

A
SHORT HISTORY
OF
DIAMOND CUTTING.

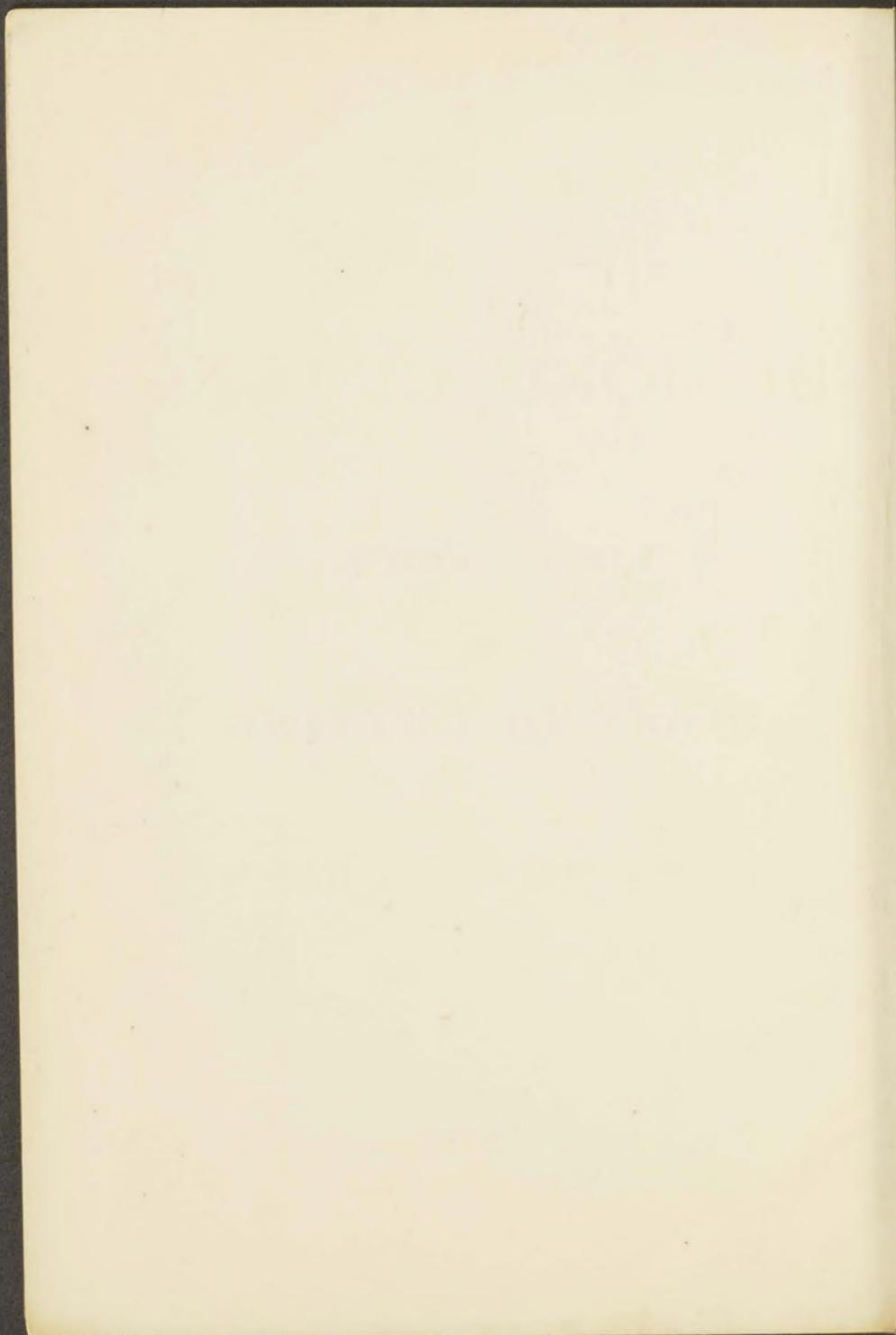
BY
ARTHUR SCOTT, F.R.G.S.,
AND
LEWIS ATKINSON.

WITH A PREFACE BY
EDWIN W. STREETER, Esq., F.R.G.S., &c., &c.

LONDON:
HAMILTON ADAMS AND CO.,
32 PATERNOSTER ROW.

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[post 1887]

RICHARD CLAY AND SONS,
LONDON AND BUNGAY.

PREFACE.

I AM very pleased to see that earnest endeavours are being made to restore to this country the art of diamond cutting, and by so doing giving good employment to numerous work-people of both sexes at a time when the labour market is so overstocked. For over one hundred years such work has been chiefly done abroad, and by foreign labour; but the old English cutting (so termed in the trade) has always been considered as the highest type of workmanship. The art of cleaving is so improved, and the rough material is so plentiful, that there is no need to consider the weight as formerly, consequently the present even surpasses that of an earlier date. As a specimen of English cutting we mention the *Orange*, weighing about one hundred and fifteen carats, cut this year. With regard to coloured gems the English lapidaries are unrivalled, and acknowledged so all over the world. By the word gem I

mean ruby, sapphire, emerald, opal, and cat's-eye : all other coloured stones come under the title of semi precious stones, many of them very beautiful in themselves, but generally of a much smaller value. But as far as burning and dyeing of precious stones, to give them artificial colours, the foreigner takes the precedence.

ED. W. STREETER.

A SHORT HISTORY OF DIAMOND CUTTING.

OBSERVANT readers of the scientific and other papers issued during the last few months will not have failed to remark sundry intelligent articles devoted to the subject of diamond cutting. More than two hundred years ago this industry held an important position in England, and provided occupation for a large number of hands. The workmen were almost all Jews or of Jewish origin. Religious intolerance drove them out of the country, when the bulk of them took refuge in Holland, and very soon succeeded in establishing their trade in Amsterdam and Antwerp upon a sound and firm basis, and having carried with them the secrets of their art they feared no rivalry. Thus the profits of an interesting and lucrative craft were, for the time being, completely lost to this country, which thenceforth depended upon the Dutch capital for the treatment of the diamonds sent to them from London at great risk and expense; and it was not till somewhere about 1871 that any attempt was made here to revive the secret of cutting. The progress was slow, the workers limited in number;

but the energy and intelligence of a few persevering men finally swept away all obstacles, and proved the possibility of restoring the trade to these Islands. To do this effectually, by following up the efforts of recent years, is the task to which the Diamond Cutting Company has resolutely set itself, undaunted by the fact that they will have to reverse the course of a stream which for two centuries has borne to the foreigner the profits we have been deprived of through the intolerance of our forefathers.

The history of diamond cutting is full of interest, and we purpose laying before the public a few particulars referring to its origin as culled from the notes of various writers.

M. Dieulafait¹ and Mr. Streeter,² in their admirable works on diamonds and other precious stones, give exhaustive details upon everything connected with the discovery, treatment, and value of gems; and to these works (on sale at the Exhibition) we would refer all those who take a more than passing interest in the subject, confining ourselves in the following pages to such information as will throw a light on the origin and progress of diamond cutting, which the exhibit in the Glasgow Exhibition will give an inquiring public the opportunity of witnessing, and show the skill and patience required for the success of such delicate operations.

¹ *Diamonds and Precious Stones*, by Louis Dieulafait: Blackie and Son, London, 1874.

² *Precious Stones and Gems*, fourth edition, by Edwin W. Streeter, F.R.G.S.: Bell and Son, London, 1886.

Mr. Streeter tells us that in ancient times the natives of India and China practised the art of the lapidary in a rough kind of way, but as they preferred weight to brilliancy, and size to effectiveness, they generally contented themselves with rubbing down the angles of the stones, polishing the surfaces and retaining the fanciful shapes each stone possessed when discovered; they were, nevertheless, the probable pioneers of the art, but it was left to Western energy to make the onward step. In the year 1290, a guild of gem polishers and cutters was formed in Paris; and in 1373, diamonds were polished at Nürnberg, but the method employed is still a secret. There also the famed "table-cutters" formed themselves into a guild at a later date, in conjunction with the stone-engravers. In 1434, Guttenberg learnt gem cutting and polishing of Andreas Drytzen, of Strasbourg. In the year 1590, Claudius de la Croix, a Frenchman, carried on the cutting of rose-garnets at Nürnberg.

Diamonds have been found on Church ornaments of great antiquity, and unknown periods, having upper table-like surfaces with four polished borders, and the lower sides cut as four-sided prisms or pyramids.

The inventory of the jewels of Louis of Anjou, drawn up between 1360 and 1368, included a number of cut diamonds.

The art of diamond polishing in Paris can be traced back to the beginning of the fifteenth century; and in 1879 there still existed in that capital a cross-way

called La Courarie, the abode of the diamond workers more than two hundred and fifty years ago.

In 1407, diamond cutting made great strides under Hermann, an able artist. A sumptuous banquet was given at the Louvre by the Duke of Burgundy to the King of France and his Court, and the noble guests received eleven diamonds set in gold, of which the value has been computed at £117 18s. 0d. sterling; although imperfectly cut, these gems evidenced the intention to heighten the play of light, and thus give greater satisfaction to the recipients.

It was in Bruges, in 1456, that Louis de Berquem, who had long lived in Paris, made known his discovery of a mode of cutting the diamond into regular facets, which increased the play of light so considerably, and so thoroughly revolutionized the jeweller's art, that his contemporaries regarded him as the father of diamond polishing and cutting. Ten years later a guild of diamond cutters and lapidaries was established in Bruges.

In 1475, Louis de Berquem made his first experiment to obtain *the perfect cut* on three rough diamonds of extraordinary dimensions, sent to him by Charles the Bold, Duke of Burgundy. No. 1, historically known as the "Beau Sancy," was a thick stone cut all over with facets, which Mr. Streeter esteems to be the work of an Indian lapidary. No. 2 passed into the hands of Pope Sixtus IV. No. 3 was presented to Louis XI. by the Duke of Burgundy, who is said, by Louis de Berquem's grandson Robert, to have paid 3000 ducats for the work.

Many of Louis's pupils went to Antwerp, some to Amsterdam, and others to Paris. Diamond cutting did not then succeed in Paris, but under the powerful influence of Cardinal Mazarin, and owing to the taste for diamonds among the higher classes in France, the art prospered until the latter part of the seventeenth century, when the trade became practically extinct, only seven masters remaining in the city, and these gained but a scanty and precarious living. Even to this day the trade is on a comparatively limited footing.

London has always possessed lapidaries of great ability, the "old English cutting" (so termed in the trade) being regarded as a type of the best workmanship; yet the competition of skilled hands in Holland vastly exceeds that of England, the labour is less expensive, and the demand for it more general than here. In dealing with coloured stones the English lapidaries are unrivalled.

When at the height of her power, Portugal was the seat of a very extensive trade carried on by Jewish lapidaries; those at Lisbon raised their art to a perfection never, perhaps, surpassed, many of the old Lisbon-cut gems exhibiting a beauty of workmanship which taxes all the skill of our first lapidaries to rival. Religious fanaticism and bigotry at length prevailed against both merchants and lapidaries, who, with the rest of their countrymen, were expelled also from Portugal in the latter part of the sixteenth century, and the art was lost to Lisbon.

The exiled gem merchants and lapidaries found an

asylum in Holland ; and since that time Amsterdam has been one of the chief centres of the diamond trade, and remains to this day the principal seat of diamond cutting. The value of London workmanship is still evidenced by the fact that at the present time old English-cut diamonds will always command a very high price.

Any one visiting one of the largest cutting factories in Amsterdam will be shown a model of the *Koh-i-noor*, and told that it was re-cut and polished at the factory, when it is an undisputed fact that in consequence of the keen interest evidenced by Her Most Gracious Majesty the Queen and the late Prince Consort in the manipulation of this wonderful gem, Messrs. Garrard, the Queen's jewellers, at their instance, had a room specially fitted up at their present establishment in the Haymarket, where Her Majesty herself, and nearly all the members of the Royal family, personally assisted in putting on the facets, which for perfection are unequalled ; the Duke of Wellington personally putting on the first. There are at least seventy-two facets on the stone, which still retains a vitreous lustre, and a few extra carats' weight are preserved at the expense of its beauty. The two celebrated diamonds belonging to the Shah of Persia, the *Daria-i-noor* (the Brilliant Sea) and the *Koh-i-noor* (the Mountain of Light,—which must not be confounded with the *Koh-i-noor* in the possession of the Queen), are both specimens of irregular cutting.

Indian stones of such imperfect cutting are called

Labora, and when sent to Europe are re-cut and polished.

We will now proceed to give Mr. Streeter's description of the process of diamond cutting, as published in his fourth edition of *Precious Stones and Gems*: visitors desirous of observing the workmen engaged at the Diamond Cutting Company's stall will find this book a help.

DIAMOND DUST.

The diamond, the hardest of all known bodies, can only be manipulated by means of diamond in the form of a fine powder. This powder is prepared generally from faulty diamonds, and from the refuse in cleaving and cutting, which, being put into a mortar of hardened steel, is beaten until it is fine enough for use. In 1876 this powder was worth from 8s. to 10s. a carat, but is now much cheaper.

CLEAVING OR SPLITTING DIAMONDS.

The value of cleaving or splitting of diamonds is that should they be flawed or spotted they can be reduced to smaller stones by a fresh cleavage; by this means the flaws or spots are removed.

To avail himself of the cleavage, the workman must have an intimate acquaintance with the structure of the crystal. Diamonds can only be split along certain definite lines of cleavage, known to the trade as the "cleaving vein."

CUTTING AND POLISHING OF DIAMONDS.

a. The stone is first given to the *cleaver* or *splitter*, who examines it carefully in order to ascertain how he can develop or bring out every property to the best advantage, with as little loss of weight as possible. He must discover every imperfection. His tool is a wooden *bâton*, having at one end a little projecting ferrule, containing cement of brick-dust and resin. He softens this cement by warming it over a small fire, lamp, or gas-jet, lays the diamond in it, allowing the stone to remain there until the whole is quite cold, by which time the diamond is firmly embedded. He then takes another diamond with sharp edges, and with it cuts a notch or mark in the one he is going to cleave. This mark is generally in the shape of a **V**, and determines where the cleavage shall take place. This would be very difficult for an unpractised eye and hand. He catches every particle of dust in a box, with a sieve in it, which separates the dust of the cement from that of the diamond. When the notch is made deep enough in the diamond, the wooden *bâton* is set upright in a block of lead. With one hand he introduces the blunt edge of a little steel blade into the notch made, with the other he strikes the blade a quick sharp blow with a steel rod, and the stone is split. This is always a serious operation, for if any want of skill were shown by the workman the stone would be injured, perhaps irretrievably. The stone thus divided is taken out of the cement, and the

process is repeated until the diamond has received the rough form decided on by the workman. The process of cleaving, however, does not apply to *all* stones, but in the proportion of about one in ten.

b. The stone then goes to the *cutter*, who has similar instruments for his work. Instead, however, of cutting notches in the diamond, he works or rubs one against another until both are quite smooth, and thus brings out the facets roughly. The process is very laborious, and the workman has to wear thick leather gloves to preserve his hands. From time to time the stones must be looked at, and the powder removed from them with a fine camel-hair brush, and the facets touched with the tongue to keep them damp. The cutter is in reality the architect: it is he who lays the foundation, fixes the form, and shapes the stone. If it is thick enough for a brilliant, he forms the "table" first, and then, successively, all the facets.

Only highly skilled and very honest artisans are intrusted with the cutting of very large diamonds. When the diamond passes from the cutter's hand it is by no means perfect. The lustre and transparency for which it is so much valued are only fully developed in the hands of the polisher.

The polishing of the diamond is effected on flat wheels, propelled by steam-power, which make from 2000 to 2500 revolutions per minute. Before these silently revolving discs you will see men so intent upon their work that they have eyes for nothing else; for, notwithstanding the machinery, the skill of the workman is of primal importance, and he must have a

perfect knowledge of the grain of the stone, as diamonds can only be polished with the grain. Should the workman place the diamond on the mill against the grain, the diamond, being the harder substance, instead of being polished, would cut a groove out of the mill or disc.

In the treatment of gems, precious and semi-precious stones, other than the diamond, the lapidary arranges his work much in the same manner as the diamond cutter, but he uses other means for the cutting and polishing, according to the nature of the stone to be worked.

Different forms of cutting receive different names, which are often extended to the finished stone itself. For instance, if you hear of a "brilliant" with a flat top, or "rose" with a faceted top, you know at once it is a diamond, although many other precious stones receive the same form.

The brilliant is the most favourable form for enhancing the play of colour, and is therefore most effective for all precious and most of the semi-precious stones. It is said to be the crowning invention in the art of diamond cutting, and was due originally to Vincenzo Peruzzi, of Venice, which city was, in his time, the chief seat of the diamond trade ; but to-day the cutting of diamonds is brought to perfection.

As a brilliant the diamond has the form of two cones united by their bases ; the upper one being so truncated as to give a large plane surface, the lower one much less so, in fact terminating almost in a point. The stone being set with the broad plane

uppermost, produces the effect of great depth of light, and its many facets increase what is termed its play of light ; the density of the material naturally enlarging the refractive power, and thereby increasing its brilliancy. The plane surface at the top is called the *table* ; the bottom plane is called the *culet* or *culette* ; the junction of the upper truncated pyramid with the lower is the *girdle*, and the lower pointed portion is the *pavilion*. Between the table and the girdle are thirty-two facets, and below the girdle twenty-four. These facets receive their names from their forms. Star facets are those whose edges abut on the table, the others are generally triangular. According to the number of facets, the brilliant is said to be single or double cut. The brilliant depends greatly upon the faceting for its exceeding beauty. The English make the girdle rather sharp, the Dutch rather broader. The former method brings out the play of light better.

A form called the "star" was invented by M. Caire, to take advantage of the clear portions of rough diamonds which could not be otherwise used without great sacrifice of material. The star-cut diamond, as now worn, must be cut with extreme exactitude, avoiding the very slightest irregularity.

Brilliolettes are pear-shaped, round, oval stones, having neither table, culette, nor edge, but covered equally with triangular-shaped facets, and frequently pierced through in order that they may be worn suspended. They are rare and, when a pair can be obtained exactly matching, are of great value.

The "rose" form has been in use since 1520, and resembles an opening rose-bud. It is chosen when the diamond is too thin to be cut into a brilliant. The characteristic of the "rose" is that it is flat below, and forms a hemisphere or low pyramid above, covered with small facets. A circular stone is best for the rose.

Although the rose gives out a strong fire, and sends its rays as far as a brilliant, yet in the latter the play of light is more remarkable, because the stone is deeper and the facets exactly corresponding, which makes the prismatic colours more distinct. A Dutch rose has twenty-four facets; the rose *recoupée* thirty-six; and the Brabant rose twelve, or even fewer, only less raised than the Dutch.

The other cuts are called, respectively, the Indian cut, the point cut, portrait stones, the steep cut or graduated form, and the convex or *cabochon*.

The particular merits, qualities, and value of gems and precious stones can only be found by a perusal of the works above mentioned, which would amply repay the reader, as also Mr. Streeter's work on the *Great Diamonds of the World, with their History, &c.*

In the full knowledge of the fact that London is the greatest emporium and market in the world for diamonds and other precious stones which are found in the numerous possessions of the British Crown—and notably at the Cape—in greater abundance than in those of any other Power, it is a monstrous anomaly that hitherto all this natural wealth should have had

to be intrusted to our Dutch neighbours for manipulation. London men are not generally backward in initiative, especially where profit is certain. The establishment of the Diamond Cutting Company shows an awakening interest in the vital question of finding remunerative labour for many thousands of men, women, and children. It is but a nucleus, but, if we mistake not, the industry will before long take such dimensions that London will ultimately become, not only the importer, but also the sole manipulator and vendor, of the precious merchandise.

We close our remarks by quoting an article from the *Statist* of the 29th of October, 1887.

THE DIAMOND CUTTING INDUSTRY.

LONDON V. AMSTERDAM.

At the present time, when complaints are heard on all sides of the loss of trade, we have actually staring us in the face an industry which the bigoted short-sightedness of our forefathers, some two hundred years ago, forced away from our own shores; and anything we can do to awaken our countrymen from their lethargy, and re-establish what was once absolutely our own, should be unhesitatingly done with that object.

As a matter of fact, the most important of the diamond-producing countries are portions of the British Empire; but, monstrous as it may appear, manufacturing in connection with diamonds is chiefly

in the hands of foreigners, and this paradoxical condition of affairs is a standing reproach to our shortsightedness. A few statistics—though we do not propose to deal with the matter from a statistical stand-point—will be useful to show how enormous is the business which we are actually losing.

From official sources we have ascertained that the rough stones exported from the Cape during the four years 1883-8 weighed no less than ten and a quarter millions of carats, valued at eleven millions and a half sterling, but no reliable data can be obtained prior to September, 1882. Of course no accurate estimate can be made of diamonds taken away on the person, or (we may add) stolen or smuggled away. Further, it is estimated that thirty-three millions of carats, realizing upwards of forty millions sterling, had been extracted from the mines of Kimberley, De Beer, Bultfontein, and Dutoitspan collectively, up to the end of 1886.

The diamond cutting industry in Amsterdam, which employs in all some 10,000 persons, appears to have been in a state of transition for some years past, and it is a known fact that much of the capital employed in this lucrative enterprise is controlled by London and Paris houses. The original system, by which the owners of the so-called diamond cutting mills in Holland simply provided the motive power, lighting, and necessary space at fixed rates to contracting cutters, seems to be gradually giving way to the establishment of large diamond cutting works, employing regular cutters, who are paid wages according to their capa-

bility. The number of mills in existence in the Dutch capital cannot be less than 6,000 to 8,000. Not only is this number rapidly increasing, but the cutting industry has extended from Amsterdam to Antwerp, to Hanau, near Frankfort—where the diamond cutting and polishing is almost exclusively for London account—and even to Switzerland.

It would be difficult, in fact impossible, to give anything approaching to correct statistics of the quantity of diamonds passing through the Amsterdam mills, owing to the special character of the trade, and the fact that the stones, both rough and cut, are carried backwards and forwards between Amsterdam and the markets on the persons of the dealers, thus escaping observation of the State authorities, but also from the number of private cutters engaged in the business. The best judges, however, estimate that about 20,000 carats of rough diamonds are weekly manipulated by the Amsterdam craftsmen.

As regards wages it is not easy for us to give any absolute figures which would serve as a basis, nearly all the work being done by the “piece,” the price of which varies with its nature and the size and value of the stones ; hence the tariff has a very wide range. A skilled cleaver and polisher can almost command his own price. In the large establishments which employ cutters the wages paid are about as follows :—

Women and girls, for rose cutting	25s. to	35s.	per week
Cutters.....	35s. to	75s.	„ „
Cleavers.....	50s. to	130s.	„ „
Polishers	40s. to	120s.	„ „

working twelve hours daily.

There is no doubt that some of the skilled and private workmen can and do earn more than the maximum figures. These workmen under the old system have to pay for space and motive power about 2s. to 2s. 6d. per day of twelve hours—the weekly rental of about 15s. per mill showing a profit of about 50 per cent., after deduction of expenses and interest on capital.

The earnings of workmen employed in the Amsterdam trade are gradually decreasing, and probably will continue to do so, as the new system of large works conducted on wages payments and with powerful mechanical appliances develops. Hence, even if the skilled English workmanship were not immediately procurable here, there would be little, if any, difficulty in inducing Amsterdam diamond workers to come to London at about the same rate of wages as hitherto paid them in Holland. The poorer Jews who are so largely engaged in this industry are nomadic, fond of change, and soon make themselves at home in new surroundings ; moreover, the surplus labour will ere long make itself felt in the Dutch capital.

Having laid the above facts before our readers, let us now turn to the influence they have upon our own position in the matter. It has been said that patriotism in the abstract or collectively is strongly present in most men. In the concrete or individually it would appear to be a *quantité négligeable* when the pocket is affected, for if the patriotic shoe did not pinch in that direction how comes it that we for generations should have permitted and fostered an industry at our very

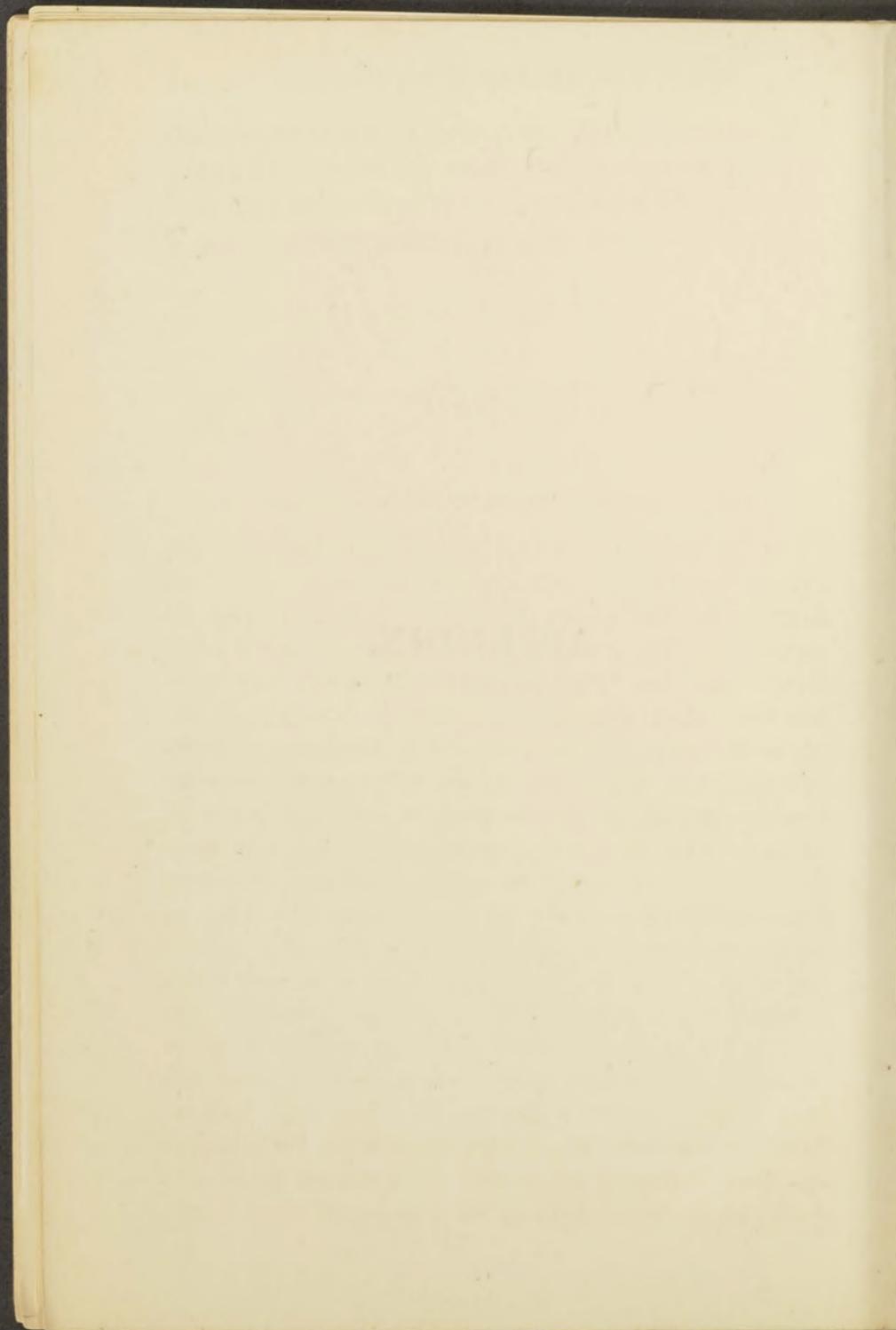
doors, knowing full well that such industry at the present time actually owes its prosperity to exports from possessions of the British Crown? Nay, we will go further, and state that while thousands of workmen are unemployed, or find it difficult to secure remuneration adequate to their skill, many influential English houses and at least one powerful financial institution are at this moment subsidizing and supporting, directly or indirectly, the Amsterdam diamond cutting industry for fear of losing customers.

There is no presumption in stating that this art would be capable of employing thousands of artisans, both male and female, and distributing in wages an amount which would reach annually, at least, half a million sterling. There are in our midst skilful and competent Englishmen, able and willing, if only properly backed up and encouraged, to implant anew in this country, and to direct with intelligence and entire success, this most lucrative business. There can be no question of our ability to erect and equip workshops equal, if not superior, to anything to be found in Holland or elsewhere, and to carry on operations at a reduced cost. The trade admits that factories solely laid out for cutting, and capable of turning out workmanship of the highest excellence, would receive hearty support, and that if such were efficiently organized they would undoubtedly be successful. Under these circumstances, it certainly appears desirable that the trade should foster any movement which may have for its object the restoring of the lost art to its ancient stronghold, and of

making world-wide the fact that British workmanship is equal to-day to any that can be procured abroad. The time has arrived for action, the field of operations is open, and the demand is greater than the supply.

FINIS.

APPENDIX.



APPENDIX.

THE DIAMOND INDUSTRY OF AMSTERDAM.

THE Consul of the United States at Amsterdam, in his last report on the trade of the Netherlands, devotes a section to the diamond trade and industry of the Dutch capital. In 1886 the import of the "rough stuffs" was very large, but not in excess of the demand for "polished goods." The prices were higher than those ruling for some time previously. This is said to be due to the operations in the diamond-fields being more expensive now than in years gone by, and also to the fact that the mines have now generally got into the hands of wealthy corporations, which put the produce in the market in such a way as to obtain fair prices. It is estimated (an accurate statement is impossible) that about 20,000 carats of rough diamonds reach the hands of the Amsterdam manufacturers each week. When finished these vary in price from 16s. to £11 per carat, while some stones command very much higher prices. The capital invested in this trade is not all Dutch; for a very large proportion of the diamonds manipulated in Amsterdam belong to London and Paris houses. Berlin, Frankfort, St. Petersburg, Moscow, Rome, Naples, Barcelona, and Madrid, as well as Paris, London and New York, are all markets for diamonds prepared in Amsterdam. Besides Antwerp, the diamond industry is carried

on extensively nowhere else. The trade is usually conducted on the cash system, credit being generally short. The aggregate paid in wages to diamond-workers in Amsterdam is about £600,000 per annum; and it is estimated that from 7,000 to 8,000 persons are employed in the industry, and in the business of buying and selling the rough and polished stones. The wages of the men engaged in the various operations of cleaning, cutting, and polishing are decreasing, because of the constant increase in the number of skilled workmen and the never-ceasing accession of apprentices. The declared export of diamonds from Amsterdam to the United States in 1886 amounted to £275,708; but this by no means represents the total export, but those the invoices of which were presented to the Consul to be certified. A large quantity is sent to Paris and London, to be despatched to America, and many diamonds are also taken in the person. [*Times*, 18th October, 1887.]

DIAMOND CUTTING.

THE public interest now being manifested on the subject of diamonds is about to be very materially increased by the fact that a company is about to be formed, under good auspices and patronage, with a view—whilst enjoying the full benefit of the large profits attached to the business—of actively developing the industry of diamond cutting in England, and of again demonstrating to the world that British-cut diamonds are as sought after to-day as they were some two centuries ago.

Such an institution, backed up as it will be by the trade, cannot fail to be successful, and it is a matter which will give rise to great astonishment that the unique advantages at our disposal should only have served as a prop to a foreign industry; and every encouragement should be given to those who are actively fostering what may safely be described as a patriotic movement,

especially at the present time, when millions sterling of subsidized foreign-manufactured goods are being imported into this country, and when the legitimately (or wilfully) unemployed are clamouring for state assistance.

If further proof were required of the superiority of British workmanship, and of the field of operation which, as a natural consequence, is thus opened up, it is the fact that Dutch-cut brilliants have actually been re-cut in London. No stronger reasons can be adduced for furthering the scheme about to be submitted to public appreciation, and it only requires British capital and British support to give the necessary interest for the industry to be developed to an extraordinary extent, and of destroying at once and for ever the popular but utterly erroneous impression that diamonds could only be cut at Amsterdam.

With perfect machinery, skilled labour, unlimited supply, and an ever-increasing demand, no element is wanting to ensure success. Even the Chinese, who were till recently prohibited from adorning their persons with the precious gem, have succumbed to the craze; and here alone, without clashing with our Dutch neighbours, there is room for thousands of British artisans, male and female—indeed, we may add (*par parenthèse*) that ladies themselves could not do better than learn to be skilful in an art to which their own sex gives its chief *raison d'être*.

The imports of rough stones amount to millions of carats yearly, nine-tenths of which come from Cape Colony; and as these can be successfully and perfectly manipulated in London, it is but fair and just that preference should be accorded to British workmen, who have now recovered their long-forgotten art, and are entitled to the sincere co-operation of the public. The moment is especially favourable for elaborating the project, as the revival of the industry in this country has received great impetus, through the practical interest shown by the Worshipful Company of Turners, ably and patriotically assisted by the Baroness Burdett-

Coutts, whose husband is the present Upper-Warden of that guild and its future master. [*Money*, Wednesday, November 30, 1887.]

DIAMOND-CUTTING.

LONDON is admitted to be the chief centre of the diamond trade of the world, and, therefore, it seems not a little anomalous that the diamond-cutting industry should be almost entirely confined to Amsterdam. But the fact is that, until towards the end of the seventeenth century, it was essentially a British industry, giving lucrative employment to a large number of Jews resident in London. They were however driven out of the country by religious persecution, and they took their art with them to Holland. Not that it became altogether extinct here, for there is at least one well-known firm of diamond-cutters doing a flourishing business in Hatton Garden, and the famous "Koh-i-Noor" diamond was, we believe, cut and finished in this country. But for nearly 200 years it has ceased to occupy an important position, and one of the main objects of this company is to revive what was formerly one of our distinctive national industries. We understand the idea has been very warmly welcomed by the diamond trade. Nor is it difficult to understand that they would be glad enough to get their work done on the spot as skilfully and cheaply as in Amsterdam, and so avoid the risk and expense of transit. There is no difficulty now about obtaining the requisite skilled labour. There seems to be no doubt that full work can be found at once for a factory of a hundred mills, and considering that there are 10,000 mills in operation on the Continent this does not appear an over-sanguine estimate, especially when it is remembered that one-eighth of the Cape diamonds alone would be sufficient for the purpose. [*Investor's Guardian*, 3rd December, 1887.]

DIAMOND CUTTING.

TO THE EDITOR OF THE TIMES.

SIR,—My attention has been drawn to some statistics given in your paper of October 18 regarding the diamond-cutting industry of Amsterdam. The public are probably not aware of the extent to which this interesting industry has been revived in London.

Nearly 200 years ago Englishmen were the finest diamond-cutters in the world, and the trade was nearly all carried on in London, and at the present time old English-cut diamonds will always fetch a very high price, as the cutting is still so much prized. Through religious persecution the cutters migrated to Amsterdam, where they have since remained. At the present time any one visiting one of the largest diamond-cutting factories in Amsterdam will be shown a model of the Koh-i-noor and told that it was cut and polished at their factory, when it is an undisputed fact that both Her Majesty the Queen and the late Prince Consort took so great an interest in the cutting that Messrs. Garrard, the Queen's jewellers, had a room specially fitted up for it to be cut in, and it was all done at Messrs. Garrard's present establishment in the Haymarket. The Duke of Wellington put the first facet on, and Her Majesty and nearly all the members of the Royal Family assisted in putting on those most perfect facets that it now has; and there are at least 72 of them on the stone.

At the time that the African diamond fields were discovered there was only one diamond-cutter in London. Dutchmen were accordingly engaged to work in London from Monday morning till Friday sunset, and they were to receive 10*l.* per week each man. There was a very large supply of rough diamonds to be

cut, so they struck several times successfully for higher wages. They would allow no person to be in the room that they worked in, being afraid that the secrets of their art might be discovered. At last they demanded 18*l.* per week each man, when they were discharged and English precious gem-cutters were put at the work. At first they were only able after a deal of trouble to cut a class of diamond in one month which they could now cut in about four days. As soon as it was clearly proved that Englishmen had once more gained the art, the Worshipful Company of Turners had their attention called to it by their Past Masters, the late Professor Tennant, the Queen's Mineralogist, and Mr. John Jones. They at once decided to give English cutters every encouragement, and have, with the valuable assistance of the Baroness and Mr. Burdett-Coutts, who are both members of this company, offered money awards in competition against the Dutch for the best cut diamonds. After several contests the Englishmen gained the first prize and most of the others. Great credit and thanks are due to this company and the Baroness and Mr. Burdett-Coutts for giving such valuable assistance to this industry.

In 1869 there was only one diamond-cutter in London, as I have already said. At the taking of the last census the census committee went to a lot of trouble to get the exact number of diamond-cutters in London, and I gave them several foreign terms and their meanings that the men might give in describing their trade, but the return was not a success, as a great number of the men put down other trades. They nearly all have some other occupation which they can return to when a depression comes on in the diamond trade, but at the present time there are now a great number actually in full work.

Up to the end of 1885 out of four of the principal mines of South Africa—viz., Kimberley, De Beers, Bultfontein, and Du Toit's Pan, no less than 33 million carats of diamonds (or more

than six and a half tons' weight) have been extracted, realizing about £40,000,000. The diamonds now discovered are nearly all found in British possessions, viz., Africa and India. Mines are now being developed in New South Wales, and yet the vast majority of the stones are still sent to foreign countries to be cut and polished, which I am sure every Englishman will consider ought not to be, especially as we have so many good workmen with no employment. With the aid of the British public and the Press the trade could be developed into a very large and thriving industry, as not only is there an immense opening for men to cut and polish the large stones, but at the present time the supply of small brilliants to use as decorations round other gems, &c., is not equal to the demand. As one of the greatest secrets connected with the trade consists in the one word "patience," there is an immense field for the employment of women.

As a nation, the Americans are the finest judges of diamonds in the world. American buyers insist on getting the finest stones and the most perfect of cutting. India takes a very large quantity of the white stones, as the natives invest their capital in them as we do in stocks and shares, but they will not take yellow or coloured diamonds nor stones with flaws or specks in them. Russia takes the large and yellow stones. China has only lately opened up her country to the diamond trade, as until recently Chinese subjects were not allowed to decorate themselves with these magnificent gems, but just recently the Empress of China has broken through that custom by wearing at Court a very superb diamond necklet, so there is now a demand in that vast continent.

In the report you quoted were these words, "Besides Antwerp, the diamond industry is carried on extensively nowhere else." If that be so where does America go to for her finest cut diamonds? Well, I am very thankful to say, London. I believe the last official report published was that America took

about £3,000,000 worth of cut diamonds annually from England.

It is a well-known fact that where the British workman has mastered his art, no matter what art that may be, he is absolutely unsurpassed. We are actually at the present time permitting the diamond-cutting industry to extend from Amsterdam to Antwerp, New York, and Paris, and even Switzerland is employing large numbers of both male and female workpeople in this art. It only requires a determined effort for us to regain it entirely as our own, and at the present time, I am glad to say, the serious attention of some of our leading men is occupied in trying to develop this industry. If any information with regard to this subject be required, I shall be most happy to give whatever I can, as it is a subject that I have studied with great interest for some years now.

In fairness to the British diamond industry, I sincerely hope you will not only let the public know these facts, but will also aid us in our endeavours to recover a lost trade.

I remain your obedient servant,

LEWIS ATKINSON, Manager of the British Diamond
Industry exhibited in the Cape of Good Hope Court,
Colonial and Indian Exhibition.

33, Brook Street, Grosvenor Square, W.

[*Times*, 4th November, 1887.]

PRESS NOTICES.

THERE is one thing, it appears, in which the British workman has not made that progress which his attainments in the past would have led one to expect. About two centuries ago, according to Mr. Lewis Atkinson, the best diamond-cutters in the world were Englishmen, and the work was nearly all done in

London. In 1869, about two years after South African diamonds had been discovered, there was only one diamond-cutter in the whole metropolis; but old English-cut diamonds still have a special value. Mr. Atkinson tells us that owing to religious persecution in days of yore, "the cutters migrated to Amsterdam where they have since remained." This would be a proof that change of country was at least productive of remarkable longevity, if the statement might be taken literally. However, it seems certain that, though the number of English diamond-cutters now in London cannot be ascertained with accuracy, there are a great many more now fully employed here than was the case some years ago. These men have shown themselves fully able to compete with Dutchmen, but all the same, as Mr. Atkinson points out, we are allowing an industry which should have its great centre here to spread over the Continent, and even to be extended to New York, for lack of energy in its development among us. Some slight idea of what employment diamond-cutting may provide may be formed when we say that from the four chief mines in South Africa, up to the close of 1885, more than six tons and a half of diamonds have been taken, which have been sold for forty millions sterling. As most of the diamonds now obtained are found in British possessions, it is extremely unsatisfactory that the great majority of them should be cut and polished in foreign countries, and at high rates of pay. The Turners' Company have done something to encourage English diamond-cutters, and the result has proved that our countrymen can produce work equal to the finest ever done, whether in Amsterdam or elsewhere abroad. [*Chronicle*, 5th November, 1887.]

DIAMOND-CUTTING.

TO THE EDITOR OF THE DAILY CHRONICLE.

SIR,—There are one or two most important facts which ought to be mentioned in reference to a letter that you published in your issue of the 11th inst. One is with regard to the number of diamond-workers now actually in employ in London. Your correspondent gives the exact number of cleavers, cutters, polishers, and setters, which would give an erroneous impression to the public, as I still maintain that no one at the present time can give the exact numbers, and your correspondent, no doubt, gave the numbers as he had got them entered on his books as subscribers to the Diamond-workers' and Jewellers' Benevolent Fund. But I am pleased to be able to contradict those numbers, as there are a great number of men that I know of who do not belong to any society of this description, and these have never been counted. Your correspondent also makes a statement that the cause of this art not flourishing in London is because the trade is monopolised by a few masters, and single workmen cannot go to the merchant direct and get work.

Now, that statement is entirely wrong, and when I give the cause I am sure you will quite understand it. The diamond merchants in Hatton Garden buy up the rough diamonds from the Cape Colony, India, Brazil, and New South Wales, and as trade exists at the present time a merchant buys a parcel of rough diamonds, say for £15,000, for which he has to pay cash, or very short credit; his object is to get them cut and polished as quickly as possible, so that he may sell them finished. Now, if he asked any London diamond-cutters and polishers to get them all done in a fortnight it would be impossible to get them done, there not being sufficient polishers in London at present; so he is compelled to send them to Amsterdam, where he gets them

finished in about a week, although of course he has the additional expense of insurance, postage, and risk in sending them to Amsterdam and getting them back again to put up with ; therefore, if the merchants could only get their diamonds cut and polished in as quick a time as they do from Amsterdam, they would much rather have their diamonds cut in London, as it would entail less expense and no risks, so would gladly support the revival of diamond-cutting in this country, if it was carried out in the proper manner and on a large scale.

Since my letter appeared in the *Times*, and also your able remarks upon it, I have had a great number of enquiries if ladies could be employed in this art, and having both cut and polished diamonds, I can speak with some authority on this subject, and I must certainly say it is a most suitable trade for both women and girls to be employed in, as for every good-sized diamond found there are at least six small ones found, and for some considerable time now there has been a greater demand for all small brilliants and roses, used so largely in ornamental work, than the supply, for the reason that men will not give their attention to small stones when they can get large ones to cut, therefore women could be employed in large numbers in two branches of this art—that is, cutting, in which one diamond is rubbed against another diamond until it is formed into the proper shape, and in this branch those of our fellow-creatures who are sadly afflicted with deafness, dumbness, or lameness could be with advantage employed ; then in the polishing branch, where machinery plays such an important part, although at very slight risk. Women would sit in front of a table, on which a cast-iron round plate revolves at the rate of 2,500 times per minute. Here it is where such great patience is needed in finding the grain so that the stone will polish, and all those lovely facets are put on to the brilliant, of which number there ought to be 58. There is no manual labour at all attached to this, and one's

interest is at once attracted in overcoming the many difficulties. I believe that a woman or girl, with a good education and quick intelligence, who took an interest in her work, and under proper tuition, would be able to polish a diamond very fairly in six months. The qualities necessary in this art are great—honest, good education, quick intelligence, great patience, and a good eyesight.—I remain, yours faithfully,

LEWIS ATKINSON.

33, Brook-street, Grosvenor-square, W.
19th November, 1887.

DIAMOND CUTTING.

THE interesting letters of Mr. L. Atkinson on the subject of diamond-cutting, which have been contributed during the past few days to two of our daily contemporaries have indeed brought to light a most anomalous and surprising state of affairs. Mr. Atkinson, their writer, than whom, perhaps, there is no greater authority on the subject in this country, points out that we have actually, at the present time in our midst, a highly lucrative industry, which, from utter callousness on our part, is not cultivated to any considerable extent. The British artisan is noted for his cleverness in diamond-cutting. Quoting from Mr. Atkinson's own words: Englishmen have ever been acknowledged to be the finest workmen of the art in the wide world. The present is an age of competition, and we must bear in mind that the Americans are taking out of our hands much of the work for which Englishmen are so peculiarly well fitted. It is necessary, therefore, to be up and doing if, at any rate, we desire to oust the foreigner from the monopoly he now appears to be enjoying in regard to this particular trade. Many thousands of men and women now in the ranks of the genuine unemployed could easily be trained in the art, for as Mr. Atkin-

son observes in one of his letters, the essentials for success are "great honesty, good education, quick intelligence, great patience, and a good eyesight." Surely these are qualities which English men and women possess in as great a degree as their neighbours. Efforts are now being earnestly directed towards restoring the lost art to its ancient stronghold, and so far the experiment has met with all the success which it most undoubtedly deserves. All—even ladies of culture—may take up the art, for while it is easily learned, the wages of a proficient are sufficiently high as to prove an attraction to those whose incomes are not so elastic as might be wished. [*City Press*, 30th November, 1887.]

