reported that the French fleet was assembling off the coast of Brittany and an imminent invasion was feared. The English fleet, led by Admiral Sir Edward Hawke was immediately dispatched and attacked the French, who were commanded by Marshall Conflan, in a hazardous engagement close to the rocky coast off Quiberon Bay. At one stage the two flag ships exchanged fire at close quarters but after a few broadsides Conflan declined combat and sheered off pursued by the English; hence the couplet around the arch of the dial. By nightfall the majority of the French fleet had been destroyed. It was an important victory for the English and it put paid to any French plans of invasion for many years.



The arch contains a painted maritime scene with a rocking ship actuated by the pendulum. Several of the ships are carrying the Royal ensign and a fort on the shore is flying the French flag. The upper engraved spandrels show, to the left, a sailor with a telescope standing by a cannon and a banner reading "A Sail, a Sail 'tis Hawke" and the other depicts a French sailor holding a broken flag and a banner reading "We've Beat the Dogs Damn 'em".

This clock was made some twenty years after the event, perhaps for a naval man who had served with the fleet and as a memorial to Admiral Hawke who died in 1781.



WANTED IMMEDIATELY,
A N Ingenious YOUTH as an APPRENTICE to a
CLOCK and WATCH-MAKER.

* * * As he will be taught **MUSICAL CLOCK-MAKING**, in all
its various Branches (a Business taught but in few Shops in the
Country, a **PREMIUM** will be expected.

Enquire of **JOHN WILSON**, Clock and Watch-Maker, Bourn.
Letters, Post-paid, duly attended to.

LR&SM 1st. April 1785.

Musical clocks were made by very few clockmakers and are rare. The clock featured here is the only known surviving example by John Wilson. The three train quarter chiming movement plays a choice of four tunes on eight bells on the hour, *March, Air, Hornpipe and Money Musk?*, which can be selected by the right hand subsidiary dial in the arch. There is a Strike / Silent control dial in the left of the arch. The painted break-arch dial is quite plain with the minutes numbered at the quarters and the matching steel hands suggest a date c.1810.

The mahogany case has a pagoda-topped hood with reeded columns with brass inlay and a fret above the arch to emit the sound. The long trunk door is flanked by reeded quarter columns; it is of London quality and was no doubt bought in from one of the specialist cabinet makers of the city.

The musical train requires a very heavy weight to drive the pinned barrel and lift the hammers and an interesting survival is the double-cranked winding key.



(Photos' courtesy Mr. Geo. Reeve.)

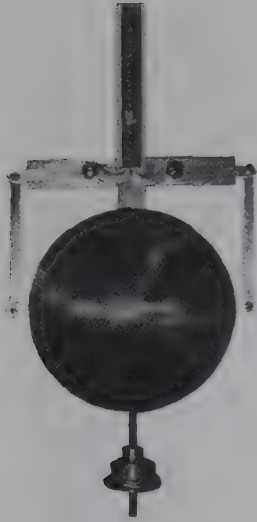


Photographs of this clock are courtesy of P.H.Wattenburg.



This is a fine and unusual longcase clock by John Wilson of Peterborough of c.1790s. and is unusual in several respects. Although externally it appears to be a domestic eight day clock with rolling moon phases in the arch (the dial by his namesake Wilson of Birmingham), the movement is designed as a precision time keeper. It incorporates a dead beat escapement with a temperature compensated pendulum and maintaining power. The clock is housed in an oak case with a scroll topped pediment with a dental frieze below the scrolls. The hood has fluted columns with Corinthian capitals and the trunk is similarly embellished with fluted quarter columns and capitals. It is a good quality example of provisional cabinet making.

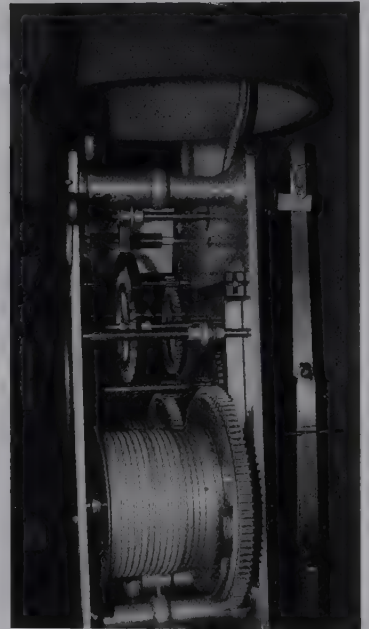
The intention of the compensation was to reduce the error in timekeeping occasioned by changes in temperature. A rise in temperature causes the pendulum rod to expand and lengthen which results in the pendulum beating more slowly and the clock to lose time. A seconds beating pendulum with a steel rod will lose two and a half seconds per day for every rise in temperature of 10 degrees F. Before the advent of central heating for houses the seasonal variation in room temperature could be quite large, probably 30-40 degrees; the variation in timekeeping would be in the order of a minute or so per week, summer to winter. In an era when there were no trains to catch, errors of this magnitude would seem be of little consequence for domestic purposes. This clock must have been made for a very discerning client interested in precision timekeeping.



The lower part of the compensated pendulum

The pendulum is of a design invented by the eminent watch and clockmaker John Ellicott, a fellow of the Royal Society. His compensated pendulum comprises a steel strip which is overlaid by a strip of brass firmly fixed at the top but free along the rest of its length to allow the greater expansion of the brass to take place and actuate two pivoted levers at the lower end from which the round pendulum bob is suspended. The geometry is such that during a rise in temperature the greater expansion of the brass strip results in the bob being lifted by an amount equal to the increase in length of the pendulum thereby maintaining its effective length. Fine adjustment to time is achieved by the brass rating nut beneath the bob. This combined with the benefit of the dead beat escapement should enable the clock to keep time within a few seconds per week.

During winding of an eight day weight driven clock the driving force to the train is removed resulting in the seconds hand stopping (or even running backwards). In the case of normal domestic time keepers this is of no great importance; they are normally arranged to gain the 20 or 30 seconds that the winding procedure takes. With a regulator-standard movements such as this it is necessary to incorporate a way of overcoming this. In this case an invention of John Harrison's (of longitude fame) of a mechanism to maintain the driving power to the train is used. This is achieved by introducing a small internal spring and an additional ratchet between the barrel and the great wheel. It is better than the earlier 'bolt and shutter' device in that its operation is automatic. As a matter of interest Harrison had also invented a temperature compensated pendulum using a series of brass and steel rods, generally known as his 'grid iron pendulum', which in practice proved superior to that of Ellicott's although perhaps at this time John Wilson was not aware of that fact or he found the Ellicott one easier to construct.

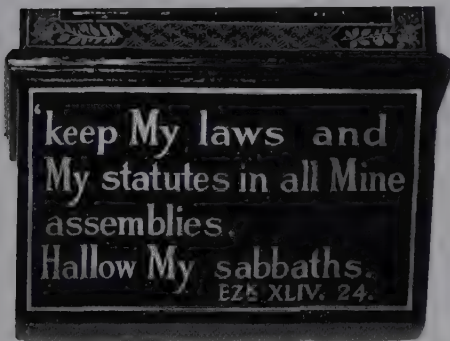


The winding barrel incorporating Harrison's maintaining power

Other clocks by this maker include several eight day longcases. One with single sheet silvered brass arch dial has an applied brass beading around the outer edge of the chapter ring and brass spandrels attached to the silvered background. This is again housed in a London quality, flame mahogany, pagoda topped case.



Tavern clock by John Wilson of Peterborough c.1800.



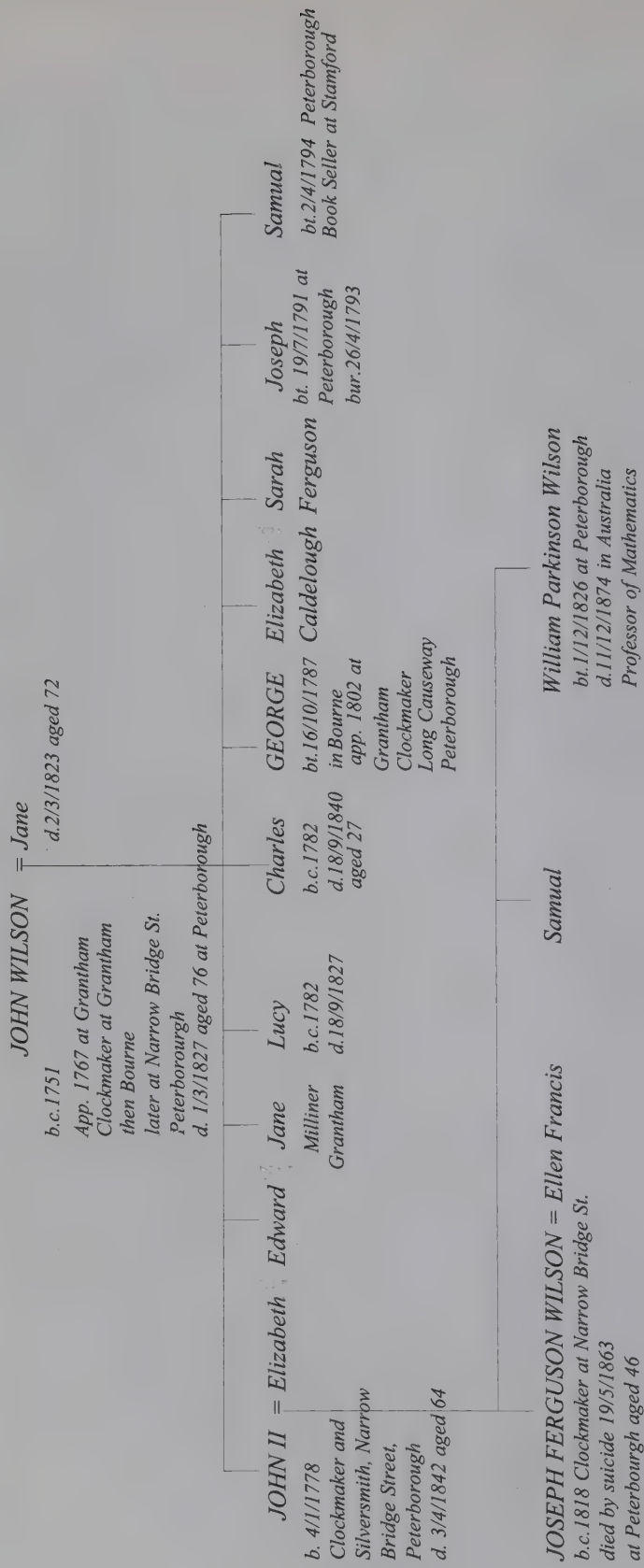
The base of John Wilson's clock

A number of tavern style wall clocks have been recorded, one a striking clock with a white round dial and the door with chinoiserie decoration lettered 'Jno. Wilson, Peterborough' above and a chamfered bottom was sold by Christie's in 1988, and others with black lacquered dials with gilt numerals are also known. The one illustrated here has the trunk door decorated in the Chinese style which was popular in the 18th. century. The biblical quotation on the chamfered base suggests that it was specially commissioned for the church at Peterborough where it still hangs.

John Wilson died on March 1st. 1827 aged 76. A transcript of the inscriptions from a monument in the Old Churchyard, Peterborough, records his death along with that of his wife Jane, his son John II and grandchildren Lucy and Charles.

In his will he left his estate to be divided amongst his nine children. To his son, John II, he left the tools of his trade who succeeded his father in the shop at Peterborough. Another son, George, was also a clockmaker and is listed in the directories at an address in Long Causeway, Peterborough. On the death of John II his son, Joseph Ferguson Wilson, continued the business at Narrow Bridge Street into the third generation.

THE FAMILY OF JOHN WILSON Clockmaker and Silversmith of Grantham, Bourne and Peterborough.



Notes.
 i) The marriage of John I and Jane has not been found nor have the baptisms of their children John, Edward, Elizabeth, Lucy, Charles, Jane and Sarah been located but were probably before they settled in Peterborough; their names have been taken from his will which was proved 17th Dec.1827.
 ii) There are other 'clockmaker Wilsons' in Peterborough, Stamford, Grantham, Bourne, Spalding and Lincoln who may be related to this family. Any information from Wilson family historians will be most welcome.

The Diary of George Bird, the Corby wheelwright, includes an entry of 8th. September 1865, "Henry Wiseman came over to mend Mr. Musson's clock, he stopped dinner and tea with us. Had a few shots in the afternoon. I went to the station with him at night, went home by the 5 train".

A later diary note of the 13th. September 1870 reads, "Henry Wiseman married to Maxey's eldest daughter, scarce 17 years old, at Swinstead". (A slightly disapproving tone to this entry, perhaps George was jealous?)

In the census of 1871 Henry gives his age as 21 and his wife Elizabeth as 18 and in White's directory of 1872 Henry Wiseman is listed as a watch and clockmaker and optician but he does not appear in any later editions.

In a newspaper advertisement in 1753 "*John Wood, Watch and Clockmaker who lately served one of the most eminent watchmakers in London*" announced the opening of his shop in Grantham. It is not known which of the several eminent watchmakers of the time he had worked for but he was a native of Grantham, the son of John and Dorothy Wood and christened on 18th. August 1729 at St. Wulfram's Church. When he was 21 years old the Corporation Minute Books record, page 358:--

"At this court came John Wood, eldest son of Mr. John Wood, a freeman of this Corporation, made free 17th. Oct. 1750."

He probably returned to his hometown to fill the need created by the death of Grantham's previous clock maker John Fox. He quickly became involved in the town's affairs as Freeman and during his long career held most of the Corporation's appointments at various times. In October 1767 he was elected and sworn a 'Second Company Man' and in 1768 he was appointed Chamberlain and Cashier. In 1779 John Wood was elected a 'Comburgess', one of twelve Freemen responsible for the running of the town's affairs. At the Court of the 19th. October 1781 he was chosen as Alderman for the following year which was an annual appointment as leader of the Comburgesses. Thereafter he was the Deputy Alderman and Chief Magistrate for many years.

John Wood doesn't seem to have had any children. There is a marriage recorded in the registers of the parish church, in 1761, between John Wood and Mary Colby but no issue of this union appear in subsequent entries; perhaps she died young? He did marry later in life Elizabeth Laxton, a widow, at St. Wulfram's on 11th. Oct. 1792 but she died aged 49 in 1802.

The Minute Books record that at the Court of 30th. Dec. 1795:-

"Mr. John Wood one of the Comburgesses of this Corporation desired to be excused from any further attendance and begged to go out of Court on paying the usual fine of fifteen Pounds etc.

Resolved unanimously that the thanks of the Court be given to Mr. Wood for his unremitting attention to the Concerns of the Corporation during his long continuance in different Departments and that a copy of this Resolution be transmitted to him by the Town Clerk".

During his time in business he had many apprentices. Their indentures were recorded in the Corporation Minute Books and after the usually seven year duration they were entitled to be enrolled as Freemen and this event is also noted. During this period the amount of premium paid was subject to a tax at the rate of 6d. in the £1 for the first £50 and this tax was recorded in registers that still survive in the Public Record Office at Kew. Informal apprenticeships, when the master trained a member of his family without drawing up an indenture, were exempt from paying duty. The premiums demanded would depend to some extent upon the reputation and status of the clockmaker and those of John Wood were quite considerable sums, although it should be borne in mind that the master was required to accomodate, feed and clothe the apprentice for the duration of his time.

THE APPRENTICES OF JOHN WOOD.

Name	Date	Premium paid	Date made Freeman
1. William Read	5th. Oct. 1754	£25	22nd. Oct. 1761
2. Richard Rubins	9th. Aug. 1760	£25	3rd. June 1767
3. Edmond Monk	15th. Sept. 1762	£25	24th. May 1769
4. Samual Cowsell	11th. Dec. 1765	£25	28th. Oct. 1772
5. John Wilson	30th. Nov. 1767	£5	30th. Dec. 1774
6. John Gamble	5th. Aug. 1769	£30	25th. Sept. 1776
7. John Langston	28th. May 1779 (assigned from Rd. Rubins)		29th. June 1780
8. John Robinson	17th. Jan. 1786	£30-10s.	7yrs. from 29 Nov. 1785
9. George Johnson	31st. Jan. 1791 (no premium stated; not listed at the P.R.O.)		
10. Richard Ellis	26th. Sept. 1792		(ditto)
11. George Wilson	30th. Dec. 1802	£40	7yrs. from 17th. Nov. 1802
12. Edward Rose	30th. Aug. 1804	£20	7yrs. from 27th. Aug. 1804

Of these men William Read eventually opened a shop of his own in Grantham after remaining with John Wood for many years. Richard Rubins went into business in the town on his own account after completing his apprenticeship but either died or left the town around 1779. Edmond Monk worked as a journeyman for James Wilsom of Stamford and later joined his brother Thomas Monk, a gunsmith in Stamford. John Wilson became an accomplished maker of clocks of the highest quality later in business in Bourne and Peterborough. John Langston voted, as was his right as a Freeman, but was described as 'of London' in the Poll books of 1818 and 1820. George Johnson founded a business in the town around 1800 which continued until his death in 1828. George Wilson, the son of John Wilson, a previous apprentice of John Wood, also moved to Peterborough where he is listed in the directories and in the census returns. Edward Rose founded his own business at Goxhill in Lincolnshire.

John Wood also employed journeymen in his workshop and advertised for one in the LR&SM in October 1802. He was again advertising for a journeyman in 1809 and again in Feb. and May 1811. By this time he was in his 80s and probably had difficulty in recruiting boys for a 7 year apprenticeship.

WANTED immediately, a Journeyman Watch-maker.—None need apply but such as are good workmen, and can bring testimonials of character and abilities.—Reference to be made to JOHN WOOD, watch-maker, Grantham, post paid. 1st May, 1811.

On the 9th inst. in the 82d year of his age, Mr. John Wood, of Grantham, watch-maker, and formerly Chief Magistrate of that place.—He retained the use of his faculties and worked at his business till within a few days of his death.

LR&SM 17th. May 1811.

THOMAS WILSON, Watch-maker, Silver-smith, and Jeweller, WATER-GATE and COLL-HILL, GRANTHAM, begs a continuance of favors from his friends in particular, and at the same time takes the liberty of soliciting those of his relation—the late Mr. Wood, deceased, on whose friends in his life-time, from a delicate regard, T. W. never before obtruded his solicitations. But to those who please to honor him with their commands, every attention shall be paid, and their favors sincerely acknowledged.
Mourning rings at the shortest notice—Plate of his selling neatly cyphered without any extra charge.

LR&SM 24th. May 1811.

G. JOHNSON, Watch and Clock-maker, (late Apprentice to Mr. Wood, deceased,) takes this early opportunity of soliciting the patronage of the friends of his late master in the above business, and assures them that he will exert himself to give them the satisfaction they have been accustomed to receive,—his experience in the business, and length of residence in the town, enabling him with confidence to accomplish what he asserts. His friends and the public are respectfully informed that he has selected a variety of new Watches, upon the most approved principles, which he can warrant, and will sell on the lowest terms. Grantham, May 23, 1811.

LR&SM 24th. May 1811.

To WATCH and CLOCK-MAKERS, &c.
To be SOLD by AUCTION,
By Mr. Cor,
Upon the premises of the late Mr. JOHN WOOD, Watch and Clock-maker, HIGH-STREET, GRANTHAM, on Wednesday the 21st of August, 1811, and the two following days;
ALL the STOCK in TRADE, and an extensive assortment of capital Watch and Clock Tools, and Fittings-up of the Shop; consisting of 3 good new silver watches, 50 second-hand ditto, 7 eight-day clocks, 1 thirty-hour ditto, 2 time-pieces, 2 spring clocks, a month regulator, an eight-day ditto, mahogany clock-case, oak ditto, a large assortment of gilt and steel watch-chains, seals, and keys, gold seals, lockets, watch-keys, brooches, and shirt-pins, silver caddie-spoons, fruit-knives, thimbles, bodkins, table-spoons, tea-spoons, cream-jugs, punch-ladles, and sugar-bows, 10 very good barometers, 1 thermometer, a large quantity of spectacles and cases, 6 telescopes, an extensive and well-selected assortment of watch and clock makers' materials, with a numerous stock of capital tools used in the watch and clock businesses, and also several watch and clock benches, glass-cases, nests of small drawers, deal-presses, &c. &c.
Catalogues may be had of the auctioneer.
The tools will be sold on the first day.—The sale to begin each morning at 10 o'clock precisely.

LR&SM 16th. Aug. 1811.

John Wood died on the 9th. May 1811 aged 81 years and is buried in the churchyard of St. Wulfram's together with his wife who had died in 1802. This was the end of a long established business and the other clockmakers in the town lost no time in canvassing for his customers. The advertisement of Thomas Wilson appeared in the same issue that had carried John Wood's obituary. George Johnson, his late apprentice, also advertised for the next two weeks.

In his Will he left all his estate to his daughter-in-law Elizabeth Laxton. She was the daughter of his wife by her previous marriage; today we would describe her as a 'step-daughter'. The Will was sworn as of "under six hundred pounds" and included the premises on the High Street, two securities in the Grantham Canal Navigation and all household furniture, goods chattels etc. A three day sale by auction followed on the 21st. August 1811.

There must have been a considerable amount of stock to take three days to sell but their auctions were probably more leisurely affairs than the frantic pace of the modern sale room. The stock gives us an idea what an early 19th. century watch and clockmaker sold. It was diverse including 7 eight day longcase clocks but only one 30hr., spare oak and mahogany cases, 50 second-hand watches but only 3 new ones, 10 good barometers and a large quantity of silver and spectacles and their cases.

His shop, workshop and residence were on the East side of the High Street and were conveyed "to John Wood the younger of Grantham, clock-maker, in consideration of £220" by indenture dated the 5th. & 6th. April 1758. The premises were later rebuilt in brick, around 1822, and are now numbered No. 25 High Street, at present occupied by Focus Eyewear.

(I am indebted the Dr. John Manterfield for this property information)

In the Name of God Amen I John Wood of Grantham in the County of Lincoln Clock and Watchmaker being in health of Body and of sound and disposing Mind Memory and Understanding praised be God for the Same but calling to Mind the uncertainty of this life Do make and Ordain this my last Will and Testament in Manner and Form following (That is to say) First I commend my Soul to Almighty God hoping through his Mercy and the merits of my only Saviour Jesus Christ to have full Pardon of all my Sins And my Body I commit to the Earth to be decently Interred with a little pomp as possible in such discretion of my Executors hereinafter Named First I Will that all my just Debts and Funeral Expences be paid and satisfied I Give and Bequeath unto my Dear Daughter in Law Elizabeth Saxon who now dwelleth All that my House with the Appurtenances Thereunto belonging ^{me} now standing and being in the High Street in Grantham in the County of Lincoln wherein I now dwell To the said Elizabeth Saxon her Heirs Executors Administrators or Assigns absolutely forever And also Two Securities in the Grantham Canal Navigation which I am now Possessor of And also all my Household Furniture Goods Chattels ready money Securities for money And also all my Personal Estate of what nature or kind soever and wheresoever I Give unto my said Daughter in Law Elizabeth Saxon And I do hereby Make Ordain Constitute and Appoint my said Daughter in Law Elizabeth Saxon sole Executrix of this my last Will and Testament Hereby revoking and making void all other Wills by me at anytime heretofore made In Witness whereof I the said John Wood have hereunto set my hand and Seal this fifteenth Day of December one Thousand eight Hundred and seven

be published and declared

John Wood as and for his last Will
 sent in the Presence of us who in
 us and at his Request and in the presence
 in have subscribed our Names as

Witnesses hereunto

John Wood

Geo. Cooper
 Tho. Simpson
 Robt. Colcroft

Grantham 27 July 1811

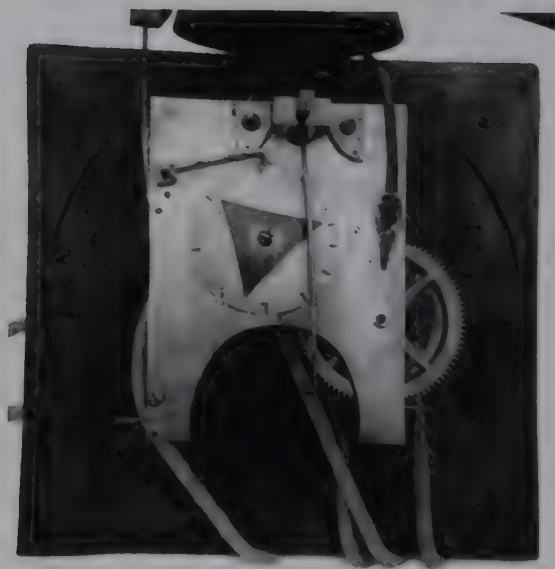
Appeared before me Elizabeth Saxon Spinster
 the sole executrix named in the above will and made Oath that
 she believed the same to be the true last will and Testament of the
 abovesaid John Wood - that she will duly administer to the
 Effects of the said John Wood and that the Value of the said
 Effects is under Five Hundred Pounds

before me Tho: Easton, Juroy

Numerous clocks by John Wood have survived with both brass and painted dials. They are of all types from single handed in simple oak cases with brass dials, and more unusually two single handed clocks have been seen with 9 inch painted dials, through to more expensive clocks with eight day and month going movements with square and arch dials. Some of these clocks are in simple oak cases, obviously locally made, but some are in London quality cases with fine mahogany veneers and some with lacquer with chinoiserie style decoration. The illustrations in the following pages will give an idea of the range of styles he produced during his career.



A 30hr. single handed brass dial longcase clock by John Wood of Grantham c.1750.



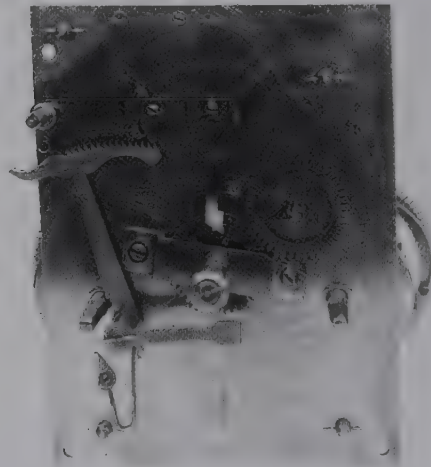
This 30hr. clock, with 10 inch square brass dial in a locally made oak case with a caddy top to the hood, is one of his earlier styles and represents the 'economy end' of his repertoire. The large semi circular cut-out in the plates was to reduce the weight and therefore cost of the brass.



8 day longcase clock by John Wood in an oak case with caddy c.1760.

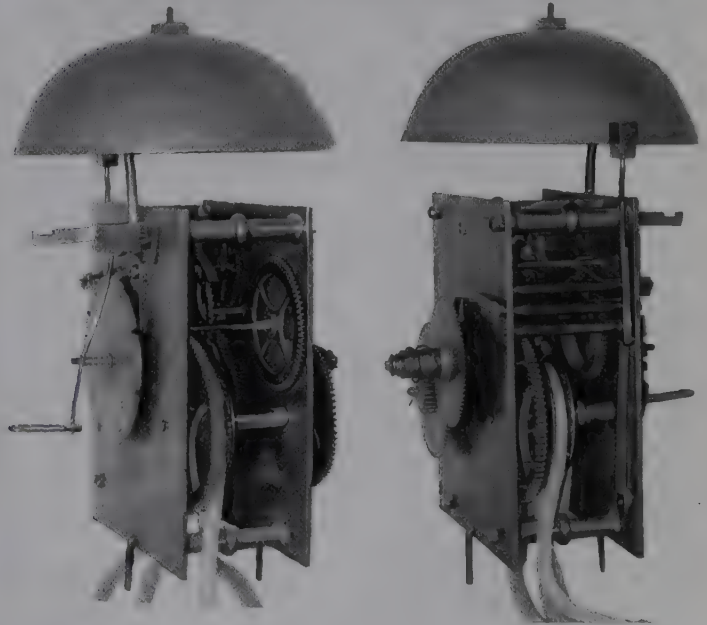
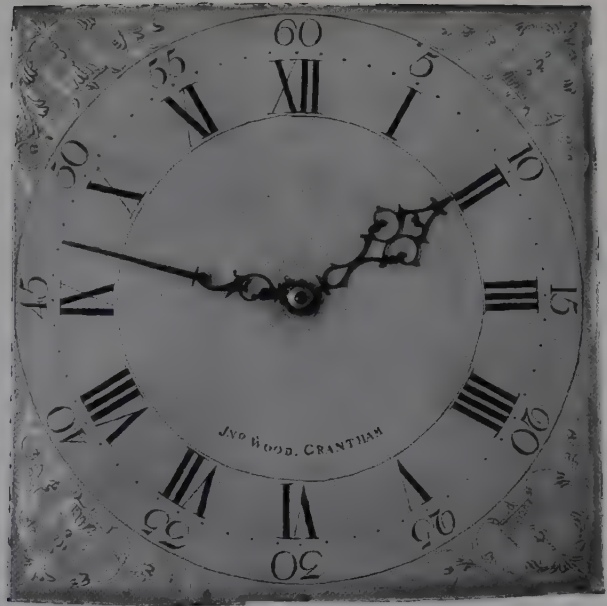
These oak cased two handed clocks, eight day and 30hr., are typical of Wood clocks of the 1760s, the dial centres and chapter rings would have originally been silvered although this has now been polished away.

30hr. longcase clock by John Wood c.1760.



An eight day brass dial longcase clock by John Wood of Grantham c.1770.

This eight day clock has a handsome oak case with an architecturally topped hood. In his eight day clocks John Wood used the rack striking mechanism and in this clock it is of an unusual, probably experimental design, in which the lifting piece, rack hook and warning detent are combined in a single component on the front plate.



A 30 hr. painted dial longcase clock and movement by John Wood of Grantham c.1780.

This small oak cased clock has an 11 inch painted dial of the early form with gilt spandrels and non-matching steel hands. As is usual the rope driven 30hr. movement uses the count wheel striking mechanism. Note the two threaded studs in the centre of the bottom edge of the movement plates which were used for securing it to the seat board; a unique feature of many of Wood's clocks. Note also the large bell, common on all 30hr. clocks. This type of clock, intended for a cottage, was likely to be the only one of the household and the large bell meant it could be heard all over the house.



The clock pictured here is an early painted dial clock by John Wood housed in a fashionable London-quality mahogany case no doubt made originally for a gentleman's residence. As longcase clocks fell out of fashion they descended down the social scale and this one finished up in a cottage of a local village. As often happened, it was necessary to reduce its height, but although it has been shortened both top and bottom it still retains some of its former dignity. Note also the calendar dial which balances the seconds dial nicely, but was rarely used in this area where the curved aperture was the norm.



*An 8 day, mahogany cased, longcase clock
by John Wood c.1780*

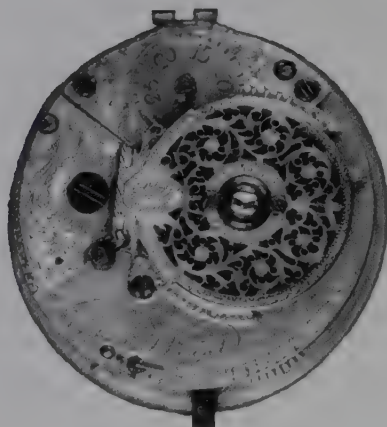


Eight day longcase clock by John Wood in an oak case with round dial c.1790.



Round dial clocks are not common in this area. This one makes up for the rather plain painted dial by having a polychrome scene on the hood beneath the scrolls of a fox in a moonlit woodland setting commissioned, no doubt, for a supporter of the local Belvoir hunt. It retains the original matching diamond-pattern steel hands which became popular at this period. The oak case has mahogany cross banding to the door, quarter reeded columns on the trunk and mahogany veneers with boxwood stringing to the hood.

The only evidence we have of John Wood's watch-making is this surviving verge movement in the Usher Collection at Lincoln. The movement, numbered 851, is typical of the late 18th. early 19th. century style with diamond endstone and Tompion regulator.



Glossary and index of terms used in the text

Anchor escapement -- sometimes called a recoil escapement. The most common escapement used in clocks - developed c.1680 it replaced the earlier verge escapement. See page 39

Arabic - a style of numerals 1,2,3 etc. as an alternative to the Roman style of numbering

Arbor - the axle or shaft on which the wheels and pinions of the gear train are mounted.

Arch dial - one which has an arched top - usually in clock dials it is strictly speaking a broken arch shape as it has a shoulder at each side from which the arch springs

Automaton - a clock with moving figures operated by the clockwork - a cuckoo clock is a form of automaton clock

Back cock - the bracket, usually at the back of the movement, from which the pendulum is suspended. See page 45

Balance cock - a term used in watch work for the bracket which provides the top bearing of the balance wheel pivot - in early watches it was often round and covered the diameter of the balance wheel to protect it from careless handling. - English cocks had one foot but in French work it more usually had a foot at each side and formed a bridge. See page 113

Balance wheel - was used on early lantern clocks and later, together with the balance spring, it was the time keeping element of a watch escapement. See pages 113

Balance staff - the arbor of the balance wheel with its fine pivots was the most delicate part of the mechanism which frequently broke if the watch was dropped.

Blued steel - polished steel when heated can acquire various shades of blue often used to colour the screws and hands of watches and clocks.

Barrel - or spring barrel - the flat cylindrical drum which houses the mainspring of the clock or watch.

Bellows - employed in organ or cuckoo clocks to produce the notes from the organ pipes. See page 94

Boule work - a form of marquetry using thin sheets of brass and tortoiseshell or turtle shell invented in the 18th century by Charles André Boule in France and used for many types of furniture including clock cases. See page 97.

Brocot escapement - a form of pin pallet escapement attributed to a Frenchman of that name and often used as a visible escapement in front of the dial. See page 98

Brocot suspension - another invention which was incorporated into the back cock and enabled the pendulum length to be adjusted from the front of the clock by a small squared shaft above the XII numeral of the dial. Many silk suspension clocks were converted to this system.

Calendar work - the mechanism of a clock or watch which shows the date and sometimes more comprehensive information e.g. day month and year - more complicated are those which are termed 'perpetual calendar work' which take into account the changes due to leap years.

Chapter ring - the ring engraved with the hour numerals and minute divisions of a clock dial often silvered and applied to the dial sheet as a separate component - later engraved directly onto the dial sheet. See page 16 and 19

Collet - the turned brass hub or ferrule used to attach the wheel of a clock to its arbor - a dating feature for movements - early work sometimes had the wheels riveted to collets formed from the arbor itself or very small brass dome shaped collets which became longer in later clocks.

Compensation balance - a balance wheel designed to reduce errors such as the error attributed to the effects of changing temperature upon the balance spring.

Compensation pendulum - a pendulum designed to reduce errors due to variation in the length of the rod with temperature change - usually found on regulator clocks. Wooden pendulum rods were sometimes employed as they were less subject to this effect. See page 302

Countwheel - used in the striking train to determine the number of blows struck at each hour - sometimes called a 'locking wheel'. See page 41

Cross banding - a cabinet making technique in which a band of veneer is laid with its grain at right angles to the edge of the panel, often in a different and contrasting coloured wood to the main panel. Oak with mahogany cross-banding was very popular from the late 18th century for many types of furniture. See page 57

Cylinder escapement - a watch escapement also known as the 'horizontal escapement' - invented by Thomas Tompion and improved by George Graham - it was not much used by the English but taken up on the Continent particularly enthusiastically by the Swiss in the 19th century. See page 113

Dead beat escapement - Invented by George Graham c1715 and proved to be more accurate than the anchor. It has no recoil and used extensively for regulator clocks. The lever watch escapement is, to a large extent, a development of this invention. See page 301

Depth - a term used to describe the amount of engagement or intersection of a toothed wheel and pinion or the pallets with an escape wheel.

Detached escapement - used to describe the escapements of watches with later developments of the lever escapement in which the balance wheel becomes increasingly free of the impulse. See page 114

Detent - a form of stop, pawl or click; also a type of chronometer escapement. See page 41 and 113

Dial - the face of a clock or watch.

Dialling - the art and science of laying out a sundial. See page 143

Dial clock - a wall clock in which the mechanism is contained in a case concealed behind the dial of the clock. See page 77

Drop dial clock - a similar wall clock but one whose longer pendulum is housed in a short trunk which projects below the clock dial surround. See page 78

Drum clock - a clock which has the movement and dial contained in a cylindrical drum - often used by Paris makers of the 19th century and which enabled them to fit them to a variety of sculptural cases provided with standard diameter apertures.

Duplex escapement - a watch escapement whose escape wheel has a double set of teeth. Invented c.1850. See page 113

Escapement - the parts of the mechanism which allow the escape wheel teeth to be released or 'escape' one at a time at intervals determined by the pendulum or balance wheel.

False plate - a plate fitted between the dial and movement of a clock to facilitate the attachment by the dial pillars in a convenient position on the front plate of the movement, particularly necessary for painted dial 8-day clocks. They often have the name of the dial maker cast in. See page 21

Fly - a rotating vane on the last arbor of the striking train by which its wind resistance regulates the speed of striking. See page 45.

Foliot - the earliest time keeping element of the verge escapement which comprises two horizontal arms with adjustable weights to adjust the speed of reciprocation. See page 9

French polish - a spirit and shellac based polish used extensively for all types of furniture from the early 19th century. It was very popular as it would harden over a wide range of surface finishes even if they had been previously waxed. Much early furniture which had previously had an oiled or waxed finish was refinished with this medium.

Fusée - a spirally grooved conical pulley used to equalise the power of a mainspring - much used by English makers in both clocks and watches. Early examples used cat gut between the spring barrel and fusée but later a fine bicycle-type chain was used in watches and better class clocks. See page 110

Gathering pallet - the pin or pallet which gathers the teeth in a rack striking movement. See page 46

Geneva movement - in this type of watch movement the wheels are each pivoted in a separate bar or cock instead of using a solid top-plate. Watches from this region were imported in huge numbers and were generally referred to as 'Genevas'.

Gilding - where the surface is covered in gold leaf. The early method of gilding metal was by first covering the surface with mercury and then laying on gold leaf or powdered gold. When heated the mercury evaporated leaving the gold alloyed to the metal surface. It is now deemed as a very dangerous practice and has been superseded by electroplating. Ormolu, much used by the French, is gilded bronze. Wooden and non metallic surfaces are gilded by using leaf with a water or resin based size.

Going barrel - an alternative to the fusée drive in which the spring barrel is combined with the main driving wheel to supply power directly into the train of wheels. Much used by most of the Continental and American makers for watches and clocks who realised that the fusée was not really necessary when using a lever or anchor escapement. See page 108

Gnomon - also known as the 'style' which casts the shadow on the plate of a sundial. See page 143

Grandfather clock - a common name for the longcase clock. The name was coined by the popularity of a late 19th century composer of a song to describe an old-fashioned domestic clock - prior to this they were referred to as 'longcase' or 'case' clocks to distinguish them from the earlier lantern type or wall clocks. See page 15

Grid iron pendulum - a type of temperature compensated pendulum invented by John Harrison in 1725 which used multiple rods of iron and brass. See pages 302

Gut - a strong cord made of twisted sheep's intestine still used for the weight lines of clocks and fusée lines.

Hair spring - an alternative name for the balance spring of a watch.

Hall mark - a marking system used to indicate the quality of gold and silver articles enforced by British law and indicating the place and date of assaying the quality of the metal and is usually accompanied by a maker's punch mark.

Jewels - were used in watches and sometimes in clocks in places to reduce wear - originally natural stones such as ruby, sapphire and garnet were used but were later replaced by synthetic stones. See page 114

Lantern clock - the earliest form of English domestic clock. See page 11

Lantern pinion - a pinion formed by wire pins held between two small discs. Frequently used by Black Forest and American makers but not favoured by English makers. See page 101

Lacquer - a type of varnish made from coloured resins and used by the Japanese and Chinese as a decorative finish for furniture. Also a term for a transparent protective coating for polished metal. Originally made from bleached shellac and spirit - modern lacquers are cellulose based and less inclined to darken with age.

Lever escapement - a watch escapement invented c1760 and after many years of development became the most successful for mechanical watches. See pages 114 and 123

Lines of latitude and longitude - imaginary lines on the surface of the globe. Those of latitude are drawn east to west and defined as the angular distance in degrees north or south of the equator which is taken as 0 degrees. Those of longitude run north and south between the poles and divide the globe into 360 degrees. The earth's rotation means that each degree takes 4 minutes. Greenwich in England is defined as 0 degrees.

Local time - or solar time is that told by a sundial at a particular place. See page 144

Maintaining power - the method of continuing power in the driving train during the winding of weight or fusée driven clock or watch. See page 302

Marquetry - a form of inlay using veneers of different and sometimes coloured woods often using naturalistic designs - bird and flower was much used by the Dutch furniture makers. See page 51

Matting - a non reflective surface finish for metals. Often used for the dial centres of brass dial clocks. See page 17

Mean time - or Greenwich mean time is the time as indicated by a clock at Greenwich. The difference between this and solar time is known as the equation of time. See page 144

Norwich clock - a type of weight driven wall clock popular with the makers of that area. See page 74

Passing strike - the simplest form of striking in which one blow is struck at each hour. The hammer is operated by a pin on the motion work.

Pair case watch - a watch with an inner and outer case to prevent the ingress of dirt etc. entering the movement via the hole for the winding key. Some early watches had a further third case often decorated and pierced. See page 111

Pallet - the part of the escapement which interrupts the teeth of the escape wheel and transmits the impulse to the pendulum or balance wheel. They are often jewelled particularly in watch work to reduce wear. See page 39

Pendant - the part of a watch where the bow or ring is fitted used to attach the watch chain or ribbon. The winding button of the keyless watch also occupies this position.

Pediment - the top of the clock hood, often of architectural, caddy or scroll design.

Pillar - the distance piece separating the plates of a clock or watch. A dating feature of clock movements in that the earlier ones were often turned with rings, fins and knops becoming more plain in later work although some provincial makers used plain square iron section throughout. Early watch pillars were often square and shaped, polished and gilded becoming round and plain after c. 1800.

Pivot - the smaller diameter at the end of an arbor which with the hole in the plate becomes a bearing of the wheel work.

Plates - the metal or wooden parts of the movement between which the trains of gears were pivoted. See page 35

Platform escapement - a complete balance wheel escapement mounted on an independent rectangular plate often used in carriage clocks.

Rack striking - a design of striking which became in common use from the early 18th century usually used for 8-day clocks and superior in some ways to the older count wheel system. See page 44

Recoil - an anchor escapement, in good condition, will impulse the pendulum sufficiently to drive the escape wheel momentarily backwards. Known as the recoil, it shows there is sufficient impulse to maintain reliable operation, although it does introduce additional wear in the gear train. The dead beat escapement is designed to work without recoil.

Rebushing - a frequently required repair to old clocks to overcome wear in the pivot holes of the plates. The hole is enlarged and a small brass bush is riveted in place to restore the hole size and location.

Regulator a term for a clock specifically designed to improve its accuracy by incorporating a variety of additional work such as maintaining power, temperature compensation, and a more accurate dead beat escapement. Many watchmakers' shops had this type of longcase clock with a glazed door which was used to time the clocks and watches they had repaired.

Repeater - a clock or watch in which the striking of the last hour and quarter (and sometimes minute) could be repeated at will.

Repoussé a form of metal decoration where the design was achieved by hammering and punching from the back to produce a raised scene to the front. Often used for the outer case of 18th century pair cased watches in gold or silver. See page 111

Shellac - a resinous substance used as an adhesive in watchwork and when diluted as coating or polish for metal and wood. See Lacquer.

Silvering - a process of finishing metal - particularly clock dials - in which a thin layer of silver is chemically deposited on the surface. See page 16

Skeleton clock - a type of clock popular from the 1850s in which the plates are cut away to show as much of the wheel work as possible. Some were complicated with musical striking and unusual escapements. They were protected from dust by a glass dome. See page 109

Solder - a substance used for the joining of metals using heat. Two types are used in horology: soft solder, which is an alloy of tin and lead and hard solder which is an alloy of silver and tin. Soft solder was generally frowned upon in horological work.

Spandrel - the corner space made when a circle is fitted inside a square. Brass dial clocks employed a cast brass decoration in this position and painted dial clocks used a painted or some times a gilded design. A useful dating feature as their designs evolved over time.

Stop work - a device which restricts the extent to which the mainspring can be wound. In some cases this was necessary to prevent damage to the fusée chain or gut and in others to ensure that only the more constant middle part of a clock spring was used in the interest of accuracy.

Suspension - the means by which the pendulum is hung - sometimes on a knife-edge as in verge clocks or by a silk thread favoured by earlier French makers or by a thin ribbon of steel used by English and American makers.

Throw - a form of hand driven lathe used by clock and watchmakers.

Timepiece - a clock which does not strike the hours - it tells the time of day only by the dial.

Ting Tang - a striking system using two bells or gongs of different tone and often used for quarter striking clocks where one ting tang is the first quarter, two for the half hour etc.

Train - a succession of wheels and pinions geared together in a watch or clock.

Turns - a primitive form of small lathe hand driven by a bow used principally by watchmakers.

Turret clock - a large clock used in a church tower or turret - some drove external hands but some struck the hours only.

Unbreakable glass - developed particularly for wrist watches made of a plastic such as Perspex or Celluloid.

Up and down dial - a subsidiary dial to show the state of mainspring winding often used on chronometers.

Verge escapement - the earliest form of escapement for clocks and watches and replaced eventually by the more accurate anchor. See page 11 and 113

Veneer - thin slice of wood usually of decorative grain glued to the carcass of a piece of furniture which economised in the use of expensive woods and provide a more stable panel. Early veneers were saw cut but later thinner knife cut veneers were used. See page 51

Vernier - a method of division, invented in 1631 by Pierre Vernier, which enabled readings of one tenth of a division to be read. Used in measuring instruments and the scales of barometers. See page 137

BIBLIOGRAPHY

The following is a small selection of more specialised books which, along with many others, are available from the Horological Booksellers. Some should be available from your local library.

The Longcase Clock reference book in 2 volumes by John Robey pub. by Mayfield books

The White Dial Clocks the compete guide by Brian Loomes.

The Brass Dial Clock by Brian Loomes.

Grandfather Clocks and their Cases by Brian Loomes.

Lantern Clocks to be published shortly by Brian Loomes.

Watch and Clockmakers of the World by Brian Loomes.
plus other titles by the same author

The English Dial Clock by Ronald Rose

Collectable Clocks, 1840-1940 by Alan and Rita Shenton

English 30hr Clocks by Darken and Hooper.

Barometers a series of books by Edwin Banfield and others pub. by Baras Books.

Pocket Watches of the 18th and 19th century by Alan Shenton.

A Brief History of the Black Forest Clock pub. by Deutsches Urenmuseum Furtwangen

American Shelf and Wall Clocks a pictorial history by Robert W D Hall

Clocks a monthly magazine, edited by John Hunter, which covers a wide range of horological subjects.

Antiquarian Horology the quarterly journal of the Antiquarian Horological Society

Horological Journal the monthly publication of the British Horological Institute (the B.H.I.)

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Photo Denzil Watson

Hugh Watson was born in 1937 and educated, together with his elder brother and sister, at Ilkeston Grammar School. His leaving school coincided with his parents retiring to their native Lincolnshire. Hugh continued his education at Lincoln Technical College whilst serving a student apprenticeship as a distribution engineer with the Electricity Authority.

His interest in clocks began at an early age; when ever he stayed for his annual weeks visit to his maternal grandmother in Lincoln, he was always greeted by "Oh Hugh, I'm pleased you have come, you will be able to get my clock going".

Getting the clock going was not a major problem, apparently it only needed the weights re-hanging and the occasional squirt of cycle oil. It is likely that Grandma' Watson stopped the clock as soon as he departed but it sowed the seeds of interest and a belief, albeit mistaken, that he had a natural talent for such things.

Married to Doreen for 46 years with a son Denzil; Hugh has lived and worked in Lincolnshire for over 40 years. He helped arrange an exhibition some years ago of locally made clocks and watches in Grantham Museum which proved very popular. His catalogue of the exhibits sold very well so he resolved to write a more comprehensive account. Retirement led to more time to devote to his hobbies. Recognised as an expert on provincial horological matters this book is the result of many years of research and experience.



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Keeping Time



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