

ANCIENT ATLANTIC CROSSINGS



THE REPEATED DISCOVERY OF AMERICA

by Rod C. Mackay

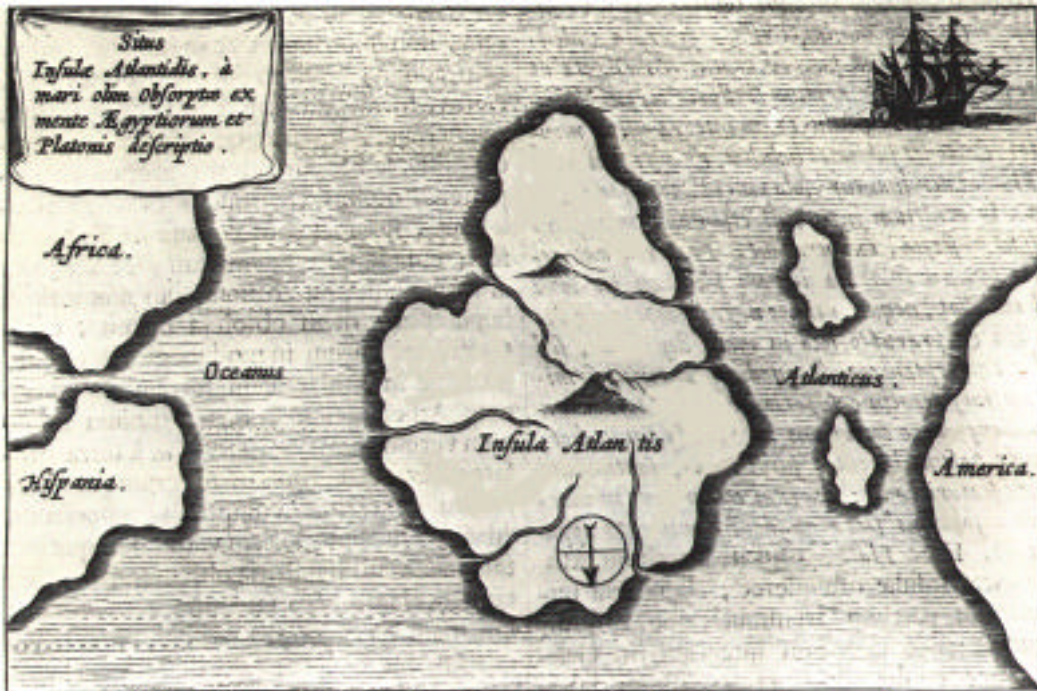
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Illustrations and Design
by Rod C. Mackay

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ATLANTIS



In this older map the usual north/south orientation is reversed.

The Greek writer named Plato (427-347 B.C.) remarked that the race of gods "divided the whole earth amongst themselves." He had no first-hand knowledge of their activities, but he did have an indirect witness of past events in a collection of rough notes inherited from a distant relative called Solon (639-559 B.C.). He said that this philosopher had spent ten years living in Egypt, studying documents in the great library at the mouth of the Nile and consulting Psonchis, the most learned historian among the Egyptian priests. From him, through Solon, Plato reconstructed the myth of Atlantis, but died before he could complete the story.

The tale says that Atlantis was the land granted the god named Poseidon. According to the Egyptians, this island had stood in the Atlantic Ocean somewhere west of the Pillars of Hercules (Straits of Gibraltar) approximately nine thousand years before the rise of the Greek city states. Plato said that Atlantis was larger than Libya and Asia (i.e The Middle East) and a stepping stone "to other islands from which could be

reached the opposite continent (unquestionably America)." In those days the Mediterranean was seen as the central or inland sea, and the Atlantic as a circular outer-sea enclosing the world of men. It was theorized that there might be a more distant outer circle of land enclosing the "all-encompassing ocean." We will find this ringed version of reality reflected in the construction of the city of Atlantis and in Celtic structures, real and imagined.

The lot which Poseidon drew consisted of a number of Atlantic islands including a very large land mass eventually called Atlantis. Arriving to survey his lot, the god found it already occupied by an "earth-born" man whose name was Euenor. A true primitive, he and his wife Leukippe, and their single daughter Cleito (sometimes Kleito), had settled themselves near the centre of the island. The man and the woman died of disease soon after Poseidon's arrival so that he became the guardian of a girl well on the way to womanhood. He afterwards had intercourse with her and raised a very large mortal family.

Atlantis was an oblong island, sloping slightly from north to south. At the latter edge a plain dipped into the sea and this continued inland for "a distance of about fifty stadia (roughly six miles)" Here there was an unassuming mountain "not very steep on any side". Within it, in a cave, Poseidon found Cleito and her family. Seeing that this place had possibilities as a hill-fort, the god began to break ground and enclosed the homestead within several broad concentric mounds of earth. He flooded the land between the rises producing moats. It was said that the engineering was so precise it looked as if the entire island had been turned on a lathe, "the circles being equidistant in every direction." With these barriers in place Poseidon felt relatively secure. In fact, the precaution may not have been necessary since ocean-going ships had not yet been invented.

It is noted that "as Poseidon was a god (and in charge of advanced technology) he found no great difficulty in bringing two streams of water up through the earth, one of warm water and another cold. He was also able to make food plants spring abundantly from the earth."

He sired five pairs of male children and gave each a land grant on the

main island; the first-born eventually inheriting his mother's old dwelling place and all of the improvements made within the inner moat. Atlas thus became king over his brothers, who were installed as princes of the land. To his twin-brother Gaderius, who was born only minutes after him, Atlas gave the portion of the island to the east, closest the Mediterranean Sea. "All of these men and their descendants were the inhabitants and rulers of divers islands in the open sea; also, they soon held sway over other countries within the Pillars of Hercules as far as Egypt and Tyrrhenia."

Atlas had "a numerous and honourable family, and his eldest branch always retained the kingdom for many generations, and they had such wealth as is unlikely to be again, and the Atlanteans were well furnished with everything which could be purchased, whether country- or city-dwellers. Because of the greatness of their empire many things were brought to them from foreign countries although the island itself provided most of what was needed for life and prosperity. Among the Atlanteans there were miners who dug from the earth what minerals there were as well as metal. In those days they recovered orichalcum (mountain-bronze) from many parts of the island, and although it is now nothing more than a name, it was formerly regarded as the most valuable ore of the earth with the exception of gold. There was never a lack of wood for carpenters and no lack of animals. There were a great many elephants already upon the island and wild spaces for animals of every kind. Whatever fragrant things grow, these were found, whether roots, herbs, flowers or fruit; all grew and thrived in this place. The cultivated foods were likewise hardy and men harvested legumes, fruits having hard rinds, chestnuts and the like, all available in wondrous and infinite abundance."

"In this easy land, the Atlanteans built their temples, palaces and harbours and docks, arranging the entire island as follows: First they bridged the moats which surrounded the oldest inhabited parts making entrances into and out of the royal palace at the centre of the island. Within the palace they built a habitation for the god and their dead ancestors. They continued to ornament this place with successive kingships, each new monarch surpassing the last in his efforts at craftsmanship. In the last days they made the building a marvel of the ancient world in terms of size and beauty. Beginning from the sea, the

workmen next dug canals, like spokes of a wheel radiating inward toward the centre of the island. These were very precise being 300 (Greek) feet wide and fifty stadia (30,000 feet) in length. These they constructed as far as the innermost moat, making a passage to the sea from each circle of water. This was enlarged into a protected harbour and the openings were kept large enough to enable ingress by the largest vessels. They also spanned all of the various circles of water constructing bridges adequate to the passage of a single trireme. They roofed these over to keep them from the weather and left way underneath for the passage of ships. The outer water zone was now made three stadia in width; the next two stadia and the inner circle but a single stadia. The inner palace island was now five stadia across. The outer circumference of the innermost moat was surrounded by a stone wall with towers and gates at every place where the sea passed in. The stone they used was quarried from the mountain which had stood at the centre of the island as well as from the various zones of the island. The stones were variously coloured, white, black and red and were quarried from places where docks were needed. As they were excavated these were roofed over with native rock. Some of the buildings were unassuming but in some the coloured stones were intermingled for the sake of ornamentation. They eventually built a wall around the outermost moat and this they faced with brass, but the next circular wall was coated with tin. The oldest wall, encircling the inner citadel was flashed with the red orichalcum."

"The palaces of the citadel were constructed as follows: At the very centre was the temple dedicated to Cleito and Poseidon, which in the later days was inaccessible and surrounded by an enclosure of gold. As this was the spot of the birth of the five twins who sired the race, this was where men brought offerings of fruit in season and performed the sacrifices to the gods. Near this centre was Poseidon's own temple, a stadium in length and a half stadium wide and high. All of the outside of this building was barbaric in design, and with the exception of the pinnacles, sheathed in silver, the pinnacles themselves being gold. Inside this place, the roof was ivory, the walls and floors being adorned with gold and silver and orichalcum. In the temple were statues of gold including a figure of the god himself standing in a chariot behind six winged (sea) horses. Such was the size of this representation (nearly 300 feet) that the god's head nearly touched the ceiling. Around him were the figures of a hundred

nermaids (sea-maidens) all riding dolphins. Also in the interior were numerous plaques and images dedicated to the temple by private individuals. Outside the temple there stood gold images of the ten kings and their wives; along with great offerings from the city itself as well as from foreign dignitaries. There was an altar in proportion to these giant statues and surrounding palaces which reinforced the glory of the main building."

"Outside this island, in the next band of land, there were many fountains of cold and hot water with buildings constructed about them, all well planted with suitable trees. Some cisterns were open to the heavens, others roofed over to be used in winter as warm public or private baths. The baths for the current king, noblemen and women were kept apart as were those for horse and cattle. All were given as much ornament as was thought suitable to their station. Some of the water that ran off was carried to the grove of Poseidon where were found gardens and trees of great luxuriousness and beauty, owing to the excellence of the soil in that place. The rest of the water was conveyed by aqueducts over the bridges to the outer land. Here were temples built to many other gods, along with gardens, places of exercise for men and horses. In the two secular zones there were many racecourses, usually a stadium in length. There was also a larger raceway that extended about the entire island. There were guard-houses everywhere and nearby the homes of those appointed to stand guard, the most trustworthy living closest the acropolis. The most trusted lived within the citadel as bodyguards to the king. The outermost harbours were three in number and surrounded by walls which went out into the sea on either side and then came together creating a channel for shipping. The seaside was densely populated with habitations and the largest harbour was always full of merchant vessels coming from all parts."

"I have repeated a description of the city and palace as it was given to me, now I must say something of the countryside: As we have said the city was upon a level plain but most of the rest of the island was lofty and precipitous, surrounded by mountains which very nearly enclosed it on three sides. The greatest length of the island was overall three thousand stadia (roughly 300 miles) the greatest width two thousand stadia (200 miles). The whole island slopes toward the south and is sheltered by the

mountains of the north. The mountains are themselves are celebrated for their number size and beauty, exceeding all that now stand anywhere in the known world. Within the uplands there were many inhabited villages of great prosperity. Between them there were many lakes, meadows, fields, rivers and woods providing all sorts of employment."

I will now describe the southern plain (between the mountains and the city) cultivated by many generations of Atlanteans. It was rectangular and drained by straight ditches within and oblong ditch, some excavated to a depth of a hundred feet, its breadth overall being a stadium. It carried around the whole plain and was ten thousand stadia long, receiving the streams that came down from the mountains and touching the city drainage system at various points, and so to the sea. These channels were used to bring down the wood from the high forests and to convey the fruits of the earth from this plain to the city. In winter the channels were always open it being the rainy season but in summer seawater was introduced into the ditches to allow the passage of ships. Each of the lots within the plain had an appointed chief of men and the size of each holding was ten stadia square and the total of lots, sixty thousand."

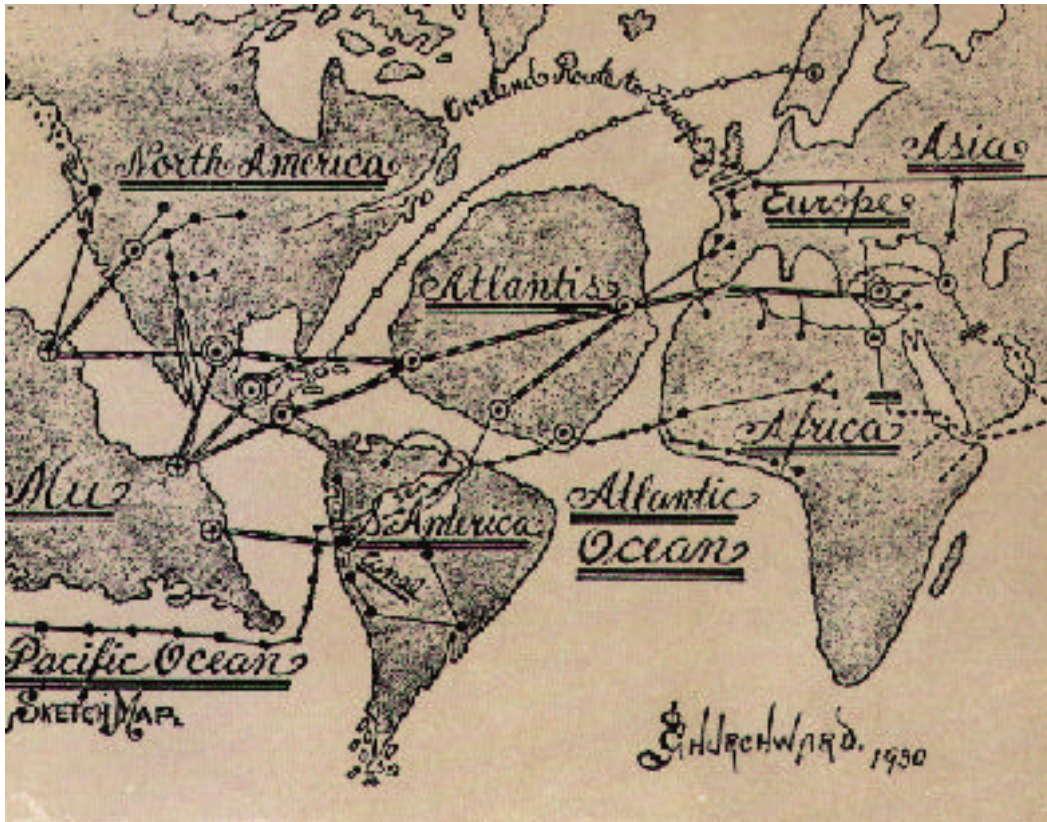
"The mountaineers had were similarly organized (into feudal groups) and all the rest of the country had similar sub-leaders. Each leader was required to furnish, for any war, the sixth portion of a chariot, to add to the total of ten thousand war-machines; also he had to contribute two horses and riders, and also a light chariot with an accompanying foot-soldier. He was also bound to supply two heavily-armed men, two archers, two slingers, three stone shooters, three javelin men and four sailors for the fleet (adding to the compliment of twelve hundred ships). Each of the ten kings (in his own city and island) had absolute control over the citizens and law-making, punishing and slaying as he wished."

"Now the relations between Atlantean city-states were managed through the laws of Poseidon. These were inscribed by the earliest men of the island on a column of orichalcum (possibly bronze?) which was situated at the temple. Here the people gathered together every fifth and sixth year to decide upon public affairs and arrange for judgements against law-breakers. At that time sacred bulls had the freedom of the temple of Poseidon and ten were placed within the temple itself to be

used as sacrifices to the gods of antiquity. At the time of killing, men hunted these animals with stave and noose and the bull they were able to contain was led to the column of laws and struck on the head, its blood spattering the sacred inscriptions... There were supplementary laws engraved upon the walls of various temples, but the most important was that no Atlantean should bears arms against his own kind. Another, almost its equal, stated that the family of Atlas was supreme, and that no underling could rule except by the consensus of the ten kings."

"Such was the state that Poseidon had settled on Atlantis, and it was this powerful kingdom that came to war with our own country on the following pretext: For many generations, as long as the blood of the gods held and divine nature continued within them, the Atlanteans were well disposed toward the gods who were their kinsmen. Then, they despised everything but virtue and cared little for possessions, property and the other burdens of life. Unfortunately, the blood of the gods became diluted with that of foreign mortals and they lost the eye for true happiness. Zeus, the god of all gods, perceiving this and seeing this honourable race in a wretched state, collected his allies, and when they were assembled at Mount Olympus, spake as follows:

(Here, Plato's Critias ends abruptly.)



Churchwood's Map of Atlantic

Fortunately, we know the conclusion from Timaeus a second uncompleted book by the same author:

"...now the sea that within the Pillars of Hercules is hardly more than a harbour, but outside is the ocean, and the land about it is most assuredly another continent. The island called Atlantis, which stood west in this true sea was great and wonderful, and had control over several other islands, as well as parts of the continent which it had conquered. In Europe its troops were found as far north as Tyrrhenia (Germany). This vast power, gathered into one, turned upon Greece and Egypt but Hellenic allies gathered, persisted, defeated and triumphed, and thus liberated all who dwelt within the limits of the Columns of Hercules. The Atlantians retreated to their own place but afterwards there occurred violent earthquakes and floods, and in a single day and night of rain, all of this evil warring race were swallowed by the mud of the earth, and the island

itself disappeared below the waves. And that is the reason that the water, in that portion of the ocean, is still impassable because of the shallows of mud left after the subsidence of the island."

This ending is consistent with an earthquake in a low-lying region: "Liquification is a devastating earthquake phenomenon that occurs where the water table is high and the soils are loose. The shaking turns the earth to quicksand, destroying its strength and amplifying the waves of energy shaking the ground." Earthquakes and accompanying volcanic activity do make substantial changes in the earth's surface over long periods of geologic time, but it is generally thought that such forces, acting alone, involve only a few square miles of land area.

There are, of course, other things that are known to inundate land, both permanently and temporarily. Most of our ancient civilizations have been based on agriculture, and this business flourishes in river valleys. River valleys are susceptible to flooding from meltwater, as is evidenced by the almost annual troubles along the Mississippi. The area affected by such flooding is hardly equal to that supposed for Atlantis, but these floods quite possibly made people of earlier times think that the whole world was involved in disaster. In 2287 a flood brought the Yangtze and Yellow Rivers of China into contact creating a great inland sea that the engineer named Yü struggled to undo for years. A combination of high tides and storm and earthquake could conceivably do great good damage around the mouth of a river.

The Biblical "World Flood" may have been based on a known inundation of the Euphrates Valley sometime between 5400 and 4200 B.C. In 1929, Wooley, who was doing archaeological digs there discovered an eight foot layer of clay with no human artifacts in it. Above the clay he found remnants of the Sumerian civilization, below, a mixed collection of Sumerian and pre-Sumerian objects. Sumerian records of the past treat "The Flood" as an historical happening; thus, Wooley was able to deduce that the pre-cursors of Sumeria had preferred to build on rich interval land, but had been persuaded to seek the hilltops by a single devastating flood. That whole region of the world was obviously wetter then than now and evidence has been found of similar troubles in Iraq.

Some geologists state that the Mediterranean basin was once dammed at its mouth, and originally contained a minor fresh-water lake fed by tributary upland rivers. The rise in Atlantic sea levels with the melting of the continental glaciers broke through natural dykes in the region of Gibraltar creating a flood which has to be one of the greatest disasters of all time. There is an historical example of similar broaching of formerly dry land in the swamping of the Zuider Zee in 1282 A.D. At that time a great sea-storm broke through similar natural dykes and allowed the North Sea to inundate a vast land area in a single day. The Dutch have been fighting ever since to reclaim this land and keep it dry. There are still inland regions of the world which are below sea level (I am writing in one such valley) which are protected from destruction by seaward landforms. The Imperial Valley of Southern California has had troubles with the in-welling of the Colorado River since the year 1906. The formerly dry Lake Eyre in South Australia was given a similar connection with outside waters and 4000 square-miles of land became submerged.

Submergence is a consistent theme of folklore as well as history. Various classical writers, such as Florus and Timagenes, stated that the Celts and Germans in coastal regions of northwestern Europe were constantly harried by flood-waters and even caused to migrate because of them. These accounts sound very like the medieval tales of the lands of Ys and Lyonesse. The former city existed in Breton lore as a place which existed into the Christian era. It was supposedly located on the shores of the Bay of Trespasses, its king the pious Gradlon (who was made the hero of Edouard Lalo's opera *Le Roi d'Ys*). The place was protected from high tides and the wind by a massive wall and drainage ditches had been built to take overflow. Grandlon had a dissolute daughter named Dahut who got drunk along with her lover and accidentally, or deliberately, opened the sluice which connected with the sea. St. Gwenole, the founder of the first monastery in Amoricia (later Brittany) warned his patron, the king, of the impending disaster, and his was able to gallop off to high land just ahead of the flood-crest.

This is very similar to stories told about Lyonesse, an island kingdom supposed to have stood southwest of Cornwall. When it sank, Trevillon was the sole survivor, and like Gradlon, he had to spur his horse

furiously in the direction of the nearest high ground. There are numerous lesser tales of land loss: In this same country we have the Penhale Sands, a beach front which local lore insisted was the site of "a seven church town." This considerable civilization was supposedly flooded out of existence. The tale was taken as a fable until a seventh century church was actually unearthed there along with a number of human skeletons.

In Wales there is Llyn Llech Owen. Here a man named Gorlas took water from the local magical well, but failed to replace the cover after use. This had the same effect as leaving the sluice gate open, but fortunately he perceived the damage on the following morning and "rode clockwise three times around the flood" thereby preventing further enlargement of the newly formed lake. There is a flooded village at Llangorse Lake, near the village of the same name, where church bells are heard ringing as a presage to stormy weather. Again at Bala there is a town submerged by God because of the dissolute nature of its citizens. Similarly, Llanddwyn Island is said to be the only land left of the submerged town of Cahtref Waelod, which was "destroyed by the sea."

Cardigan Bay, Wales and Lough Neagh, Ireland, are other places with similar folk-tales. The Irish at Connemara have a similar tradition of a sunken city just off their coast, which seemed to turn to reality one stormy night in 1948. All the folk looked seaward that year and observed a host of twinkling lights apparently shining from under the water. At dawn they were all relieved to see a Spanish fleet of trawlers riding out the storm in the lee of the Aran Isles.

Most geologists are agreed that Europe, England and Ireland were a single continent at the height of the Pleistocene Age, although that would not have been apparent in a fly-past since everything was under ice for most of that time. When the melting commenced, the North Sea at first emerged as a low plain over which rivers, such as the Thames and the Rhine, took their slow and meandering passages to the sea. That plain started to become submerged more than 10,000 years ago, but it was occupied by men since fishermen are still dredging up stone-age implements and animal bones from the bottom.

It is conceivable that there was damming of local parts of the

continental shelf into the bronze age, and if so, Plato's tale may be based on a distant flooding perhaps on a scale surpassing that of the Zuider Zee. L. Gidon, the translator of Alevandre Bessmerty's L'Atlantide thought that this event, tales of local submergence, rumours of lost Atlantic Islands and Plato's Atlanto-Athenian war are all "but an echo of the migrations of the Kelts and Germans displaced by these floods."

Earthquakes alone have killed relatively few men, but the mud-slides that accompany them and the tsunami or "oceanic-waves" driven by them are the leading killers of men. These waves do not usually take the form of a super-breaker but produce super-tides, which is why they are sometimes given the misleading name "tidal waves." The increase in tidal range can be more than 200 feet when there a tsunami moves in on the land. Fortunately these waves usually expend their energy along a narrow shoreline unless the land they invade is very flat. They are unlikely to cause any great change in landforms and when the water recedes the people may be dead, but the contours of property are much as before.

This is not to suggest that earthquakes and vulcanism are incapable of producing large displacements of real estate. We know that Krakatoa, an island in the South Pacific, erupted, carrying away an island 1400 feet high, and left a pit of water 1900 feet deep, but in a, this island was no Atlantis being only fourteen square miles to begin with. In recorded geology the maximum horizontal displacement along an earthquake generating fault has been in the vicinity of 20 feet (A (at San Francisco in 1906). The greatest vertical displacement was about 50 feet (Alaska, 1899). In the 1920s an oceanic quake off southwestern Newfoundland caused the sea bottom to drop 34 feet along one side of a fault, so there is seismic activity in the Atlantic, even if it is not as usual as that about the Pacific "zone of fire."

A fifty foot drop along one of the block faults found in Atlantic Canada would make a swamp of parts of Nova Scotia and New Brunswick but this would only be true in the immediate vicinity of the seismic activity. For example, that quake at Yakutat Bay in Alaska depressed land by fifty feet along one side of a fault but the area affected by this quake was all within fifteen or twenty miles of the action; further back the earth was, more or less, at its old levels. There are records of

submergences in historic times which tend to support this idea: A portion of Bengal sank into the sea in 1762, but although the lost land was sixty square miles that was only equal to an island the size of Staten Island, New York.

As Sprague de Camp has noted Atlantis was said to be much larger than that island. He does admit that "if there were a large island of very low flat relief, nowhere more than a few feet above sea-level, it might be possible, by an earthquake greater than any ever recorded to submerge several hundred square miles at a clip." Unfortunately Plato described Atlantis as decidedly mountainous, and continental in size.

Excepting the fact that Atlantis was supposed to have been located west within the Atlantic, we have few facts to use in locating its latitude and longitude. The point that it was supplied with warm water direct from the earth, and the fact that the island succumbed to an earthquake, indicates they were in a geologically active region, such as that found near the Mid-Atlantic Ridge. There is also an indication that the winters were severe enough to require shielding of the bath-houses and, in folklore, Atlantis was often designated as an Arctic or sub-Arctic island. As late as the sixteenth century, Gerardus Mercator fixed the remnants of Atlantis in that region on one of his maps, as did Abraham Ortelius on his world map of 1570. One can hardly fail to have noticed that the winters there might have been snow-filled by that time, but if the date given by Plato is accurate, the heyday of Atlantis was close to the Thermal Maximum for the planet earth, a time when the surface temperatures were higher than at any time since before the last glaciation. Archaeological evidence has shown that men and women of Scandinavia were then cavorting in grass skirts.

One scientist who has made a study of climate says that if the present Gulf Stream, warm-water gyre, was there in an even warmer past, then the North Atlantic circulation would have passed warm tropical waters about "Atlantis" in a counter-clockwise direction, giving it a very favourable climate with few seasonable variations. The loss of volcanic islands off Iceland is a matter of record as is the rise of Surtsey off its southwestern coast during our century.

A majority of scientists have avoided speculation about lost lands, but in 1915, P. Termier, used the Bulletin of the Smithsonian Institute to note that "the Platonic history of Atlantis is highly probable...It is entirely reasonable to believe that long after the opening of the Straits of Gibraltar certain submerged lands still existed, and among them a marvellous island, separated from the African continent by a chain of smaller islands. One thing alone remains to be proved - that the cataclysm which caused this island to disappear was subsequent to the appearance of man in western Europe. The cataclysm is undoubted. Did men live who could withstand the reaction and transmit memory of it?"

The real problem here is the undeniable fact that this earthquake is "unverifiable history" and there are secondary difficulties: Plato's stated size of the land mass of Atlantis and the fact that its remains were reported to lie not far below the surface of the ocean. There has been, admittedly, a lot of glacial water under the bridge since the Thermal Optimum, still one might expect to find extensive shallows west of the Straits of Gibraltar (at depths of no more than 100 meters). There are shoaler waters in the vicinity of the Azores (a favoured location for the lost continent) and this is near the Mid-Atlantic Ridge, but there is nowhere near the requirement of 60,000 square miles of shallows. Here the islands are really nothing more than the mountain tops of rises from very deeply submerged abyssal plain.

If we assume that Plato's island was northwest of the Mediterranean there is room for it on the British continental shelf, all of which is less than 100 meters under the water. I.W. Cornwall and archaeologist at London University is among those who has pointed to the fact that the English Channel is a very shallow body of water. During the last glacial period (a mere 15,000 years ago) this whole area was nearly dry land. He says: "England was last united to the European mainland during this period of lowered sea level." At the time he estimates that the ocean was lower by a full 330 feet (100 meters) baring everything all the way to the edge of the present continental shelf. He further notes that "the deepest soundings of the Straits of Dover are little over thirty fathoms (180 feet) so that sea level was such...men could cross the English Channel dry shod, having to detour only to avoid a few shallow lakes. This situation persisted until about ten thousand years ago (coinciding with the time of

the loss of Atlantis)..."

This fact almost certainly explains Welsh tales of their drowned city of Llion as well as the lost kingdom of the Bretons. The latter identified their undersea kingdom as Lyonesse and their descendants are confident that its remains lie in the mud off Point du Raz. There is a similar situation off the Danish coast and some of the men of Gaul, who were interviewed by Caesar, said that their ancestors had come out of the "sea-lands" in times long past.

The baring of continental shelves and their eventual cloaking with water was, of course, a world-wide phenomena and this has allowed various writers the liberty to position Atlantis, arbitrarily, at all sorts of places around the Atlantic basin. There is enough shelf off Iceland for it to have been located there. Some have placed it in the Antilles of the West Indies and at least one researcher preferred coastal South America as the site of the Great Cataclysm. The only problem with most of these places is Plato's statement that it was "west of the Pillars of Hercules" and this logically precludes everything but the shelf of northeastern America which has ample shallow water in the form of the Grand Banks of Newfoundland, the Scotian Shelf and the lands underlying the Gulf of Maine. The only other candidate of appropriate size is the Blake Plateau east of Florida.

Cape Hatteras, North Carolina is at approximately the same latitude as Gibraltar, but the mid-Atlantic coast has a narrow continental shelf. That leaves the off shore of the northeast and the Bahama-Florida-Cubs complex as likely candidates for future archaeology. It is noteworthy that the highest intensity east coast earthquake in this century took place at the top of the Laurentian Cone, where the waters of the Saint Lawrence River fall between Cape Breton and Newfoundland into an abyss known as the Sohm Abyssal Plain (17,400 feet below sea level). Fortunately, this catastrophe was not on land so there was no damage to any part of the northeast although the trans-Atlantic cables were severed.

At that, the loss of Atlantis may have been more a matter of deluge than subsidence, for it was never really said that the island "sank into the

ocean" as is usually stated. That there have been catastrophic American floods is beyond question: Dr. Caesar Emiliani, a professor of geology at the University of Miami in 1975 dated one at the year 11,600 before the present, which comes close to the mark for Atlantis.

His catastrophe followed the Valdres Advance of the North American ice sheet. While polar, as well as high-land glacial ice, began to deteriorate as much as 15,000 years ago, the changes of state between ice and water were never gradual and progressive. Rather, the ice fluctuated, advancing and retreating in an uncertain climate. As Emiliani reconstructs events, much of the earth was at first covered by two polar caps and their associated glaciers with only the tropical and costal areas of temperate zones being habitable. As the climate began to warm, alternate melting and thawing created a situation in which vast sheets of ice became undercut by moving water. When ice began to move to the high latitudes it slid more rapidly on this lubricating layer, and surging into the warm areas of the earth, melted still more rapidly, piling up waters behind stone and ice dams at the glacial fronts.

The Valdres Advance saw an ice ridge travel 150 kilometres out of the Laurentian mountains into the south. When its meltwaters broke through various fronts the fresh water surged over the northern lands as far south as the Gulf of Mexico. There they were sufficient to dilute salt water to such an extent that marine life forms were extinguished. It is believed that these movements of vast quantities of fresh water influenced local weather producing heavy rainfall, while it is just possible that readjustments of isotasic balance in the earths crust may have favoured earthquakes. Emiliani says that this one advance was so persuasive "it raised all the world's oceans by 131 feet, a rise so great it flooded all the world's costal regions (including north-eastern America). This event was followed by a rise in sea level at the rate of several decimeters per year which caused "widespread flooding of low lying areas, many of which were inhabited by man. We submit that this event, in spite of its great antiquity in cultural terms, could be an explanation for the deluge stories common to many Eurasian, Australasian and American traditions."¹ If no artifacts of the lost islands are found this should not be a surprise considering the layers of mud, silt, sand and gravel which must have been dumped on them.

Before dismissing myths as fables the case of the island of Kuwae in the South Pacific should be considered: When missionaries went to this place, which is about 1,200 miles east of Australia, they found not the one island mentioned in local legends but two; Tongoa and Epi. The residents of both places explained that the island had been a single place which was "broken in two." This was dismissed at the time as nonsense but archaeologists found that other aspects of legend, such as the places where the kings were buried, were accurate. That led them to call in volcanologists in the 1960s, and these people found a seven-mile wide crater on the sea-floor between the two islands. They say that eruption must have had the power of two million Hiroshima-style atomic bombs and the eruption was carbon-dated to about 1420-1475. In the year just past Kevin Pang, an astronomer at the Jet Propulsion Laboratory in California, correlated the explosion with historic records of atmospheric events in Europe, and with ice-cores from both Greenland and Antarctica, and was able to conclude that the eruption probably took place in 1453. During that year Constantinople was under seige, and in April and May was deluged à la Atlantis. The city's residents faced unseasonable thunderstorms, hail, and drenching rain in various combinations. Pang thinks the strange weather and extraordinary darkness of that year was due to Kuwae's eruption. When the storms let up, the whole city was enveloped in a cold impenetrable fog and when this lifted, the buildings seemed to be ablaze with a cold flame. Nothing was ever damaged until the gates fell, but Pang has noted that these optical effects go with vulcanism since, "the twilight is intensely red because of the selective attenuation of light by volcanic particles." These bad omens happened at the time of a total lunar eclipse, and all these things were interpreted as a sign that Constantinople would fall, and it did, on May 2 of that year. Unfortunately, this loss of a Christian realm to the Muslims planted seeds that led to such current misfortune as the Bosnian war.

In this context, it may be supposed that "Atlantis" succumbed to a number of related natural phenomena, possibly including earthquakes, vulcanism, some localized subsidence, breaching of natural dykes, thunderstorms, rain, weathering and erosion, landfalls and landslides and inundation, all remembered in the tradition of a World Flood. This event probably required more than a single day and night, but memorable damage

may have taken place in that time. As Sprague de Camp correctly says: "While earthquakes and tsunamis can do vast damage to the fragile works of men, they do not (alone) plunge whole continents beneath the waves."

But land has been lost and wherever "Atlantis" were located, it does not seem to represent a recent memory of catastrophe. As previously noted weathering and erosion had a large impact between 15,000 and 5000 B.C., but since then there have been only minor changes in the volume of free water added to the oceans. Most scientists consider our long-term "racial" memory for such events to be very defective which explains their addiction to the printed word. These men align themselves with professional historians in the view that Plato's tale must be mainly historical, with the distortions and exaggerations typical of earlier ages, or a fiction based to some degree "on living or antiquated facts." They often fail to observe the self-same difficulties in assessing the validity of modern history and science.

Sprague de Camp thinks that Plato's general idea for the defeat of a powerful foreign invasion by the Greeks springs from the Persian or the Graeco-Carthaginian Wars, or from both, combined in turn with some remote legend of troubles with an extra-continental invader. The union between Kleito and a superman, he thought drawn from the general pool of Grecian myths where mortals frequently consorted with gods, particularly those of the ocean. He considered the time and place of Atlantis to be based on various tales of real places such as Tartessos, on the Spanish coast, and imagined kingdoms such as Elysion, the Garden of the Hesperides, and the like.

"Plato could have derived the city plan of Atlantis from Babylon, changing the square plan of the latter (as described by Herodotus) to a circle, or from Carthage with its circular walls, or both." De Camp also thought that the decorations within Atlantis were reminiscent of those supposedly found at Tartessos; and the harbour plan seemed to him to be that of Syracuse, the prime Grecian port of the Old World. Plato's vision of sea-rovers, he said, might have sprung from legends of the sea-kings of Crete. The flood legend itself is older than the writings of Hellenized Babylonia, but de Camp considered it likely that Plato had knowledge of the Grecian myth involving a similar Grecian disaster and flood-survivors

presumably based on this older model. Thus, he notes, "while the flood legend may be based upon a real flood, it is not so much a historical record of any special inundation as a fiction that has borrowed a plot element from reality."

De Camp has obviously tagged onto the Victorian idea that all things of worth came to western Europe from the east, but Atlantis has a peculiarly Celtic floor plan resembling the mythic island-kingdoms of An Domhain and Hy Brazil in most essentials. While the island was supposed to be located on an irregularly shaped piece of land sloping from north to south, it will be recalled that the major city was a metropolis on the southern plain with Kleito's ancient hill at its centre. Around this hill Poesidon "terra-formed" two rings of land and three of water, forming a circular citadel three miles in diameter. The various kings who ruled the place built bridges connecting the land rings and tunnels connecting the moats, the latter being large enough to accommodate ships. The larger metropolitan region was fifteen miles in diameter and a ship canal, running south, connected the citadel with the city's docks. An irrigation canal had a similar connection with the citadel from the north, and the plots of tenant-farmers were located between the city proper and the northern mountains. The inner rings of land centred on a temple surrounded by a golden wall, and all the buildings within this sacred preserve were described as having buildings lavishly decorated with gold, silver, tin, ivory and the mystery metal known as oreichalkon, which "glowed like fire." This Greek word means "mountain bronze," and it was probably a highly refined variety of brass or bronze.

An Domhain, the Celtic "Beginning Land," always sited in the western Atlantic, is described as "a revolving circular island, a fortress in the sea." Today the word domhain is taken to correspond with "deep," and has particular reference to "a hole in the ground filled with water," thus it is a comparative for the Atlantic Ocean itself. The English word "deep" confers linguistically as does the Gaelic domhan, the Universe personified. The Allfather or creator-god was often identified as Don or Donn, the English "Doom." His co-creator was the goddess Domnu, the "mother" of all the sea-folk collectively known as the Fomor, literally the "undersea dwellers," perhaps those who lived "below" the western horizon. The name itself signifies a "deep hole" or "abyss," and has overt

sexual connotations. Through all of the sagas and tales it is the Children of Domnu who are represented as agents of darkness and evil. They are contenders against the people of Dagda, the chief land god, and his mate Danu or Anu, who represent the interests of light and goodness.

An Domhain had the circular "Cauldron of Abundance" at its geographical centre. From it there emerged the seven rivers which nourished the landscape in every direction. Since this island-kingdom of uncanny, shape-changing, one-eyed folk was hard to find it was sometimes classified as a submergent island, existing at times on the ocean floor, where its people subsisted within a magical bubble of air. It was said that the island was forced to emerge once in seven years to replenish its air and fresh water. In later mythology it was suggested that An Domhain was a subterranean place at the roots of the island which the Gaels called Hy Breasil.

Hy Breasil became the refuge of the Tuatha daoine an Irish race which defeated the Fomors, but being themselves conquered, were forced to flee to this western refuge. These "gods of light" naturally acquired the upper world while the "dark giants" were left with control of the underworld of their island. Hy Brazil was first charted on Atlantic maps in the fourteenth century and disappeared from the cartographic records in 1865. It was at first shown a little southwest of the Aran Islands but was gradually moved westward eventually coming to harbour in Newfoundland waters.

The striking characteristic of Hy Brazil: it is often, but not invariably, shown as perfectly circular in shape. An examination of medieval maps sometimes shows islands as indented squares or rectangles, which are apparently meant to indicate fortified retreats. In the fifteenth century, cartographers who knew of an island in the Atlantic, but had no certain information about its form, indicated their lack of precise knowledge by drawing scalloped or dotted edges to represent the land. Even at that they usually included some geographic information, a trend of the coast, some offshore rocks, or a general shape, suggesting that it was a place which could be found. It was not uncommon to indicate a river or two on such representations.

Donald S. Johnson concludes that Hy-Brazil was a complete abstraction, an island having no basis in reality. He explains the configuration as matching that of the Promised Land of the Saints, as it is mentioned in Saint Brendan's Navigatio. Actually there is no suggestion that land was round although it does seem to have had an east-west river like that shown on ylla de Brazill as it is represented on a Catalan map of the year 1660. Johnson presumes that Brendan's Isle was circular since the men of his expedition walked for fifteen days at its coast finding "no beginning or end." He says that they walked in a circle and compares Hy-Brazil's single bisecting river with Biblical "rivers of life," concluding that a circle is a "fitting symbol" for the Christian Promised Land named New Jerusalem."

Like most historians Johnson has decided that Celtic mythology is based on a Greek model, but the circle was never a Christian symbol. It does symbolize a regenerate earth but it honours the elemental gods, and not the Lord God. It is absolutely pagan in its original intention, so much so that the early Irish missionaries negated it where they saw it on standing stones by inscribing the Christian cross over it. The so called "Celtic-crosses," are nothing of the sort. These derivatives of the tradition of the aboriginal cromlechs are still sometimes referred to as the "alien Greek stones," in Gaelic.

The circle is endemic to pagan theology representing the concept of renewability and reincarnation. It is no accident that the Celtic holy wells were built with circular stone walls in imitation of the shape of the original "Cauldron of Life and Rebirth." It was generally supposed that this life-source was purloined by the Tuathan "gods" from the sea-kingdom when they followed the giants there after their defeat in Ireland. This "Kettle of the Deep," was eventually buried at the geographic centre of Gaeldom where it became the astral-genius of Ireland.

Cup-and-ring markings are frequently seen on megalithic monuments such as the cromlechs of Ireland and Scotland. These are essentially cup-shaped hollows gouged out of the stone, frequently seen surrounded by engraved concentric circles. From the internal cup, a single radial line is often seen drawn to a point outside the circumference of the outermost circle. Occasionally a system of cup are seen joined by a number of these

lines, but most often they simply end beyond the outside ring. These enigmatic designs, "upon which no light has been thrown," are found on vertical and horizontal surfaces in Great Britain, Brittany, and as far east as India, where they are termed mahadeos, "great gods." The fact that they are engraved upon stones which the Irish call Cromm-leace corroborates this, Cromm, being the dark-god, corresponding with the creator-god Don. A leac is a flagstone, the word being similar to our English "plank."

T. W. Rolleston has noted European examples which are "richly decorated and accurately drawn," and he thinks they may represent "diagrams or plans of megalithic structures." He thinks that the central hollows may represent burial chambers and the circles, surrounding standing stones, fosses or ramparts of earth. The penetrating avenues would then represent doorways by which priests moved to and from some interior holy spot or shrine. More symbolically, we think the interior represents a place of rebirth as well as that of death. In cross-section, these rings have the look of the human male and female reproductive organs in action, and the standing-stones upon which they are engraved are more generally taken as phallic symbols.

Something of pagan Celtic theology is embedded in the sixteenth century Cymric work known as the Barddas. While it is contaminated by Christian beliefs Rolleston says that it does "speak of an independent philosophic system." Not surprisingly this "druidic" system supposes antagonistic forces, that of Hu, or God, which is constructive in intent and result, and that of Cythrawl (corresponding with Cromm) the principle of destruction and chaos. Organized life was thought to have arise at the will of the creator-god, who created the primal substance of the universe as minute indivisible particles each a microcosm of the primal god-force. The innermost circle from which all else sprang was called Annwn in the Welsh language, and this confers linguistically with An Domhain, "The Deep." It was thought that this innermost place was one of primal life forms all struggling to evolve out of chaos. Those entities that succeeded were considered to move to an outer ring of being where life was more "purified" having attained triumph over darkness and evil. The third ring of being is termed Infinity, a place inhabited by god alone. It is predicted that "all shall attain to the circle of Gwnfyd (White light) at the

last."

In Celtic societies, the mortal god-king, and his queen, were seen as the "fountain" and the "well" of regenerative spirit, thus their place at the centre of the community, within a holy circle which conferred with "The Cauldron of the Deep." Stone fortifications were largely "ring-forts," the largest representing the belly of Danu or Domnu, smaller ones being microcosms of the larger, all relating back to the one source of life within the deep-ocean. There are currently ruins of ring-forts numbering "from thirty to thousand individual structures," in Ireland alone. Archaeologist Sean O'Riordain says that the unknown forts must increase this number to "tens of thousands" of these buildings in the Emerald Isle.

O'Riordain notes that the simplest ring-fort consists of a circular space surrounded by a bank and a fosse, the former built by piling up the debris obtained from digging up the latter. The word *lios* and *ráth*, anglicized as "liss" and "rath," are applied to earthen ring forts. Other names such as *cathair*, *caiseal* and *dún* were applied to examples laboriously carved out of solid rock. The ring-forts vary greatly in size, and their remains range from 50 feet in diameter to about 400 feet. Examples of large, multi-circled raths are uncommon but they do exist and being sited on high land are referred to as hill-forts. Examination of artifacts associated with these ringed structures shows that some are pre-Celtic dating back to the Bronze Age. Some of the stone circles, formerly regarded as ritual sites, have recently shown evidence of past habitation, and it is now known that the uprights were placed as a framework for building banks of rubble, sod and earth. In some cases wooden posts had the function of these upright stones and in these cases all that remains is circular plug-holes to indicate this style of construction. It is assumed some of ring-forts were defensive in intent, but many have "one slight bank and a shallow fosse," whose security must have been theological rather than military in intent.

One of the largest raths of ancient times was that held by Queen Mebd and her consort Ailill, which was called Rath Cruachan or Rathcroghan. Its outer circle encompassed numerous other fortresses, and the place was still used in 645 A.D., when the Connaught king Ragalach was assassinated on its grounds. In times past Connaught was alternately

called Cruachan from the fame of this residence of the semi-mythic goddess-queen. Notice the implications of the word crogan , a drink of blood taken to inspire the blood-fury which the Norse called the berserker-rage. Rathcroghan has the further sense of "penfold of the banshee," or "death-maiden."

The main point here is its structural similarity to the inner sanctum of Rathcroghan to that of Atlantis: "The manner of the house was this: There were seven companies in it from the fire to the wall. all round the house. Every (circular) compartment had a face of bronze. The whole was composed of beautifully carved yew wood. Three strips of bronze were laid in at the door of each compartment. The house from here out was built of pine. A covering of oak shingles was what it had externally. Sixteen windows were in it, each with a shutter of bronze, and bars of bronze were made to close each shutter. Ailill and Mebd's compartment was at the centre of the house and it had a doorway front of silver and gold. There was a wide band of silver on the side of it that rose to the ridge of the house, and reached all around it from one side of the door to the other." It is said that "the place was surrounded by five concentric ramps, three of which may still be seen."

Queen Mebd is a side-form of the goddess Mhorrigan, the "Great Queen, born of the sea." The major Celtic goddess of war, death and slaughter, she double-crossed her "father" Don and assisted the land-gods in overthrowing and eliminating him, his defeat being symbolized in the taking the Cauldron of Abundance to Ireland. In the latter days she was rewarded for her duplicity with the sexual favours Dagda and care-and-control of his "Kettle," which is clearly the womb of the land. She was the sovereign-bride of all the high-kings of Tara, and no man could rule without her complicity, which was represented in an annual ritual pairing with her in the form of the human brides from the side-hill of Boann. When her interest in a man failed his kingship, and sexual vitality soon failed. Like Cleito, Mhorrigan sired many children, the legitimate ones being known as the Maines. These troublesome fellows appear to represent the seven oceans of the world, and they were all outlawed from Ireland for various infractions of the law. They did, however, respond to their mothers unsuccessful attempt to overcome Ulster during the Tain war.

Medieval Christian dogma was opposed to the belief in transoceanic continents like Hy Brazil and Atlantis, whether real or imagined. Anti-scientific thinkers such as Kosmas were flat-earthers, who knew what they saw and defended it with a vengeance. Christians who were willing to admit that the earth was round were still often unable to grasp the concept of men walking about on the underside of a ball. Saint Paul had written that the words of the gospel went out "unto all the earth," and if there were unknown lands this was a falsity or at least an over-statement, so many Christian theologians opposed the idea of a counter-world in the west.

The discovery of Australia and America caused a re-juggling of theology and a revival of interest in Atlantis. In 1553, a Spanish historian named Francesco Lopez de Gomara wrote a General History of the Indies suggesting that Plato's Atlantis and the newly found continent must be one and the same, or that Plato, at least, had heard rumours of this western land and based his tale of a lost continent upon it.

The classical writers had named the Atlantic after the water-god Atlas, and it was now discovered that Azetecs of South America had a legend that their tribes all came to land from a mid-oceanic island which they called Aztlan, the "Plain of the Reeds." It was also found that their word atl was descriptive of water and god-hood incarnate.

With this, and similar arguments, Guillaume de Postel (1561) came up with the seemingly appropriate idea of naming one of the new continents Atlantis. In 1580 the remarkable English wizard/cartographer John Dee applied the name Atlantis to America on one of his maps. In 1689 the French writer and map-maker Sanson followed suite, as did his fellow national, Robert de Vangoudy, in 1769. They both went Dee one better by actually taking their maps to publication. Vangoudy illustrated Poseidon dividing the land between his ten sons on his map, and received a great deal of scorn from the scientific community for his "foolishness."

The men who accepted America as Atlantis were not all fools: Sir Francis Bacon (1644) said, "I... think that America was sometimes part of that great land which Plato calleth Atlantick island... But when it happened that this island became a sea, time wore out the remembrance of

remote countreys..." Buffon accepted this theory in the eighteenth century as did Jacob Kruger and Alexander von Humbolt in the nineteenth. In 1855 Robert Prutz took up the Atlantis in America idea, suggesting that the Phoenicians were actually the first to rediscover it in "modern" times.

Current scientific opinion is opposed to this idea because "the native American civilizations were barely rising from barbarism in Plato's time" and because the American aboriginals "never developed the technics to mount military expeditions across an ocean." It is also argued that the ships that plied the Mediterranean in Plato's time were incapable of crossing the Atlantic, that they "could not row it because they could not carry enough food and water" and couldn't sail it because they lacked the ability to tack before wind.

This attitude overlooks the fact that there have been recent crossings of the Atlantic, in both directions, in vessels as improbable as canoes, kayaks, giant inner tubes, row boats and coracles. The Norse managed the Atlantic by running before open winds, and it was never argued that Atlantis existed "in Plato's time." Any reality may be argued for a time and place ten thousand years in our past.

The common argument that European ships of the age of discovery were make-shift efforts which only crossed the Atlantic by virtue of great good fortune has been attacked and ravaged by a number of sea-bent authors. It is a usual corollary to this that pre-Columbian vessels were completel un-seaworthy and too small to challenge the Atlantic.

It is a matter of record that the Babylonians had oceanic contact with India in 1200 B.C., and the Phoenicians routinely traded with Azores in 1200 B.C. The latter islands are one third of the way across the Atlantic in the direction of America. By 2500 the Egyptians were routinely building 100 foot vessels propelled by large square sails and these travelled as far as the Syrian coast and the Red Sea. During the tenth century the ancients considered ships of 770 and 80 tons burden as the smallest useful transports on the Mediterranean. From the fifth century B.C. vessels of 150 to 500 tons displacement were commonplace, and by the middle of the third century B.C. the Greeks were building grain freighters of 1,900 tons burden, which is at least twice the size of the

Santa Maria, the lead ship used by Columbus in his "discovery" of America.

In any case size bears no relationship to sea-worthiness as the recent 150 solo expeditions made by ships of 25 feet or less have proven. A voyage made from Casablanca to Florida involved nothing grander than a six-foot sailboat, and this was accomplished in 84 days. William Verity travelled from Florida to Ireland in a 12-foot home-made craft, and a toeless fingerless sailor managed a similar crossing in a 24-foot sailing boat in less than a month.

The initial voyages into the Atlantic were likely accidental accomplishments like the Portuguese explorer Cabral's discovery of Brazil as he attempted to round Africa in 1500. Even as late as the last century there were hundreds of recorded accounts of sailing ships caught up in contrary winds and currents, who ended by making an unintentional trans-Atlantic crossing. Some scholars have insisted that ancient seamen caught in this predicament could not have survived at sea. This is a strange belief since it is common knowledge that a man can survive for at least fifty days on water alone, and the problem is lessened if he is able to obtain fish juices.

If the Atlanteans have their model in the Phoenicians as some historians suppose, then oceanic-travel would have been no problem for them. Latin school texts of my day contained unflinching depictions of the Roman, Punic and Greek ships, all entirely speculative, based on the vivid if hyperbolic descriptions of Greek and Roman writers. The far-ranging warships of these peoples were largely unknown as they were often involved in fatal encounters with the elements or their enemies.

In 1969 a sand dredger working off Sicily, near Marsala, bit into wood and stumbled on a whole cluster of ancient Carthaginian warships. Since Carthage was an outpost of Phoenicia, archaeologist Honor Frost was given the means of reconstructing a very ancient craft. His team eventually excavated and reassembled a Punic warship of the third century B.C., and made a crucial advance in our understanding of what the ancient world possessed by way of sea-worthy craft.

The Punic ship was found to be long (115 feet), not very wide (15.7

feet) with a displacement of 120 tons. It was seen to have been powered by two banks of oars on each side and probably carried 68 oarsmen, and perhaps half that number of fighting men. The analysis of its construction seemed to support the insistence of classical writers that whole flotillas of these craft were placed on the Mediterranean within two months of the cutting of lumber. Modern historians dismissed this as wild exaggeration, but it now seems probable that these ships were prefabricated and Frost says that the effort shown in building them "adds up to a degree of industrial organization not again recorded until the Industrial Revolution." The refurbished ship was declared "undoubtedly fast" and very capable.

IN THE BEGINNING

The written accounts of the first days commence with the Fertile Crescent and the ancient kingdoms of Sumer and Akkad. No exact Sumerian myth dealing with the creation of the universe has been recovered but the Akkadians have left a creation-poem known as the Enuma-Elish. This work speaks of a time "when the heavens were not named on high, and the earth not called by name below." Then, it is said, there existed only the primordial oceans named Tiamat and Apsu. In this seascape the gods were born, and one of them, named Ea (the Sumerian Enki) led them in wisdom and cunning. The oceanic gods soon became disturbed by their unceasing bustle and clamour, and Apsu, decided to eliminate them without the consent of his wife Tiamat. Ea however successfully plotted against the elemental god and killed him with the help of magical incantations. Ea then set up housekeeping on the body of the dead god thus populating the first oceanic island. Here Ea impregnated his wife giving rise to Marduk.

Tiamat was understandably annoyed at the death of her husband and conscripted some of the gods and a number of oceanic monsters to her cause, Marduk led her opponents to a victory which resulted in her death. Afterwards Marduk created heaven and earth from the corpse. He then created a home for the gods, fixed the constellations in the sky and set the sun and moon in motion between easterly and westerly gates. To free the gods from menial labour Marduk created mankind from the blood of Kingu, a rebel god who had led Tiamat's host. In appreciation the gods built Esegila, Marduk's temple at Babylon, and gave him the fifty names which embrace the powers of all the gods in the Akkadian pantheon. In the Sumerian version of events Enki, or Ea, is referred to as a water-god, suggesting that he may have been the progeny of the two ocean giants and thus committed paternicide..

Except for references to mankind as the servants of the gods, little reference is made to them in these old myths. An exception is found on a single Sumerian tablet of which only two-thirds of a tale is preserved, the beginning having been broken away and lost: Here the story begins with the creation of men, vegetation and animals and the establishment of five antediluvian cities of men, each ruled by five tutelary deities. We are

told that these gods have been made unhappy by a decision which has been made to flood them out of existence. We are introduced to Ziusudra (resembling Zeus or Tius?) a god-fearing king of Sumer, always on the lookout for divine revelations, who is given prior knowledge of the planned disaster. A defacement of the tablet prevents reading of Ziusudra's reaction to this news, but he is later seen caught up in showers and a deluge which persisted for seven days and nights. Following his survival, Ziusudra is seen prostrating himself before the sun-god and is given "life like a god." At the same time he is translated to Dilmun, a divine paradise in "the place where the sun rises."

Elsewhere it was said that Dilmun was at first a barren land, lacking fresh water and plant life. The water god Enki therefore ordered the sun god Utu, to fill that land with water taken from earth-world. The earth-goddess Ninhursag, a tri-partite deity, "delivered" herself of the plant life, which was subsequently eaten by Enki. Seeing her "children" treated in this way Ninhursag cursed Enki with death and banished from this new home of the gods. Through the intervention of the fox-god, Enki and Dilmun were eventually restored to health.

Although this myth deals with a divine rather than a human paradise it has parallels with the Biblical heaven. The Babylonians, who conquered the Sumerians, also located their "land of the living," the home of their immortals, in Dilmun. The terrestrial paradise of the Hebrews was set "in the east of Eden," and from it there flowed the four rivers that watered the earth, two of these being identified as the Tigris and Euphrates which were within the Fertile Crescent and axial to all three of these ancient kingdoms.

Some mythologists say that Dilmun has an earthly counterpart in the land now called India. Here Vedic literature makes reference to a dual deity who existed before the universe was created. In unison they were referred to as Asura, the "Living Power." Individually they were Vritra, a male god and Aditya, a feminine personification of god-power. The former was said to be a son of Danu, "Restraint," and the latter a child of Aditi, "Freedom." No male parent is mentioned for either of these deities. The children of these two prime deities were hostile to one another and warred to a impasse, but Vritra and Aditya did cohabit to produce a son

named Indra. At his mother's breast he consumed a powerful liquid called soma and this caused him to swell and burst. The process was so terrifying that the elementals of Sky and Earth were driven apart.

Indra was unharmed and was soon conscripted to battle against the Vritra, and especially to do battle against Tvashtri, the god of lightning, who was described as "a serpent lying upon the mountains." In the battle he split open the belly of his father and killed Danu at the same time. When all was done, Vritra's belly gushed forth the waters of the earth. Astonishingly, the primal oceans were already pregnant with the sun.

Thus Asat, the Great Chasm, where there was nothing but chaos, darkness and demoniac activity existed, was reformed as a world for men and the gods. The first men were described in Indian myth as children of Vivasvant, the "Wide-shining One," or the Sun. As elsewhere, they were considered servants of the gods, their function being that of strengthening order and frustrating agents of darkness.

The ancient land of Canaan is the Syro-Palestinian part of the Fertile Crescent, the land lying between the Mediterranean Sea and what is now eastern desert. The people who spoke Canaanite dialects included the Hebrews and the Phoenicians as well as a host of smaller allied tribes. Cannanite paganism is of special interest because of its interaction with the Judeo-Christian faith.

The Bible is filled with references to Cannanite myth and religion, but since 1929 tablets have been unearthed at Ugarit, providing supplementary text dating from the fourteenth century. Here again we find a creator-god named El who retires to the seashore to create daughters named Dawn and Dusk. In another coupling (with the ocean) he produces seven sons, "the newborn gods, all voracious giants." Two of these were Bal and Mot, who were constantly at war with one another. The former, a god of light and life, nevertheless displaced his father El as the ruler of the earth-gods.

The sea-gods are the allies of Mot, the lord of darkness and death. The tannin, or dragon of the ocean, is well known as the scriptural Leviathan. In the Psalms it is revealed that the Hebrew God crushed the

seven heads of this great monster. In Revelations, Leviathan is represented as a reincarnate personification of evil to be overcome by God in the final days of our world. In 500 A.D, Aramaic magicians invoked the precedent of God's victory over this great worm when they wished to dispel evil from the home of a client. All of this has a great deal to do with the Judaic and Christian theologies of dualism; that light balances darkness; evil stands against good, that God has a counterpart in Satan. Although this is frequently attributed to Zoroasterism, it is more clearly allied with Hebrew-Canaanite mythology. The seven-headed Hydra of the Greeks is clearly allied with this concept, as are the seven evil Mains, the sons of the Gaelic sea-goddess Mhorrigan. The goddess herself is frequently represented as a sea-serpent.

Mot, literally "Death," gathered an ancient cult known as Az-mawet, "Mot is Strong." This evil deity reverberates in Baal-Sebub, the prince of demons in the New Testament. We suspect he confers as well with the Gallic Belenos and the Gaelic Bil, whose name attaches to the British festival of Beltane.

Again, in Iran we hear of twin primordial spirits, proponents of life and non-life, apparently brought into being by Ahura Mazda "who created this earth, who created that sky, who created man." It is of interest that in both cases cited above the verb "to create" is the *dā*, the Indo-European *dhā*, which appears in Danu, and is the Latin *facio*.

Once again a void is postulated. On one side of it was Ahura Mazda, on the other Angara Mainyu, the destructive half of the creator-god. While they remained separated there were three thousand years of peace, albeit not much action. Perhaps bored by this stasis the good god "in a moment of doubt" allowed the antagonist to glimpse his light, and immediately Angara sped upward in an attempt to extinguish it. Failing to do so, he retreated to a dark corner "and fashioned many demons." Mazda and Angara eventually agreed to meet for a final battle at some point in the future, but in the waiting time, they co-operated in the creation of the universe of men: "First they made the sky, in the form of an egg of shining metal." The earth they conceived in the centre of this sphere "like the yoke in the centre." After the earth was made the dual-god fabricated "the seed of men and bulls."

In the Persian theology the antagonistic spawn of Angara, who opposed men and the gods are the daeva, a general designation for demons. It is assumed they will eventually be overcome, in the meantime, the glorious dead are routed to Asa, "Truth," a paradise or heaven where there is "light and all comforts known to men." Another designation for this place is Asa nmana, (note the Norse Asa or Odin) the "house of Reward," suggesting that religious warriors might expect compensation for their war against evil. It is sometimes argued that this paradise was to be found above Hara, the first mountain created, supposedly sited at its geographic centre. The Christian Hell obviously owes more to the Zoroasterian model than to the Old Norse Nifhelheim: It was said that all souls of the dead had to march at last to the Bridge of the Requirer, to be judged as good or evil. Evil characters were unable to ascend, but after three days of waiting were "dragged to the depths" and after a period of purgatory entered the dominion of Angara.

The idea of a primeval ocean reappears in Egyptian mythology, where the earth is first envisioned as "a hill standing forth amidst waters." It was said that the first lands had "a flaming appearance and bore with them the first living creature." This early life form is usually said to have been a serpent, although it is also given as the dung-beetle. The Egyptians were somewhat vague about the origin of things, but the sun was looked on as the general source of all life. There were suggestions that men were descendant from the gods perhaps via the "cow of the ocean" and the "bull on high."

The Egyptians were not Indo-Europeans and hence the disparate elements in their mythology. The Greeks, on the other hand, like the Hittites, Iranians, Celts and Germans, were of the Indo-European language group. Like the others, the Greeks supposed that the first father-god was a Titan, or sea-god, himself a son of the elementals Uranus and Gaia. Cronus who dethroned, and possibly killed his father, was in turn banished to some western island by his own son Zeus.

According to Hesiod there was, at the beginning, a state characterized by the word Chaos, the "Void," or "Emptiness." In it Gaia and Uranus, personifications of Earth and Heaven mated producing the first

generation of deities. Kronos having set a precedent in the castration and death of his own father was always fearful of similar treatment at the hands of his offspring, and got around this fact of life by swallowing each of Rhea's children as they were born. His sister/consort substituted a rock for Zeus and he escaped into a cavern where he was hidden by his grandmother Gaia. Cronus probably had indigestion so Zeus was able to persuade him to disgorge his undigested brothers and sisters, who being grateful, declared him king of the gods. The followers of Cronus were then banished to a northern netherland.

At a meeting of the American Chemical Society in 1973, participants in a seminar took up the matter of why dust clung to the boots of the Apollo astronauts as they walked on the moon. Dr. Gustav Arrhenius suggested that the dust particles, charged by cosmic rays from space, became electrically charged and tended to stick to each other and all other matter. In a cloud, such as that out of which our sun condensed, such clumps of matter could aggregate to form planets. "Thus," said the good scientist, "they could give bring with them the starter chemicals from which life could arise on such planets."

In our world, this explanation is given more veracity than the Biblical account and the pagan tales of our forbearers. But is this theoretical model for creation less fanciful because it speaks of critical temperatures and pressures? No physicist, scald nor druid was present to see the first explosion of light as the sun ignited, but these tale-tellers each have their own somewhat fanciful versions of creation.

In Gaelic realms, similar tales are a matter of folklore rather than record. In the northwest the "will" or "spirit" of the universe was thought at first embedded in chaos, which resolved itself in the form of an-t-athair, "the one god," the creator of all things. This god was sometimes entitled ool-athair, or Eochaid oolathair, and he was the equivalent of the Norse Alfadr, or Allfather. The world he created was often called An Domhain, "the Deep," a synonym for the abyss or plain of the great ocean-sea (the Atlantic). The Beginning Gap, which lay "below" the western horizon, was first peopled by the famhaire, or giants, all from the loins of Domu by this Allfather, who was familiarly called Ler, or Lear, the "Sea". The "undersea folk" were said to be of the House of Ler. This god

“retired” early on, his departure perhaps aided by parenticide or murder. The rule of the sea-kingdom was afterwards managed through most of the time in question by Ler’s son Manann mac Ler. As ruler of the deep, Ler or his son Manann was sometimes called Domhnull, or “Donald” and was distinguished from land-based Donalds as “Old Donald,” in recognition of his seniority. At present the name is used, in Scotland, to indicate the Devil.

The land folk liked to think that they were entirely separate creations, the progeny of a bear-man and a bear-woman in a remote and vague antiquity. If their Allfather had a home it was not in the Deep but within the North-, or Pole-Star, which was observed to be the centre of the sky-universe. The closest constellations to it were referred to in this (and other) mythologies as the Great and Little Bear.

The land-based House of Dōn, (Anglo-Saxon, Doom after the goddess Danu) always insisted that it was entirely “human” and independent of the House of Ler, but there was intermarriage. Since these houses had offspring together it must be assumed that they both contained a single species and the Allfather of the sea-giants must also have been the ancient ancestor of the land people. Manann mac Ler was, in point of fact, the seed of Ler through a union with Tuathan princess from Ireland. The progenitor of the Tuatha daoine was the Dagda, the “Father of Day,” and the female By-anu, Bas-finne, or Danu (the last a feminization of Domhnull). These deities have names which are surprising close to those of the sea-born deities Domh and Domu, so these folk are probably nothing more than alter-egos. The first-born of the Dagda and his mate were the twin sons named Lugh (Light) and Nuada (New), the latter being a few seconds “newer” than his brother. After the defeat of the sea-giants, the land folk often deliberately confounded their Dagda with the Allfather and attributed the creation of the universe to his sons.

Reference to a great singular abyss at the beginning of time is in complete agreement with scientific theory: Men have been about for 4 million years, hardly a whisper of time in terms of the earth itself which was a full 4 billion years old when it gave birth to our moon. The earth was already losing its liquid state when this happened so the great void from which our satellite was torn (which is now the Pacific Ocean basin)

was a reality in the surround of proto-continents. At that most of this torn "skin" reformed before the crust entirely solidified. After the first rains fell, the solid granitic crust commenced to come into being. At first the worldis thought to have had a single shallow ocean which inundated most, if not all, of the crust. Driven by forces in the underlying basalts, which remained in a molten state, the continents, formerly a single land mass on the side of the earth away from the moon-scar, began to crack and drift away from one another.

The Oolathair undoubtedly found An Domhain a boring place. Lugh Long arm and Nuada of the Silver Hand, certainly found the chaos of the Beginning Gap equally unchallenging. Some Gaels claim that on a May-day, the two brothers stumbled upon one another in the primal darkness, and walked the distance of the universe, to see what the place contained. After a one thousand year survey they concluded that it was entirely featureless, and decided that the "Beginning Gap" needed light, so that they might at least see one another. Easily amused, they are said to have sat contemplating first fire for five thousand years. It was then that they noted a preliminary to the event scientists have referred to as "The Big Bang:" "They were noticing that the fire was automatically growing and declining in intensity. When the fire was increasing in intensity particles from it were coming together and throwing off rays of light, which lit up every part of the darkness both far and wide." At the limits of the universe, the two gods saw that the light weakened to extinction. However they saw that the de-energized particles were then drawn back to the original fire, where they were reinvigorated and repeated the process.

This alternation of light and darkness they called day and night, but it fluctuated chaotically until the brothers decided to "set limits to arbitrary nature." In the interests of order they created time and space and "made their Creation round." Apparently chaos still existed beyond their round universe for they set physical laws so that "chaos may not impinge, but the round be made square with measurement, knowledge, reasoning and fact." All this was instigated at their will, as was the division of light and darkness into even sets. At that, the universe was still an uneventful place until Lugh experimentally thrust his spear "the one that was living like his hand" into the central sun-fire, picking away a

great glowing orb of fire which he lifted aloft. In a playful mood, his twin brother sprang to his feet , seized his irresistible sword and brought it down on the blazing spear. This scattered sparks far and wide, and that it is said, is how the stars became distributed in space. When Lugh lowered his spear, a single drop of matter fell into space and this was later termed the gelach or moon. At about this time the brothers fell into a power struggle with their father and killed him, salvaging the body parts to create a world now called earth.

For a long while the brothers were content with observing their new playthings, but eventually they were joined by their sister Dag, who the English called "Day." Note that the Dagda is named for his part in her creation, hence Dag-da, literally the "Daddy of Day." Realizing that they intended to people the planet that now embodied the spirit of the Allfather, she noted that the earth was immobile in space and that any residents of it would either live on the sunlight side of the sphere in endless light, or on the dark side, in perpetual night. The brothers corrected this by shaking their universe until its parts fell into periodic movements, the earth wheeling about the sun, the moon about the earth, and all rotating on their axes. It was Dag who decorated the world: "She was in charge, making the things to grow. On the grass she put green saying, "It is the best background colour!" She placed miscellaneous colours on the flowers, on the fruits and on the growth of the fields. She classified the things that the boys created as kind, generation, gender, social order, assimilation, all according to their contained spirit, to their reasoning power, and to the laws of nature. Male and female she placed on land and sea and air as well as within these elements. She made a large pot (the ocean), the coire mor, "the great cauldron, which was always filled with every kind of food and provision, so that no living thing would go without provisions."

As the proto-continent which scientists termed Pangea began to disassemble a number of continuous "rift-valleys" were created. Eventually the plates on which the continental "islands" were rafted about and came into collision, and where they did, great mountain ranges were raised. Mountain-building brought with it local weakenings of the earth's crust and periods of great volcanic activity and earthquakes. The mountain ranges impeded the flow of air about the earth, creating hot and

cold spots on the surface. In the region nearest the poles the highlands became the sites of continental glaciation. The good news is found in the fact that each period of mountain-building was followed by a corresponding, and far longer period of mountain erosion, weathering and decay. The effects of wind and rain, and alternations of heat and cold, was the break up of rock into boulders, the disassembly of them into gravel and sand, and finally the deposition of mud and earth in lowland regions. The enormous weight of sediments depressed lowlands into the plastic basalt, causing it to adjust by raising mountains at the edges of the ancient seas. These ancient deposits became the groundwork for soils allowing the development of plant and animal life.

Ice ages are a relatively recent anomaly in the behaviour of the earth's climate. In the beginning days, when there was a super-continent and shallow seas, and not much to retard the passage of winds over the surface of the earth the Permian weather was more or less genial, a situation that continued for about 200 million years. When the continents shattered and its parts began to drift and collide, giving rise to mountains, air-flows were interrupted and weather and climate became more complex, so that all of the Quaternary period of time became one of high relief and dramatic climatic changes.

Mountain building may have something to do with ice ages, but the creation of weather cells does not explain why our periods of icing and de-icing sometimes took place in such rapid order (occasionally an ice age came on within a decade) or why the ice sheets fluctuated, advancing and retreating as if influenced by some outer force. A theory intended to explain this periodicity was proposed by Milankovitch, who thought that changes in solar intensity might be the driving force behind ice formation and melting. This is not the place to go into detail, but he did notice that there have always been slow minor changes in the tilt of the earth's axis in relation to its plane of orbit, which might create differences in the radiation received by the northern hemispheres at different times.

Whatever the force for climatic changes, there have been four continental ice sheets spread out over our world, larger brothers of those still in place at the polar caps. In Europe the centres of glaciation started with accumulations in northern Scandinavia, the Alps and the Pyrennes of

Europe. In North America there were major centres of collection in the Cordellarian mountains, Keewatin and Labrador. From these high lands, the ice slipped down into lower latitudes and crawled out across the plains, reaching as far south at the 40th Parallel in North America and approaching the 50th in Europe.

One result of the ice-advances was the conversion of the climate of present day cool-temperate lands on both continents to a decidedly sub-arctic, or arctic, character. In Africa and Central America there was no ice, but when glaciation was widespread there was actually a minor ice-centre on the top of the Atlas Mountains which are middling close to the equator, and the same holds for the volcanic cones of the great equatorial mountains of Kenya, Elgon and Kilimanjaro. The sudden shift in climate pushed the current humidity of the Mediterranean into Africa where the Sahara became grasslands as long as the cold persisted.

The final retreat of the ice just prior to historic times opened what we call the Postglacial period, which hopefully may not prove to be a misnomer. The Ice Ages saw men in Europe at the hand-axe stage of Palaeolithic development and did absolutely nothing to advance his attempts at a quiet life-style. By the Middle Palaeolithic a few hunter-gatherers had learned to subsist in arctic conditions at the edge of the glacier, but all this adaptation was turned against men of the Late Palaeolithic when the climate turned unexpectedly warmer, killing off the tundras and animals on which men depended. Mesolithic man, still the hunter, had to take up, fishing to supplement his diminishing food supply. The Thermal Maximum arrived about eight thousand years ago, and the improved climate allowed agriculturists to move in from eastern Europe. These bearers of the New Stone Age culture were the first northerners to contemplate a settled existence in large communities. Among them the specialization of community chores led to the development of metal-smelting and the creation of tools and weapons of agriculture and war.

When the ice began to move down over the land it tied up water so that the distribution of land and sea was not quite as it is today. When the glaciation was at its maximum 18,000 years ago, the average sea-level was 100 metres (or about 330 feet) lower than it is at the present. There is a lot of real estate in the North Atlantic that would come to light

if the salt-water were to fall by this distance. In all quarters of the Atlantic there are depths less than this all the way out to the edge of the so-called continental shelf. It is suspected that this is the place of original earth-cracking and spreading, where the old super-continent of Pangea fragmented, for the undersea lands dip precipitously at this edge to the flat-lands of the deep ocean, which are variously referred to as the abyssal plains.

In the past, the continental shelves were much more open to the sun: In the case of North America, the largest lost lands were in the Northern Atlantic, some continuous with places such as Cape Cod, Prince Edward Island, the Magdelan Islands and Newfoundland. Others existed as large isolated off-shore islands most located south-east of Maritime Canada. In the year 16,000 B.C. almost all of the current lands of the north-east were submerged beneath the Appalachian Ice Complex, exceptions being Anticosti Island, the Magdelans, the south-eastern tip of Prince Edward Island, the northern promontory of Cape Breton Island and perhaps part of the Avalon Peninsula of Newfoundland. According to the best guesses of the Geological Survey of Canada there were perhaps thirteen remote unglaciated islands in the American Atlantic, the total land area of which was greater than that of present-day Maritime Canada.

In those times the continental shelf went partially dry all the way from Labrador to Cape Horn, but only Trinidad among the Caribbeans lost its identity as an island, and in all the more southern regions the width of the shelf was much less than in the north. Alaska was, of course, firmly hooked up with north-eastern Siberia, allowing men to migrate from Asia to the Americas. Even at the lowest extremes of temperature neither Siberia nor Alaska was completely inundated with ice as was the case with in the extreme North Atlantic. Even with a slight glacial retreat it is assumed that temperate westerlies would have opened an ice-free corridor for anyone wishing to make the trip from the old world to the new.

Very nearly the same situation of exposure held for Europe, where England was firmly then tied to the continent, although almost everything north and east of London was wrapped in ice. It has been noted that the deepest soundings of the Straits of Dover are thirty fathoms, which is

only 180 feet, and that the sea-level was then depressed by 330 feet. For about half of the time of glaciation the sea-levels in that region were such that a visitor from Europe could cross to England completely dry-shod, taking brief detours to avoid shallow lakes and streams. The Irish Sea, on the other hand, was deeper than the English Channel, and there were only two land-bridges, one between Anglesey and Dublin, Ireland, the other spanning the Irish Sea between the Llyn Peninsula and Wicklow Head, also in Ireland. These narrow ridges would have emerged only briefly at the most extreme time of cold. To all intents and purposes Ireland has always been isolated from the rest of Europe in all time since the penultimate glaciation during Lower Palaeolithic times when the seas dropped by 660 feet. There are no known human remains of that date for Ireland, so it has been thought that conditions were perhaps too severe to allow a crossing of men from the east at the times of glacial maxima.

On average the sea-shore was much further sea-ward for our ancient ancestors because of the vast volumes of sea water tied up in the glaciers. The continental shelf were not dry land but they were low-lying marshes or fens, gradually developing forests as the tundra retreated to be replaced by temperate zone plants. It is known that some of the best fishing banks on both sides of the Atlantic, which were then land areas, frequently surrender masses of "moorlog", peaty material consisting of the remains of freshwater and land vegetation.

In places along the Atlantic, notably in New Brunswick, Labrador and Scandinavia, the early post-glacial coast-lands were actually well above present levels in spite of the flooding that has taken place. This is explained by the weight of the huge glaciers pressing down on such locations. When this over-burden came into place it depressed the land, which rebounded with the removal of the ice. At that, the rate of rise was never equal to the increase in sea-level in some places. Generally, more northern locales got the most ice and are still involved in an upward movement. In Maritime Canada, the so called "eustatic axis" runs through extreme southern New Brunswick. Everything south of that mark is being gradually inundated while the north is still in rebound.

Almost as soon as the glaciers began to recede men appeared trailing the caribou that migrated the tundras. In Atlantic Canada, the

melting was well under way by 12,000 B.C. although only a small corner of southeastern New Brunswick was relieved of ice. By the year 11,000 the situation was much different, the glacier having retreated to six highland areas in Atlantic Canada. The coast was at first much enlarged, the rise of the land being well ahead of submergence by melt water. At this time Newfoundland was still in the deep-freeze but Maritime Canada had twice its present land area in addition to nine large off-shore islands, three approaching Cape Breton in size. A thousand years on, the islands remained relatively untouched but the flood waters had by then drowned many present-day inland regions in the north. Atlantic Canada was still larger in land area than at present, and the glacial centres had shrunk to five local sources of ice. The Thermal Maximum arrived about the year 8,000 B.C. creating extreme flood waters. Most of the large sea-islands, constricted of sandstone, were easily swept away at this time, an exception being Sable Island which has persisted as a sand island. The rise of the land more than kept pace in the north and New Brunswick at first gained real estate. The upper reaches of the Bay of Fundy were dry forested land following the complete retreat of the continental glacier to Labrador and for 5,000 additional years Prince Edward Island and Cape Breton remained attached to the mainland. The development of the Northumberland Strait between Prince Edward Island and the mainland, and the Strait of Canso between Cape Breton and Nova Scotia commenced sometime after the year 3,000 B.C.

It may well be that men inhabited all of these glaciated lands well before the last over-run of ice but few bones or artifacts remain as moving ice has had the effect of grinding all but the hardest rocks, and certainly all the remains of men, into a fine powder. There have been exceptional finds within the caves and crevasses of Europe, one of these being the Heidelberg Jaw which was found in near the river Rhine. The animals associated with this proto-man were warm-temperate, and he is thought to have lived 300 thousand years in the past, existing during the so-called Interstadial Phase between two times of glaciation. This prehistoric man was perhaps replaced by the "classic" Neanderthal at the beginnings of the last glacial period. Homo sapiens appeared soon after the maximum extent of the last glaciation. Just how the two species interacted is not known but before very long the stone implements of the Neanderthals disappeared to be replaced by the superior stone-work of the

newcomers. Since the ice was further north in Britain than in Atlantic Canada there were larger populations in the former place at an earlier period.

Christian missionaries to northwestern Europe and northeastern America, understandably, misrepresented the pagan polytheism they found in these places. The "gods" of ancient men were not immortal and all of the tale-bearers of the el-people were agreed that there was once a single all-powerful immortal god-of-gods. This god is usually characterized as making the stuff of the universe, setting the spheres in motion, then going on to other more interesting or pressing matters. This Allfather differed from the Christian God in the fact that the latter was neurotically possessive of his creations.

Even so, in all theology, there is nothing at the beginning of any creation-myth except the "Deep." This corresponds closely with scientific conclusions about the earliest times, when what land there was incorporated in a single "proto-continent," which has become known as "Gonowandaland." This "beginning place," had not yet been pushed up into mountains and driven down into valleys by the forces governing plate tectonics, so it was, indeed, the "great plain of the sea," which is spoken of so often in mythology. The seas of those times may have been shallower, but they were all-encompassing. As this older world broke apart and the plates of the crust began to grind one another, mountain-building commenced and the "worlds" known to men came into being.

There is a name for the "Beginning Place," in all of the languages of earth, and the ancient shamans could point in the direction of this oldest of lands, the place where all their tribe was assumed to have originated. The place that the Gaels called it An Domhain, was Ukakaumkuk for the Algonquin Indians, and they said that it was not only the place at the start of time, but that where all time would terminate. For them this place lay in the ocean northeast of their holdings.

Ukakaumkuk was frequently said to be an island like An Domhain and it has been variously identified by the aboriginals as Isle Haut, Grand Manan, Cape Breton, Prince Edward Island or Newfoundland. The wandering nature of the "Beginning Place" was no more of a problem in Algonquin

than in Gaelic tradition, for again all islands were seen as reflections of "the one island" at the beginning of time and space.

In many Indian myths the world is said to have been fashioned by the "Great Spirit," who was the "Allfather Sun." Some tribesmen have guessed that the "one-god," squeezed water from the clouds of the void to create the sea. The deity then shit into the Deep and this became the "raw-material" for the land. In some of the more highly developed myths, the god fashioned his body waste into an egg and sat upon it until it hatched into a green scum. The heat of his being afterwards divided this matter into the "fourfold" earth-mother and the sky-father. This pair cohabited to produce the living creatures of earth. In the "nethermost (northernmost, womb or beginning place) of the four caves of the earth," the eggs of life were impregnated, deposited and hatched into "nature red of tooth and claw." At first the seething cauldron contained reptile-like beings that engaged in "every sort of indecency," but gradually the first men arose and sought to escape to the surface of mother-earth. Those who came first asked the Sun-Father to deliver others "from the Netherworld."

Note the parallels with Gaelic cosmography and with modern biology: "At some time in the earth's history...in ponds or on the seacoasts, there were...simple compounds of the elements which compose the living substance protoplasm. With the energy of the sun...various chemical combinations were formed. Some of these possessed the power of self propagation...it is not difficult to suppose that some aggregation (of such matter) led to the development of larger organisms, independent, creating their own food from simple substances, and using the energy of the sun. There is evidence that both plant and animal kingdoms originated from primitive flagellates..."¹

The creator, who the Micmacs called Kjikinap, "The Great Spirit," was more generally known among the Algonquin-speakers as Michabo, "The Hare," a very neat symbol of procreative power. These Micmacs have characterized men as "the el-folk" and "the new-people," and this corresponds with the Gaelic idea of the gods and men. It also matches

¹Buchsbaum, Ralph, Animals Without Backbones (1966), pp. 12-13.

archaeological science for it is known that there was a "Great Hiatus," a long period of time during which men were absent from Maine and Maritime Canada. In the old tales it is explained that Michabo offended the horned-serpent peoples who lived in the sea, by showing favouritism towards the land animals. As a consequence, having some magical control over water, the sea-creatures flooded the land and destroyed their rivals. The god Michabo, more bemused than angered, sent his raven messenger to locate a bit of earth from which the whole might be regenerated, but the bird failed in the quest and returned with an empty beak. The god then sent an otter diving to the roots of the Deep to bring up the "germ of all things," but it also failed. At last the Hare turned to the Muskrat, and it was able to bring back the "bones of the earth," from which Michabo regenerated the solid land. After this, the creator-god "rewarded" Muskrat by impregnating her. From their union there arose a new race of men, the sea-people who were the kin of the mortal-god Glooscap. In some of the tales the Algonquins or "Dawn People," are said to have arisen directly from this union of a water being and the sun-deity, but in others the creation is credited to Glooscap.

Whatever the situation, the new gods and men had more of the sea-spirit in their makeup and were less offensive to the jipjakamaq or "horned-serpent people." The serpents of the land were often adopted as totems because of their relationship to the "powerful princes" of the open ocean. Further, the ultimate horned-serpent chieftain was seen as the alter-ego of the creator-god, and this is shown in certain Indian pictograms where the serpent appears in circular form, its tail in its mouth (exactly like the Norse and Gaelic World Worm). Overall, this disk is believed to represent the Sun-Father. The orb in the sky has always been seen as quixotic, blessing the land with favourable weather on one hand, and blighting the crops with the other.

The left hand of the god was the serpent which was also thought to represent lightning, a component of god-power. The jagged rapidity of a snake in motion, its sharp spring and recoil, the brilliance of its gaze, and the seeming intelligence of its habits, gave all snakes a reputation as possessors of orenda, or magical power. It was long noted that lightning was at its height in the "snake-season," the summer months, when plant growth took place. It was therefore suspected that the sun, snakes and

lightning were all necessary to plant growth. Lightning itself was described as "the hissing of the great snake," and was sometimes said to be the "vomit," of the sun god. The eyes of the thunderbirds correspond with this orb in the sky and their glance was also said to leave serpentine twists along the sides of trees.

For costal Indians the supreme prince of the horned-serpent people lived in the ocean, but the inland tribes thought he was resident in the Great Lakes. Wherever he dwelt, his horn was seen as embodied in all of the horned-serpents, and these relics were sought as the most potent war-charms. Powerful chiefs and priests routinely professed to carry a bit of this sea-monster in their medicine-pouch. This water-god, the darker face of the sun, was seen as leaving his imprint on land, in the snake-like configurations of rivers. Rivers devoted to the snake-god were often entitled *kennebec*, "the twisting things." One of this name is found in Maine and another in the *Kennebecasis*, which is tributary to the Saint John River. In such places the quixotic nature of the "snake," was greatly feared and it was thought advisable to consult the local *manitou* before invading his waters. Foolhardy men who warred upon such waters, or who drew attention to themselves by breaking the ice beneath their feet, were often dragged down into the dismal fastness of the Deep. It must also be noted that the rivers themselves were regarded as clefts left by the passage of horned serpents. Lesser markings were often made from one large body of water to another by smaller members of the species, and it was said that men could attain the form of the *jipjakamq* by merely lying within its path. It was also said that these water-beasts could swim through rock, and they rested within the land in the form of mountains. This may explain why the Indians feared the peaks, saying that when such places were disturbed the earth erupted in earthquakes. On the opposite side of our globe, Japanese archaeologists have found stone-age memorials at the bases of mountains known to be sacred. From these they have inferred that these rises in the land were "the private abodes of spirits," always to be consulted from a distance for fear of raising unwanted "winds within the earth." We are also reminded of the Old Norse *lomagandr*, "The World-Snake," one of the offspring of the fire-god *Loki*. When this worm grew to unmanageable proportions, *Odin* threw it in the great ocean-sea. There it grew to such a size that it encircled the earth. When its head approached its tail it was led to take it as an appetizer, but

each bite created a convulsion, which was credited with creating earthquakes on land and at sea. Thor once attempted to remove the World-Worm when he went on a fishing expedition, but his failure meant that earthquakes still shake the serenity of Middle Earth.

The relationship of the Micmac culture hero Glooscap to the sea giants is shown in the fact that he was said "born of the sea foam." In addition, like the jipjakamaq he was a shape-changer who came to the land from the open ocean. Furthermore, Glooscap was always accompanied by a giant named "Earthquake," a herald who always announced his comings and goings by shaking the earth beneath men's feet.

In the chant of the Meda, who belonged to the Algonquin magician's lodge, it was asked, "Who is the true manitou?" The reply was always, "He who walketh with the serpent." Thus it was that shamans showed the potency of their shadow-guardians by handling large, if not always poisonous, reptiles. In the old days, there were frequent public displays of snake-handling and in the inland regions dangerous reptiles were displayed. It has been guessed that medicine-men knew that the witch-hazel repels all snakes, and they may have incorporated it into an antidote for snake-poison. However they managed it, such exhibitions had a profound effect on spectators, who became convinced that the magician had made the creator-god compliant with his desires.

It is surprising that tales of these serpent-folk may be found in inland locations far from the northeastern coast. Where there is a lack of water, the horned-people are called the "Underground Panthers," or something of that ilk. Strangely, the very same myths are found in northwestern Europe, the most thorough exposition being found in places that were once part of the old Celtic domains.

It is said that Bith, Finntan and Ladra who were "men of Greece," built an idol in the form of a standing stone. This structure spoke to them warning them that the land of their birth would be submerged by a deluge and strongly suggested that they construct a ship and sail away if they hoped to escape their fate. The cromlech was unable to say exactly when catastrophe might fall upon them so they sailed into the ocean as soon as they could gather an expedition. The planning may have been a little too

hurried for it is noted that "Bith's venturesome daughter" left land with "fifty fair damsels to solace her warriors three." Ladhra served as pilot to the ship which spent seven years on the open sea before arriving in Ireland. Cassir's chief advisor was another lady named Barran, whose name is sometimes given as Barrfhind, the "leader of the white-ones (women)."

Once landed the expedition broke into three camps each "serviced" by one of the three younger men. Ladra was at first hurt by an unequal division which left him with only seventeen "soul-mates," but these proved more than equal to his sexuality and he was soon reported "dead from a surfeit of women," the first man so recorded in Irish history. The amazonian leader attached herself to Finntann but a ballad-sheet (1913) tells us that these people were ill-fated:

Bith died at the foot of his mountain,
And Ladra on the top of his height;
And Cassir by Boyle's limpid fountain,
Ere rushed down the Flood in its might.

The spirit of the drowned men passed into the mountains that now bear their name, but that of Cassir, being most potent, became the astral-genius for the entire island. In later mythology Banbha, literally, the "fat pig," is a name given to the land to suggest its productivity. The uncapitalized Gaelic word also cites "land left fallow for a year." Note also that this "goddess" was, from time-to-time, incarnate as one or more of a triune, the other two being Folta and Éiru. With her sisters this queen of sovereignty met the Milesian invaders of Ireland and each asked that her name be attached to the country. Each name has been used in Irish literature but it is Éiru that was finally adopted as the political name.

Finntann was not caught by the flood waters. A cautious man, he secretly constructed and provisioned a tul-tunna or "flood-barrel" which he anchored at the crest of the Irish mountain which still bears that name. When he saw the waters closing about him this "gentleman" quietly stole away from his wife and...

For a year, while the waters encumber
The Earth, at Tul-tunna of strength,
I slept, none enjoyed such sweet slumber
As that which I woke from at length.

In an alternate myth Finntann shape-changed himself into a salmon and so remained until the skies cleared. However he managed, duplicity had its rewards, and Finntann, the grandson of Nodha, having escaped his fate, lived afterward, as a virtual immortal, at Dun Tulcha,, in southwestern Kerry. He lived for a very long time, once commenting that he had passed one day through the woods of west Munster and brought home the red berry from a yew tree. He planted it and saw it grow to a size which allowed "a hundred champions to recline beneath its foilage." When it died he had seven huge vats made from its wood. When the hoops of the vats decayed from old age he made other objects from the wood, until all was finally reduced to a single wooden cup. At that, he outlived the cup which fell into dust while he continued in ruddy good health. Thousands of years later Fintann was called to court by Diarmuid mac Carroll to solve a question of the limits of the Royal propoerties. When he travelled he brought with him nine companies of direct descendants, and nine additional companies of his close kin. Incidentally the name Finn-tann translates as "the slender white one," and this may be decriptive of his condition on emerging from his long sleep at sea.

Because these people were spoken of as the descendants of Nodha, the writers of the Christian era assumed that they were the "sons of the Biblical "Noah." These seemed to be reinforced by the myth that they came to Ireland from a land named Tir-nan-Bas, which they took to mean "the Land of Basques," which they equated with modern Spain. It was, therefore, supposed that the folk of the patriarch named Bith or Ith must have sailed to Spain out of the Eastern Ocean, now known as the Mediterranean Sea.

Nodha is, of course, a form of Nuada (pronounced nood-a), the twin-brother of the creator god Lugh (pronounced look-a) and has no connections with Christian mythology. Bas is the Gaelic word for "death," so their origin was in "The Land of the Dead," which traditionally lay on an "island" somewhere in the Atlantic. This interpretation makes their

seven year journey to Ireland more plausible. A cruise along the Mediterranean would hardly have required that length of time. The Bas-breton, or Basques, probably received their names from their war-like habits, as well as from the fact that they claimed descent from the "Lords of Death."

The place where Fintann's folk settled was ultimately named Munster and, as we have said, it was a province in the south. The name is an anglicized form of the Gaelic Muhan with the Old Norse ster ending. Earlier forms were Mumu and Muma. The Munster kings only grudgingly admitted kinship with other people in Ireland, and only recognized the high-kingship at Tara in the ninth century A.D. Munster was itself divided into five principalities, reflecting the ancient political divisions of the countryside. Later it had two major divisions. There are several things that separate Munster from all other places in Britain. First, it had a proud association with the Bas-finne, or Befind, the triune goddess of Fate, who the Norse called the Val-kyra, or the Nornr. Second, they had off their shores an island named Tech Duinn, the staging ground of the dead, where all the shades of the deceased supposedly gathered before being shipped out to the Otherworld in the west. Finally, the ruling house of Munster was Taigh Domh. "The House of Don," the "land-gods" who were forced to swear allegiance to, and take refuge with, the sea-giants in the western ocean.

In the ancient tales it is always Munster that is represented as the primal world or place of origins. Because it had this reputation every invader tried to legitimize his landing by sending some part of his fleet to these shores. Although the northerners said otherwise, the kings of Munster always traced their descent from Lugaid son of Ith.

Unfortunately, gods and heroes were routinely reincarnated in these early days and another Ith came to the fore several thousands of years after Lady Cassir's voyage. He is given as the son of Bregon and is said to have dwelt in a great tower which is father built in Spain. From the ramparts the young man, who possessed the gift of long-sight, said that he could see Ireland and he resolved to go there. He eventually sailed with ninety retainers and landed in County Kerry. He arrived at a time when monarchs of the north and south were arguing about their bounds. Seeing

a supposed neutral, the kings asked Ith to suggest a settlement. When he did as asked the northerners were dissatisfied and killed him, sending his body back to Tir-nan-Bas, or "Spain." His relatives saw this as an exceptional excuse to invade and gain new territory, thus followed the so-called Milesian Invasions of Ireland. The sons of Mil deliberately confused Ith son of Lugaid with their own Ith and thus gave Munster to his descendants. In that place, the Milesians were assimilated and many years after we find the famous king Cú Roi still referring to himself as domhain-righ the "ruler of all things," or as the "king of the deep."

The ancient Ith must have been a son of the ancient creator-god named Dom. The seat of power of this god was An Domhain, sometimes identified as a circular island on, or under, the western sea. The confusion over its location was brought about by the fact that no one knew much about conditions in the vast western ocean. It was observed that Lugh who travelled the daytime sky embodied in the sun, regularly went to rest in the western waters at night; presumably spending the dark hours in some undersea kingdom. It was further held that the walls of the fortress of An Domhain had magnetic properties and that it was not solidly anchored in the water, but revolved counterclockwise on its axis. Some men guessed that this floating island, at the nexus of creation, carried its own atmosphere but had to emerge once in seven years to take on fresh water and air. Tales of such a place were very persistent and as late as 1585, the renowned geographer Gerhardus Mercator published a polar map suggesting that there was a land in the Arctic Ocean at the pole itself. Here ice and water was swept away from the sea-bottom by a massive whirlpool and at the centre, "a high magnetic rock, thirty-three German miles in circumference."

The land of An Domhain once had, at its geographic centre, the Coire Mor, the "Great Kettle," also known as the Cauldron of Regeneration. A symbol of the fruitful ocean, the kettle was said to be always full of food and drink for men of a just nature. In addition, it was "the source of all poetry and inspiration" for the giants, men and the gods. The object which stood at the centre of the ancient sea-world was a shape-changing spirit, for in some of the tales we find the kettle supplanted by a head, a slab of rock, or a fountain, or we find it referred to as the navel of the worlds. It would seem that the "cauldron of the deep" was sometimes an

embodiment of the immortal Oolathair, or Allfather, also known as the creator-god Dom. Where it is represented as a standing stone or a fountain it is a male element of regeneration, where it appears as a cauldron or chalice, it is obviously female.

The Gaelic Tech na Danu, or "House of Doom," might not have despoiled the land of The Deep except for the attempt of Breas to retain the high-kingship of Ireland after his time had passed. The help he conscripted from the Fomorians led to their defeat on land and sea and they were forced to retreat "beneath the waves." The Tuatha daoine, or "folk of Doom," always claimed that they followed their enemies into their western retreat to get back the Harp of the North, purloined by the Fomors as they retreated. This was probably a partial truth since it is on record that the Tuathans used the "Dagda's Cauldron" to restore their dead during the Irish wars. If so, they may have looted the old sea-kingdom long before the harp was taken. In any event, the robbery of the various symbols of Fomorian power, including the "Cauldron of the Deep," obviously "emasculated" them as they were never again seen as a massive power in the British Isles.

In folklore, the final despoilment of An Domhain was supposedly the work of the Dagda and two of his sons, but in literature an allusion is made to the robbery in The Book of Taliesin. In this obscure Welsh poem the first recorded note is made of the British king named Arthur. "Here Arthur sets out upon various expeditions over perilous seas in his ship Pridwen; one of them having as its object the rape of a mysterious cauldron belonging to the king of Hades. Six times (in sixty lines) the tragic line recurs, "Thrice enough to fill Pridwen were we who went into it; but seven alone were they who returned from Caer Sidi." The endings vary at each repetition - Caer Vedwyd, Caer Rigor, etc. - and whether these are different places or different names for one place cannot be said. The whole poem evidently deals with expeditions conducted by Arthur to the realms of twilight and darkness." Ancient British poetry has nothing further to tell of this mysterious being. That Arthur was already (12th century) a figure of legend is the only clear fact in the general

obscurity.”²

Not all of this reference is lost in western mists: *Caer* is the Cymric equivalent of the Gaelic *cair*, “boggy ground, which relates to *cathair*, a city, the Latin *castrum*, a fortification. *Caer Sidi* is a clear reference to the *Daoine sidh*, or “Side-hill folk,” the people of *Danu*, who later found themselves banished to the western islands of the Atlantic. The other Cymric place names can also be translated, *Caer Vedwyd*, for example has the sense of the “Ball-shaped City Out Yonder.” As Sampson has said this does not tell us whether the names are descriptive of a single land or may individual places.

The Old Norse gods also had their run-ins with giants, and they distinguished between land giants and sea-giants. The latter were sometimes spoken of as the *Vanas*. In the beginning days *Odin’s* folk invaded territories within Europe that were held by these people. At first they warred without effect but finally the contenders gathered to make peace, which was affirmed by spitting together into a common container. From this saliva the land-gods said that they created a giant who they called *Kvasir*, a creature well-known for his wisdom, good humour and sage advice. Having no better prospect he wandered the worlds answering all questions that were asked of him, thus teaching and benefiting both men and the gods. The dwarfs who were collectors of knowledge coveted *Kvasir’s* great wisdom, and finding him asleep killed him and drained his blood into three vessels. They then mixed each with honey and from the blood made a beverage which was so “uplifting” that those who tasted it became instant poets, while others could sing charms that immediately won people to their side.

Although the dwarfs put together this mead for their own use, they did not bother to experiment with it, but rather hid it away in a secret place so that it might not be stolen, Soon after *Fialar* and *Galar*, the dwarfs who had invented mead, killed a sea-giant and her husband, and the relatives came seeking vengeance. The giant *Suttung* tracked down the murderers and stranded them on a tidal bar where they would have

²Sampson, George, The Cambridge Book of Prose and Verse< Cambridge, 1934, p. 209.

drowned except that they bartered away their mead in return for being put ashore. The giant having received the valuable compound entrusted it to his daughter Gunlod, bidding her to guard it against the gods and men. To better ensure security Gunlod placed the three vessels in a hollow mountain which had no entrance.

The ever inquisitive ravens of Odin soon found the place of concealment. Odin had by now tasted the waters of Mimir's Fountain, which gave him wisdom, but he wanted the new magic fluid for its usefulness in persuading the arts and crafts. He therefore journeyed to the giant's mountain representing himself as Bolwerk (literally the Evil-worker). He soon managed to find employment with Suttung's brother Baugi, and laboured diligently in the fields all one summer in return for the promise of a draught of the magical mead. When the time for payment arrived Baugi admitted that he could not deliver as promised, saying that he dared not openly ask his brother for the "fluid of inspiration."

Odin therefore conspired with Baugi to enter the mountain but they could find no entry to the secret place. Odin now produced his trusty rock-borer, the augur named Rati, and forced the giant to make a hole in the mountain-side. Having gotten inside by shape-changing himself into a snake, Odin reformed himself and advanced to meet Gunlod. Won by his wooing, the giantess spent three days of love-making with him, and afterwards brought out the three vessels full of mead saying he could have a sip from each. He sipped so deeply he consumed all the drink that was in the three containers. He then fled from the cave, donned his eagle feathers and flew southeastward towards his own country. He was soon pursued by Suttung who was also shape-changed into an eagle. Seeing his danger the gods created a huge pile of combustibles within the ramparts of Asgard, and as soon as Odin had landed they lighted it, so that the rising flames caught Suttung's feathers and brought him to earth in flames.

As for Odin, he had vessels prepared for the mead and disgorged what he had stolen. This was done in such haste that droplets spattered down to Middle earth where they nourished human rhmestyers and poetasters. The gods, however, kept most for their own use only occasionally allowing a mouthful to some favopured mortal. As men considered that Odin had gifted them with poetry and inspiration they

worshipped him as the patron of the scalds, who the Gaels called bards. A child was eventually born to Gunlod, and this was Braggi, who was given a magical harp by the dwarfs and sent up by boat to the world of men "from the subterranean darkness." It is said that his craft passed at last through the realm of Nain, the death-guardian, and that the young god thensat up full of mortal spirit. While Odin was no slouch at the arts, Braggi was the northern god of eloquence, poetry and song, and the better scalds were entitled braggimen or braggiwomen after him.

The location of the hollow mountain from which the secret of alcoholic drink was purloined is never given except to say that it was somewhere north of the lands of men. Here again the "Rape of the Draught" symbolizes a passing of spirit from the water-world to the land-world through the yielding of a female water-goddess to a male land-god. There are overtly sexual symbols in Gunlod's hollow mountain which Odin penetrates as a snake, and notice the death of her father at the hands of lands-men. In a separate tale Skaddi, the goddess of winter, a daughter of the dead giant, shows up at Odin's court seeking compensation and cohabits with Odin/Uller, the god of winter. She is the Gaelic Mhorrigan, who in winter dominates Lugh, the god of the sun.

There are many versions of the story of the rape of An Domhain in the north. Similar concepts are embodied in Thor and Tyr's taking of a "kettle" from the ice-giant named Hymir (literally the High-Sea). This female symbol of the astral genius of the ocean was said so huge that Thor could only lift it by pulling his power-belt in to the last notch. Unable to carry it he was forced to wear it as a cap over his head. In taking away this kettle of abundance Thor did damage to the sea-world since his feet went through the floor of Hymir's keep as he struggled with the pot. Back in Asgard the kettle was said to have been used to brew ale for the harvest feast.

In long span of geologic time there has been land in the midst of what is now the Atlantic. Geologists say that this Ocean has, on five occasions, spread itself more widely across Europe, Asia and North America than it does at present. It has receded during the intervening periods of mountain building and glaciation. Without citing all of geological history we may say that the old supercontinent of Pangea

existed into Paleozoic time, about 200 million years ago. Only then did the continents began to break and drift apart. It has been pointed out that the outlines of the present continental shelves would fit like jigsaw puzzles if they could be brought back into contact. The jagged break known as the mid-Atlantic Ridge may mark the place where the continents separated in days long past. Today this submarine mountain range is the world's longest run of mountains, stretching 10,000 miles from north to south. Covered by water averaging a mile in depth, it separates the Atlantic into distinct eastern and western basins which are about three miles deep. Only a few of the highest peaks crest above water, the largest of these being located on the Azores Plateau, which has approximately the surface area of Maritime Canada. It is only happenstance that one of the Azorean sea-mounts is called the Atlantis Seamount, but this complex and the Azores-Gibraltar Ridge, which stretches towards Spain, are the physical features most often associated with the legend of the lost islands of the Atlantids.

The fact that An Domhain was described as an "undersea kingdom" may relate it to the better known island of Atlantis, which was said to lie "west of the Pillars of Hercules (the Straits of Gibraltar)." As we have noted Atlantis was named after Atlas one of the princes of the Atlantean empire ruled by his father Poseidon. A "god" who cohabited with a mortal named Cleito, Poseidon was the patriarch of those who raised a great Atlantic empire sometime about the years 14000 to 10000 B.C. According to the Greek writer Plato, the island dwellers opposed the men of Greece and their "legitimate gods," headed by Zeus. The Egyptians supposedly allied themselves with the Hellenes and defeated the off-shore warriors, driving them from the Mediterranean. "Afterwards there occurred violent earthquakes and floods, and in a single day and night of rain all of the war-like men sank in a body into the earth, and the island in like manner disappeared below the sea. That is the reason that the Ocean Sea in those parts remains impassible, blocked as it is by shallows of mud. All this was caused by the subsidence of the island."

Plato lived in an active earthquake zone, and there were intimations of his tale in the writings of Homer and Herodotus. The earlier writer identified "a forested isle, the haunt of a goddess, the daughter of crafty Atlas, at the very navel of the ocean." Herodotus wrote about the

Atarantes, who mined salt, cursed the sun for burning and wasting their country, and lived near the mountain named Atlas "so lofty its top cannot be seen amidst the clouds." He said that the folk who lived upon the foot of this mountain were the Atlantes: "They are reported not to eat any living thing and never to have dreams."

In his history, The Peloponnesian Wars, Thucydides mentions another element of the Atlantean myth: "In the ensuing summer the Peloponnesians intended to invade Attica (Greece) but were put off by numerous earthquakes. At the time of these earth movements the sea at Orobiai in Euoboia, retired from what was when the coastline and rising in a great wave overwhelmed the city. It subsided in some places but on parts of the coast the inundation was permanent, and that which was land is now sea. All who could not escape to high ground perished. A similar sinking occurred in the neighbourhood of Atalantë, an island on the coast of Opuntian Locri. This carried away an Athenian fort, and dashed two ships to pieces. At Perarethos the sea also withdrew and the earthquake overthrew part of a wall and several houses."

At a later date Strabo said that this earthquake involved all of Greece and noted that "the greater part of the Lichades Islands and of Kenaion were engulfed by the sea." As for Atalantë, he claims that "it got a natural ship canal through the rent in the earth, and some of the plains were permanently flooded as far back as twenty stadia from the sea, and a trieme was lifted bodily out of the docks and cast over a wall."

Poseidonios was one of the first nay-sayers, doubting that Atlantis could have been devastated as described, if it actually was "an island as large as a continent." He wrote that "Its inventor caused it to disappear, as the Poet (Homer) did the walls of the Acheans." Aristotle was the first proponent of the idea that the walls of Troy were a fabrication, but as it chanced Poseidonios made a poor comparison as these walls were unearthed in later centuries.

The Roman writer Philo Judaeus was supportive of the Atlantis tale, noting that many districts on the mainland (of Italy) as well as those near the coast, have now been swallowed by the sea." He mentions the opening of the Sicilian strait, "forming the island of Sicily which had previously

been one with the mainland. "And it is said that many cities have been lost to violent influx of the sea, They speak of three such places in Peloponnnnesos (Greece): Aigira, fair Boura, and Helika, once renowned towns now covered in wrack and seaweed."

Tertullian, speaking on this same theme, said: "Even yet the earth's shape is mutable. Consider that Delos is no more, Samos a heap of sand, and the Sybil (a sooth-sayer) thus proved no liar. In the Atlantic an isle supposedly equal in size to Libya or Asia is now sought in vain, and Sicily is a relic of its former self." Ammianus Marcellinus defined earthquakes as taking four forms, the most violent being the chasmatiae, "which suddenly, by a violent motion, opens huge mouths, and so swallows up portions of the earth, as in the Atlantic Sea, on the coast of Europe, a large island was swallowed up."

Plato may have had his model of submergence from the Mediterranean, but there is also a zone of vulcanism at the centre of the Atlantic. Vulcanologist Dr. Sigurdur Thorarinsson has described it as "a 10,000-mile-long Mid-Atlantic Ridge, the mostly subsurface mountain chain that reaches from Bouvet in the South Atlantic to Jan Mayen north of the Arctic Circle." In 1965 he noted that the Rift had been "restless" for the past decade. "A new volcano emerged and grew in 1957 and 1958 in the Azores. The inhabitants of Tristan da Cunha, in 1961, had to abandon their island because of an eruption."

At 7:15 a.m. on the morning of November 14, 1963, Olafur Vestmann, a cook aboard the fishing vessel *Isleifur II*, was at watch when he felt the boat take a twist in the water, as if caught at the edge of a whirlpool. In the darkness, just before dawn, Vestmann detected smoke to the south, and thinking some ship was afire woke the captain who radio-telephoned the coast guard. They said that they had no S.O.S., so the *Isleifur* steamed in to have a look. There the men came upon an outburst of vapour, ash and rock bombs, all thrown up by an undersea volcano.

By the next night a narrow ridge of black ash had surfaced from an ocean floor which had previously been 425 feet deep. The new land was extremely unstable consisting of a loose and porous mixture of ash and rock. Although explosions from the volcano were relatively subdued, a grey

plume of smoke formed in the air, and the superheated steam from the water condensed on air-borne pumice and fell as hailstones, which menaced sightseeing planes and ships. Now and then there were spectacular thunderstorms in the vicinity of the new land and when underwater vents were blocked the clouds assumed a sinister darkened aspect.

The eruption was more than an spectacle for the 4,800 Westman Islanders who lived nearby. The ash deposits not only coated everything but contaminated drinking water, which had until then been collected from the roofs of their houses. The men were also concerned about the effects which might be felt on their cod-fishing grounds, but they did not haul aboard any parboiled animals. The islanders hosed down their roofs and took rain when the winds blew the ash away from their island, and the warming of waters may have created the record catch they experienced in 1963-64.

By November of 1963 the new island was 130 feet in height, but by December the cone had grown to five hundred feet. In March the new island was one square mile in area. At first it was thought that the island might prove to be submergent, like the island of Nyey, which suddenly appeared 65 miles southwest of Reykjavik in 1783. The Danish king, who was also titular head of Iceland at the time, planned to lay claim to this island by planting a six-foot stone monument there, but while the standing-stone was enroute, the island vanished beneath the surface of the ocean.

After some daredevil Frenchmen landed on the island, the government of Iceland assembled a Place Name Committee, and designated it Surtur, or Svrtr(the Dark One), after the elemental god of fire and dark clouds. The Westmanlanders being highly independent went to Surtsey (Svrtr's Isle) and attempted to rename it Vesturey, but the old god reacted by showering them with pumice and ash, and so the name was generally accepted.

On April 4, 1964, an eruption of lava encased the porous rocks, which had been thrust up, ensuring the relative permanence of Surtsey. The rate of rock-formation was estimated to average 180,000 tons per

hour. During its first weeks, Surtsey was, necessarily, sterile, but seaweeds, green algae, bacteria, moulds, grass and rush seeds, a few rooted plants, a live mussel and a moth were found when Thorarinsson went there in 1964.

Plato described the main island of the Atlantids as a place much larger than Surtsey. There are highlands out there under the sea exactly where Plato said they might be found, but all are within the bounds of contour lines 1,000 feet below sea-level. Unhappily for atlantologists there is little evidence of recent subsidence of this magnitude. This is not to suggest that the sea bed about the Azores is geologically stable; as we have said it is close to the Mid-Atlantic Rift. In 1808 a volcano erupted on San Jorge raising a mountain that was 3500 feet in height. In 1811 a similar eruption arose under the sea off San Miguel, creating an island 300 feet high. It was barely named Sambrina, when it collapsed back into the ocean.

Even Ireland is within the grasp of this great region of vulcanism, whose main arm stretches across the North Atlantic from the Canaries to Iceland. The Gaelic annals record that the Ox Mountains, at Sligo in western Ireland exploded in 1490 killing a hundred people along with their cattle. In 1788 there was an outburst of lava from the hill of Knockdale in Antrim province, and a stream of the hot liquid sixty yards wide poured across the land for thirty-nine hours, destroying the village of Ballyowen with all of its inhabitants excepting one family.

The sea-kingdom of An Domhain was in the hands of Dom and his consort Domnu . Like the Atlanteans, hisfamhair, or "undersea people," appear to have been god-like. When the spirit of the creator god, as expressed in his offspring, became mixed with that of mortal men, who they met on the shores of Europe, "they became unseemly, creatures of darkness and ill." Plato wrote that the Atlanteans subjected the continent to their will: "parts of Libya as far as Egypt, and Europe as far as Tyrrhenia (Germany)..." The famhairaig aparriar, or "western under-sea mercenaries" were similarly war-like, "a sept descended from one of the sons of Nodha." The Annals of Clommarcnois represent Nuada as "Noah," but characterize them properly as "those that lived by pyracie and the spoiles of other nations, and were in their days very troublesome to the

whole wide world." As a result, the land "gods" headed by the Dagda, gathered what forces they could find in Ireland, and fought a decisive war with the Fomors. During the last battle the sea-folk carried off the Dagda's harp, and he followed ravaging An Domhain looting it of the famed Kettle of Regeneration. As this device was the essential genius-astral of the Atlantid-dwellers, their sea kingdom was never able to rise again against its enemies. The Kettle was transferred to Hugh's Hill, at a site between the four provinces of ancient Ireland, and this place became known as the navel of the land-world.

In some of the myths the invaders are said to have struck off the head of the proto-giant (who is the Allfather or Don) and it is explained that his spilled blood created the world-flood. The ancient fidchell game boards, which the gods played to "maintain the balance between the worlds" were often made in the form of a Fomorian giant, complete with head and feet. The object of the game always centred on a quarrel over a central peg which was the "belly-button" of creation. The cutting away of the navel of the giant was as fatal as taking his head. In either case, it is clear that the gods were not so much guilty of miscegenation as paternicide. The head and the navel seem to be phallic symbols, while the rape of the Cauldron refers to the womb of the earth. Setting his own rules, the Allfather (or Allmother) endured death, but apparently disliked the experience, for he (or she) visited mortality on both the gods of the land and the sea. From that time forward, all humanoids were forced to endure a succession of deaths and reincarnations.

At the turn of the last century natural scientists were pretty much agreed that "there are few scientists who would support the view that an Atlantic continent floundered, taking down an ancient civilization. We are compelled to regard the legend of Atlantis as an extremely ancient and exaggerated myth, possibly based on relatively small sinkings of land over long periods of time." Scholars and scientist were very unhappy with the concept of a catastrophic flood.

In 1923 Sir Leonard Woolley led an expedition to a huge red mound in the Mesopotamian desert, and located the foundations of the great tower of Ur. Here they discovered tablets describing a great flood. In that desert they dug into layers of clay ten feet in thickness, and beneath the

clays found flint tools among clay potsherds buried amidst the bones and ruins of a very old human outpost. At first the researchers thought that this might be the outflow from the river which had run past the gates of Ur 4000 years in the past. Woolly ultimately cabled London saying "We have found the flood." His contemporaries were willing to admit that the explorer had discovered a flood but the consensus was that this was not the flood.

Thirty years ago the suggestion of something more calamitous turned up in core samples from the Soto Canyon off the west coast of Florida. The samples were found to contain foraminifera within sediments at the 11,000 to 12,000 year levels. These are nearly microscopic creatures having glass-like "skeletons," a feature which has allowed them to persist to the present day. Dr. Cesare Emiliani found them interesting because they turned out to be fresh-water species, 131 feet below the water's surface in salt water. Obviously there had been a world flood!

This movement of waters which probably killed many animals and plants was caused by glacial meltwater from the Laurentide ice centre, which once sat upon Labrador. Writing for the magazine "Science," September 26, 1975, Dr. Emiliani said: "The time of 11,600 years B.P. when the influx of Laurentide ice melt water into the Gulf of Mexico was highest, coincides in ages with the Valdres Readvance (in continental glaciation). The 150 km readvance was, therefore, a surge which led to strong ablation and the observed high concentration of ice melt water in the Gulf of Mexico. The concomitant accelerated rise in sea level, of the order of decimeters per year, must have caused widespread flooding of low lying areas, many of which were inhabited by man. We submit that this event, in spite of its great antiquity in cultural terms, could be an explanation for the deluge stories common among many Eurasian, Australasian and American tradition."

The time cited by Dr. Emiliani is almost precisely that usually given for the loss of Atlantis. It may not, at first, be obvious why a readvance of the American continental glacier led to flooding: The warming of climate and the consequent melting of glaciers was more a roller-coaster of events than a gradual controlled process. The ice cores from the

Greenland ice-sheet, taken in this last decade, show that glaciers have often undergone changes of state during short periods of time. As a result there were mammoth rivers, lakes, and even oceans of fresh water within and behind the glacial fronts. As long as there was no precipitous change, the run-off was gradual and unobstrusive, but a sudden refreezing and advance of the ice at the southern margin always had a damming effect. In the case of the Valdres Readvance, the next warming trend virtually pulled the plug out of the dam. Layers of ice move upon a layer of water produced by friction with the ground. When the water surged out of the front it moved the ice more rapidly against the ground, produced increased melting, and sent the whole mess of ice, mud and gravel tumbling end-over-end all the way to the Gulf of Mexico. A world wide flooding at the rate of "a few decimeters" a year may not seem like much, but Dr. Emiliani has suggested that it was locally devastating and probably not an isolated incident, since there were other glaciers in a similar unstable condition at this time.

Scientists have always had trouble with the "sinking" of Atlantis in historic times. They have never said that Atlantis was non-existent, in fact one group of geologists has created a map of the protocontinents in which he names one of the elder day continents Atlantis. Their map supposedly shows things as they were 200 million years ago when the supercontinent of Pangea had begun to disassemble. The southern hemisphere, of that day, was the place of a single continent which has become known as Gondwanaland. In the north what is now eastern Asia is thought to have existed as a small continent, Angaraland. It was separated from Atlantis by the Volga Sea, which inundated all of eastern Asia. The northern continents were separated from those of the south by a band of ocean called the Tethys Sea. The continent named Atlantis was thought to have been U-shaped, with the tines upright. The western side, sometimes identified as Nearctis was centred on the lands of present-day eastern North America. The eastern lands, standing upon Greenland and western Europe were labelled North Atlantis. The bottom of the U was a natural land bridge boxing in the Arctic Ocean, and this was South Atlantis. In former times this bridge, named Eria, was understood to be comprised of a huge complex of mountains which geologists still refer to as the Caledonian Range. These rivals to the present Himalayas cut off all of the present Labrador Basin confining it to a much small

Arctic Sea. It is of note that the Old Norse as well as the Celts designated this ancient Sea as the Beginning Gap, and indeed there is a very old fault, known as the Mid Ocean Canyon, which cuts through it. Mythic Nifhelheim, the "Nis named Hel's home," is thought to correpond somewhat with An Domhain and it may be to the point that viking sailors identified Baffin Island as Hellulande. The Caledonians have been pushed up a number of times in the past by plate interactions, but they once rivalled the Himalayas when rose out of the old sea of Tethys 30 or 40 million years ago. All that remains of that once great salt-water sea is the Mediterranean, the Caspian and the Black seas. As this ancient sea shrank, the Appalachians appeared, and Central America emerged creating land forms more nearly like those that now enclose the Altantic Ocean.

Somewhere in the scheme of things most of North Atlantis and virtually all of Eria were lost by subsidence, but scientists are largely agreed that that was a long time ago. It has been guessed that that incident, whether gradual or calamitous, must have taken place at least 100,000 years ago, precluding any huge downturnings of the crust at the time when the mythic Atlantis was supposed to have foundered. The biologists have supplied this evidence on the basis of forimaniferan shells, the remains of the oceans smallest sea creatures, miascopic life that reproduces at the bottom of the food chain. The slow sdeady rain of these shells into the deep has build up a fine carpet of sediemnts, which are layered by species peculiar to particular times and ocean temperatures. In the northern oceans this so-called globigerinian ooze is interleaved with the silt, mud and gravel of various ice ages. Tests of the Atlantic abyss tell the tale, and that story has it that these layers are undisturbed in the various North Altantic basins right up to the time of the last glaciation.

This does not destroy the idea that Atlantis and An Domhain may have been flooded out of existence, their demise accompanied by suitable earthquakes and even vulcanism. The sudden loading of the earth's oceans with melt-water from the glaciers must have put a strain on every point of geologic weakness all about the globe, creating lots of pyrotechnics.

The Irish annals say that the "Land of Shadows" was southwest of Ireland, and the Faraday seamounts are a part of the old Caledonians, but

that they are too far below the surface of the ocean to have been seen as islands except at the maximum of world glaciation. While the Azores make an acceptable Atlantis we have the impression that the old Celtic death-world was more immediately west. Fortunately Plato explains that "the broad Atlantic was once navigable (for coast-hugging craft) from the island which was situated to the west of the Straits which you call the Pillars of Hercules, and it could itself be used to sail to other islands, and from those islands one could pass to that other continent (i.e. America). This place is known to surround the true ocean (the Atlantic), for the sea which is inside the Pillars (the Mediterranean) is a mere harbour with a narrow entrance, the outer sea being the true sea, and the surrounding land is that which may be counted as a true continent."

The undersea kingdom of An Domhain may have been any one of these westward islands or even some part of the continental shelf, lost at the time of the Valders Readvance. Not all of the western lands were as finally submerged, and when the waters pulled back from Ireland after the first outpouring from the north, other men came to its shores. The next arrivals were followers of Parlan, in the early Irish Partholón. The Romans spoke of these people in the latter days as the offspring of Partholomœus or Bartholomœus. There has been a suggestion that the name relates to the Celto-Spanish Bar-Tolmen, and Professor Rhys thought that that they came from this land. All that is really clear is the fact that the name is non-Gael and probably pre-Celtic, since it has the forbidden "p" at the beginning of the word. The Celts Clann Pharlain by substituting an "f" for the "p," thus we have Clan Farlane or Farland, the source of the M'Pharlain, known to English-speakers as the Macfarlands. Gaelic historians say that the new arrivals came precisely 278 years after the Great Flood. If the flood occurred about the time of the Valders Readvance, this puts their arrival at something before the year 10000 B.C.

Partholon was a descendant of Magog and Japhet, (sons of Adam). It must be understood that the transcribers of unwritten tradition were Christians, who wished to give the Hibernians the best possible genealogy. Whatever his background, Partholonan followed the example of the Biblical Cain and murdered his father Sera, hoping to inherit his kingdom. This is very reminiscent of the killing of the Oolathair by his sons and this portion of the tale may be a reinterpretation of that myth as

Sera appears to be a form of the Gaelic *siar* or *iar*, the "west." Note that none of the murderers inherited their fathers holdings but were all forced into exile. It was thus that Partholon and a number of close friends set sail upon the ocean and finally settled in Munster, Ireland, arriving significantly on the first day of May, which is to say *beulteinne*. It was sometimes claimed that this hero came from Spain, but it will be recalled that the Gaelic for this place is more correctly understood as a synonym for the "dead-lands," which were understood to be placed in the western Atlantic.

Some biographers insisted that Sera had a kingdom in Scythia but our ballad-sheet has *Tul-tunna*, the survivor of the flood sing these words:

When Partholan came to the island
From Greece in the Eastern Land,
I welcomed him gaily to my land
And feasted the whole of his band.

We think that this early Munster-man did not come from the east and have T.W. Rolleston for support. He says: "The Celts as we have learned from Caesar, believed they were descended from the God of the Underworld, the God of the Dead. Partholan is said to have come from the West, where beyond the unsailed Atlantic, the Irish Fairyland...the Land of the Happy Dead, was placed. His father's name was Sera (?the West?). He came with his queen *Dealgnaid* and twenty-four men and an equal number of female companions. He is recorded as having three legitimate sons, the eldest named *Eber* (the same name as one of the sons of *Mil*), and one "a hireling." His other sons were *Rudraíhe* (Roderick) and *Laighhlinne* (*Lochlann*), and an unnamed by referred to as "the hireling." When *Rudhraidhe* died his was buried by his father in a place which erupted water from the gravesite, and this flood continued creating the modern *Loch Rudraidhe*. The first record of fornication in Ireland was followed by a second. The queen was "ignored" by her husband and while he was away on a journey she had an affair with a household servant named *Todga*. When the leader returned he forgave his mate, noting that he was not blameless and had been wrong in leaving her without company.

When the Partholonians arrived in ancient Eiru it was a wilderness embracing three huge lakes and nine rivers on a single plain. The persistence of these numbers in druid magic dates from these early observations. The new men on the land are said to have hunted the plain, set up the first hostels, and cleared the land for agriculture. The old tales insist that the Farlanders had two ploughmen in their retinue and that these men were equipped with four working oxen and ploughs with iron blades.

These men were not long in place before they met the sea-roving Fomorians, This race emerges again and again in the Book of Invasions and they are hardly ever represented as a "civilized race," an epitaph which Donnelly gives them in his book Atlantis the Antediluvian World. They did come with "sixty ships and a strong army" as this writer suggested, but they did not kill Partholon and they failed to defeat his people as he suggests. Some of the Irish claim descent from the sea-folk of the underwater kingdoms, and perhaps Ignatius Donnelly is one of these! A greater number of Irish have taken the other court, e.g. Katherine Scherman: "In Partholan's time these savages lived on coastal islands, and fought against Partholan's race although equipped with but "one foot, one hand and one eye." Some men said that these intruders were shape-changers, cannibals often observed to have the heads of animals (probably because they wore the hides of their totem animals), Strangers always have an uncanny appearance! This historian thought that the Fomors were probably some faint racial memory of Mesolithic man, a stone-bearing creature "who crept round the edges of the country catching what food he could with his rude weapons and eking out a static existence...presenting his infelicitous countenance and his paltry resistance to more progressive successors."

We shall soon see that that the Fomorians were not all that ineffectual although Partholon did meet and defeat these hordes who were led by Cichol Grinchenghos (the Footless). The Farlanders actually fell prey to the first plague in Ireland after they had gathered for some unstated purpose near the Old Plain called Senmag. Tallaght, on the west slope of Dublin mountain is notorious as the actual site of the death of nine thousand men and women, the descendants of the original settlers. It is claimed that they all expired within a week and those who survived

gave them a mass burial. One can see tumuli on the hillside which seem to support their myth. In the year 774 A.D. the king of Leinster gave this place to Christian monks for a monastery, but even less remains of their monastery. This place was much too close to a very good harbour, which the viking Norse preferred when they came to establish a settlement at Dublin.

This leaves only the telling of the tale of Tuan which was preserved in The Book of the Dun Cow a manuscript from about the year 1100 A.D. This Farlander was the son of Starn who was the son of Sera and the brother to Partholon. After the great pestilence this sole survivor wandered about from one vacant settlement to the next, but saw nothing except wolves. For twenty-two years it is said that he lived without comfort or company, until at last he fell "into the decrepitude of old age." He was apparently unaware of the presence of a parallel character, the flood survivor Finntann. Speaking of the Partholons this character says, in the 1913 ballad:

Again, when death seized on these strangers
I roamed the land merry and free,
Both careless and fearless of dangers
Til Blithe Nemid came over the sea.

According to Tuan the new arrivals were relatives led by Nemed the son of Agnoman, another brother to Partholon. We are not told how Finntann greeted these folk, but Tuan kept his own company thinking that there might be antagonism over the death of his grandfather. One night Tuan fell into a deep sleep and emerged in the morning to find himself shape-changed into a deer. Although he retained human intelligence he was completely unrecognized and so became king of the deer in all Ireland while Nemed's people walked the land.

Nemed is said to have sailed to Ireland with thirty-two ships. His fleet spent only a year and a half at sea where most of his people died of hunger and dehydration. When the survivors landed they were only nine in number, but in the course of many years they also multiplied until there was a population estimated at 8,060. Like the Farlanders, the Nemedians were agriculturists who reformed the land into sixteen plains and made a number of new artificial lakes.

Before long they became acquainted with the "huge, mishappen, violent and cruel" Fomorians, and fought four pitched, and successful, battles against them. The source of their quarrel is not given, but it was never about land as these sea-people are not recorded as coming into Ireland as a regular part of the population. It would appear that the Fomorians sought the normal rewards of piracy. They were unable gain much booty in any of the land encounters but after the fourth encounter the chieftain and 2,000 of his people were killed by plague. Nemed was buried on the largest island in Cork Harbour.

This unexpected help from the bas-finne, or fates, allowed the Fomorians to dominate the Nemedians although they never felt confident enough to mount a frontal assault. In this period the Fomorians were led by two chieftains named Morc and Conann. By this time, the under-sea people had established a outpost on Tory Island off the coast of Donegal. From here they raided the land and at last demanded a tribute of two-thirds of the milk production and two-thirds of all the children born to the Nemedians. At this the Nermedian leaders balked, and led by three chieftains they landed on Tory Island and took both Conan's Tower and the Conann. At this moment in the battle Morc arrived with a fresh host and utterly routed his enemy killing all but thirty of the invading warriors. It is said that the survivors gathered up what remained of their possessions and people and retreated, leaving no descendants to show that they had been there.

As Rolleston has said some wordsmiths have associated Nemed with the old Gaelic word for "sanctuary," and with the goddess Nemain, who is the Basfinne of the Gaels. Some hav even gone further noting that there was a goddess named Nemetona who was worshipped in the sacred groves at Bath. Perhaps with this in mind attempts were made to suggest that one of the retreating Nemedians settled in GreaterBritain, giving it his name. It is also said that others of this tribe became the ancestors of of later invaders, but as Rolleston says these "histories" seem laboured and artificial. It would appear that the Nemedians came from the west and this is not so clearly the case with the some of the late-comers.

As for Tuan; he survived all this and again approached old age, this time in

the form of a deer. Although he enacted no magic, Tuan was again regained his youth, but this time was reincarnated as a black boar. After a time the old Farlander began to suspect that some powerful force was responsible for his rejuvenation, and having time for thought recalled that in old age he had always sought out a cave in Ulster. The next time he became aged, Tuan tested this theory and found himself reborn in another animal body. The place of rebirth was obviously a "kettle of regeneration" some reflection of the Fomorian "womb of all things" which the land people had not yet pirated from the sea-folk.

Our ballad has this to say of the next wave:

The Firbolgs and roving Firgallions
Came next like the waves in their flow;
The Firdonnans arrived in battalions
And landed in Erris - Mayo.

Actually it was the Firbolg or Vir-bolc. who came ashore some 400 years after the Nemedians; the Firdonnans were next after them and the Firgallions, or Gauls, the third tribe of invaders. The form Ver-bolc is the older designation, but again the Gaels had trouble sounding that first letter and it became an "f" rather than a "v." It is guessed that the first part of the word confers with the Sankrist vira and the English word virulent, The Welsh equivalent appears to be ver, "super." having unusual strength. The last part of the name seems to arise from bó, a cow, added to leagh, leaky or dripping. Taken as a whole: the super-abundant cow, and indeed these folk should be identified as the fir, or "people" of Bolg, the cow-goddess. Most wordsmiths miss this connection, identifying them as the "people of the bag."

We do not know what type of ship the earlier races used to reach Eiru but the Firbolgs are known to have travelled in coracles, hide-covered sailing ships. The Roman writer Nennius says that the people of the Bolg came from "Spain" which makes us suspect another rationalization of the Celtic word for the Kingdom of the Dead. It is very certain that this new race was at least acquainted with westerners for their king Eochy (pronounced yeo-hee) mac Erc is recorded as having married Taltiu or Telta, a daughter of "the Great King from the Great Plain (of the Ocean).

In the later tales this lady is sometimes connected with the great sea-lord Manann mac Ler, a son of the god Ler who is generally equated with Domh (in Wales he was identified as Manawyddan, the son of Dön). Telta had a palace at Teltiu, and after her death a great annual festival was held there, an assembly that persisted into medieval times. It is said that the Firbolgs fled their first home because they had been enslaved by a rough-and-ready race (possibly the Fomorians).

We have seen it said that the Firbolgs cleared the forests of Breg ,divided the country into five principalities, raised their chief city on the site of Tara and managed to ward off the troublesome Fomors for thirty-seven years. Katherine Scherman insists that the Fir Bolg were "an offshot of a Continental tribe, the Belgae," but we see no evidence of this aside from a loose coincidence of names. They actually show a greater affinity with the Firdonnan who worshipped the goddess Boann or Boyne. They were also a cow-herding folk, who settled near Tara to exploit the best grassland in Ireland. We think Scherman is more nearly on the mark when she notes that these were people with "a war like aristocracy, introducing metal weapons and the system of monarchy." With the Firbolgs there were kings in Ireland and perhaps bronze age weapons.

Rolleston says they "play no great role in Irish mythical history, and a certain character of servility and inferiority appears attached to them." We can see nothing of this, in fact quite the opposite, the Firbolgs did not disappear from history, or survive as a remnant race, but left numerous descendants still identifiable in their habit of prefixing their names with the words mhic, sons, or mhac, son, or with the designation ogha, grandchild. The gene pool of the mics and macs of Scotland and Ireland and the maps of Wales continues to flourish as do the O'Neills, O'Banions, O'Briens and host of similarly designated men who bear names from the remotest past. It was often said that these were the only clans who were truly haunted by the death maidens, or banshees, who were decidedly sea-folk.

Then came the wise Tuatha de Danaans,
Concealed in black clouds from their foe;
I feasted them near the Shannon

Though that was a long time ago.

There is no question that the Tuatha daoine (pronounced Tootha danann) were the Firdonnans mentioned earlier. In the myths it was held that that they lived originally "in the northern isles of the world learning lore and magic and druidism and wizardry and all cunning until they surpassed the sages of heathendom. They came from four cities in which they learned their arts and crafts, their science and the diabolic business, to wit Falias, Gorias, Murias and Findias. Out of the first place came the Stone of Fal, which was in Tara. It used to roar under every (legitimate) king that would take the realm of Ireland. Out of Gorias was brought the spear that Lugh had. Out of Findias was brought the Sword of Nuada. Out of Murias was brought the Dagda's cauldron."

What is not mentioned is that all of these magical devices were booty from An Domhain. It will be recalled that Lugh and Nuada were not only the creators of the world of men, but the boys who slew their father and despoiled his undersea kingdom, transferring the spirit of that land to the navel of Ireland. There is no question that these lads and their kin were at the very least close relatives of the Fomorians. They never liked to emphasize past indiscretions, which may explain why they claimed that their parents were the Dagda and his wife Danu, or Dana sometimes called Anu, Boann or Boyne. These actually seem to have been the matriarch and patriarch of the Firbolgs so appears that the Tuathans were merely trying to cloud their relationship with the undersea people rather than completely deny their attachments within with the House of Don.

Notice that the land-dwelling Danu is strangely close in form to the sea-matriarch Domnu, who is touted as the Goddess of the Fomorii. Peter Ellis notes that her name connotes a womb or an abyss of the sea, "and that "through the various sagas and tales an eternal struggle is seen between the Children of Domnu, representing darkness and evil, and the Children of Danu, representing light and goodness." The undersea island of An Domhain was said to contain not only the Cauldron of Regeneration, but also Tech Duinn, "The Arrival Place for (Dead) Men." Under these circumstances it is not surprising that the sea god Domh is often "equated with the Dagda and Bilé." The latter land god is of course cognate with the Brythonic Bel or Belinos, and he is frequently referred to as "the

Father of the (land) Gods and Men and a husband to Dana." All of these seems to have been a deliberate snow job and the Tuathans did what they could to further distance themselves from the shape-changing sea-people by stating that the latter were actually of the House of Ler, which was ruled by the only remaining immortal among the sea-gods with the help of his son Manan mac Ler. The latter is often spoken of as the boatman of Tech Duinn, the one responsible for ferrying men in both directions to and from Ireland. In the old days, the death-god was also seen as a life-god, whose charge was to maintain a balance in the weight of souls inhabiting lands in the east and the west. Those who died went west; those slated for reincarnation were carried eastward on Manan's ship. Interestingly Bile is sometimes given Manan's duties especially with respect to the continental Gauls. All this leads to the strong suspicion that the Dagda and Domh are nothing more than alter-egos, a good and an evil face for the creator-god. It is also true that Lugh is frequently pictured as the boatman between the the lands of men and the Otherworld. Representations of him aboard a sailing ship, with a sun orb leading his self-propelled craft, are among the most frequent in Gaelic art. In the event that he is given this role his antagonist, or altered form, is usually identified as Cromm dubh, "the Bent Black One."

It is said that the new invaders were called the Tuatha daoine, because they were the "people of Danu." More exactly they were those "of" the goddess Aione or Aine. In the Irish dialect these people were the Tuatha danann, the folk "of Ann, both variants of Danu. In the Middle Irish tongue she was entitled Dan, and her name harks back to da, the verb "to give." Like the Dagda, the "giver of the day," she had an opponent in Domhnu, whose descendant was the Black Dannis, or Annis, a witch-like hag feared in southern England. Her particular land residence was the Paps of Anu, two breast-shaped mountains in County Kerry, which point to her fecundity and position as the mother-goddess and a fertility figure. Any king of the northern Irish had to be ritually married to this sovereign-goddess before he could claim legitimacy. She had a number of local names named as Danu brighida, "the firey one," and thus was sometimes called bridd, "the bride," or Brigit (in the latter days she was canonized as Saint Brigid). She was also entitled the Bas-finne indicating her role as a dark lady, the consort of Domh, and part-time resident of the Otherworld. In this form she was the triune goddess whose parts were Mhorrigan, Badb

or Mebd, and Macha. Like the Norse goddess Hel she was often referred to as the "parti-coloured goddesss." In earlier times, before the word tartan was available, this term was the one most often used to describe the colourful wearing apparel of the Celtic upper classes. She is also Skadi, the Old Norse goddess of winter, who just might have given her name to Skadilande, which the English called Scotland. The Scandinavians suggested that Skadi was the form assumed by Hel when she snowshoed the earth accompanied by her vicious winter-wolves. Here it is necessary to recall that the Norse often referred to the Scots as the Hellr, "Hellers," or "people of the goddess Hel." There are as many Gaulish as Gaelic references to this lady, but she is most often given as Brigando, from which our word brigand. Among the Britons she was Brigantia and there was a race of Celts named the Brigantines, situated in the north of England and in east central Ireland, who worshipped her as the goddess of love, hearth and home. In this incarnation she was often spoken of as the daughter of Dagda, but the fact of incest was never considered a crime in royal families. It is said that the lady had three sons. They in turn "had but one son among them," whose name was Ecne, "Poetic Knowledge."

It was the long-lived Tuan who described the Daoine sidh as "gods," and they might have seemed so to the unfortunate Firbolgs.. Tuan said that they came to Ireland "out of heaven," bringing with them the four treasures of their race. They were supposedly wafted out of a cloud onto a stretch of land in western Connaught, and when the vapours cleared, scouts from Tara discovered them comfortably encamped at Moytura. We are fairly confident they did not come down from the North Star, in fact the name Tuatha and the fact that they landed on the western coast of Ireland tells us almost everything about their origin: In the Old Irish tongue tuath meant a populace. This word is also seen in Welsh, tud, a country or nation, in the Cornish tongue, tus, and in the Bruthonic dialect, tud. This form was also used by the Gauls and indicated a nation. It is also a word related to the Gaelic tir, land, which is the Latin terra, having the same meaning. There is also the Gaelic adjective tuto, well omened, or good, or left-handed, turning in a counter-clockwise direction. Think of Ireland, consider a counterclockwise sailing from its shores, and you will finish in the Labrador Basin. No other route is really feasible since the Gulf Stream and the prevailing winds of lower latitudes prevent any westward movement without great manipulation of the sails. Finally the

modern word tuath is still connected with "people," but now has special reference to tenant farmers, rustics and "northerners." Further Tuath is the Anglo-Latin Tyle or Thule, a "hidden place," a name often visited upon mythic islands in the Atlantic. In the years of post-medieval exploration the Ultima Thule was Iceland, but it was never suggested that this was the only "secret place" in the ocean. In the first days the Tuatha daoine were routinely described as "warrior-magicians," but they were eventually defeated and reduced to farming the most distant of the rockiest most fen-ridden barrens in Ireland and Scotland.

Some researchers have connected the Tuatha daoine, or danann, with the "Beaker People," who arrived about the year 2000 B.C., precisely fitting the mythological time-frame. The big drinking pots, which they made, have been found widely spread throughout Europe and these finds led to the conclusion that they came to Britain out of one of the continental Low Countries. Whatever their source the newcomers brought a revolution in field monuments. Like those before them, the Beaker Folk buried their dead, but where the earlier islanders had preferred communal graves, these people laid each individual in a solitary place and raised perfectly circular barrows over the bodies. In really stony country these round soil-covered barrows became cairns. These monuments are still discernible at 20,000 sites throughout Britain, and clustered on the brows of a hill, they are the most commanding feature in many parts of the country.

The skeletons of the invaders show that they were taller, more round-headed, and possessed more shapely defined features than the Firbolgs, who were a smaller, more slender, somewhat "Mediterranean" type. As the Beaker Folk were found buried with the equipment of bowmen and with flint, copper or bronze daggers and stone battle-axes, it has to be assumed that they were a population of warriors. One archaeologist has said that "until, they became merged with the islanders, had formed an élite and had an influence out of proportion to their numbers."

It was never claimed that the newcomers invented the cromlechean or stone-henges, but they did have a part in their development. They were engaged in the second phase of the development at Stonehenge, where they set up the famed bluestone circles. They were also present during the main period of construction at Avebury, where Beaker-style burials have

been found at the base of individual stones. Most scientific researchers consider generalizations about neolithic religions rash, but there is some suggestion that the Firbolgs were mainly concerned with worshiping earth and fertility deities while the Tuathans became more involved with celestial divinities, "in particular with the cult of the sun."

Stonehenge and Avebury stand in Wessex but there are equally imposing circles in Brittany and Scotland, although they were never very numerous, or as elaborate, in Ireland. In these places pottery associated with the Beaker people has also been found, although it is admitted that many of these structures predate the usually datings at about 1800 B.C. Wherever these newcomers set up camp, their descendants were able to develop societies in which bronze had little real utility. The warrior-magicians made little use of copper and bronze, and it was they who took the lead in developing the Cornish and Irish tin mines which were fully operational by 1600 B.C. The main source of their wealth was cattle, but they were also involved in trading the metals they smelted, and Irish gold, on the continent. By the beginning of the last millennium B.C. bronze was freely available, and the whole appearance of the countryside had altered from a wilderness with the spread of villages and regular fields, cultivated with ploughs rather than the wooden hoes and crooked sticks of the past.

The Tuatha daoine had not planned their invasion on a whim. Years before one of their kind, a man named Goban had lived as a smith on the north western coast of Eiru. He contracted to build a crystal tower for a Fomorian chieftain named Balor and was paid for the work with a prize cow. The cow was only secure if tied with a magic cord, but since the wiley Balor failed to supply this device, it soon escaped to Tory Island. Goban's brother Cian had agreed to watch the cow for him while he worked the forge, and when it got away, was obligated to find and return it.

Cian sought the advice of a druidess, who gave him a woman's garb as a disguise and arranged that the "sea-gods" give him passage to the island. On the island, the Danann warrior found employmen as a cook, and on his off-time went searching through the tower for the lost cow (men and their beasts were then housed together) enshrouded in a cloak of invisibility provided by Manann mac Ler.. Before he discovered the animal,

he came upon Balor's daughter. In due course Ethlinn gave birth to three sons, and Balor reacted by commanding that they be drowned in a nearby whirlpool. The henchman who was given the deed of murder tied the newborns in a sheet, but on the way to the coast, one of the thorn stay-pins came loose and one child tumbled out on the ground at a place still called Port na Delig, the Haven of the Pin. The other two were killed and the servant reported his mission complete.

The child who had escaped injury was found by the seeress Birög and eventually restored to Cian, who had to make a hasty retreat to the mainland. There the child was at first taught smithery at the forge of his uncle, and under his father became a skilled physician. When he had grown to youth he was fostered out to Duach, "the bad out-being," in recognition of the help that Cian had received from the people of Manann mac Ler in crossing to and from Tory Island. While he lived among the undersea folk in the care of this "king of the Great Plain," the boy was called Dùil dunna, "the man creature." Here he learned the more esoteric arts and crafts, and here he remained until he became a man.

As Duach was a vassal of Manann mac Ler, the boy was often referred to as his offspring, but it has been noted that he was actually of mixed Tuathan-Fomorian ancestry, and to confuse matters still further he was, for a time employed at the Firbolg court. At this time he was called Sab Ildanach, the Stem of All Arts, because of his proficiency in the various forms of hadwork. The Tuatha daoine, who were considering an invasion of Ireland at this time, sent the young man ashore to the court of Eochaid mac Erc as a spy. The doorkeeper was suspicious of the newcomer and demanded why he thought he should be admitted. The Sab Ildanach explained that he was a carpenter seeking work, that the guard suggested he continue on his way since they already had a master-carpenter. He then said he was an excellent smith, but they also had one of these. He suggested he might help them as a warrior-champion, a harpist, a poet, an antiquarian, or as a cupbearer, magician, or physician, but the doorman told him they already had plenty of talent in all these fields. Hereing this the young man said: "Then go to your king, and ask if he has any man among him who is the master of all these arts and professions. If he has I shall no longer ask for admission to the court of Tara."

The king was, of course, amazed at such seeming arrogance and invited the young man to undergo testing. In the end, all the assembly admitted that this man was superior in all the arts and crafts and appointed him ard-ollam, the high-professor of his caste. Unfortunately for Eochaid ard-righ, the newcomer was able to inform the Tuatha daoine that Firbolgs would not prove an insurmountable obstacle to their plan to take Eiru. Presumably, this gifted man retired to the sea-kingdoms with his espionage for nothing more is heard of him until the Tuathans were securely in place as rulers of Ireland.

Hearing that the Fomorians were demanding tribute money of his folk, the "professor" stirred himself from his western home-land of Tir na mBeo, the Land of the Living Gods, and approached his "father" Manann mac Ler ruler of Tir nan Og, to see what help he might give. Ler loaned him the use of his soul-ship, that would travel wherever the helmsmans thoughts demanded; equipped him with the Horse of the Sea which could travel equally well upon land or water; and provided the sword named Fragarach, "the Answerer," which could cut through any armour.

The Fomorians observed the coming of Lugh in the ominous rising of the sun in the west rather than in the east. The Tuatha daoine took this as a favourable portent, "like the coming of the sun after much rain." Instead of paying the tribute demanded of them, the Tuathans rallied under the newcomer, who became known to them as Lugh lamfada, the "thief with the long arm." He certainly stole the prize from the Fomorians and overcame their plot to "make fast the island by cables to their ships and tow it northward to the Fomorian regions of ice and gloom."

To forstall this Lugh summoned every man he could depend upon, from the lowliest cup-bearer to the greatest sorcerer. The druid caste had promised that they would raise earthquakes and "cast down upon the giants the twelve mountains of Ireland." they also said that they would create "three showers of fire to pour on the faces of the enemy host." By magic they intended to create a curse which would rob the Fomorians of two thirds of their physical strength, while "binding the urine within the bodies of these people and their horses."

Creidné, "the artificer" (goldsmith) and Luchtra, the chief carpenter

to the tribe took charge of repairing broken weapons, all with magical speed. It was said that only three blows from Goban's hammer was needed to make metal right, while the handle and supports almost flew into place. The wounded were healed by the magical pig-skin (which corresponds with the Cauldron of Regeneration).

The Fomorians were not without a powerful weapon in the pirate-chieftain who was the grandfather of Lugh. This was Balor of the Evil-Eye, whose one eye was never opened "except on the battlefield" and then "men died by the thousand from the venomous fumes that emanated from it." Some say that Balor met his fate on shipboard, others in a land engagement. In any event his eyelid had drooped in weariness allowing Lugh to approach. Told of the presence of this "shining" sun-god, the giant began to lift his lid in order to see "this babbler who is conversing with me." Before he could do that Balor received a dart, or a sling-stone, "that carried the eye full out through the back of his head." Thus the prophecy that the Tory Island leader would be killed by his grandson was fulfilled.

Seeing this the demoralized Fomorians scattered and were followed and killed, dying in numbers "as the stars of heaven...as the flakes of snow, as grass underfoot." Retreating back into the sea, they took with them the Harp of the North. Enraged, the Dagda and his sons followed them into the heart of An Domhain, despoiled the undersea lands and carried off its essential spirit so that the Fomorians never re-emerged from the dark lands of the deep. It is said that the Fomorians were ever after restricted to lands beyond the horizon. While this was basically true their bloodlines continued in north-western Ireland particularly in Connaught Province.

In the war, the Firbolg king was killed and King Nuada lost his right hand (perhaps leading to the use of the word tuath as descriptive of a left-handed individual). Even the Dagda lost his son Ogma, the god of eloquence and the inventor of the cryptic language and writing now called Ogham. By the laws of kingship of that time, Nuada was deposed for having a "blemish," and a hero named Bres was elected to kingship. In retirement Nuada was given a silver prosthesis made by Creidné.

The new king was the handsome son of a woman named Eri and, presumably, of her husband Cethor. Unfortunately, the lad was not

entirely of Danann ancestry. As a young woman his mother had walked alone on a western strand and watched the "crystal ship" of a Fomorian chieftain named Elathu come to shore. He impregnated her and being a foreteller, told her she would bear a boy. He gave this lady a ring as a birth-gift for his son and disappeared into the west. Bres knew nothing of this adventure when he became king.

Bres managed to cling to his post for seven years, but while he was handsome and a capable warrior, he had some of the failings of his father's people, particularly with respect to hospitality. Patronage was an essential part of the old Tuathan order and the king was ungenerous: "The knives of his people went ungreaed at his banquet tables," and the poets and pipers, harpists, trumpeters, jugglers and buffons were never employed at his court. There was a mighty grumbling throughout the land but it went unanswered until Bres, offered Cirbre, the most prominent poet of the times, a cold apartment and a niggardley meal. The satirical poem he composed against the king roused laughter, and no longer fearing Bres men rose against him and deposed him.

When Nuada had been retired his missing right hand had been replaced by one made of silver, but a "leech," of great skill had been able to regrow a replacement limb of living tissues. This made the old king eligible for reinstatement and he was returned to the throne.

Bres was now told of his background, and fled for refuge and support to his father's "kingdom" in the Hebrides, the islands north of Scotland. His father assembled his sea-pirates, got the support of Balor the chieftain of Tory Island, and sailed against the Danann. This might have ended badly as Balor was possessed of the "evil-eye" whose could kill and things did appear unresolved at the end of the first battle at Northern Motura, on the Plain of Sligo. In a second encounter, partly on the sea, Balor had his eye taken out by a missile from the sling of Lugh Longarm, and after that the opposition fell away. The final struggle between the "gods" and the "giants" is remembered in cairns and pillars that still stand in Moytura at the place called "the Plain of the Towers of the Fomorians."

A peculiar, supposedly prophetic event, took place at the time when

Lugh introduced himself to the Tuathans as their newest god-hero: As the Fomorians gathered, they saw the sun (Lugh) arise in the west rather than in the east and some of them recognized this as a bad omen. This peculiar phenomenon is not without counterparts in other parts of the world. The fifth century B.C. historian Herodotus quoted Egyptian sources when he said that "Four times in the past, the sun rose contrary to his wont; twice he rose where he now sets, and twice he set where he now rises." It may also be recalled that as the Canaanites fled the armies of Joshua and fled through the valley of Beth-Horon "the sun appeared to stand still and the heavens rained boulders upon the fleeing people. In each case other uncanny events accompanied these omens in the sky. In Ireland "the twelve mountains rolled their summits against the ground," and although sorcerers took credit for this event which belaboured the Fomors, it is better interpreted as the result of an earthquake.

Such spectacular effects are difficult to explain but Immanuel Velikovsky thinks that the cause was the close passage of some large passing celestial body. He suggests that Venus might have come into being as ejecta from the face of Jupiter, the red spot being its birthplace. Venus was certainly known to the Babylonians as "the bright torch of heaven," suggesting that she must once have been the subject of catastrophe or closer earth than at present. The Chinese said that Venus "spanned the heavens," rivalling the sun in brightness, while a rabbinical record from the deep past says "Venus blazes from one end of the cosmos to the other."

Velikovsky theorizes that Venus was drawn by gravity in the direction of the sun and in doing so interacted with the nearly equal mass of the planet Earth. According to him, a violent convulsion afflicted both planets, and on earth the terrestrial crust was pulled and convoluted so that all of the mountains world-wide must have shifted with horrific effects on people and animals. Velikovsky thinks this event might have taken place about the year 1500 B.C., the approximate time of the second battle at Moytura. Whatever the case, it was recorded that the sea-giants died "as many as the stars of the heaven, as flakes of snow, as grass under men's heels."

Lugh, became the next king since Nuada was killed in battle. He will

be remembered as the brother of Nuada, and like him one of prime incarnate mortal gods. He may belong to the triune of elemental gods, which some say constituted the only deities in times when men had little leisure to trace heavenly relationships. His brothers in that day were said to have been Ler, the god of the sea, and Ve, god of the wind. Originally these three lads were all-powerful within their individual domains but lost their immortality because of an unspecified crime "against nature." The elementals certainly correspond with the Old Norse figures known as Loki, Hler and Kari, whose names translate directly as "Fire, Water" and "Wind." In the Scandinavian tales Loki fell from grace after killing the "Allfather's" (i.e. Odin's) son, a hero named Baldur.

Lugh had no such fall in Gaelic mythology, but he did become much reduced in folklore. His attachment to Loki can be shown in terms of linguistics as Loki is the Germanic god Luchre or Laugar, who came to England with the Anglo-Saxons as a simple spirit termed Lob, also called the lobracain, or leprachaun. Ellis says that Lugh was remembered as Lugh-chromain, which identifies him with his alter-ego Croom, or "Crum" the "crooked." The word mainnir, indicates a "goat-pen." This Christian epitaph of demotion, implying that the old god was a day-labourer, is translated by Ellis as "little stooping Lugh." He notes that this word is anglicized as leprachaun, "all that survives of the once potent patron of arts and crafts whose name is remembered in many place names - Lyons, Léon, Loudon and Laon, in France; Leiden in Holland; Liegnitz in Silisia and Luguvalum (Carlisle) in Roman England as well as the capital itself, which like Lyons was once the "fortress of Lugh," - Lugdunum, hence the Latin Londinium and London."

It must be mentioned that Lugh was the supposed father of Cúchullain by the human maiden named Dechtra and his place of refuge was a side-hill known as Rodruban. When Cúchullain faltered in his battle against Connaught, Lugh appeared to relieve him. His last personal appearance in person appears to have been when he appeared before Conn of the Hundred Battles (a High King, 177-212 A.D.) to name his descendants. When Lugh died he was replaced on the throne by his father Dagda, who reigned for eighty years, but hopefully did not survive to see the degradation of the "gods." His three grandsons ruled, in turn, after him, and it was in the term of the last of these that the Milesians came.

In the ballad Finntann is made to sing these words:

After them (the Tuatha daoine) came the Children of Mil
From Spain, o'er the southern waves;
I lived with the tribes as their Filea (poet)
And chanted the deeds of their braves...

What has been said makes it apparent that the Firbolgs and the Tuathans were at least kissing-cousins and both (protests to the contrary) were somehow related to the "inhuman" Fomorians. In point of fact, the most ancient books of Ireland relate them all to the Partholonians and the Nemedians, and these four tribes are all characterized as escaping the World Flood.

Seumas MacManus reminds us that the Tuatha daoine were "uncommonly skilled and dazzled even their conquerors and successors (by their wealth, their arts and their crafts), who regarded them as mighty magicians...Most conquerors come to despise the conquered, but (the Milesians) came to honour them, almost to worship those they had subdued..."

One may wonder how they were brought low, and the answer seems to lie in the fact that iron proved superior to bronze and magic, and the Celtic Milesians possessed this metal, which would take a sharper cutting-edge than bronze. Bronze, an alloy of copper and tin, was known in ancient Sumer, possibly by 8,000 B.C., but it was always thought that this technology appeared in western Europe at a much later date. All that was changed recently by the emergence of a sub-alpine man's body from a glacial crevasse. This "stone-age" individual was dated to 5,000 B.C. but was found carrying a bronze weapon. Obviously other such finds may be in the offing as the world's cold lands diminish in the current phase of global warming. Iron does not seem to have been possessed by any of the immigrants from the western Atlantic, and none of these tribes can be undisputedly described as Celtic.

We are not absolutely certain that the Celtic Milesians came from the east as their myths, and conventional history, suggest, but there are some suggestions that this might be the case. The sons of Miled or

Mil or Milus are the only ones mentioned in Irish myth in a legendary context. Further the patriarch and hero Miled has a name which is represented as far east as Hungary when he is identified as the son of Bilé. In that place as elsewhere on the continent, this deity is recognized as the God of Death. On the other hand, they too are said to have come from Bas-breton, and there is another problem: By the start of the first millennium B.C. the Celtic peoples had the working of iron well in hand, at a time when this metal was only becoming known to the workmen of Greece and Rome. By the sixth century B.C. they had developed formidable weaponry and were militarily superior to any of their neighbours. Their axes and ploughshares were so good they were able to cut roadways through the previously impenetrable forests of Europe and open new farmland. The Gaelic word for a road is still *slighe* from the verb *sligim*, to hew wood. Without their iron swords the Celts could not have harassed the classical kingdoms. The very word iron is, in fact, Celtic, its original form having been *iarn* in the Gaelic dialect. Notice that iron bars were the "gold-standard" of Gaelic civilization, and the redoubtable Queen Mebd counted her worth in *iarn-lestair*, the number of "iron vessels" she possessed. Notice also that the mythic smith *Goibhniu*, who we have referred to as Goban, was known to have had his smithy at *Sliab nan lairinn*, the "Iron Mountain," east of Lough Allen in County Leitrim.

We are almost in touch with "true history" when we come to the Milesians, but there is a good deal of uncertainty regarding the time of their invasion. If antiquarians represent a greater authority than others then the sixteenth century scholar, named O'Flaherty, says the Milesians arrived about the year 1000 B.C. at about the time that the Biblical Sargon was ascending the throne. Victorian historians liked later dates up to the year 200 B.C., but the latest trend has been in the direction of an earlier origin for the invasion, Donnelly suggesting 1700 B.C. In any case, the pre-Celtic peoples obviously pre-date any such move toward "civilization" in the Mid East.

Leaving that matter, it might be instructive to look at the work of an unknown Greek writer quoted by Plutarch (ca. 120 A.D.) This individual said that "The Land of the Dead" was the place of origins for the Gauls, and that these lands were thought to lie "in the western extremity of Great Britain." It was rumoured that this place was cut off from the

world of men by an impassable wall. On the northern coast of Gaul, says the reporter, was once a group of mariners whose only business was ferrying the dead from the continent to their resting place somewhere in the west. The mariners claimed they were awakened, in the night, by whisperings from offshore, and that they then went to the strand where they found the dark ships anchored. These they attested were not the craft of any known people and the pilots and were invisible. These men awaited the loading of equally invisible passengers who sank the ships to the gunwales. Those who hired aboard these ships said that the vessels made the other shore in a single hour, where it took many hours for a normal craft to reach Britain under sail. At the Otherworld, "passengers" were not seen to disembark, but the ships lightened and rose in the water as a voice was heard intoning the names of new arrivals, presumably now added to the population of the Dead Lands. On the return voyage the vessel was also seen to be similarly loaded and emptied. The voyage always took place at midnight and often at a quarter day, for by the laws of nature, these appeared to be the times when the fabric of otherness faded, and the land of the living became open to the land of the dead, and vice versa.

It was this invariable way of things that allowed Ith the grandfather of Mil to perceived the wealth of Eiru from a tower "in the Land of the Dead at the centre of winter." He resolved to go there and embarked at last with ninety warriors, and took land at Corcadyna in the south-west. Here the tale becomes intricately bound up with that of the Munstermen in a myth already quoted.

Whether he came from the east or the west, Ith came to an island ruled by Ith, on landing, discovered that the Tuathan king, Neit had just been killed in a battle with the Fomorians. His sons were at Aileach, in County Donegal, trying to equitably divide their inheritance. At first the three kings apparent were suspicious of the motives of the newcomer, but seeing him as a rational man, asked him to help settle their differences. Seeing that this might lead into deep waters, Ith suggested that they divide this country "rich in fruit and honey, wheat and fish, and temperate in climate" according to "the laws of justice." The three kings could not be happy with this judgement and the little talk about the goodness of Eiru led them to suspect that the visitor had a hidden agenda. His companions

on the voyage afterwards recovered Ith's body and transported to back to "Spain." Here the children of Mil ostensibly plotted revenge, but seem actually to have decided on an invasion of Ireland based on the reports of its wealth. As noted earlier this entire story may have been a fabrication, as the people of the land of Ith or Bith later insisted that they were unrelated to any of the Milesians.

Whatever their rationale, the thirty-six chieftains of Milesia put together a equal number of sailing craft. At the crossing two people fell into the sea and drowned, one a son of Mil who climbed the mainmast to get a better look at their landfall. The other victim was Skena, the wife of the poet Amergin. When they were settled, the Milesians buried her at Inverskena, the ancient name for the Kenmare River in County Kerry.

In the old accounts it is claimed that the forces of Mil (which did not include the now dead patriarch) arrived on Thursday, 17th, on the seventeenth day of the dark moon, the first day of May, anciently termed the beulteinne. Partholon had also made land on the fateful Beltane, which was named for Beul, one of the most important ancient gods of the Shadow Lands. It was said that he was the one who made decisions concerning death and reincarnation. His female counterparts were the Basfinne.

Soon after landing, the Milesian host advanced on the main city of Tara, where they found the three Milesian kings awaiting them. The invaders immediately demanded unconditional surrender, and the Tuatha daoine seem to be disposed to comply, but they did ask that the host withdraw for three days so that they could consider how to bring about a surrender. The poet Amergin agreed that this was a proper request and so the Milesian fleet withdrew to a distance of nine waves from the shore.

No sooner were they anchored than a mysterious mist tightened about their ships and a storm came up,, all raised by the sorcerers of the Tuathans. The winds soon dragged the ships into deep water and they were dispersed to in the Irish Sea. A man was sent aloft to see if the storm was natural, and before he fell to his death from the rigging was able to shout out: "There is no storm aloft." At this Amergin began to chant a counter-spell and the winds dropped. The Milesians were thus able

to point their prows to the shore but one of the Milesian lords, a man named Eber Donn, fell into a berserker rage against the Tuathans and his tempest reinvigorated the one at sea, with the result that most of the ships went down. The seemingly pitiful remainder found its way into the estuary of the Boyne, while a few more landed in the southwest of the island.

The first engagement in the high mountains of Slieve Mish in Kerry, the other at Telltown, the place named after the woman sometimes spoken of as the foster-mother of Lugh. Some say that the three queens of the Tuathans bargained away the land in exchange for a promise that the Milesians would name the countryside after them, and indeed it is still called Eiru, Banbha or Fodhla in Gaelic. Others claim that the three ladies and their husbands were killed in battle. Whatever the situation, the last of the mythic invaders had breached Irish shores and entered upon their sovereignty of the lands.

After the great slaughter at the edge of iron weapons, the somewhat jaundiced poet Amergin was called upon to make an "honourable division" of the lands of Eiru. In the world's best example of technical justice he deeded all the sunlit lands to the Milesians and gave the Tuatha daoine control of all the natural caverns of the earth and islands "beyond the horizon" in the north and western seas. As it turned out these latter properties were no mean piece of real estate. Amergin might not have been so quick with his judgement if he had known the actual extent of caves and weems and man-made souterrains in Ireland. Archaeologists have suggested that these structures, probably pre-dating Tuathan control, were frequently occupied by men from a very early date. Sean O'Riordan notes that: "Only a small proportion of souterrains are known, and it is not possible to give any estimate of their number. The total must be very large..." (1942).

In response to this the Tuathans assembled at the mouth of the Boyne under the chairmanship of the Fomorian Manann mac Ler, a sea-god who had always had a soft spot for the kin of his foster-son Lugh. The Dagda his kingship because of the defeat and an election brought Boabd Dearg, the "Red Crow" to leadership. Manann offered the defeated people cloaks of invisibility to help them avoid detection by the Milesians, and

promised those who wished refuge in the western lands of the Atlantic. Some of the Tuathans elected to join their former Fomorian enemies in those lands but others fled to Alba (Scotland) and its islands. The remaining survivors at first tried to co-exist with the invaders, but the Milesians noticed their skill at the arts and their conspicuous wealth, and placed the best craftsmen in bondage, and created laws prohibiting the Tuathans from having any part in politics or other highly remunerative jobs. To make matters more difficult they levied heavy taxes and insisted that the conquered people remain out of sight. In the end large-scale movements of the Tuathans were limited to the quarter days while individuals were only allowed freedom of movement in the night hours.

These restrictions forced the Tuathans into the remote countryside where they took up the more menial occupations. These fugitives were only seen as shadows moving through the twilight by successive generations of Milesians. As a result of the seemingly magical skills the Tuathans had at avoiding detection, they became known as the *Dei terreni*, the "gods of the earth," residents of the "hollow hills," the descendants of powerful deities. Wealthy beyond reason or belief they were seen as having fairy palaces within the earth, and there held revels in unending sunshine, nourished by magical meat and an unending source of ale, both of which imparted undying youth and beauty and near immortality. From these places they occasionally emerged to mingle with men in acts of love or war. The original concept was one of a heroic race, whose gods were admissible in the Milesian pantheon. In the latter days, under the influence of Christianity, they were at first disparaged, being referred to as the *Daoine sidh*, the "side-hill folk," or as the *Tuatha athach*, the "people of the wind." Notice that the latter word *athach* is a synonym for "giant," thus, an "imaginary people." These "rent-payers," sometimes entitled "rent-payers to hell," actually were a mix of all the earlier peoples who had become subject at one time or another. Each of these made notable, but futile, attempts to regain power and property in historic times.

The Tuathans, "ground down by rents and compulsory toil," overthrew the Milesian king under the leadership of *Cabri Cinn Cait*, the "Cat-Headed," in the first century before Christ, and he ruled through five years when there was "but one acorn on the stalk." At his death, his son *Morann*, recognizing the fact that the goddess of earth had attached herself to the

Milesian line, refused the crown. This allowed the ascension of Feradach Finn-feactnach, whose reign was equally unhappy. In the reign of the next Milesian, the Tuathans again banded together and resumed power for twenty more years. Tuathal Feachtmar, "the Desired" was the next Milesian to get the upper hand, but he had to fight 133 battles against the "little people." In the end he did break the tribes of the north and scattered them so widely they were never again a force in Irish history. The sigh never quiet perished, but among present-day inhabitants they are quiet creatures of the imagination, who infrequently trouble the affairs of men.

The Milesians were left with only two sons of Mil when Ireland was first conquered. There had been eight, but Bith had fallen overboard, and Donn and his other brothers had been drowned in storms at sea. This left Eber Finn and Eremon, who approached Amergin for a judgement concerning the portions of property they should hold. The druid-poet declared that since Eremon was the oldest he should first rule all the lands passing them at death to his younger brother. Eber would not submit to this arrangement and thus the Irish "troubles" commenced nearly 4,000 years ago. At first Eremon asgred to keeping the peace by dividing the land into northern and southern halves, the division line running "from the Boyne to the Waves of Cleena." The northern half was deeded to Eremon with a small northeastern corner granted to the children of a lost brother named Ir. This was the land first invaded by the Norse, and encounters with this tribe caused the whole island to be called Irlande. The south was the land of Eber, excepting a southwestern part of Munster which was given to a cousin named Lughaid because he was the son of Ith or Bith.

This settlement held for a single year, but in that time Eber's wife began to politic for possession of Tara which was within the northern bounds. This "quarrel between women" concerning "the pleasantest of all Irish hills," led to war between their husbands in which Eber was defeated and the sovereignty settled upon Eremon.

At this time, some two thousand years before the Christain era, legend says that the Cruithne, better known as the Picts, arrived among the Milesians. These may very well be the Fingallions referred to in our

1913 ballad, the word does point to the Gauls of France and Belgium, who were closely allied with the Celto-Iberians of Spain. At any rate, the people who lived about Inver Slaigne in the extreme southwest were plagued by a tribe of virulent visitors from the east who were decimating the population using poisoned arrows. The Picts were known as mercenaries and were invited to fight for pay. They were very successful at eliminating the unwanted element and were rewarded with a grant of land. Sadly, they were almost as barbaric as the earlier strangers and the chief of that quarter, a man named Crimmthann decided that they needed to be persuaded to "pass on over." Three Pictish chieftains were therefore given Irish wives and granted land in Alba, and according to Seumas McManus this was their wellspring in the land now called Scotland. This is not a universal interpretation of events; it is more usually supposed that the Picts were the early Britons (it can be shown that Breatnn is actually derived from Cruitnich) and they are thought to have been in place in Scotland before the Gaels. For our story it is only important to know that they were settled in Britain in prehistoric times.

Eremon's victory over the Picts and his brother had slight effect in guaranteeing his descendants overlordship, for all of the defeated peoples returned from time-to-time, and the implicit quarrel between north and south was never resolved. In point of fact, there was a notable return of the Fomorians from Alba led by the four sons of Umor. They took refuge in Ireland from the land-hungry Picts, and the high king was more or less forced into granting them lands in Meath. These people soon found this an unhappy arrangement and fled across the Shannon into Connaught, the great wilderness favoured and dominated by the Firbolgs. There the celebrated Queen Mebd gave them lands in the south of that province, and made them part of her great army.

The oldest foreign reference to Ireland, in the sixth century before Christ, gives it the name Ierna. Aristotle in his Book of the World also favoured this name. In the first half of the first century Pomponius Mela called it Iuvernia, but the Romans preferred Hibernia or Scotia. The Scottish matter is probably the most confusing element in Irish history, since the related word Scotland was eventually applied to Ireland's northwestern neighbour, the land at first called Alba.

Scotia is a name from literate times but was claimed to be derived from Scota, the first queen-mother of the Milesians (and thus a counterpart of Danu). The term Scoti was definitely preferred by continental writers as the name for the people of Eiru. Thus it is explained that "Hibernia is the nation of the Scots," Scotia being a name "which links itself to no land on earth."

Thus, as late as the seventh century, we find native "Irishmen" referring to themselves as Scots when they were in exile. Further, as time passed, they even began to designate their homeland as "the land of Scots." In the third century the Scots began a colonization of the southwestern peninsula of Dal Riada in Alba. The first colonies in this new place received military help from Tara in order to put down the neighbouring Picts.

In the following century, a Munsterman, Lugaid mac Conn, fleeing from enemies, made himself the chief power in this new land. From his son came the ancestors of the lords of Argyle; the MacAllens, Campbells and the MacCallums. A hundred years further on Cabri Riata established kingdoms in both Ireland and Scotland. The Picts were not enamoured of any of this and would have driven the Scots from their land, except for the efforts of the high-king Niall of the Nine Hostages. The effect of all this was the establishment of a huge military presence in Alba by the sixth century, when it became an independent kingdom under Aedh ard-righ. For a time it was powerful enough to hold Antrim, in Ireland proper, as an appanage.

That was the state of things until the end of the eighth century when began to pressure them in Argyllshire and Dalriada. Looking for a more secure home-land the Scots of Dalriada marched into Pictland and conducted campaigns against these people until 850 A.D., when Cinead (Kenneth) mac Alpein completely overthrew the Picts by very devious means, and became high-king of all Scotia, Some claim that he even subdued the Britons on his southern borders and the Anglo-Danish population of the southeast. At this time, with the Scotie people in a position of power, Ireland was called Scotia Major and Scotland Scotia Minor, but the title fell away from Ireland as their power waned.

In the eleventh century, when all Scotland was dominated by Gaelic-speakers (excepting headlands, and the western and northern islands which were under the Norse), the kingship passed to Mylcollum (Malcolm) who married Margaret, a daughter of King Edmund, an Angli-Saxon monarch. Unfortunately for the Scots, he was easily swayed by her, and their son Edgar was entirely English in name and outlook. When he was crowned king, a division developed between the highland tribes and the lowland English kinsman of the king. In the thirteenth century, Gaeldom flickered and went out as a force in the north, the old Irish line becoming extinct with Alisdair (Alexander III) in 1297. Afterwards there began the long wars for succession which ended with the old-English families of Bruce and Balliol firmly on the throne of Old Scotland.

There is some correspondence between the old warrior-magicians of pre-Milesian times and the Scots: When the Scots invaded Alba they found present-day Scotland divided into seven territories, and they continued with these divisions. "Each district was termed a Tuath or tribe; several Tuaths formed a Mortuath (sea-tribe) or great tribe, two or more Mortuaths a Coicidh or province, at the head of which was the righ, or King. Each province contributed a portion of its territory at their junctions to form a central district, which was the capital of the whole country, and the King who was elected to be its sovereign had his seat of government here. The central district, where the four southern met was Perthshire and counted Scone as its capital. The northern Tuaths adjoined at Moraigh (near the sea). In the twelfth century the system was modified and the righ was no longer held by the heads of the Tuath and Mortuath. but at the head of the former was the toiseach (the beginning or front one) and of the Mortuath, the mormaer (the great mayor or major, the sea-ruler, or great steward)."

It is possible that these designations were picked up from the Picts, but it is more likely they were names visited upon the Scots by their Irish enemies. If this is so, it is likely that sea-faring Scots numbered survivors from the old Fomorian sea-kingdoms in the west. It is almost a homilic to say that pre-Roman Britain was inhabited by a people "who were mainly Celtic and that the Celts reached this country in three principal waves of immigration. One wave came to the east coast by way of the North Sea, another by way of the Gaul to the South of England, and

the third from the Continent by way of Ireland."

This is the view of most historians, although there is no written magic to back up the idea that all the peoples of the islands arrived from the east. In the black well of times long past historians are as much adrift as mythologists, and many of these have a contrary opinion. These is the problem of Irish Gaelic, which is still considered the most antique of all the Celtic tongues. Aryan scholars say that the Indo-European tongues started in northern India and spread slowly from there westward. Professor Schleider (1874) that this Celtic tongue has the appearance of a separation from the supposed root (Sankrist) at a later date than the Cymric and Brythonic tongues, but they are supposedly of more recent evolution. Worse still, Gaelic has the look of being more closely allied with Latin than any of the supposed Indo-European affiliates. These idiocyncracies suggest that Gaelic might have spread from Ireland to the east, where it collided with, and became associates of the west-bound language which is now preserved in English, German and the Scandinavian tongues.

We are then left with the question of wherethe Gaelic vocabulary originated and are led back to the fact that the Celto-Iberian tongues have "more analogies with American types than with any other." In his book, On the Phenomena of Hybridity in the Genus Homo, Paul Broca (1869) said that "Of all Europeans, we must provisionally hold the Basques to be the oldest inhabitants of our quarter of the world." He said that their language, the Euscara, "has some common traits with the Magyr (Hungary), Osmanli, and other dialects of the Altai family, as for instance, with the Finnic, on the old continent, as well as the Algonquin-Lenape langauges and others in America." Gaelic has been given similar attachments both from a shared vocabulary with the Algonquin languages and with parallels in the myths of the two people. Folklorist Mary L. Fraser has examined some of these correspondences and concludes that, "The closeness of the (mythic) parallels show that the Indians and the Celts in the far distant past were in direct communications with one another, or were in touch with the same source of inspiration. According to Indian tradition, the white man came from the East, and the Indians from the West, yet there must have been a (very early) common meeting-ground somewhere, sometime."

The classical peoples, who lived close by the supposed centres of ancient civilization regarded Ireland as the most ancient place, This is revealed in the fact that Greek scholars routinely referred to it as Osygia. It may be useful to our arguments to note that Osygius, who gave the land its name, was the supposed founder of ancient Thebes, and that his is the antique name for Bacchus or Pan, one of the more antique gods of agriculture and fertility. Rufus Festus Avienus , a Latin geographer of the fourth century remembered this place as,

Insula Sacra (the Sacred Isle) so named by all the antiquarians,
From times immemorial in the womb of Chronos, (the ocean)
This Isle rising over the waves of the Ocean,
Covered with a sod of rich luxuriance.
The place peopled far and wide by the Hibernii.

The English antiquarian William Camden (d. 1623) wrote that no one of his time could conceive why the Greeks referred to this western island as the "Insula Sacra" and "Osygia," "unless from its antiquity, for the Greeks call nothing by this name unless it is extremely ancient ." Notice also that this individual was often regarded as the lone survivor of the Grecian version of a World Flood and the the name is sometimes given as Ogygia, which makes it confer somewhat with the Gaelic og, young; hence, a "commencement place." The ending is comparable with ùigean, a "fugitive or wanderer." Personalized by capitalization this word becomes the Gaelic equivalent of the name for the Anglo-Saxon god Woden. Woden, or Odin, was given this name for his tendency to tour during the winter season. There is also possible connection here with Ogma mac Elathan, sometimes identified as the son of Dagda, His island in the west was Tir nan Og, the "Land of Youth," a place of perpetual beginnings and ever-renewed youth.

These are not the only indications that Ireland once harboured a prehistoric civilization. In Sankrist texts it can be seen identified as Hiranya, the "Island of the Sun," the centre of a religion for sun worship which extended far beyond its borders. In his Gallic Wars, Julius Caesar wrote of the druids, who tended the earthly affairs of Lugh: "...it is

believed that their rule of life was discovered in Britain and transferred thence to Gaul." In this context, note that the Algonquin tribes of eastern North America identified themselves with a creator-god who came down to their land as the morning sun, and that they called themselves the "people of the dawn." The Caeronii of northern Scotland also referred to themselves as Daoine aod, the "people of the day." This may simply show that world myths are amazingly similar, but the correspondence, at least, helps the idea of of prehistoric contact between the two groups.

The sum of all this is the possibility that there might have been a transatlantic commerce in people and their ideas. quite possibly in both directions. The Irish "saint" named Vergile (ca 750A.D.) got into difficulties for expounding this idea in public. He was accused of promoting heresies by speaking on the subject of the antipodes (the world beneath one's feet (that on the opposite side of the globe). The Church wrote suggesting that he mend a few fences, and Vergile responded by going to Rome, where he convinced Pope Zachary that the Irish had not only believed in a distant world across the ocean, but were in communications with it.

Farley Mowat insists that "History preserves the records of several "discoveries" of Europe from America." Unfortunately he does not give us the names of these histories, or even those of the supposed travellers, so must assume he speaks in supposition, thinking of Neolithic men, who might have come inadvertently to Europe riding the Gulf Stream and the prevailing mid-Atlantic winds. Some might have made the harder northern crossing from Thule in the skin boats now known as umiaks. These were never the primitive unseaworthy craft they appeared to be, and surviving examples have been seen to be capable of carrying forty passengers on extended sea-voyages. The umiaks are not unlike the Irish currachs or coracles, and this correspondence may not be accidental since the Inuit of northern Canada have said they were descendants of people from Thule and these people were perhaps the mythic Tuatha daoine.

Indian bark canoes were of immense size in the past perfectly capable of testing the open ocean. The east coast tribes living in Newfoundland had twenty and thirty seat sea-canoes when they were first spotted by European fishermen in the seventeenth century. These craft

hold little resemblance to the "crystal" ships that supposedly came to the shores of western Britain, but they could have made the crossing following the Stream and the prevailing westerlies of the mid-Atlantic. The European equivalent of these early Amerind ships could not buck the wind or the current against the Stream, but they did have an advantage in travelling westward. The tribes of old Alba and Eiru were already well out on the Atlantic to begin with, and had a chain of northwest trending islands leading from the Hebrides to the Shetlands to the Faroes, to Iceland, to Greenland, to Baffin Island to Canada, all places within a few days sailing of one another. Nowhere along this route is there more than 400 miles of distance between landfalls, and the prevailing wind in that quarter is up-and-along Iceland and Greenland, and finally down-and-along the coast of eastern North America. For either group of travellers, getting home was only a matter of being aware of the alternate route, which could be discovered by simply following the major currents and winds of the ocean.

An Domhain was supposedly the first land created by Don. Interestingly, he is rarely mentioned except obliquely as Nathair, "The one who is not the father of men," or perhaps as the Gaelic Beul, "The Mouth, The Devourer." He was also represented among men as Ler, a name which means "The Sea." The Britons called him Bel and the Gauls Bile, but he was always the penultimate death-god, the ruler of the dark lands. Some say he confers with the Latin god Dispat, "The Father of Discord," but the latter is more directly associated with the Germanic Tyr, a mortal-god of war and agriculture. Those who were very frightened at the prospect of accidentally getting his attention referred to him even more indirectly as An Bodach, "The Old Man," a ruse we still follow in making reference to the Hebrew god called Satan. Remember the saying, "Speak of the Devil..." It was also safe to refer to this immortal god as The Lord of the Sunless Places, Prince of Darkness, Guardian of the Deep or as the Ruler of the Land Under the Waves. Those who preferred a disguised offensive called him Auld Donald, Old Reekie, Old Crow, Old Boy, Old Lad, in one language or another. There are rivers in Europe and Britain that carry the name Dan or Don, but naming them aloud is regarded as propitiation, a "saining," or "outward crossing" to ward off evil.

The worlds of men and the gods were more obliquely created: At

first Donn sat alone with in chaos, but tiring of stasis invented the mortal-gods named Lugh and Nuada, the Sun and the Moon. Like all of the sea-giants after them, these boys were a little slow developing a sense of purpose, but they eventually created a universe after they engaged in mock-battle. Where the sword of Lugh and the spear of Nuada came together sparks flew off into the boundless beginning place and these became the stars in the sky and the planets that held the firmament.

One of the islands in the western firmament was Tech Duinn, "The Staging Place For Men." More accurately, this was the collection point for the souls of the dead. As we have said An Domhain was the beginning place, but it was also an ending place. It was Lugh's business to ferry souls to their destination in the west so that a spiritual balance could be maintained between the world of men and the Otherworld. Occasionally he must have tired of his task for it is sometimes performed by Manann mac Ler, the immortal son of Ler who had land holdings on the Arran Isles and on the Isle of Man. The worlds in the east and west were constantly exchanging soul-stuff, reincarnating men and animals and plants in one place or the other, struggling always to keep the populations of the two places in balance. Death was never the end of life in the old Celtic world, but a recycling of matter and energy responding to the will of the creator who controlled (or at least laid out rules for) the actions of the Befind or Fates.

The feast-day of Donn or Beul was the first day of May, which used to be termed the Bealltuinn or Beltane. The fact that Beul was a form of the sun-god is made clear by the fact that some texts represent him as, "the father of the gods and men." His name translates as "the bright one." He is, further, listed as the mate of Boann, Anu, Danu or Dana, who is more often acknowledged to be the "wife" of Dagda. In some texts Bile is stated to be the father of King Milesius, the patriarch of the Milesians, the final conquerors of ancient Ireland. Significantly it is said that Bile had his palace in Tir-nan-Scaith, "The Land of Shadows," the place of the dead.

There are many locales in Europe named after this death-god, for example Billingsgate, London, formerly Belinos' Gate. His name-sake is also counted among the legendary kings of Britain. We have in that list

the Latin Cunobelinos Rex (the Celtic form is Cunobel). William Shakespeare borrowed the personality of this High-King and gave him even greater glory as Cymbeline. The Beultuinn, which still identifies the Gaelic May-Day is less frequently called the Cetshamhain, "the first weather of summer," or "Summer's Start."

It was customary to observe the feast of Bel by kindling the Beltane, Bel-fires or Bale-fires. These honoured the constructive powers of the sun as represented in the Dagda and his son Lugh, who represented Beul transformed at the end of winter. In a similar manner, the female element was referred to in the winter months as the Cailleach Bheur or "Winter Hag." On May Eve she threw her "hammer," representing foul weather and bareness, "under the mistletoe, and coupled once more with the summer god as Samh or Mhorrigan, becoming a reincarnate virgin for each new festival. Thus the reincarnate death-god, represented in the eastern sun was praised for having overcome the forces of darkness found at the setting of the sun. Sometimes this unending struggle between summer and winter, or darkness and night, was represented as the temporary victory of Dagda over his personal enemy Crom, "The Crooked." Thus, periodically, "the crooked was made straight," the crops, the animals of men, and men themselves, being prompted to sexual unions, and the promises of yearly renewal and ultimate reincarnation. At these times of the year all fires in Celtdom were extinguished and rekindled by the druids using friction between two bits of oak, the wood sacred to the gods of fire and lightning.

The Celtic Otherworld of the blessed was not situated, like that of the Christian hymnist, "above the bright blue sky," but within the subjective world. This western paradise could be attained through the underground or by ocean travel. The easiest Irish routes were by way of the Isle of Arran or that of St. Kilda. According to folklore, Arran was similar to the Isle of Man, in being a land residence of Manann mac Ler and would naturally have easy routes to his lands in the west. The former island was sometimes called the Island of Apples, making it synonymous with the medieval island of Avalon, and the sunlit parts of the Otherworld. Again, these "sunset islands," were always spoken of as gateways to An Domhain, so perhaps this never-never land lay beyond these mystic entry points. Off the shore of western Scotland, the Isle of Handa, off

Sutherlandshire had a similar reputation as did the Isle of Eigg and the more distant Isle of Lewis.

As regards the Coire nan Domhain, "The Cauldron of the Deep:" It was taken from the island of Murias by the Dagda and his sons after the decisive defeat of the Fomorian sea giants at the second battle of Moytura in County Mayo. After this it is recorded that the forces of "winter, darkness, and ill" were never again a serious threat to the British Isles. Lugh Ildanach sat enthroned replacing his dead brother Nuada and the mythic solar hero was seen triumphant over the death-king of the west.

In the mop-up following this battle the Dagda discovered that his personal harp had disappeared from his quarters. Suspecting that the Fomors had taken it in the confusion of the last moments he organized a *radh* or "raiding-party," and he and his two surviving sons followed into the banqueting-hall of the enemy within the keep of Murias. They were, of course, seen but the Dagda called his harp into his hands and it went winging across the room killing nine of the enemy on its way. Having it in hand he invoked its magic, singing:

Come apple-sweet songstress,
Come four-angled murmerer of harmonies;
Come Summer, come Winter
Out of the mouths of harps, bags and pipes.

In possession, the Dagda played the traditional "three strains" of the master harpist: The Strain of Lament reduced his enemies to weeping rags; the Strain of Laughter, to inordinate mirth; and the Strain of Sleep, to profound slumber. While they slept, the three invaders ravaged the land of the Fomors and carried off the Cauldron of the Deep and certain other magical objects which they thought might be of value.

Their best plunder proved to be the cauldron for it was found that no hero ever went from it hungry or thirsty. Effectively, the "gods" had purloined the womb of all life from the beginning place. The human dead who were placed in it after warfare had their life force returned, although their souls were not restored intact.

Cuchulainn followed the example of the Dagda and his three sons, when he and Cu Roi invaded the western lands and stole a magic Cauldron from a mysterious fortress. This one poured streams of gold and silver on command. Nera, a servant of King Ailill of Connaught was another Gael who entered the Otherworld (through Rath Cruachan rather than by sea). There he saw a similar cauldron. Returning to the world of men he organized the plunder of Rath Cruachan, and from it brought back the Crown of Brion one of the magical wonders of ancient Ireland. There were numerous parallels in Welsh mythology: Annwn, king of the Otherworld had one, as did Didwornach, Ogyrwan, Perdur and Bran.

In The Mabinogion it is said King Bran of Britain possessed the original cauldron long after the "gods" had retired to Hy Brazil. He gave it to the king of Ireland when the man married his sister Branwyn. When she was misused by her husband a war was fought between the Welsh and the Irish. "When there was need, the Irish kindled a fire under the cauldron of renovation and they cast the bodies into it until it was full; and the next day there came forth fighting men, as good as before, except that they were not able to speak." On this occasion the cauldron was seen being used by a Welsh warrior named Ebnissyen. To destroy this unnatural advantage of his enemies, Ebnissyen pretended to be dead and was flung into the cauldron with the bodies of the Irish. There "he stretched himself out, so that he rent the kettle into four pieces and thus burst his own heart."

The cauldron of the deep is generally conceded to be the model which Christian writers used to create the Holy Grail. King Arthur and his forces represent the pagan Dagda and his host in Christian versions of the story. It is on record that Arthur entrusted the cauldron to his half-sister Morgan Le Fay. In the earlier version, the Dagda's cauldron which "came out of Murias (the sea island)" was sometimes said guarded by his daughter Mhorrigan.

It is noteworthy that the Norse god Thor stole a similar kettle from the giant named Hymir, so that Hler god of the sea could brew ale to host the land gods at their harvest feast. In a separate incident, the formula for the beverage was stolen from the giants by Odin, who first seduced the giantess Gunlod. This defrocked guardian became pregnant with Bragi, the

god of poetry and inspiration, but Odin fled with a sample of the drink in his mouth. The bowl, which may perhaps symbolize the ocean, is represented in Norse myth as being "a mile in width and proportionately deep." It is difficult to see how Thor managed to run away with this kettle mounted helmet fashion on his head; the Celtic form was a little more manageable being able to hold eight-score gallons of various liquids.³

The ancient island of An Domhain was considered to be the ultimate shape-changer, a Fomorian par excellence, the most gigantic specimen of that kind. The island incarnate could be either male or female, at will, so that there is a question as to whether the Dagda and his crew performed a hysterectomy or a castration. In any event, their taking of the Cauldron of the Deep robbed An Domhain of its astral genius. Without this spirit, the Fomors lost their reproductive powers although they were able produce children by mating with men. This explains why the Fomors and their allies, the Sidh, were always involved in changeling exchanges and the abduction of men and women. With the soul of the place removed to the east, the western islands became known as places where there was "not save truth, neith age nor decay, sorrow or gladness, nor envy nor jealousy, hatred or haughtiness." Thus did the people of the distant isles lose their souls! Understanding of their predicament remained: They were no longer able to raise the will to invade the realms of men, and their creative hopes were dashed. Their arts and crafts, and their science, became stagnant and they were reduced to copying successes from the past. It is said that their music was often spritely, but apt to descend "into weeping and lamentation," at any hint of their loss.

The Gaelic board-game called either fidcheall or brandubh, This game remembers the fact that the chief totem of the Fomors was a black bird sometimes identified as the European hooded crow or the raven. Interestingly, the people of Dagda and Danu also used this symbol because of their deep blood ties with the sea folk. With the creative-spirit was

³Here it must be noted that the Dagda's "porridge" consisted of "four-score gallons of new milk, and a like quantity of meal and fat. Goats and sheep and swine were put into it, and they were all boiled together with the porridge."

forcibly moved to Ireland, the work of the Befind tended to be routed through the sun-god Lugh, who frequently played at the game of the gods, in order to see that a balance was maintained between the Middleworld and the Underworld. Odin's gods had a similar magical preoccupation in the game they called Nnefatafl. The brandubh, or "black raven," was played upon a grid of seven squares to the side, and had a fid or peg placed in a hole at dead centre to represent the raven-leader. Surrounding squares were filled with smaller pegs meant to represent defenders of the "navel of all things." The raven seems to represent the Cauldron of the Deep, for game boards which have been recovered, often feature a head feet and hands at the four sides, indicating that the board itself is the slain giant, so well known to Indo-European cosmology.

The god who expired, his blood becoming the oceans of the world, is of course the creator-god, or Allfather as embodied in his first gigantic creation, the sea-world known as An Domhain. In later days the "gods" suggested that the deity who died was some lesser giant. In Norse tales his name was given as Ymir, in the Celtic realms as Don, but this was all creative propoganda. In some of the tales it was clearly the stated that the magical object taken from the depths of the sea was not a cauldron, nor a belly-button, but a talking head, or some other object representing masculine powers of regeneration. Whatever this object was, it served as the talisman of the west, protecting it against invasion. In the fifteenth century an Arab writer noted that a Genoese mariner named Kolombo (Christopher Columbus) had just returned from the far lands bearing this talisman thus opening the western Atlantic to development.

The sons of men preferred to think that their loss of immortality was due to miscegenation with the giants, but it seems that the Allfather disliked the experience of death and thus forced all beings of his creation to undergo frequent destruction and reincarnations in the interest of revenge. The creator-god apparently submitted to th indignity of extinction in the interest of experiment, thus giving rise to the northern European rite of periodically killing the "god" in the form of a reigning monarch (or his proxy). When the undersea cauldron, or head, was moved to the land it was buried in the ground, becoming the astral genius of the new place. In Ireland the "artifact" was said to have been placed at the centre of the four ancient provinces within a mound known as Hugh's

Horse. This use of language has intentional sexual connotations, Hugh being the old god Aod, also known as Lugh "of the Long Arm." In England, the myth says that the head was that of the giant known as Bran (the Raven) and it was placed at Whitehall, London, its face turned east to protect that realm from continental invaders. The Celtic King Arthur thinking that Britain needed no greater might than his sword arm dug up the head with predictable results.

An Domhain was afterwards deliberately hidden from men partly because the dissipated Fomorians lacked the will of an ineffective foe. Notwithstanding, it was believed that the Otherworld was visible and unlocked at the quarter days, and especially on the eve of Samhuinn when "inhabitants of the deep could set out to wreak vengeance on those living who had wronged them." This ancient pagan belief survived the coming of Christianity to Britain, and the beliefs continue in the traditions of Hallowe'en. It is thought that creatures of the dark world might ensnare unsuspecting souls on this night. As a counter-charm the people set their bonfires, placed lights about their dwellings and remained in family groups rather than wandering alone in the dark.

Even in their reduced state the Fomors were considered a force to be avoided: "The sea giants, or demons of the deep were powers for darkness and ill, supposed to have been overcome by the Tuatha danna. Most of them were represented as huge and deformed, some with animal heads and gifted with blighting and malignant potencies." A Victorian authority says: "Celtic myth has its god-contending giants in the Fomors, and they appear in many medieval romances and nursery tales, where many of their mythical traits are preserved, such as the power of assuming animal forms, and anthropophagy (the eating of men) and their wild unsociable character."

The properties of Donn fell at last to Ler, the immortal god of the sea, the day-to-day management of the western isles of the Atlantic being in the hands of his son, Manann mac Ler. Ler is completely cognate with Hler of Old Norse myth and the Welsh Llyr. In the Gaelic version of events the chief Fomorian married Aobh, the eldest daughter of Ailill of Aran and the foster-child of Boabd Dearg. In addition to fathering four of his children, this sidh often took the form of his steed Aonbharr, the

white horse of the sea, a creature able to travel on land or water. In the latter case it was only her head that remained horse-like, the rest of her body becoming that of a 100 foot serpent. The sea-people were not restricted to this shape, but travelled the waters as fish or marine mammals. Those who were not true Fomorians sometimes travelled to and from the undersea world by donning the cohuleen druith, or sea-cap, which enabled them to respire the waters of the ocean. The Daoine mara descendants of the Daoine sidh who took refuge in the undersea kingdom after they were defeated by the Milesians (who were the ancestors of the modern Irish) were only able to travel the sea by using breathing equipment and seal-skins or a fish tail which they laid aside on land. Without this breathing-gear they were unable to re-enter the Fomorian hold.

The Irish writer Croker said that their mermaid was the morugach, or sea-daughter, a creature belonging to a race known as the merrows. He mentions the sea-cap "without which she cannot return to her subaqueous abode," and says that the the Lord of Dunkerron and the O'Sullivans are only two of the numerous folk whose ancestors cohabited with mermaids and have such offspring in their family tree.

Manann confers with the Welsh Manawyddan, and he ruled from the distant western land of Tir Tairnigri. Like all of his species, Manann was a shape-changer, but he was often seen in humanoid form driving his chariot on the surface of the sea behind "horses" which were sea-serpents. Manann married Fand and by her fathered children among the gods, but he also sired human children including a son named Mongan by the queen of Ulster. Manann is mentioned more commonly in myth than any of the other Fomorians. He created the storms which nearly prevented the Milesian invasion of Ireland. He advised Bran at the start of his epic Atlantic voyage, and took Cormac mac Art on tour of his western holdings. When the Dagda died, Manann was unhappy with the succession of Boabd Dearg and refused to join him in efforts to unseat the human rulers of Ireland. Following this, Manann refused to have further dealings with the people who became the Daoine sidh, and retreated to the seclusion of one of his overseas islands.

The world-myth is incompletely represented in Gaelic myth but its

philosophy is well documented in the Welsh Barddas, a compilation made from earlier material in the hands of Llewellyn Sion of Glamorgan in the sixteenth century. In the system of thought he proposes there are parallels to Donn and Dagda in Huw and Cythrawl, the first being the powers of life and construction, the latter those of death and darkness. In the beginning it was said that Annwn was the most complete realization of what the Greeks called Chaos. In the beginning it is supposed that there was nothing beyond these forces. Organized life came into being "at a single word from Huw." Notice that this name represents the tendency towards order, the sun, and a reincarnate god, all wrapped into one. At his will manared, the building blocks of the universe came into being. The place where life sprang up in Annwn it was called Abred. Immediately the forces for construction and destruction began the contest of life and death.

According to ancient Cymric thought there was never complete death for any living plant or animal, but many reorganizations of the constituent manared. It was guessed that the beings of earth passed "every capable form of life, in water, in earth, in air...through every severity, hardship, evil before attaining gwynfyd (enlightenment). Gwynfyd cannot be obtained without seeing and knowing all, and is not attainable without suffering everything. There can be no full love without experiencing the hate which leads to the knowledge that is gwynfyd.

Every being was thought capable of attaining godhood, through a progression of lives sprinkled with both good and evil events. Those who committed evil were thought to fall out of the worlds of men and the gods into the Deep, sometimes termed "The Loveless Place," or "The Land Invisible." It is important not to confuse this place with the Christian place called Hell. Like An Domhain, Annwn was never seen as a place for the punishment of evil, but a gathering point for insensate matter that had fallen back toward chaos for recycling.

Again in Welsh mythology two great houses are distinguished, one entitled the House of Doon. One of its patriarchs was Mathonwy. Very little is known of him or of his brother Manogan. From the former arose Doon the mother-goddess who the Gaels called Danu. Her brother was Math, Wealth or Increase. By contrast the other line led to Beli, the death-

lord. At times he mated with Doon and there extensive family included Gwydion (gawd, poetry) a famous magician who aided men and the land-gods in their wars with the Otherworld. He married his sister Arianrod, the dawn goddess and their sons were Nwyvre, the god of the upper atmosphere, Llew, who is the Irish sun god Lugh, and Dylan. Other famous children of Beli and Doon were Govannan, the god of smiths and Nudd, warder of the night sky. He gave rise to Gwyn, who became well-known as the guardian of the dead-lands, which in Somersetshire was called Avalon. A sister, named Penardun married into the rival house of Llyr.

The house of Llyr started with the immortal ruler of Annwn when he mated with Iweriadd, or Ireland. This god produced by her Bran and his sister Branwen who ultimately married Matholwich one of the early kings of that realm. Llyr later impregnated Pendarum the daughter of Doon giving the world Manawyddan, the god of the sea. The lady herself later coupled with Euroswydd and they had two children. In later years the rule of the dead isles passed to Pwyll who married Rhiannon. Their son Pryderi was involved in the unsuccessful defense of the Deep against Gwydion, the god of the arts and light. Clearly this god is the Irish Dagda who purloined the Cauldron of the Deep.

The House of Donn may also be found in connection with Odin's Aesir. Snorre Sturlason says that Asa's folk lived originally in Asia, "east of the Tanaviskl in Asaland or Asagard, Odin's garden. Some historians have claimed that they were forced from this homeland by Mongols on their right, but Sturlason insists that they liked battle and simply wandered into northwestern Europe. On their journey they happened upon the river of "Greater Sweden" which was once called Tanaviskl or Vanaviskl. This was the old river Don which still flows into the Black Sea. At a fork in the river, Odin's army came upon Vanaheim, the Home of the Vans. These people, like the Fomors said that they had come out of the open ocean at a time long past.

"Odin went with his army against the Vanes, but they withstood him well and defended their land. Each of them was in turn the winner; both sides harried the other's land, and did each other great scathe. And when they became weary of it, they arranged a meeting to make peace and exchange hostages." The Vanes gave Odin their most prominent folk,

including Niord the Wealthy. The people of Asaland gave in return for their good behaviour Hoenir, Odin's brother." Niord and his son Frey and his daughter Freya were made temple priests to the "god" Odin, but the men afterwards succeeded to Odin's throne. Freya was well versed in the magic of the sea-folk and passed this wizardry on to Odin's valkyra

In their new settlements in the northwest Odin's folk could look across the western sea, and here their scalds told them lay the Ginnungagap, or Beginning Cleft, where time and place and men had their origins. On maps this Cleft in Space is frequently shown as Baffin Strait; here, they said, lay the equivalent of the Indian Ukakaumkuk and the Gaelic An Domhain.

It was said that the Beginning Gap was set between a northern water-world known as Nifhelheim, Hel's home, and an unpleasantly warm southern world called Muspellsheim. Like An Domhain the former place had at its centre Hvergelmir, the sea-fountain, otherwise known as the Cauldron of the Deep. From it their flowed the twelve great rivers of the ancient world of the sea-giants. As the water flowed from this source some of it tumbled into the Bottomless Pit. As the waters fell they were buffeted by the wind spirits and converted to ice. Huge blocks of ice thus formed at the bottom of the Gap. Hearing the commotion caused by this activity Svrtr the elemental of fire approached the pit and sensing danger brandished his sword, which showered sparks downward. Far below the blocks steamed under the heat and sent forth a mist. As the mist ascended it met the cold air and congealed into hoar-frost, and within it their arose (by the will of the creator-god) the creature who came to be known as Fornjotnr, or Orgelmir, whose name was often shortened to Ymir. This was the first of the Hrim-thurs, the Rime-frost thirsty ones," more often called the Jottuns, Heavy-eaters, or giants. In the gloom Ymir found nourishment in a gigantic cow created to meet his need. The cow, looking fore food of its own licked away at one of the salted ocean-blocks, and accidently carved out the rough form of a man-god. The Alfadr being an always curious, if not always interested party, animated the first god who was called Buri. Looking for company he produced a son by simple division. The frost-giant also produced a son and daughter from under his armpits and a six-headed giant from the soles of his feet. This creatures offspring created the evil frost-giants of the far north.

The "gods" perceived the giants as agents of dark forces and thought of themselves as protectors of the light. They, therefore, attacked the giants and were making little progress until Borr, or Bear, the son of Buri sweet-talked and impregnated a giantess, who gave them allies named Loki, Vili and Ve, which is to say, Fire, Water and Wind, the elemental or nature spirits. In later mythology the mortal-god Wotun displaced the fire god, who was demoted to the position of God of Underground Fire. These three sons joined with their kin in killing the frost-giant excepting one named Bergelmir. In the outflow of "blood" the world-flood was created and the remaining giant was forced to escape by boat to the remote reaches of Niflheim.

Taking the corpse of Ymir the gods dumped it uncerimoniously into the Beginning Gap, and salvaged body parts to create the earth as we now know it, the flesh becoming soil, the bones the mountains, and the blood the seas of the place the Norse called Misgarth, the Middle Garden, or Middle Earth. At this same time the mortal gods raised a new Asgard in the northern sky beyond the North Star and created the nine worlds known to the ancients, placing Nifhelheim below the earth. To keep the worlds apart, the Asa set up Ymir's eyebrows as ramparts, but to allow commerce they placed the worlds along the newly-created Yggdrasil, Odin's Horse, better known as the World Tree. Ordinary inhabitants of the roots the trunk and the branches could not access other places, but magicians were able to talk themselves from place to place.

The gods seemed to be on a roll, but in the north Bergelmir espoused one of their kind, and this pair raised a new race of frost giants who had to be given Jottunheim, their own world, to keep them from destroying other places. Aside from that the "corruption" of the blood of the mortal gods with the blood of the sea-giants destroyed their invulnerability and made them subject to aging. To counter this they had Idun grow and husband the Apples of Youth, but they were not patent against death, and Odin and his kind died, although they were frequently reincarnate among men. In the end the creator-god promised that the world-tree would fail because of it was founded on poor sportsmanship.

In the latter days it was said that the giants were of three houses

corresponding with those of the elemental gods. The sea-giant were said to be of the race of Hler , whose name means the sea. He confers with Vili the water-elemental. The descendants of this god were Mimir, Gymir and Grundlmir whose son was Grundl . These last may be recognized as actors in the Anglo-Saxon tale of Beowulf.

The giant named Kari, the Lord of the Upper Air, was very like the god Ve, and he gave rise to the northern storm-giants, the best known being Thiassi, Thrim and Beli (who may well have some relationship to the Gaelic Beul, the god of death.

Finally there was Loki, Hearth Fire, whose evil persona was Logi, Wild Fire. An hermaphrodite, Loki mated successfull with a stallion to produce Odin's eight-footed steed and with the female Angurboda to create the Fenris wolf, the parti-coloured goddess Hel and the great world-worm lomagandr, who used to be implicated as the cause of earthquakes. Tyr, the god of war bound Fenris within the Underworld. Odin banished Hel to the old northern world and named it after her and then threw the "great worm" into the ocean, where it remained out of sight but produced the monsters known as sea-serpents.

Like the Fomors, the descendants and devotees of Hler lived largely within the sea although they could come to land. It was guessed that the Lord of the Waves had his home in the Cattedgut off the Lessoe on the eastern coast of Denmark. This "gaunt old man" could quiet the sea at a sweep of his hand, but he sometimes pursued and overturned vessels. His wife Ran was even more voracious and like Domnu her halls housed souls of the dead at sea. The goddess was afflicted with a love of gold, thus seamen carried this metal when they travelled, thinking they might need it to get better treatment within her halls, which were known as "The Flame of the Sea." The daughters of this god and goddess of the sea were the nine Billow Maidens, a group as moody and capricious as their parents. They seldom appeared without their brothers, the Winds. With them they might prove gentle and playful or rough and boistrous. In the former mood, their tripletas playing about longships help to drive them on their way.

Hler , at his worst, was referred to as the Nikkr, identifying him with the revenge-seeking Odin. The maliganant marine monsters were

always named nikkrs after this proverbial Old Nick. The lesser water divinities had fish tails like the the Indian nehwas, the Gaelic Daoine mara and the mermaids. They were variously called undines, strumkarls, nixes, necks, neckars, nikkesens or nixons..

In Anglo-Saxon lands the sometimes violent god of the sea was called Aegor while the ocean itself was deemed to be Aegor's Kettle. English mariners used to warn against waves by shouting, "Beware! Eagor comes!" The sea-god was often confounded with Gymir, the Concealer, because he could be relied upon to keep secrets and never willing revealed the place of treasures entrusted to him. Because the ocean was seen to seethe like a brewing kettle, it was alternately named Aegor's Vat.

The principal servants of the sea-god were Elde and Funfeng, giants whose names denote the phosphorescent effects seen at sea. These creatures were noted for their quick movements and were thus appointed stewards to serve his tables in the deep. Aegor rarely left his realm but when he did it was to visit Odin and the Aesir in Asgardr. Here he was always royally entertained and once perked up by Bragi's fanciful tales extended an invitation to the land gods to celebrate the harvest home in his palace beneath the waters. This led to knowledge of the Cauldron of poetry and inspiration, which Thor and Tyr purloined from the guardian Hymir to the detriment of relations between the two races.

Within the world of men, the struggles of the Teutonic gods centred on the sea fire and frost-giants. Among them was Loki, who had a fetching personality and a quick wit. He is sometimes written into myth as one of the two brothers of Odin, but it seems likely he was a blood-brother, one of the Aesir through adoption. At first he appeared a useful addition to their counsels but eventually got into hot water because of his practical and impractical jokes. In the course of time he impregnated the giantess Angurboda, Anger Boding and generated the world-worm, the Fenris wolf and Hel. At first the gods took little notice of these violent creatures, but in the end, all were banished, the Fenris wolf and Hell being bound within Nifhelheim. At a much later time, Loki was involved in the death of Odin's favourite son, and he was even more harshly treated, being chained to the earth in the Otherworld.

The realm which has become known as Hell was originally supposed to lie beneath lands in the far northwest beyond the pallisades of Ymir's eyebrows. We are told that it could only be reached after a painful journey over the roughest paths in the world, passing in the end through the darkest most northern parts of Misgarth. The gate was said to be so far from Middle Earth that even Hermond the Swift, the fleetest of the gods, required nine nights of travel before he could reach the river called Gioll , Jell. This river was said to be the southern boundary of the Otherworld and those who went there said that it was bridged by a crystal span, so insubstantial it seemed to hang "by a single thread" over the dark waters. It was constantly under the surveillance of a skeletal figure named Modgud, who forced every traveller to pay a toll in blood before passing. The spirits generally came to this place on the wagons hauled by the horses burned with their corpses on the funeral pyre. Those who were too poor to travel in state were at least given the strongly fortified Hel shoes, which lessened the impact of the "rocky road to Hell."

Past the bridge, men and women came to the Ironwood forest where the trees were barren of leaves or left with a few curled "iron leaves." Beyond was Hel-gate the palace of the Gnipa cave and the watch-dog named Garm. Travellers who carried the required Hel-cake threw him a bit and passed without being mauled. Within the gate there was intense cold and impenetrable darkness and the sound of the seething cauldron of Hvergelmir. Also perceived was the crashing of glacial ice into waters that broiled with "naked swords." In the innermost healden or keep was the goddess herself.

She is often described in literature as the "parti-coloured goddess." This may refer to the fact that she was tartaned, or perhaps connote the fact that she had different aspects to present to different guests. In Norse mythology the dead at sea did not come here, but went to the hold of Rann. Those dead in battle went to the halls of Frigga or to those of Odin. The goddess typically took in perjurers, murderers, boundary-stone movers, and other undesirables as well as those unfortunate enough to die without shedding blood. Suicide was always thought preferable to "a straw-death," if one could not die in battle.

Those who had expired with their shoes off were treated well enough by Hell, although their existence was that of those in An Domhain, a kind of "negative bliss" in a place where there could never be love or hate. This prospect explains why the Old Norse god Odin scoured himself with a spear to bring on death. Others followed his example, the men of later ages falling on spears and the women jumping from a cliff-face to avoid Nifhelheim.

Real terror awaited Hel's guests if they happened to be guilty of crime for there was a corner of the dark lands known as Nastrond, the Never Strand. There was simply no equivalent of this place in An Domhain, as the Celts demanded no retribution for evil deeds, considering them an expected part of the natural order. The Roman missionaries did attempt to introduce the idea of cause-and-effect with respect to criminal deeds, but the Gaelic *ifrinn*, or hell, is not a native word, but one derived from the Latin *infernium*.

The Nastrond was a long sandy waste, much like those found in northern Labrador or Quebec. "Impure" spirits found themselves directed here and there could do nothing but wade streams of venom to escape the cold. They passed eventually through serpent infested caves and failing to escape from this place were at last washed into the cauldron where the serpent Nidhug fed upon their bones.

Unlike Loki, Hel was released from her "home" on the quarter days and when she travelled the earth it was astride her three-legged white horse (whose legs probably represent the Nornir or fates). In this guise the goddess is the Winter Hag of Scotland. As she passed from north to south in the midst of winter she gathered souls of the dead, but in time of famine, drought or pestilence also carried off those not yet destined to die. If the hard times were deep it was said that Hel had ridden her broom, and swept the land clear of the living. When she was in a kinder mood it was noted that she had merely raked the land. At the four quarters, Hel was accompanied by a host of long dead men and animals, thus it was fancied that the spirits could visit their descendants at these times when the gates of Nifhelheim stood open.

The Greeks considered that all space was once filled by the deities

Chaos and Nyx. The former was dethroned by his son Erebus , Darkness, who married his mother producing Aether (Light) and Hemera (Day) who, in turn usurped his power. These two illuminated the universe and created what became the world of men and the gods. With assistance from their child Eros (Love) the two gave birth to Pontus (the Sea) and Gaea (the earth). She in turn gave rise to Uranus, the god of the sky. The latter became a husband to the earth-goddess, their union producing twelve Titans, gigantic men and women, whose growing strength Uranus feared. He therefore confined them in Tartarus, the ultimate chasm, "a place as far below Hades as heaven is above earth."

Cronus, the elder son of the Titan race, mated with Rhea and their son was Hades, who eventually presided, with his wife Peresephone, over all of the underworld. Hades, also known as Pluto, the Wealth-Giver, in his more beneficent aspect, had full charge of this land, often mentioned as a place located on a remote island somewhere in the Atlantic. Tartarus was perhaps the underworld of this island, its entrance guarded by a fierce watchdog, who kept the living from entering the land of the dead.

Cronus disliked his confinement, and at the instigation of his mother Gaia, rose against his father and deposed him. History soon repeated itself, for Cronus and Rhea now gave birth to Zeus, the father of the land gods, who in turn dethroned him.

Ipestes and Themis and Oceanus and Tethys were among the "sea-deities" who escaped from the place of banishment. The latter had Atlas and Maia as their children. G.E. Woodbury described the Titans as, "the earliest children of the earth, elders to the Greek gods...a massive dim-featured race, with an earthly rather than celestial grandeur, embodiments of mighty force, but dull to beauty, intelligence and light."

These old (and maligned sea-giants) soon began a struggle for possession of the lands of the Mediterranean against Zeus, whose Olympian "gods" now sat enthroned on the heights of Mount Olympus. Their first war, known as the Titanomachy, was fought in Thessaly and was inconclusive. The second great meeting was termed the Gigantomachy took place in the same province, and it ended with the complete defeat of the Titan race. A few of the old guard, notably Oceanus and Hyperion,

submitted to the new order but the others were shipped back to Tartarus and this time magically bound in place by Poseidon, the brother of Zeus. Cronus (who the Romans called Saturn) withdrew to Italy and founded a prosperous kingdom which he ruled until his death (the newer gods being mortal).

The elder gods were deposed but not entirely forgotten, Atlas was immortalized in the Atlantic Ocean and Oceanus remembered in the word ocean. Mortal men were considered the offspring of the Olympian gods, and it was they who inherited the earth, which they believed consisted of a circular land mass with Greece at its centre, Mount Olympus being at the exact geographical nexus.

The almost circular disc of the earth was nearly bisected from west to east into two equal parts by "The Sea", which was their name for the Mediterranean.. The continuation of this sea to the east was then termed the Euxine, and this was the only other sea of which they had knowledge. It was also noticed that the known world was bisected from north to south by rivers now known as the Danube and the Nile.

Around the circular disk of the earth, beyond the Pillars of Hercules (the Straits of Gibraltar), Greek mariners had found the "river" Oceanus, which they perceived flowed from south to north in the parts that they knew. At the eastern edge of the disk it was rumoured that the current was in the opposite direction, so it was guessed that the waters flowed in a circle about the earth. The Greeks were certain that all of the rivers of their world received waters from this great body of water but since they stayed within the waters of The Sea most assumed that the Ocean River was a benign stream showing little spirit beyond the tidal rise and fall of its waters. Jason and his Argonauts found the ocean to be a very chaotic place. The tale of their voyages is legendary since none of these Greek heroes was considered divine. It is usually said that Jason's troubles were recounted as folklore before Homer's time (900 B.C.) Homer mentions Jason and the ship "Argo" in the Odyssey but the full tale was first put down by Apollonius Rhodius as the Argonautica, about the year 200 B.C.

Jason was the son of Aeson, a king of Thessaly, the latter deposed by

his brother Pelias. As child Jason was unfamiliar with this history and met on friendly terms with King Pelias, who diverted him from his interest in the throne by sending him on a quest for the Golden Fleece. This important totem was held by Aectes, king of Colchis, whose dominion appears to have been in the Caucasus Mountains. To reach that land the Argonauts the Black Sea and rowed up the river Don. At their destination Jason was promised the fleece on the completion of three seemingly impossible tasks: the harnessing of a fire-breathing two-headed dragon; the harnessing of the brazen-hoofed bulls to a plough; and the destruction of a magical arm sprung from dragon's teeth. Jason might have failed except for the assistance of Medea, a witch who was one of the daughters of King Acetes. At that, it appeared that the Fleece would be withheld but Jason and Medea managed to purloin it by drugging the dragon that guarded it.

In the rush to escape pursuit, the Argonaut ship turned north-west and following the Tanais (the River Don) "past the Scythian archers, the Tauri, who eat men and the wandering Hyperboreai, who feed their flocks beneath the polestar." At last they shipped into "the dull dead Cronian Sea. in which the Argo could move no longer." In this arctic place they toiled to place their ship on rollers, and using ropes hauled the craft "for many a weary day over land, and mud and ice." Upon another ocean (probably the Atlantic), they sailed westward to the kingdom of long-lived men, and on to the coast of Cimmeria. In later days Cimmeria was located by historians as a kingdom in the Black Sea region, or in Italy or in Spain, but Jason's place was described as more northerly, "the coast where men never see the sun, buried as they are in glens encompassed by mountains of snow." They went from there to Hermione, "the most righteous of all nations," and to, the gates of the world below." There is little question about this latter place. If they were on the Atlantic it can only be "The Cave of the Winds" in central England, one of the wonders of the ancient world. Here they sailed "southward along the land," and then "drove twelve nights on the wild western sea, through the foam, and over the rollers, where they saw neither sun nor stars." In extreme distress they came upon "a pine-clad isle" but had to turn aside when they encountered "steep-walled cliffs all around. Here Medea sensed that they sailed in waters familiar to her and she advised them to sail three days further west until they came to the home of her sister-witch, Circe, ruler of "the

fairy isle of the West.”

Historians and mythologists are sometimes agreed that this tale has “a substratum of truth, though perhaps overlaid with a mass of fiction. “ Even so, this is the first “echtral” of which we have much record. It may have been the first important maritime expedition in history, a half-piratical venture whose spoils started with a totem, which was not as valueless as modern writers have supposed.

Unfortunately, we have no account of the nature of Circe’s Island for the sisters were not on speaking terms and the Argo was sent away with bare provisions of food and wine. Returning eastward, they came to land at Tartessus on the Iberian (Spanish) shore, and passed from there between the Pillars of Hercules, returning to the Mediterranean Sea and home.

Odysseus was one of the Greek chieftains who took part in the Trojan war. Homer’s Odyssey is very nearly the only record of his adventures although there is some notice of him in the writings of Euripedes. This hero hailed from the Ionian island of Ithaca which was not far from Troy, so it is surprising that his return home required a ten year sea-voyage.

In Homer’s book it is explained that this trouble might have been avoided if the invading Greeks had not killed Cassandra the prophetess when she took refuge in Athena’s temple. Athena went immediately to Poseidon, the god of the sea, and demanded retribution, and he agreed. As a result the Greeks were treated to “a bitter homecoming,” of whirlwinds, in which the Greek fleet was nearly lost. The vessel of Odysseus eventually made the shores of Ciconia, within the Mediterranean Sea, but here they were repulsed losing a dozen warriors. Forced to sail on they were driven by eastern winds until they arrived within Lotus-land. Here the food and drink proved overpowering and the captain had to drag his men a way using brute force.

Lotus land is usually identified with northern Africa. From here, the warships attempted to reach the north shore of the Mediterranean, but buffeted by contrary winds and currents they were thrust out of the Mediterranean onto the Broad Sea. In the Atlantic they rowed through

calm waters to an island whose only inhabitants were those of the "round eye," the Cyclopaee, a stone-age people who fed upon natural products of land and sea. Forced to land for supplies Odysseus sought to present the closest Fomor with a flask of wine, but finding his cave empty, he and his men entered taking away cheese and fresh milk. When the resident, a creature named Polyphemus returned he ate several of the Greeks and took the rest as prisoners. In the morning this hungry creature ate two more of his visitors, herded his flocks into the out-of-doors and blocked the door with a huge stone. While the big fellow was away, Ulysees had his men sharpen a huge staff made of wood. When Polyphemus was asleep four men thrust the staff into the embers of the fire and when it was aflame plunged it into the giant's eye, blinding him. On the morning, what remained of the crew escaped from imprisonment by clinging to the bellies of the giant's huge sheep, as he let them out to graze. At that the Odyssey very nearly ended when the infuriated giant responded to a taunt from the ship by throwing a mountainous rock into the water nearby. The island of the Cyclops is identified in some texts as "Broad Hypernion," which we have noted as the equivalent of Ireland.

Ulysses was now upon the Atlantic and driven before a northwestern wind for ten days arrived at the island of Aeolus. Here Jupiter had installed a government under King Aeolus. When Jupiter called upon the winds they came forth from this distant floating island. The wind-people treated Ulysses and his crew with great respect and on his departure gave him winds "tied up in a bag," explaining that he could release them as needed to propel him homeward. In the first days at sea, Odysseus released fair winds which would eventually bear them south back to the Mediterranean, but while he slept, crew-members examined the silver-tied bag, and thinking it contained treasure, opened it fully, so that all of the winds got loose at once, and they were caught in a hurricane. The ship was driven even further north, and King Aeolus, seeing his wind-spirits returned to base, refused to assist any further and the Ithacans had to row for nine full days before they again found land.

The new found land was Laestrygonia,, in the far north.. Fortunately Ulysses arrived in the summer months, "when the hours of day and night were almost equal." The vessels of the Atlantic expedition (to the Faeroes, Iceland, Greenland, or Baffin Island) liked the look of a land-

locked harbour and they anchored just outside the headlands. Immediately the Laetrigonians began hurling missiles from the land, and with them overturned all but the lead ship. Crewmen who managed to swim ashore were put to the spear. To late, Ulysses commanded his men to pull hard away on their oars, and they alone escaped. In a bit of a blue funk, Ulysses turned southwest and pulled away for many of the remaining days of summer. In the fall they came upon the island of Circe, the shape-changer. Like Mhorrigan and many of her kind she was reputed to be a daughter of the sun.

At the perimeter these sea-island seemed a desert, but at the very centre Ulysses spotted a fountain and a surround of trees. Hoping to test the hospitality of this unknown place, the captain sent half of his men ashore but as they approached the palace of the goddess they were hemmed in by wild animals. Nevertheless, the men were met by a soft-voiced enchantress who served them wine and other delicacies. Unfortunately, the food was as potent as that of An Domhain, or any other fairyland, and the men were changed into pigs. She then drove them into stiles where they were offered acorns rather than human food.

One luck sailor escaped transformation and returned to report what had happened. Ulysses felt obliged to see if he could recover his men. Warned of the dangers of Circe, Ulysses came equipped with a charm in the form of a magical plant named Moly. When Ulysses had introduced himself and taken food, Circe except that the hero rose and confronted her with his sword. She begged mercy and he extracted an oath from her that she would reverse her magic and offer no further harm to any of his men. She was true to her word and for many months remained as the guest of the goddess, seemingly converted to a life of pleasure and ease.

Eventually Odysseus recalled his home and with Circe's help cleared the shores of her place and set sail for the northern shores of Europe. They came in to land near a great whirlpool in the Euxine Sea near the island of Aiaie. This was a place peopled by sea-trolls, and some of his crew might have jumped ship to be closer their miraculous music but Circe had warned them to stuff their ears with wax. Skirting this land they travelled southwest and came to the island inhabited by Scylla and Charybdis . The former lady was a sea-serpent created by Circe who

dwelt in a cavern near high water, the other a monstrous whirlpool. Ulysses navigated past the latter, but the sea-snake took some of his crew. There is some evidence that the sailors were now of the Scillas of Cornwall, for they passed on to Thirnakia where the Hypernions kept their cattle. Ulysses knew that it was likely dangerous to touch these beasts, but his men were hungry so he allowed them a night on shore. When contrary winds delayed them for a long time in this place, and Circe's supplies ran out, some of the animals were killed. Nevertheless, the winds turned fair but a storm at sea brewed lightning that shattered their mast and at last the vessel went to bits in the ocean. The keel remaining, Ulysses clung to it for a long fearful ten day float into northeastern waters. Here, at the centre of the northern sea (perhaps Spitsbergen) he was cast up on Osygia, a place ruled by Calypso and her attendant sea nymphs. This lady was compliant enough, and even enamoured, so that she wished to keep him as a permanent possession. But eventually, the sea-goddess was given instructions from Jove to release her captive.

She reluctantly obeyed but could only provide her paramour with a raft and provisions and a favouring gale. He was blown back toward Britain, travelling eighteen days before the north wind. At that his mast broke and it looked as if the raft was about to disassemble. A sea-nymph tracking him in the form of a comorant, seeing his difficulty, alighted and gave him a magic belt, which he could use as a life-preserver. Meanwhile, Telemachus the son of the hero was tracing his father's footsteps all over the Atlantic lands. He also had to fend off Calypso's romantic impulses.

Ulysses used the swim-bladder with good results and was carried ashore in Scheria (an island in the North Sea). This country was then within the influence of Phoenician commerce and was perhaps an outpost of that civilization. The people of this place may have been descendants of the Nemedians who had suffered under the Fomorians in Ireland, for they said they had once lived on the islands of the Cyclops but had had to abandon colonies in Hypernion because of the oppressions of this savage race. Like the Tuatha daoine the Scherians were described by Homer as "god-like, fearing no man." They were said to be very wealthy and lived a life "undisturbed by any alarms of war." "As they dwelt apart from gain-seekers, no enemy had any need, or even much awareness, of their shores.

They did not even keep, let alone make, bows, arrows and quivers, and their chief joy was navigation. Their ships, which flew with the velocity of birds, were endowed with an intelligence of their own. They knew every bay intimately and needed no pilots. Alcinoous was at this time their king, a just man and beloved sovereign." This sounds very like the pre-Celtic Tuathans at the height of their power as "sages of magic in advance of any others in the northwest."

If so, they were intimately connected with Phoenicians, for Ulysses saw artifacts of these people in the towns he passed through in seeking the court of the king. Once there he exchanged the story of his Atlantic travels for a vessel which took him at last back to the island of Ithaca. At home he dispatched the suitors that had flocked about his wife in his long absence and was reunited with his son.

The tale of Ulysses is very like the Oriental romance of Alexander the Great (336 - 323 B.C.) Alexander was represented in Arabic as al-Iskandar Dhu al-Qarnain, the "Two-Horned," possibly from his travels to the two "horns" of the earth (the far east and the far west). It is said that Alexander, finding himself at the advanced age of thirty, set off for "the Land of Darkness," because he had learned through prophecy that his life was almost at an end. In the Syriac version he was accompanied by Idris, his favourite far-eastern cook. In the Arabic counterpart his companion was the shadowy al-Khadir, "The Ever-Green One." In the final chapter it was the foreigner that stumbled on a nearly dead fish which managed to flop its way into a pond, where it immediately became vigorous again. al-Khadir bathed in the pond and became virtually immortal. Returning to his master, the two sought the pool but could not relocate it. Thus the servant became an immortal, but Alexander returned to his troops and death at the age of thirty-three.

This episode is paraphrased from an immensely long, convoluted story which is still well-known in the Islamic world. There are even versions of this tale in the Mongolian languages and among the Javanese. A European version of the singular wanderings of Alexander was popular during medieval times but it made no mention of the Fountain of Youth. The Arabic Ta'rikh-i Hind-i Ghardi, which is nothing less than a summary of Islamic geographical knowledge for the thirteenth century,

enumerated all of the seas, continents, mountains, and rivers known at that time. Here mention is made of an island off Uman where a tree grows whose fruit can be eaten to restore youth. The author of this book retold the story of Alexander's wanderings, confining them to the Caspian Sea. It is said that Alexander wished to know the people who lived on the southern coast and provisioned a ship for two years before setting sail. After thirteen months on the water he met a storm-damaged craft. His mariners tried to question the strangers, but having no language in common, were unable to communicate with them. Alexander's men did, however, exchange a woman-slave for a man from the passing ship, and then returned to their northern encampment. Alexander married the stranger to a woman of his tribe, and when their male-child reached the age of reason, he was able to interpret for his father. Thus, Alexander learned of land in the northwest ruled by a monarch with more power and wealth than himself. As Alexander had done, this king had invaded southern realms and made himself exceedingly powerful. Unable to resist testing this rumour, Alexander mounted an expedition into the west and sailed for two years and two months before coming to land. The historian al-Idrisi mentions the fact that Alexander's last landfall on the eastern side of the Atlantic was Sawa, "the land nearest the Sea of Darkness." There the expedition was greeted by stone-throwing natives who injured some of Alexander's companions. In this story, Alexander was no more successful than before.

The Caspian Sea can be crossed by sail in a very short period. The author of the Arabic atlas, Zakariyya al-Qazwini, admitted that these ancient tales could only make sense if the body of water being crossed was the Atlantic Ocean. "It is possible, he notes, "that the ship encountered on the first voyage by Alexander was one journeying out of a New World!" His compatriot, al-Idrisi, noted some of the mythic islands that Alexander passed on his journey west: Residents of the island of al-Su'ali were said to be shaped like women who had extraordinarily long canine teeth. Their eyes were said to flash like lightning and their thighs were described as being the size of logs. The men and women of this place had no facial hair and dressed in the leaves of trees but were friendly and carried on constant warfare with "the monsters of the sea." The island of Hasran was observed to be crowned by a large mountain, which supplied waters to a river that ran through the only important

settlement. The people there were short and brown "with broad faces and big ears." It was said that they were vegetarians, and that some of the men had beards that reached to their ankles. On al-Chawr, a long narrow island in the ocean, plants grew thickly and there were many rivers and ponds, giving good cover to wild donkeys and long-horned cattle. Al-Mustaskin was inhabited and had a town with high walls in the midst of a lush land. A dragon also shared the island with bulls, donkeys and humans, and the residents were compelled to feed the beast to keep it docile. Alexander called a halt to the dragon by feeding it a volatile mixture that blew it into pieces. Qalhan was seen to be inhabited by animal-headed humanoids who swam in the sea to obtain their food. On the "Island of the Two Brothers," Shirham and Shiram, Alexander paused to look at humans that Allah had changed into stone for acts of piracy. This island was said to lie near Asfi, and on clear days the mariners said that smoke could be seen rising from it. One last island mentioned in this account was Laqa, where trees resembling the aloe grew "but there wood has no scent." The wood was said to be black in colour and valuable enough that merchants went there to harvest it for sale to the kings of the far west. This island was thought to have been inhabited in remote times, but had fallen into ruin, and like An Domhain, had a central plain infested with snakes.

The Greeks had less commerce with the Scythians who lived along the Danube and frequented ports about the Black Sea. Herodotus noted that these people occupied a region north of which stood impassable mountains "said to house a goat-footed race." Further north his reporters said there were "men who sleep for six months" although Herodotus admitted his incredulity at this information. The people of this land were presumably adherents of the Titan called Hyperion, for they were termed the Hyperboreans (those who live beyond the north wind). The historian described the true north as a place of "excessively hard winters: for eight months the cold is intolerable; the ground is frozen iron-hard, so that to turn earth into mud requires not water but fire. The sea also freezes over so that the Scythians have to make war upon the ice. The remaining four months are also cold, and no rain worth mentioning falls in that season, whereas throughout the summer it hardly stops. A winter thunderstorm is looked on as an oddity as are earthquakes at any time of the year. The Scythians say that feathers frequently fill the winter sky making it impossible to see much of the northerly part of the continent. I think by

feathers they mean snow , and from what I hear it must be always snowing through most of the year."

"Of the Hyperboreans we get little accurate information except perhaps from the Issedones, who live a little east of the Scythians. These men give us tales of one-eyed men and griffins that guard gold but that is hardly more credible than what we have been told by other less reliable races. Perhaps the Delians (residents of the island of Delos) are more truthful on this subject since they have traditionally received offerings to Artemis that pass through Scythia on their way south. At first the Hyperboreans committed their annual offering to the care of two virgins with five men sent to protect them, but all remained in Delos and the northerners, finding that their messengers did not return, changed their plan and began wrapping the offering in a straw bundle which they took to their border, paying their neighbours to relay the package from one nation through another to the final destination."

"I cannot give as much credit to the tale of Abaris, the Hyperborean who travelled all about the world without ever eating. I must, however, say that if Hyperboreans exist "beyond the north wind" it is as likely that Hypernotians are likely to be found "beyond the south wind."

Herodotus (485-425 B.C.) was not noticeably off the mark in describing the Arctic and the sub-Arctic but those a little less in the know agreed with him only on the point that the place was "inaccessible to ordinary men by either land or sea." Metaphysicians thought that the Hyperboreans might be "exempt from disease, old age and death," and were granted these favours because they were so virtuous they had the constant good-will and friendship of the gods, who condescended to visit them, participating in their games and feasts.

In the other direction, touching on the southern stream of the Ocean River was the country known in folklore as Aethiopia (Ethiopia) inhabited by a people as happy and blessed as the Hyperboreans. The most interesting place of all was the island kingdom which actually stood in the ocean-stream, south west of the Mediterranean Sea. It occupied several islands and Homer referred to them as the Fortunate Isles or the Isles of the Blest, although earlier men had called them the Elysian fields,

and perhaps earlier still, the Isles of Hades. These were the places the Greeks termed *Ton Makarôn Nēsoi*, the Isles of the Blessed; the Arabic *Jaza'ir al-Khalidat*, or Eternal Isles. While Tartarus was reserved for usurpers and criminals, the upper island had never had the same reputation as a dank prison and it had laterally become a place where mortals who had lived virtuously were sometimes transported by the gods, without experiencing death. In the fields of the west they might expect to experience an eternity of bliss for the islands of the ocean were said to be a place which had sun, moon and stars of their own, and where the winds from Hyperborea never sounded: "Here breatheth the soft wind named Zephyr sent by the ocean for the refreshment of the island dwellers." The king of this fortunate realm was Rhadamanthus a son of Zeus and Europa

We may be reasonably certain that the Isles of the Blest represent Hades for this king is named one of the three judges of Hades, those who decided the fates of men. The good were transported to the Elysian Fields, the bad were entrusted to the snake-like furies "who drove them as far as the gates of Tartarus and through them to their place of incessant torment." Aside from death or a long sea-voyage, there were said to be mainland entrances to the underworld. The Romans suggested that the approach was at Avenue, a volcanic lake not far from Cumae, in southern Italy; but the Greeks asserted that the only entrance was near the promontory of Taenarum in Laconia. From either place, it was said that there was a long passage "easy to descend but toilsome to win back the light of day."

As a descendant of Zeus, Rhadamanthus had no love for the remaining Titans, which explains why he coached Hercules in magic so that he could contend with a common arch-enemy of the gods, Hera, a goddess-giant, one of the daughters of Cronus and Rhea. In his time of training, Hercules is said to have been advised to by Rhadamanthus to favour the woman Arete (virtue) over her half-sister Kakia (Vice). While the latter promised the young man riches and delights and the former struggles and hardship, his choice made him a hero of the Greeks and an actor in the "language of illusion" in every country of our world.

We have seen that most Greeks had a better grasp of the geography of the imagination than that of the real world, excepting perhaps the lands

south and east of their own country and the closest coasts along their Sea. The deities personified in the Dawn, the Sun and the Moon were observed to rise out of the eastern sea in the morning and return to the western waters at night. It was generally supposed that they travelled back to the east by way of Tartarus and unknown underground passage-ways. If this was not the case, it might be thought that the sun-god had a boat which conveyed him by night on the Ocean-River from west to east.

Atlantis was gone, but hardly forgotten, and it was rumoured that it still housed residents, who lived on in some vast entrapped bubble of air or as magically modified marine monsters. There was certainly one survivor, Atlas (represented in some myths as the son of Iapetus and Clymene). Although he escaped the deluge this Titan chieftain had the misfortune to be taken by allies of Zeus. For his opposition to the "true gods" of the east, Atlas was condemned to stand upon the northwestern shore of Africa, supporting the weight of the heavens on his back. Atlas was the father of the ladies known as the Hesperides, survivors who were not proscribed, but were given the duty of guarding the golden apples given to Zeus by Hera (the step-mother of Hercules) on the day of their marriage. These ladies were water-nymphs who were given the use of a fierce land dragon to see that the apples remained secure.

Hera overtly gave her love to the father of the land gods, but she always had low tolerance for Hercules, the son of Zeus's first wife. While Hercules was still in the cradle, Hera had sent two of her sea-snakes to kill him, but the precocious child strangled one in each hand. Nevertheless, he always seemed to represent the losses of the sea-people for Hera and after he married and had children, she afflicted him with a temporary insanity which caused him to kill all but one of his own children. In an act of expiation Hercules was indentured to the King of Mycenae to fulfil a number of seemingly impossible feats.

One of the tasks of Hercules was the destruction of the nine-headed water serpent named Hydra but the most difficult was the recovery of the golden apples from the Isle of Hesperides which were located "in the golden realm of the sunset." After many futile wanderings in the search of the gardens of the apples, Hercules encountered the sea-god Nereus, who advised him to seek out Atlas, who would certainly know where his

daughters might be found. On Mount Atlas, Hercules made his plea for help and the elderly Titan agreed to seek the apples on his behalf, if he would support the heavens while he travelled into the western ocean. Surprisingly, Atlas performed as promised, but on his return was loathe to take up his old duty. Hercules appeared agreeable to the task if Atlas would take the apples back to the king, but he did ask that the sea-god shoulder part of the burden so he might get a pad beneath his shoulders. With the skies partially supported, Hercules snatched up the apples and made for Mycenae. After many additional trials, Hera became reconciled with Hercules and even arranged his marriage to one of her daughters.

There is a Gaelic tale that has loose connections with the Mediterranean myths, namely the quests of the sons of Tuireann. As we have noted the sons of men made every effort to distance themselves from the people who invaded An Domhain and killed the Allfather. In this particular version of distant events, the Clann Tuireann is clearly identified as some foreign brood, for their very name says, "people of Thor." These are the out-dwellers who occupied Eilean Tuir, or Thor's Island, northwest of Ireland. Oddly, this place is also the main Irish redoubt of the bloodthirsty Fomorians.

In any event, the Clan Tuireann was at odds with Clan Cian. The base for this word is the Gaelic ceann, a head. Alexander McBain says the root is the generalized Celtic word gen or gan, beginning, hence, the first one or even beginning place. Cé+ann, indicates within the earth, so there is little question that this clan considered itself descended from the ultimate creator-god whose name appears embodied in Céitean, the month of May. This god is also entitled Aod or Hu in the Celtic realms, both words being linguistically similar. In the tale of which we speak, Lugh, the god of the sun, is represented as the son of Cian Contje (the Handy One).

At that time in Irish history, Lugh had just finished off his training under his foster-father Manan mac Ler, and had returned from the western Land of the Living with the Boat of Manan, which could travel anywhere on land or sea, following the helmsman's thoughts, and the magical sword Fragarach, which could cut through any mail. Feeling well-equipped to face the Fomorians he appeared before the Tuatha daoine as "the rising of

a sun on a summer's day." At the next tribute-paying time, under Lugh's leadership, the Tuatahans attacked the tax-gatherers and sent their heads back to the sea kingdom. Balor of the Evil Eye then made ready his fleets, instructing his captains to make fast to the island with cables, so that it could be towed into the far north as soon as the Irish were defeated.

Lugh was by no means certain that he could prevail and lusted after "certain magical instruments," which he knew could help his cause. Nevertheless, the story says, Lugh sent his father Cian into the northern lands to summon what allied might be found. On his way into Ulster, near Dundalk, he met the three brothers Brian, Iuchar and Iucharba, the children of Tuireann. Knowing there was some antagonism with this clan, Cian sensibly converted himself into a pig and joined a wild herd rooting on the plain. The brothers, however, recognized the father of Lugh, and Brian wounded him with a cast of his spear. At that Cian changed back into human form. Brian was pleased, saying, "I would liefer kill a man than a pig," But the mortally wounded god smiled in return noting: "Better for you if you had slain a pig, for that requires no payment of blood-money, and now you must pay the eric demanded for the death of a man. Never shall greater eric be demanded than that you will be asked to pay by the avengerr of my blood." Thus the start of the life and death cycle among men.

Hoping to avoid the charge that they had killed the god-giant with weapons, Brian and his kin stoned Cian to death. Shortly after Lugh passed across the plain where his father lay dead, and the death-head cried out demanding revenge. Lugh raised a cairn above the body and then went to the High King demanding justice. The king agreed that Lugh could have the three executed or demand an eric as he pleased, and Lugh chose the latter, asking the sons of Thor to bring back from distant lands seemingly common objects: three apples from the Orient; the healing pig-skin of King Tuis (the god Tyr); the spear of King Píscar; the horses of King Dobhar; the magic pigs of King Easal of the Golden Pillars (Gibraltar); the whelp of the king of Ioruaidh (the Red Island); and the cooking spit of three women from Fianchuibhe. Finally the three were to give three victory shouts from the Hill of Míodchaoín in their own country.

The brothers bound themselves by oath to make this restitution in

order to clear themselves of guilt and avoid the penalty promised by Cian. With infinite daring the three adventurers went to the Mediterranean and eventually sailed back to their homeland with everything needed except the cooking-spit. It gradually became apparent that Fianchuibhe was no normal island, but one beneath the western sea. To get there Brian had to "borrow" one of the sea-helmets of the Daoine mara. Once equipped he was able to descend to the land of "thrice fifty sea-women," and there seized the golden spit that rotated over the fires of the sea. The ordeal of the hill came last. Here the travellers encountered the property owner, the giant Miodchaoin, who they had to kill. Mortally wounded by him, they gave their cries of victory, but with these sounds surrendered their life-spirits to Bile, the death-god, the alter-ego of Lugh. Although dead, they returned to their father's house where the aged man-god pleaded for the loan of the rejuvenating pig-skin (which represents the "pig-god" Cian) to restore them. The implacable Lugh refused and all four of these ancient "gods" perished.

All of this supposedly took place before the first coast-hugging Phoenician vessels established their trading post at Gades (now Cadiz) just outside the Pillars of Hercules. There is some possibility that these sea-traders established pre-Anglo-Saxon London for the wealth of their home-port of Tyre was based on tin trade with the British Isles some thousand years before the birth of Christ. It has been suggested that the Phoenician sailors were originally traders from the Fertile Crescent who had wandered overland through Persia and Syria to the shores of the Mediterranean. A tough, hardy, adaptable bunch of merchant-adventurers they developed a bent for creating trade goods and took to the water to pursue profits. They were fully active throughout the Aegean when the Greeks were still barbarous tribesmen, notwithstanding the fact that the Greeks dismissed them as the "Red Men," because of their swarthy sea-tanned skins. They had no compasses, and were forced to hug the coast with their primitive craft, nevertheless they number with the Arabs, the Chinese and the Polynesians as the earliest men to invade the great ocean-seas of the world.

Five hundred years before the Christian era a Greek named Midacritus may have coasted the Biscayan shores as far as the English Channel, while a fellow countryman named Euthymenes looked at the

northwestern coast of Africa. According to Pliny, an explorer named Himilco sailed as far as the Tin Isles off Cornwall in 443 B.C. A Carthaginian traveller named Hanno actually founded a number of coastal cities on this same coast cruising as far south as Sierra Leone. Like others of this time he avoided the "deep sea" being, perhaps, a little fearful of the rumours of "coagulated seas" and the dark isles of death that lay there. Others of his race may have felt differently for Carthaginian coins have been found on Corvo, the most westernly island of the Azores. Found in the nineteenth century, these coins have been authenticated although their origin in that place, one third of the way to the Americas) has never been satisfactorily explained. Oddly, Corvini (Corvo) is marked on the Canterino map of 1351 considerably before it was officially discovered.

Aristotle's Minor Works are thought to have been penned by his students in the fourth century. On passage has this to say of this race of voyagers: "In the sea outside the Pillars of Hercules they say an island was found by the Carthaginians, This place is a wild land filled with navigable rivers and various fruits, but is many days sailing distance. When the Carthaginians observed that men were attracted there by the fertility of the soil and pleasant climate and that others went to live there because of the wealth which could be had, they feared that knowledge of this place might become general among other nations. Therefore the Empire, expecting it might suffer damage to its own trade, and lose dominion over the sea, issued a decree that none should sail there under penalty of death."

In general armchair travelling was preferred over field-work, but the profitable tin mines of Britain remained a magnet, and in 300 B.C. a Greek named Pytheus voyaged out of Roman Massilia (Marseilles, on the southern coast of France) and cruised most of the shores of northern Europe. Being an astronomer, he took note of the stars as seen in high latitudes and charted the tides and currents. After visiting the Cornish tin mines, Pytheus appears to have gone on to the Scilly Isles, Scotland and the Orkneys. Several days voyage beyond this last landfall the historian Strabo (20 A.D.) says he found the place he named "Thule, along with other islands; a strange land where neither earth, water nor air exist separately, but where everything seemed a turgid mixture. This stuff can

neither be travelled over or sailed through." Clearly this Mediterranean lad had encountered ice and snow in a persuasive form. He must have been in the far north, for he noted that the midsummer night was only two hours long. From Norwegian (or even Icelandic waters) turned back and examined the Frisian coast, where he discovered the source of the amber which was already known in the Mediterranean trade. He then circumnavigated Britain and returned home to face disbelieving scholars, who equated Thule with the other fabulous islands of the Atlantic. Thule may have been a part of Norway of Mainland, the principal island of the Shetlands, but the name was given to Iceland on latter-day sea-charts. In any event "Ultima Thule" was taken up by the Latins to describe the most remote northerly places, fabulous regions at the ends of the earth, as well as any remote, probably unattainable goal.

In 62 B.C. the Roman Consul Matellus Celer, who was officiating in Gaul wrote home saying that the king of a neighbouring province had just brought before him several strange "red-skinned people," with very long dark hair. The Gauls told him that these people were found at the seashore and claimed to have been blown across the ocean from the west. Two centuries later the Greek geographer Pausanias supported this when he wrote that west of the Atlantic ocean one might expect to find men who were bronze-skinned, "people whose hair is as coarse as that of a horse's mane." By this time it is clear that the classical writers were, at least, aware of lands on the western shores of the ocean-sea.

Using a Roman stationed in Britain as his source of information, Plutarch (40-120 A.D.) reported the existence of similar sea-islands in his book The Face of the Moon. He identified the closest of these as Osygia, connecting it with a Grecian flood legend. This "island", he wrote, lay five days of sail, immediately west of the British Isles. He added that the natives of Britain claimed a knowledge of other islands approximately equidistant from one another, all lying in the direction of the setting sun. Plutarch also said he had been told of a most distant "island" which bore a difficult to pronounce Gaelic name which he guessed might be Cronus, a name similar to that of one of the Greek Titans. Historians have since suggested that Cronus was Greenland as geographers afterwards identified its local waters as the Cronian Sea.

Diodorus of Sicily also wrote at about this time: "Over against Africa it is said there lies a very great island, but many days sail from Libya in a westward direction. The soil of that place is fruitful. A great part is mountainous but some is a plain, the latter sweet and pleasant, well watered with many navigable streams. The mountains have very dense woods and all manner of fruit trees. In the woods are enough animals to provide hunting for a long time. The island appears to be the residence of some gods rather than men. By reason of its remote location it has never been extensively explored."

At the Roman ruins of Pompey ethno-biologists found mural depictions of at least three plants specific to the new world, so perhaps some Roman made the crossing? The discovery of a Greco-Roman torso in waters of the Gulf of Mexico in the 1880's was thought significant, but this easily carried relic could have been post-Columban. Dozens of classical Roman oil lamps have since been unearthed in the pre-Incan tombs of Peru. This helps the argument for pre-Columban contact, as does the third-century Roman terra-cotta head discovered in a twelfth century Mexican tomb. Most convincing is a hoard of Roman jewelry found in a similar location by Dr. Garcia Payon and Dr. Robert Heine-Geldern. They have identified the artifacts as Roman dating to 150 B.C. It is possible that these objects could have been brought over the Atlantic in a non Roman ship, but at least the burial material associated with the jewelry has been tagged as no later than 100 B.C.

Again, Roman coins have been found scattered all about the Western Hemisphere. At York, Maine, there is an inscription on a rock, which has been known since the days of colonial settlement. It is reputed to have borne a now hard-to-decipher inscription in Latin. Be that as it may, a coin dating 237 A.D. was found not far away. A horde of Roman coins dating from Augustus as far back as 350 A.D., and now housed at the Smithsonian Institute, was found on a beach at Venezuela. The water-wear on them makes it evident that they are not a misplaced numismatic collection. In 1975 a farmer in Missouri unearthed several enigmatic metal items and a bronze drinking cup not unlike those found at the lost city of Pompeii. Tests on the metals have indicated that they could be of Roman origin.

WEST OF THE MOON

The Micmac and Malicete peoples, who currently live in the Maritime Provinces are not thought related to the palaeolithic Indians. Their ancestors could not have been in place to witness the great glacial floodings in the northeast, but may have heard the tradition from their neighbours. In any event, all of the tribes living along the continental glacial edge were familiar with the phenomenon, and the world flood probably became entwined with tales of freshet floods along the Saint John River and other local streams.

In local Indian mythology Glooscap inhabited this world, emptied of people, for "seventy times seven nights and seventy times seven days" there being no other Indians on the land at the time " excepting wild Indians, very far away in the west." It is claimed that the "Master" arrived on the scene in by "stone canoe" cruising in on the tide with the rising sun; although others claim he came down from the moon. The least imaginative version has Glooscap appearing from the depths of the forest. In the legends this mortal-god is remembered as "the wonder-worker" but his name is a synonym for "liar." Like most mortal-gods he assumed some of the prerogatives of his betters, but the Indians were always careful to point out that he was not "Niskam, Father of Us All, nor Kesoolkw, Our Maker, nor yet Espae Sakumow, the Great Chief." Rather, he was spoken of as the first creation of Kji-kinap, the Great Power.

It was said that Glooscap was once a sentient but unmoving mountain located in the Ukakumkak, or "beginning place." This is amazingly close to the Old Norse concept of a Ginungugap, or "beginning gap:" in fact the two places are both north east of New England, the former being identified as Newfoundland, the latter as beyond the Davis Strait. Before the beginning days, Kji-kinap, or Kesoolkw, is said to have tired of perpetual chaos (which is the natural state of being) and organized matter and energy as a rainy-day activity. In a Passamaquoddy version of the creation myth Kji-kinap created the Six Worlds of the known universe and came to earth in the form of a blazing meteorite. Standing over the rock mass that was to become a man-god, Kji-kinap directed lighting bolts across Glooscap from north to south and east to west. In some versions of the tale he breathed life into the mouth of the "stone man," "the man from nothing." It was said that the Great Spirit raised this first life form so that he might have someone to admire his

handcraft: "Behold here, how wonderful is my work, all this I created by my wish of mind: the existing world, ocean, rivers, river-lakes."

Being a creation of the one-god, the newly-made mortal god had an innate grasp of magic and immediately strove against his creator to see if he could better him in bringing interesting things into existence. Perhaps seeing that his cause was lost, Glooscap willed a wind, which tore some of the newly formed trees up by the roots. His maker then created a similar wind that was so strong it tore Glooscap's hair from his head. But this wind was superior, being so subtle Glooscap only noticed the damage when he put a hand to his bald head. Having a short attention span, the "one god" soon tired of this play, turned the keys of the universe over to Glooscap, and stepped back outside of time and place.

From the first Glooscap was said to have "an evil twin" but it appears that this creature was his alter-ego rather than a separate personality. The woman called Noogumich (grandmother) who shared his tent, seems, in like manner, to represent his feminine aspects. It was suggested that she was not his mate, but the provider of food, medicines and sober, grave and good advice. Malsum (Wolf), the brother, was understood to be evil from conception, and it was he who killed his mother, the moon-goddess, by tearing his way from her womb in his premature desire to be born. The origin of "The Grandmother" is rarely specified although it is said that she owed her existence "to the dew of the rock" and was "born of the noonday sun." If we accept the myth, this three-in-one being stood long upon his strange land, awaiting the coming of more commonplace men.

It is said that he afterward established an Indian village at Pictou, "a town of a hundred wigwams." This agrees with the archaeological record, and if true, attaches Glooscap to the linguistic group known first as the Sourisquois, and later as the Micmacs. Their ancient bailiwick stretched from the Saint John River east to the ocean and from the Gaspé to Cape Breton, including all of Prince Edward Island and most of Nova Scotia. It also dates his coming to the period before ceramics evolved and suggests he was not associated with the Celtic and Old Norse settlers who arrived in the northeast in historic times. As the ceramic period commenced locally about the year 500 B.C., Glooscap is associated with these or earlier times. Unless it is assumed that Indian sources are

unreliable Glooscap cannot be Prince Henry Sinclair or an viking Norse traveller as some historians have suggested.

The ancestors of these Indians approached the northeastern shore from the west rather than the east. We are told that the "people of the dawn" once lived beyond the Cordellarian Range, perhaps as far north as the Rockies. Chief William Paul of Shubenacadie claimed that three young families began this epic trip by paddling up rivers from the shores of the west, through the canyons to the headwaters. Here the party climbed to the mountain tops and portaged their canoes toward the south east and the plains. Following brooks and rivers they arrived at the headwaters of the Mississippi and followed this river to the ocean. At the delta, they struck out to the east and rounded present-day Florida. Travelling along the coast they at last came to the site of what is now New York. Here they penetrated inland to "Wokumeak", a clear water lake that used to back New York City. Following streams out of it, they paddled northeast to Boston. "When they got there one of the young men died and they named a river "Soogogea" after him. Following north, they explored the Penobscot River and the Saint John, naming the latter "Oolotook, " "a very quiet running water" which they noted ran "back and forth" with the tides (the Reversing Falls). They remained here for a year, and then moved on to "Shubenacadie", Nova Scotia, "the place of the wild nuts."⁴

Having explored all of Nova Scotia and some of New Brunswick, these early Micmacs decided to stay in the region, noting, "we can live into this place better than where we come from...no disasters will trouble our children here, no storms, no thunderstorms, no earthquakes, no cold weather (a relative and perhaps premature judgement). Every particle that belongs to this land is very precious and nice and not hurtful. Everything is ready to hold life up, and that's 'bout all."

⁴Creighton, Helen, *Bluenose Magic* (1978) p. 86: Paul also refers to this as the Indian potato and as "sugebbun-k". It is described elsewhere as the "segabun" or Indian Turnip and is now best known as the Jack-In-A-Pulpit. The plant contains crystals of oxalate of lime and is not eaten in the raw state but is allowed to dry for several months so that the pungent taste dissipates. Slices of the dried bulb are still considered a cure for chest ailments and it is used to treat stomach complaints.

Interestingly, Shubenacadie, the new population centre, was only a few miles from Debert, the former south of Truro, the latter immediately north. Thus the early Micmacs settled not far from the old haunts of the mysterious el-folk. In the archaeological records this tribe was first designated as the Souriquios, and they soon occupied Nova Scotia and all of New Brunswick west of the Saint John River. At this same time the lands west of the river, down into New England, became the province of the Malecite tribes, to whom the Micmacs are linguistically allied. The Passamaquoddies may have been a costal element of the Malecite tribe, most of which dwelt inland.

The newcomers must not have been long in discovering the presence of Glooscap's major encampments at Blomidon and Pictou, which are both close to Shubenacadie. The man-god afterwards came among men, but kept his own camps at Blomidon, at the Fairy Hole in Cape Breton, and at Minister's Head, on the Kennebecasis River in New Brunswick. In his book Prince Henry Sinclair, the writer Frederick Pohl equates the merchant-prince with Glooscap, and traces his movements in unbelievable detail (considering the fact that Glooscap's history is ambiguous and entirely oral). He contends that Glooscap spent no more than a part of one summer and a single winter among the People, leaving on the following summer. Considering the far-flung camps that the Master established, and his adventures in every part of the northeast, he must certainly have been a busy god to accomplish all of this in a single year! We are more inclined to suppose that Glooscap represents the sum of a number of visitors from the outside world.

Whether he visited little, or long, Glooscap made a serious impression on all he encountered, having "the air of a great chief." It was admitted that he was especially admired "by the women," although all felt honoured "whose wigwam he deigned to enter." He was a clever politician, "able to read the thoughts of men as if they were beads strung one after another as wampum. He could see deeply into every heart." In addition he was reported "a right boon companion, who loved nothing better than "a well-filled pipe full of fragrant tobacco." Glooscap often took leave from the Indians disappearing into the earth, or journeying in distant lands, but he frequently returned to a winter camp at Blomodin, or

established himself northwest across the Minas Basin, at Cape D'Or. The latter place was first named Owokun, "where the deep sea surges," and is a promontory well suited to guard against unexpected intrusions. Cape D'Or projects into the tidal race of Minas Basin at a place where the mouth constricts to six miles, thus it is well named.

Glooscap may have had good reason for visiting this rather exposed highland, which once stood like a spear in the waters between Advocate Bay and Greville Bay. The west side of the Cape is precipitous and more than 250 feet in height where it looks out on the Bay of Fundy. It has the aspect of a grounded island, which is exactly its history. The whole Minas Basin was once clear of water as drowned tree trunks within the upper basin testify. If the Master had arrive before, rather than after glaciation, he would have seen a "golden island" rather than a "golden cape." In those el-days these Nova Scotia highlands were separated from the mainland by a strait which was more than a mile in width. In the older seas, two boulder strewn spits very nearly closed off the race of water and then the glacier filled what remained of the channel with detritus. When the sea flooded back into the Fundy valley the island had become a cape standing above Advocate Harbour. Since then two more spits have developed shutting off the harbour.

Cap D'Or was given its name by Champlain and his cohorts, and or is French for gold, thus Cap d'Or was the "Golden Cape" when it was first seen and named in 1604. This is appropriate for any cliff face exposed to the setting sun, but is particularly significant in view of the fact that Champlain named Advocate Harbour Port des Mines and made the adjacent thoroughfare Channel des Mines and the basin beyond, Bassin des Mines.. There is no indication in the historic record that the French took any gold from this location, but the names were probably spread about to confuse competitors. Champlain did say he found abandoned copper mines at the head of the Bay of Fundy, and one of these promising locations had to be dismissed as unworkable since it was located just above the low tide line. In Glooscap's time this mine may have stood in a better location with respect to the moving tides. It must also be noted that placer gold has been found on the south shore of Minas Basin and there have been nine active gold mines there since Champlain's day. Glooscap knew about the shiny metals and warned the tribes against the avarice that white men

would show in seeking them. If Glooscap mined copper, gold or silver he said nothing to the Indians, but he did state that his wigwam, in the Afterworld, would be seen lined with gold.

The Master retained other monopolies including that "in stoneware, in toboggans, in knowledge of good and evil, in pyrotechnics, and all other commodities,,,He shaved the stone into axes, spear points and other forms, but the braves preferred plucking their beards to using one of his stone razors. He got fire by rubbing two sticks together for, well, perhaps two weeks. One occasion, he engaged in bringing all the ferocious animals under the control of man. After a rest of seven moons Glooscap got busy clearing the rivers and lakes for navigation."⁵ Chief William Paul adds that Glooscap introduced a thirty day calendar for the year, each month beginning with "the bright moon." "...twelve moons would be one year and he had a name for each moon-month. "Agese-goos," that's the month of May, "Wegawwegoos," that's October.

It would appear that the Argonauts were not the only Europeans to intrude upon the western ocean, for Glooscap created a taboo against taking canoes upon salt water, possibly hoping to forestall premature contact with the white men. Another reasons may have the simple lack of "sea-canoes." By the year 1600 Nicholas Denys reported that the natives made free use of dinghies hidden near the shoreline by fishing captains, who intended to retrieve them on a subsequent voyage to Atlantic Canada: "When the owners recognize their boats at some later date, they make no more ceremony about taking them back than the Indians do in borrowing them." L'kimu suggested another problem:, "the Bad Fish which often infest these seas." The sorcerer told Abbe Maillard that "these brutes attack the sterns of our canoes so suddenly and without warning that they sink the boat and all who are in it. Some escape by swimming but there are always some who lose their lives to these flesh-eating fish. When we make a journey on the ocean (which we rarely do) we take very leafy branches and affix them to the stern of our canoe. Then these fish draw away and do not come near us. Apparently they think this is land where they could become stranded." This was early on, but in 1893, these "devil

⁵Anon, quoted by Rev. D. McPherson, Port Hood, N.S., for many years a missionary among the Micmacs, Lib. Cong. recordings 7285, 7286.

fish" were still a force off the shores of Pictou. Here two canoemen, Louis Pictou and Peter Muise were on a trip for white maple. Just beyond Green Point, Pictou took up his gun to shoot a loon, but before he could fire had his attention diverted by a huge shark which was homing in on them, This fish was quicker than the trigger finger and bit a piece out of the canoe which was over a foot long and two feet wide. The shark did not attack after that but the canoe went down and Louis Pictou was drowned.

Whatever the true case, Glooscap predicted the ultimate collision of cultures, explaining that he would drive his canoe into the northwest seeking a new death-world for the tribes: "In years to come your home here is to be distroubled. You'll be living with people who fancy flashing stones and you'll come to trade in them as they do. You may think that these white people possess the land which belongs to you, but I will come in the end to return your homes, prevail my words." With this, Glooscap boarded his stone canoe and departed from the Maritime Provinces. Some claim that he is now busy filling a lodge with spear-points and that he will return south when his arsenal is filled.

Like most mortal-gods, Glooscap made every attempt to represent himself as the creator-god, which may explain why his name is a synonym for "liar." A few credulous individuals may have believed that he created "mikumweesmaq," the "little men who lived beneath stones," but it seems likely that few accepted the idea that he had created human life. There was is a tale that the human spirits were released from trees when Glooscap peppered them with magic arrows, but this coexists with another which says that the first man, Nataoa-nsem, "came unto Glooscap and Nogami under a noonday sun." Similarly, "the mother of all Micmacs came unto these three and saluted them (on another day) when the sun was highest." The implication is that these were children of the sun rather than the offspring of the culture-hero.

In the latter days there were no questions concerning Glooscap's status as a man-god: When they were interviewed on a Cape Breton reserve during the last century John Knockwood and Martin Sack said that Glooscap was not considered a chief of their tribes and was certainly not a god although he was "a very great man, who might have become a god."

Noting his grasp of technology and his information concerning the white races, a number of present-day writers have attempted to describe Glooscap as a displaced European. This is contrary to Indian tradition where the master is represented as "having about the same grade of yellow" (skin) as the local tribesmen.

William Paul says, "Micmac Indians. They didn't see any difference about him by the person." Glooscap appears to have been somewhat taller than average, but aside from that, his chief distinguishing attributes hinged on his possession of magical weapons and skills. Like Thor, he possessed a "laser-belt" capable of sending forth jets of damaging energy. Early on in his career, while Glooscap laboured at the organization of Kji-kinap's world, his brother Malsum toiled to construct his own forms of life. The Wolf was always an incapable craftsman and his only success was the animal known as "Lox", which white men have named the wolverine, or Indian devil. This creature served as Malsum's spy and is still known to have a genius for disassembling the works of men. Glooscap tolerated this unpleasant addition to Earth World until Malsum began to use Lox to plot with men for his overthrow. In a high noon confrontation, the twin brothers belted up and met in northern New Brunswick. Their random blasts at one another denuded the entire landscape in the fashion of a forest fire. As an unintended consequence, a stray beam of energy blasted its way through Perce Rock in the Gaspé. This supposedly created a breach in the barriers between the worlds allowing unwelcome company to flood through and savage the world of men. Those that intruded included witches and warlocks, strange sea-creatures, the thunderbirds, the underground panther, sometimes referred to as the horned serpent and the Chenoos, or Canoose, who were similar to Glooscap in size, but cannibalistic and unhygienic in appearance and attitude. These latter may have been the viking Norse, who appeared in North American waters after the Micmacs and Maliseets had become a sizeable population. According to ancient myth, Glooscap remained longer in the land of men than he had intended because he considered himself responsible for this mess. When he had civilized or terminated all of these dangerous folk, Glooscap turned his canoe at last to the north-west. Since he retreated into the northern seas there is a possibility that Glooscap may have gone to rejoin the classical race referred to as the

Hyperboreans.

Excepting his size Glooscap is not represented as much different from the Algonquin tribesmen. This is not true of the "gods" of Peru. Here the Incas told the Spaniards that they had lived in a world of savagery until a bearded, light-skinned foreigner and his entourage came to their country to teach them technology. An Inca known to the Spaniards as Garcilasso recounted developments as he heard them from his uncle: "In ancient times, all this region...was covered with forests and thickets, and the people lived like wild beasts, without religion, or government, or towns, or houses, without cultivating the land, or clothing their bodies...They lived two or three together in caves, or clefts in the rock, or caverns underground. They ate the herbs of the field and roots or fruit like wild animals, and also human flesh. They covered their bodies with leaves and the barks of trees, or with skins of animals. In fine, they lived like deer or other game, and even in their intercourse with women they were like brutes."

Ciez de Leon writing of the period "before the Incas reigned in these kingdoms, says that the sun-god first appeared in South America "on the island of Titicaca." Indian informants told him that "he came from a southern direction, a white man of great stature, who by his aspect and presence demanded veneration and obedience." Like Glooscap, he travelled widely admonishing men to prefer good over evil. In most places he was named Ticiviracocha , but in Collao they call him Tuapaka. In other parts he was Arunaua but in all places they built temples in which they inserted blocks of stone bearing his likeness."

A third writer who participated in the colonization of Peru asked the Indians about this culture-hero, the man-god was described as "a tall man, bearded, wearing a long white vestment tied with a girdle. He carried his hair short but upbraided behind in the manner of a priest of men. He walked solemnly, and carried in his hands things which the natives say were very like the books and breviaries that our priests carry in this day."

No one knew exactly where Ticci originated but in the language of several South American tribes his name interprets as, "Foam of the Sea,"

one of the designations also pinned on Glooscap. A fourth chronicler suggests that some of the Indians suspected the visitor of misrepresentation. While the highlanders of Peru were reverent towards their sun-god, the coastal dwellers said that, indeed, a tall, blonde, white-skinned personage had visited them before moving northward to Lake Titicaca. There they say he established his hegemony through deliberate misrepresentation, introducing his fair-haired offspring to the northerners as offspring of the sun. Even in his capital Ticci and his white and bearded followers were referred to as the mitimas, an Inca word for colonists or settlers, suggesting that some of the natives understood their true nature.

Like Glooscap Ticci taught men how to grow and cultivate crops and showed the Indians how to construct homes and live in organized communities governed by law and order. Going a little further than his northern counterpart this man-god introduced formal sun-worship and ordered the creation of megalithic carvings and the characteristic step-pyramids of South America. From the centre of his empire Viracocha sent missionaries to all parts to teach men that he was their creator and protector. Like Glooscap, the Ticci was unable to control all of the population and tiring of the business of revolt and war gathered his party and moved across land to the port of Manta in Ecuador, from whence all sailed westward into the Pacific departing for the "land of the setting sun."

In neighbouring Venezuela the man-god was named Tsuma or Zuime, but he is, again, credited with creating an agricultural society like Hu and Glooscap. In those parts it is claimed that this divine lived among the people for a time but was finally driven out because of his persistent stiff-necked advice. The Cuna Indians have a tradition that after the great flood, "there appeared a great personage who taught the people how to act regarding one another, what name things had, and how to use them. He was followed by disciples who spread his teachings."

In Mexico, where the Aztec empire flourished, the god was entitled Quetzacotal and it was said that he was white and bearded. It was this fact that allowed the Spaniards to penetrate the Aztec lands without initial resistance, for the men of the new world were convinced that the

new strangers were the kin of this powerful race. This god of men was "clothed in a long white robe inscribed with red crosses and carried a staff in his hand." After his tenure, some say he died on the coast of the Gulf of Mexico and that his body was burned (in Celtic or Norse fashion) along with all of his treasure. Others insist that Quetzalcotal and his entourage built ships, "a magic raft of serpents," on which they sailed away promising to return and reclaim the land in the distant future.

There are similar culture heroes north of Panama: The Plains Indians referred to this outsider as The Old Man. Among the Salish tribes he was Coyote and on the Pacific coast, Raven. He was Trickster to the Carrier Indians and Wisekedjak among the Crees and Saulteaux. Immediately west of Glooscap's country lived Nanabush or Nanabozho the patron of the Ojibwa. It was this man-god who stole fire from the sun and gave it to man. According to myth, he also raised the Canadian Shield, refashioning the world following the Great Deluge. He allied himself with men against their great enemy, the cannibalistic Wendigo, entered and exited the belly of the Great Sturgeon (thus overcoming death), persuaded the Thunderbird-men to peace, invented rock art and tutored men to become the shamans known as the Midewiwin. Like Odin he created four beneficent creatures and placed them at the four points of the compass. The one in the east was called Light; the southern spirit, Heat; the western, Rain; and the northern guardian, Snow. It was claimed that this god among men rested from his toils in the form of a great ice-island that floated upon the great seas in the remote north. It is guessed that he currently resides at the Giant's Tomb, a promontory above Thunder Bay, Ontario.

Nanzabohzo has been identified with the more recent Hiawatha, "he who makes rivers." Hiawatha supposedly assisted Chief Dekanahwideh in the creation of the Iroquois Confederation about the year 1459. Charles M. Skinner (1896) writes that this hero "came to earth on a Messianic mission,

These tales of various culture heroes suggest pre-Columbian visitations of the Americas from abroad, probably by a number of oceanic travellers, whose individual exploits sometimes became confused and embodied in a single mythic figure. Throughout the years, attempts have

been made to explain away the paradox of technically advanced, oddly-featured, strangers among the brown-skinned beardless natives who occupied lands all the way from Labrador to southern Peru. Some historians have suggested that the flowing white robes and beards of the "gods" were allegorical references to the rays of the sun, and that the Indians somehow confused post-Columbian visitors with those who visited after 1492.

Both these views reflect the early European underestimation of the intellect and sense of history of the Indian tribes of the Americas. In our day this cultural bias has combined with the odd notion that movement over vast distances is impossible without ocean liners, trains, cars and airplanes. Many modern historians will not accept the idea that men travelled widely in pre-Columbian time. This, in spite of the fact that the "first" explorers of the New World had only rudimentary methods of travel. Even on land, the Spaniards, within two decades of their first landing in Mexico, explored all the territory between there and the Pacific Ocean as well as the other compass points from Kansas to Argentina. In the millennia before their invasions it is difficult to believe that sea-voyagers and land-travellers were any less active.

The visual records of the South American cultures suggest that the "gods" were intrepid travellers. The pyramid of Quetzalcotal, the Mexican culture-bearer, shows him swimming as a plumed serpent amidst conches and other marine shells, all carved in high relief on this structure from top to bottom. On the hilltop of Cacaxtla, about ninety miles from Mexico City, there are polychromed frescoes of a black-skinned man holding a marine shell under one arm. From it, the artist has shown a white man emerging "as if born from the sea." Again, in the Yucatan, there is a Mayan pyramid whose walls featured white mariners, with flowing golden hair, doing battle, at the sea-shore, with land-dwelling black people.

We can only guess at the warring factions in these panels (now destroyed by tourists), but it can be supposed that many ancient mariners were driven from their own shores by famine, war, pestilence, and the winds and currents of the great ocean-sea. In historic times, blond-haired travellers were most often associated with the viking Norse sea-kings,

but this people inhabited the Caucasian plains in pre-history. Their blood-lines (and red hair) are still seen in Lebanon, the home of the ancient Phoenician sea-traders. The Egyptian Pharaoh Ramses II was blond-headed and the daughter-in-law of Cheops is pictured in her tomb as flaxen-tressed and blue-eyed, so that "Nordic features" are seen to have been less exclusive in times past.

The "gods" streamed into the west out of the eastern ocean, and it seems probable that their individual identities became clouded by the fact that their high-priests often assumed their names. There may have been a few dozen Glooscap heroes, all descended from the supreme sun-god who was the first to bear this name. In the long span of time these may have become reassimilated into a single mythic deity, the god-creator, culture-hero, and mortal benefactor of men, all rolled into one.

Ruth Holmes Whitehead, staff ethnologist at the Nova Scotia Museum, says that the corpus of myth will not stay still: "Kluscap is first recorded (in written Micmac tales) about 1850. He goes from being one of many Persons in the traditional Micmac world to a central position as the Micmac spirit-helper, always victorious in encounters with Europeans (such as the Canoose). His story-cycle annexes other tales, placing him in a starring role. By 1930, he has taken on some attributes of Christ (particularly in raising men from the dead at the end of time)." His earlier names are of no great consequence since the fundamental spirit of the mortal-god is preserved in his myth-cycle.

British prehistory is divided into three main periods of time - the Stone, the Bronze and the Iron Ages. The earliest period, the Stone Age is divided into the Early, Middle and Late Stone Ages. For the confusion of laymen these are represented in technical works as the Paleolithic, Mesolithic, and Neolithic. There is much controversy, particularly when it comes to relating mythic peoples to prehistoric artifacts, further the dating of these Ages is uncomfortably different from place-to-place. Katherine Scherman thinks that the Fomorians represented "Mesolithic man, who crept round the edges of the Country catching what food he could with his rude stone weapons, and ekeing out a static existence for some three thousand years..." The Partholonians and Nemedians were certainly contemporary with these folk but appear to have a more advanced handle

on things. Irish archaeologist Sean O'Riordain says that "The Bronze Age may be taken as extending from 2000 B.C. to 500 B.C. and is subdivided into Early, Middle and Late phases, each of 500 years duration." This start of this Age aligns itself with the coming of the Tuatha daoine to Ireland. This being the case, some of their number may have rubbed shoulders with the Beaker Folk. These people fashioned a distinctive style of pottery and arrived on the islands of Eiru and Alba during the earliest years of the Bronze Age. At that the Bronze Age is not isolated from the Iron Age, which is regarded as the period from 500 B.C. on to the fifth century A.D. when Christianity came to the western islands. If the Milesians are truly attached to iron technology then they date from about 500 B.C. in spite of fact that the date is given in folklore as 1000 B.C. O'Riordain has noted that the Iron Age was not really well developed in Ireland until about 300 B.C. The succeeding centuries were spoken of as the Early Christian Period, which was followed, in the eleventh century by Medieval times.

There is not a division mentioned above which will fail to raise hackles in some part of the historic and scientific communities. Nevertheless, this is a necessary and useful time scale provided that the reader remembers that time blurs at the edges of Ages and Periods, which are not sharply set apart from one another. Considerable overlap of implements and monuments occurs, and many objects have been found which fail to compute for their supposed place in time.

Throughout Britain some generalizations about time have been made by referring to the large artifacts of men; forts, souterrains (man-made caves), crannógs (lake dwellings), megalithic tombs, burial mounds and standing stones. These last, known to archaeologists as monoliths or menhirs, have attracted most attention because of their undeniable presence. These are the things that our Gaelic ancestors called the gallán (fromgall, a lowlander or stranger) or dallán. In former times circles of stone were referred to as the chrommliagán, or cromlechs, indicating they were dedicated to the dark lord Chromm or "Crumb." O'Riordain says these structures are not easily placed: "The span of dating evidence - from Bronze Age burials to Early Christian inscriptions - shows that the standing stones of Ireland cannot be ascribed to any one period..."

The megalithic tombs number over 1000 examples in Ireland alone,

and at that many have been destroyed and others lay unlocated. Most archaeologists relate these burial chambers, on the basis of structure, to others found on the continent, and consider them the product of a cult "which arose in the Mediterranean and came to this country by way of the Iberian peninsula and Brittany." In the different districts of Ireland they are referred to as "the giant's grave, Leaba Dhiarmuda's Gráinne," or the "cloghogle." As with the standing stones, there is a suggestion that the Celtic folk did not identify themselves as builders of these structures. There was always stories that Fomors had erected these and other antiquities, but the circles of stones were more often identified as unfortunate giants who had shape-changed by the Tuathan magicians. In some of the graves there are bits of pottery which have been identified as "beaker-type," suggesting that the Tuatha daoine might have been present when these passage graves were built. On the other hand there are gallery gaves both in Ireland and Scotland which have been found to contain pottery "of a heavy type" with crude decorations and these are thought to be of the Neolithic period.

The souterrains are even more numerous than the megalithic tombs and "are found all over Ireland." They occur in Scotland where they are termed "earth-houses" or "weems" (from umah, a cave) and as "wags" (from uaigh, a grave or vault). One of these at Jarlshof, Shetland, has been dated to the Early Iron Age, but others in Scotland have incorporated Roman rubble into their walls. In Cornwall they are termed fogous, and here most are of the early Iron Age. They are even found in Iceland, where they exist as rock-cut tunnels. There is an early Iron Age example in Jutland, otherwise they are not known on the continent excepting the somewhat similar souterrain-refuges of France. Obviously, not all of these structures were created by the retreating Daoine sidh, but many are early enough to have seen use by these bronze-age peoples.

In Westviking, Farley Mowat has made a case for Newfoundland as the centre of Old Norse interests in North America. As an aside he has noted that men were probably travelling the Gulf Stream to Europe in the Neolithic period. Scherman has identified the Fomors with Mesolithic man, and if this is the case, the Western Ocean was a busy place very early on. Mowat says, "They came from west to east," and insists that, "History preserves the records of several such "discoveries" of Europe

from America..." We wish we knew who they were and where these accounts he refers to. We have read brief notes concerning encounters with western men on eastern shores, at or slightly before the time of Columbus, but all the epic accounts are mythological rather than historical.

Nevertheless, we will buy Mowat's contention that Stone Age men were the equal of present-day North American aboriginals. It used to be thought that men of the elder days possessed shipping that was too frail to withstand an ocean voyage, but the archaic Indians of North America seem to have possessed sea canoes, and some of these immense thirty-seaters were still around to greet the first European fishermen when they arrived on the Newfoundland banks in the seventeenth century. The Eskimos were never limited to simple kayaks, but travelled the waters of the Northern Ocean in hide-covered umiaks, which are very similar in design to the old Irish coracles or currachs. The hide-covered boats of either people could be sailed (hence ancient references to "winged coracles") and were perfectly seaworthy, often containing forty men and their gear. Mowat guesses that these were "sea-kindly ships" in no way inferior to the fourth-century Romano-Celtic wooden ships used at a later date. "The use of square sails does not imply that these vessels were unhandy and could only run before the wind. Such acknowledges experts as Alan Villiers have demonstrated that square rig is nearly as efficient as fore-and-aft rig, and will enable a well-designed ship to go windward quite successfully."

In the earliest days there were probably few men who actively sought to cross the ocean from north-eastern Atlantic waters. Fishermen and sea-travellers are not always free agents, and some coastal voyagers must have found themselves unexpectedly storm-blown into the off-shore. The largest force there is a huge gyre of counter-clockwise travelling water, that sea-within-the-ocean which we call the Gulf Stream. It circles about the calm Sargasso Sea, and in the North Atlantic, more or less parallels the Continental Shelf, travelling dead for Great Britain. Those who are on the Gulf often need no sails to make a crossing, although the prevailing winds are also to the north-west. No west bound sailor could hope to make a fast crossing in the face of this sea-current, but the northern Europeans did have a more northerly route. Accidents of geology

left them a line of stepping-stone islands from the British Isles to the Hebrides, the Shetlands, the Faroes, Iceland, Greenland, Baffin Island, Labrador, and Newfoundland, hence to the other lands Down East. Further, the Stream eddied north-westward at this place, and off Greenland the sweep of water entered the Labrador Current. In these waters there was no prevailing wind to counter and the various landfalls were never more than 400 miles apart, usually within five days sailing distance. Once the Gulf Stream was found, and tried, it a circle route between the two sides of the Atlantic would be seen as practical. The fact that this sea-route was lost in historic times is no argument against its use in the remote past.

In an article for "Oceans" magazine Norman D. Rosenberg has identified the earliest settlers on the northern islands of Europe as "neolithic farmers and herdsman" from the eastern Mediterranean forced from their lands by their own poor husbandry and soil practices. His contention that they were led to their voyage by the voice of a priestess, following the advice of a mother-goddess, seems speculative, but the idea that they went to the forest and created "water-tight and resilient" wooden-hulled ships "with stone axes and awls," has got to be wrong. The making of seaworthy ships is not a merely a matter of a desire for survival. Truthfully, no one knows who first came to the Hebrides and what matters drove, or pulled them there. The islanders of historic times have characterized themselves as "A race of fishermen who do some farming." Considering Rosenbergs assessment of the Hebrides as a treeless archipelago amidst flagstones and heather, it is hard to picture it as the paradise of any group of agriculturists even in the warmer climate of the distant past. Further, the long trip along the shores of the Mediterranean, around Spain and through the long reaches of the English Channel and the North Sea would have been more fraught with dangerous possibilities than any ocean-crossing.

It seems more likely that the islands were populated from nearby Pentalande, the place of the Picts and later the Scots. It was probably approached by sea-men, and possibly some of them were ultimately from the mysterious west. They did leave impressive passage graves, the best known being Maes Howe (pronounced hoo) on Mainland, the largest of the Orkney Islands. It is supposed to have been erected in 2400 B.C. which

makes it a pre-Tuathan structure of Neolithic time. Consisting of stone slabs, weighing as much as three tons, and measuring as much as 18 feet in length it is an undeniable masterwork of dry-masonry, put up by folk who were contemporaries of the Firbolgs and the Fomors.

The whole place is currently hidden beneath a 24 foot high grass mound which is about 115 feet at its greatest width. This underground place was not built for giants as the 36-foot entryway is never more than 4 to 5 feet in height. At the end of this cramped passageway there is a 15 foot square room, with wall niches assumed to have once held the bones of the dead. The people who came here may have been devoted to an earth goddess as Rosenberg has suggested, but the entrance shaft is aligned for penetration by the sun at mid-winter and mid-summer and these were the times when Lugh ferried men to the west, or to the east, in his solar wind-ship. North of this location there are other stones thought aligned to the movements of the sun and the moon.

In the year 1800 B.C., Rosenberg says that the "nomads from the Rhineland, distinguished by their copper implements, bronze weapons and beaker-like vessels crossed to Britain." If these Beaker People were not the Tuatha daoine they were, at least, their associates. It is said that these newcomers swept up from the south dominating the local populations wherever they settled. On the moors of Mainland the wizard-warriors erected two great cromlechs, now known as the circles of Brogar and Stenness. These are, of course, Norse names from a later period in time. Only a few of the latter stones still stand by the Ring of Brogar is pretty much intact. A ring of similar age is found at Callnish on the island of Lewis.

During these centuries the Orkneys and the Shetlands (which also attracted megalith builders) stretched a little further seaward and stood amidst a maze of navigational hazards. When Nemed and his men sailed first in Irish waters it was said: "There appeared to them a golden tower on the sea close by. Thus it was: when the sea was at ebb the tower was above the water, but when it flowed out, the water rose and submerged the tower. Nemed went with his people toward it from greed for gold." This myth is supported by the fact that gold was now discovered in the Wicklow Hills of Ireland. The Tuathans gathered it up and took this metal

and the products of their forges into Denmark and southern Scandinavia. There they must have found and traded amber, perhaps carrying it to more southerly ports for further profit. Even after relatively secure land trails had been established for the amber trade to the east, some of this sea-trade continued into historic times, Mediterranean peoples taking up where the Tuathans and other northern people left off. As time passed the northern seas filled with ice as the climate moved toward the "Little Ice Age," but the route which by-passed the Orkneys was never completely abandoned.

Then came the Iron Age was a time of great turmoil and unrest throughout Europe. A succession of tribes moved in one each other crowding the relatively empty lands bordering the Atlantic. The Celts were at least involved in this restless stirring of peoples. In one of the waves which was generated at Britain, a people who were security conscious arrived in the outer islands and built the round towers known as brochs (from the Gaelic broc, grey in colour). These were defensive, conical, double-walled outposts, standing near the sea, on heights of land, stretching all the way from here to Ireland They may be the work of Celtic-speaking builders and perhaps a thousand brochs have been discovered as circular piles of rubble. Some, like the Broch of Mousa, in the Shetlands, is essentially complete at a height of 43 feet, Unfortunately, there is no way of knowing whether these strange structures were put up by Milesians, or Tuathans or by the Picts, and it is not clear who these people feared. Whoever they were, they seem to have retreated from these islands as low-pressure weather systems brought almost continuous rain and snow to the northlands. Any who remained were certainly put to the sword in viking times, the only exceptions being the Celtic inhabitants of the Hebrides, who mastered the Norse warlords until the year 1266 A.D. The Old Norse became a skilled sea-faring people, but they were traditionally agriculturists and hunters and might never have turned to the sea except for the sight of Celtic trading craft in their harbours. The wooden ships of Britain served as their first models for their first ungainly ships, which later evolved into the famed dragon-ships.

But before they suffered the indignity of being attacked on their own mugh mell, the Celts had a Golden Age of maritime activity, and there

might be less knowledge of this except for their contact with the Mediterranean world of written records. Men of Egypt are known to have developed primitive basketlike boats, caulked with bitumen. The Mediterranean people also had skin and wicker craft, like the Irish coracle. Wherever these were found one usually found a surfeit of cattle and a poverty of large trees. No doubt Neolithic men navigated their craft in creeks and lagoons as a preliminary to trying out the Mediterranean. Even in pre-dynastic Egypt archaeologists have found illustrations of fairly substantial Nile-ships, some obviously transporting animals up to the size of elephants.

Like the Celts, the earliest of these seafaring men must have realized the peculiar freedom and the opportunities that are linked to ownership of a ship. Boat owners could conduct trade, engage in piracy, and flee the vengeance of chieftains and kings, unless they happened to possess a navy. Because the shipping of the Mediterranean developed in warm relatively calm waters, it spread fewer sails. "The Mediterranean," notes one historian, "is a sea where a vessel with sails may lie becalmed for days together, while a vessel with oars would easily be traversing the smooth waters, with coasts and islands everywhere at hand to give her shelter in case of storm. In that sea, therefore, oars became characteristic, their arrangement being the chief problem in shipbuilding. As long as the Mediterranean nations dominated Western Europe, vessels of the southern type were built upon northern coasts, though there generally was wind enough here for sails and too much water for oars."

The first boats seen in Egyptian pictures are shown being paddled, but 1250 B.C., the crews are unmistakably shown in rowing postures, about 20 or thirty individuals being the usual number seen in action. The Indo-Europeans were generally late coming to the sea: There was some early boat building in the Fertile Crescent, but this did not lead to much until some of the Hamitic peoples crossed to the eastern end of the Mediterranean. Here they became known as the Phoenicians, and soon developed relatively large craft, and set up harbours at Acre, Tyre and Sidon. Eventually they pushed their interest westward and founded Carthage and Utica in North Africa. The colony at Carthage became the most populous city in the region. Profiting from the long siege of King Nebuchadnezzar II, they gained funds which allowed them the greatest

fleet in the known world. Carthage claimed even the Western Mediterranean as her own, thus annoying the Romans who had earlier claimed it as Mare Nostrum. The Carthaginians fought the Greeks for control of Sicily, causing Alexander the Great to plan for her conquest, but he died before his forces were able to take action.

At her greatest expansion, Carthage had a home port with a population of a million people, and was largely industrial, being famed for her woven goods. At first she was satisfied with a coasting trade, but in those sterile days she had a land-trade into what is now the Sahara Desert, exchanging black slaves, ivory, metal and precious stones from these regions with her Mediterranean neighbours. She soon noticed the Spanish copper mines and to exploit them established a colony at Gades, now called Cadiz. Coasting tentatively along the coasts of Spain and Portugal she finally discovered the Cassiterides, the Scilly Islands of Cornwall, England, and here there was tin.

In the reign of the Pharaoh Necho XXVI, (600 B.C.) a Phoenician trade ship, commissioned by the Egyptians, is supposed to have circumnavigated Africa from east to west, starting at Suez and finally returning by way of the Straits of Gibraltar after three years at sea. In 520 B.C. a similarly ambitious captain named Hanno cruised down the western shore of Africa, and came home carrying three hairy "people," who he termed gorillas. Regretably they proved to be violent shipboard guests, and were killed and skinned, the hides deposited finally in the Temple of Juno.

Recounting the success of these people, the Greek geographer Strabo noted: "Famed are the voyages of the Phoenicians, who a short time after the Trojan War (ca. 1200 B.C.) explored the regions beyond the Pillars of Hercules and founded cities there and in the central Libyan (African) seaboard. Once while exploring the coast outside the Pillars, they were driven by strong winds a good distance out on the ocean. After being tossed for many days they were carried ashore on an island of considerable size, which is situated a great distance west of Libya." We cannot know if this was one of the Azorean group or some part of the New World.

According to Aristotle, the Carthaginians were known to have made

some use of this find, for he says they explored and discovered that the "island" was "large in extent, fertile in soil and full of navigable rivers; but the Carthaginians ordered that none other than their subjects should go there." His description is hardly applicable to any of the Azores or Canaries, which have no navigable rivers. Other ancient texts explain that settlement was discouraged as Carthage felt too many of her citizens might want to go there. She also kept the land a secret because of the unsettled political climate of her times, considering that some fraction of her population might eventually need this hidden place as a sanctuary from enemies. The Portuguese writer, Antonio Galvao says that Carthaginian merchants organized a fleet for the exploration of the New World, sailing out of Cadiz, Spain, in the year 590 B.C.: "They were trying to prove that there was land and found some in the countries we now call Mexico and the Antilles."

In point of fact, the Carthaginians were quite possessive of all lands beyond the Pillars and with their maritime superiority were usually able to block the Atlantic from exploitation by other peoples. Strabo tells of an exception, when a Phoenician vessel was followed out of the Mediterranean on its way to the tin mines of Cornwall. When both vessels approached the fog-enshrouded and rock-strewn waters of Ushant at the entrance to the English Channel, the Phoenician captain deliberately steered his craft into shoaler water where both ships were wrecked. The Romans all died for their curiosity concerning this sea-route, but some of the Phoenicians escaped on wreckage, and ultimately the state compensated the captain for the loss of his vessel in the interests of preserving their monopoly over the supply of tin, which was vital in the making of bronze weapons.

This attitude explains why classical mapmakers worked in such darkness. Even in Strabo's day, the Greeks were uncertain about the exact location of the Pillars let alone anything beyond them. Timaeus had reported that the "Fortunate Isles" could be found west of Gibraltar but most geographers were skeptical of his report. Everyone knew about Plato's fable concerning a land he called Atlantis, and of his insistence that there was a continent on the far side of the Atlantic, but the idea of sinking lands was preposterous for most "right-thinking" men. As for the east, it was known that there was a place called India and an Eastern Ocean which

Aristotle though had a vague hope of containing habitable lands.

If the length of the world was poorly fathomed, the width was even less definite. The Nile was known but places further south were not. As for the Atlantic, it was not referred to as "Sea of Darkness" without cause. Britain and Ireland were known, and some islands were randomly dotted on the ocean west of Spain and Africa, but there was no decent intelligence relating to anything which existed out there. Pytheas,, a resident of Massilia , in what is now southern France was a shadowy figure whose time and personality are lost. He would be completely unknown to us except for certain "absurd" statements he made concerning the geography of the world. He claimed to have somehow avoided the Carthaginian blockade and taken an expedition out on the Atlantic for a look at the tin islands and anything else which might have some trade value. To satisfy his own curiosity he sailed to the northern limits of Britain. There he noted that the clear distinction between land and water was lost, earth sea and air becoming somehow involved in a jelly-like mix which made more northerly navigation impossible (at the season of his visit). Nevertheless, the locals told him that there was an island named Thule which lay six days voyage further in the direction of the Arctic Circle. Although Pytheas made a fair stab at describing the northwestern coast of Europe as well as the British Islands, his story was taken as "a tissue of fables," because of the references to oceanic slush and sea-fog, and his statement that at Thule, the days were twenty-four hours long at the time of the summer solstice.

While Polybius dismissed this pioneering work of discovery, other academics, notably Eratosthenes and Strabo, rethought the matter and decided they were dealing with a credible individual. These men compiled the first credible maps of the ancient world, assisted in no small measure by the the downfall of Cathage in 183 B.C., and the rise of Roman interests in places far beyond the Mediterranean.

Until Rome fell, men continued to peer beyond the great darkness at the west of Europe. In the second century A.D. the Greek geographer Pausanias wrote of islands west of the Atlantic, where there were red-skinned people, "whose hair is like a horse's mane." This followed an earlier report of the Roman Consul Matellus Celer, when he was

officiating in Gaul. The king of a neighbouring province brought before him several people having a bronze coloured skin and straight black hair. The Roman was told that these folk had said they had been blown across the Ocean in a large wooden boat. The Romans were, at least, aware of lands on the opposite margins of the Atlantic.

Perhaps they also made the western passage for a Greco-Roman torso of Venus has been pulled up from the Gulf of Mexico near Vera Cruz. This is not a very useful find since it might have been transported there long after the classical Romans were gone. This is not the case with dozens of Roman oil lamps uncovered recently within pre-Incan tombs in Peru. A third century terra-cotta bust of Roman provenance has been recovered from a Mexican tomb which unfortunately dates from the twelfth century. A better find was a hoard of Roman jewelry discovered in six Mexican graves by Dr. Garcia Payon. They have been identified as dating to 150 B.C. They could have been transported by a non-Roman ship, but the associated material has been carbon dated to about 100 B.C.

At York, Maine there is a stone said to bear a Latin inscription, and nearby a coin dated at 237 A.D. was found, but this could be a hoax. During the last century a more impressive horde of several hundred Roman coins, was found on a Venezuelan beach. They dated to 350 A.D. and are now held by the Smithsonian Institute. In this decade a farmer in Missouri unearthed metal items, including a bronze drinking cup. Tests on the various metals indicated they were made using processes current when the Roman Empire was at its height.

Claudius Ptolemy is almost as shadowy as Pytheas, but is thought to have been active about the year 150 A.D. His birthplace is uncertain but it might have been Greece. Like his predecessors this new cartographer interviewed travellers and consulted ancient texts to try to figure out what was where. The first latitudes and longitudes for his Geographica were recorded in 127 A.D. and the last in 151 A.D. With these in hand he set about creating ten maps for Europe, four for Africa and twelve maps to illustrate Asia. The authorship of the 27 maps which were finally produced to accompany his long text have sometimes been credited to Ptolemy, sometimes to apprentices and sometimes to an energetic medieval editor. The last does not seem to be the case as internal

evidence in the text indicates that the writing followed a comparison of maps already drawn. Copies were made and the earliest surviving version of the Geographica dates no later than the twelfth century.

The fundamental data needed to produce an accurate map of the known world was lacking in 150 A.D. and for many years after that date. The effect on map production was the creation of sensational errors of scale and form. Following an earlier geographer named Marinus, Ptolemy set the prime meridian at the Fortunate Isles (the Canaries or perhaps the Maderas), assuming that they were the furthest west of any lands. His knowledge of the islands in the North Atlantic was broader than that of Strabo, but he was "ill-advised" with regards to Ireland, placing it further north than any part of Wales. Scotland, drawn from his place markers, came out strangely skewed to the northeast, twisted about so that it trended almost from west to east. The Scandinavian peninsula was interpreted as two large islands, Scandia and Thule. The northern coast of Germany west of Denmark was shown as the margin of the Northern Ocean, which was pictured as running from east to west. The northern coast of Asia was not shown. A work with almost canonical influence the Geographica has been described as both a keystone and a millstone for cartography.

There were many variations on the original Ptolemy map of northwestern Europe, but one of special interest featured the offshore islands of Britain as they were perceived in 300 A.D. The mainland is represented in the southeast as Gallii Belgice Pars, the Country of the Belgians and Gauls, and as Magnii Germanit Pars, the Great County of the Germans. Britain is distinguished as Insula Britanica, while the north, now called Scotland, is represented as Albion. Ireland is shown labelled Ibernica. This map identifies the locations of many of the Celtic tribes, and we draw special attention to the northern retreat of the Caledonii. On this map there is a surfeit of "oceans," a definite change from the Greek concept of a circumfluent Oceanus. Here the Roman concept of Mare Nostrum,, "Our Sea" as opposed to those bordering other nations has been extended to the Oceanus Fluvius, or "Ocean-River," of earlier days. Thus we have O. Britannicus,, now called the English Channel bordering southern Britain and O. Germanicus, now the North Sea, due west of Germany. Magh mell, the Great Plain is seen subdivided into a southern O. Vergivus, "the

Green Ocean;" O. Hyperborealis, "the Northern Ocean;" and O. Dev Calidonivs, the "Ocean of the Caledonian gods." This last is very instructive considering the fate of the Tuatha daoine.

The more usual form of the word for god is deus, the plural being dei, dii or dis. Notice that the Romans said that the Gauls claimed descent from Dis-pater, literally the "father gods." He corresponds with the Gaelic Oolaihair, and probably confers with the Germanic Teus, whose name is preserved in the day of the week known as Tues-day. This sword-sun-war-agricultural deity corresponds exactly with the Welsh Hu or Duw, and the Gaelic day-god called Aod, whose name translates into English as "Hugh." All are related to the twins, Lugh-Nuada, and are double-barrelled personalities, the Germanic form conferring with English words such as "duo," "twi-," "bi-" and "two." O. Dev Calidonivs might have been meant to slight the Caledons as the word "devil" derives from the earlier Anglo-Saxon deo-ful, originally, "full of god-spirit," and there may have been something of this connotation in Latin. The Gaelic name for a god is dia, the Brythonic doe and the Gaulish, dêvo. This corresponds with the Latin divus, the "deified" one, the deus (hence our word deuce). This is very close to the Sankrist deva and the Norse tivar, the "gods."

At the height of Celtic marine power, the Romans went about their own business in their own seas, which included not only the Mediterranean but the Caspian Sea. It was cleared of Carthaginian pirates and the coasting trade there was brisk, profitable, pleasant and safe. The Romans got on with trade using Greek as a common language, and their coinage as the universal means of exchange. In spite of appearances the Roman Empire was on the skids, pressured by barbarians and constitutional troubles. With so much exchange of goods, ideas began to flow and the native Roman Stoicism found itself competing with Oriental cults. Overtaxation made Rome more vulnerable and in the midst of all these troubles a new and dangerous religion cropped up, its adherents so feared they were referred to as "the third race." It centred on a crucified Nazarene named Jesus, often called the "Anointed" (Christos in Greek).

In spite of governmental moves to eradicate it, Christianity assimilated Hellenism, and became a nation within the Roman Empire. Its churches became numerous, independent, and powerful, its creed easy for

people without hope to accept. Its code was rigid and conservative but demanded little, excepting faith, in a world boxed in by physical demands and mental strain. Christianity unfortunately swept up the best minds in Europe and bent them to its will, rendering scientific research comatose through the period we now refer to as the Middle- or Dark Ages (300-500 A.D.)

Between the years 410 and 422, the Roman legions began to withdraw from Britain (England), much to her detriment. The Scots moved in on the Picts, and they in turn swarmed south over Hadrian's Wall. Then the Jutes, Angles and Saxons descended on the unready Britons and by the beginnings of the seventh century all present-day England was ruled by Anglo-Saxons rather than Celts. Toleration was never a strong point with these Germanic tribesmen, who installed Thor and Odin in place of Roman Christianity or the remains of classical and Celtic paganism. But missionaries did redescend on Britain, and it was converted by men with a literary tradition starting with their "God-spells," magically entombed in magic "boxes" they called Bibles. From St. Ninian's time (360-420 A.D.) the outlanders set up monasteries that became centres of learning for the British Isles, and these places were responsible for assimilating rather than overpowering Celtic paganism. The good deities of the past were canonized, while the the dark lords and ladies were banished to some generally recognized "hell-hole" such as An Domhain or Nifhelheim. Since the Christians were able to use Celtic mythology to overcome the old gods they were not averse to collecting tales from the remote past, and it is thus that we have some notion of an echtral the "western voyages."

Joseph Jacobs, the one time president of the English Folklore Society said that his study of classical and Irish literature made it clear that the Gaels "sallied out of Ireland to harry the lands of the East and Northeast" at a very early date. Like others, he concluded that they pushed as far north as Iceland and "accumulated considerable knowledge concerning the surrounding seas and a still more considerable stock of sailor's yarns." The earliest of these may have been "The Tragedy of the Sons of Turenn." as it is the only one to include the old god Lugh as a prime character. These curaidh, or champions, were forced to take up sea

travel, and this is one of the characteristics of "imrama:" men did not choose their course, but were directed to the sea by some external force which they were unable to counter or resist. Thus mortals were blown by storm-spirits to the gates of Tir nan Og, or were seduced into that land by the caprice of immortals who promised endless life, love, food and drink. Two very old myths centre on this theme: "The Voyage of Bran," and "The Tale of Connla," both present the hero with a voluptuous maiden who persuades them to follow her to "the Pleasant Plain, the Land of the Living Heart." Some of the adventures of Bran are seen in the somewhat similar "Voyages of Maelduin," which seem to be an eighth century compilation of everything offered up in the earlier centuries. "The Voyages of Snedgus and mac Riagla," and those entitled "The Voyages of St. Brendan," appear to be Christian reinterpretations of the Maelduin story. Brendan and his seafaring monks were as "driven" as if they had set sail before unexpected winds. They were not interested in the "easy" life, gold, slaves, or obtaining new territory for their arduous right, but sought "the grace of God," and possibly found it.

During the fifth and sixth centuries in which the romances were written there was a warming of the climate and conditions became better for Atlantic voyages. This explains why men like Maelduin and Brandon suddenly began making more or less regular forays into the north-western ocean. A. R. Lewis says that by 450 A.D. Celtic control of the seas extended from Ireland to Brittany to Spain and that "this represented local maritime strength as much as any surviving Roman tradition." By the next century many traders were in routine contact with Norway and Iceland.

Something of this Celtic connection was still visible when Mercator created the first map to show both North and South America in 1538: On it the Atlantic is given as *Oceanus occidentalis*, but the more northerly part, now called the Labrador Sea is called *Oceannus Deu calidonus*, "The Ocean of the Caledonian deities." Alexander Macbain considers this a native Gaelic word derived from the root *coille*, "a wood." The Old Irish is *caill*, corresponding with the Welsh *celli*, and the Cornish *kelli*. The English equivalent is "holt" and the German *hoz*, all corresponding with the Latin *caledonius*, "a dweller in the north of Britain," thus a "woodlander" or an ancient Scots highlander. This ocean is shown as occupying the deep between *Hybernium* (Ireland) and *Baccalearum regio* (Labrador-Newfoundland). The second part of the word Caledonian confers

completely with the Gaelic domhain, and with An Domhain, the so-called undersea "beginning place."

The vessels in use ranged from carved wooden vessels to rather more ambitious hide-covered currachs. An example turned up from the bed of the River Thames shows that some were proper ships. This one was 60 feet long and had a beam of 16 feet. Her mast was ten inches at the base and her lines those of a fine sea-going ship. The currachs were, of course, powered by square sails with auxiliary oars for calms and narrow waters. In the end, the Picts and the Gaels extended their trade into the Baltic and established outposts on the Faeroes, the Shetlands and the Orkneys and had semi-permanent hunting and fishing stations in Iceland. Although they probably visited the New World, or its offshore islands, the residents of Britain were not subject to population, or other pressures, great enough to cause them to consider migration and settlement of either Tir-nan-Beo, the Land of Long Life, or Tir Thuinn, the Land Under the Waves, let alone the more austere island of Bas-ile, or that of the saints.

The Christians of Spain and Portugal were differently bent when the Moors invaded their territory in 734 A.D. As the Florentine scholar Toscanelli (1474) noted these invaders were "infidels." According to him an archbishop of the Roman church whose name was Oporto fled from Portugal with six bishops of the Spanish church and a large number of followers. Putting to sea with their goods and cattle they came at last to the Atlantic islands known as the Antilles. Several historians writing in the sixteenth century insisted that the ships intended landing there but meeting inclement weather were forced to islands much further west. They also insisted that mariners of their own time had reached a place called The Islands of the Seven Cities where they found people who spoke Portuguese. The inhabitants said their ancestors had fled a Moorish invasion of Spain and Portugal after killing their king, one Don Rodrigo. According to some sixteenth century chronicles the Seven Cities corresponded with the place called New Spain, now Mexico, but others say the place was "recovered" on the coast of northeastern America.

Following the Moorish invasions Spain and Portugal developed a culture tinged with Arab interests. In the twelfth century Europeans embarked on a massive translation of Arabaic documents, founding a

college at Toledo with this in mind. As works of mathematics, astronomy and history became available to western scholars it appeared that the Arab races were fully aware of all eastward approaches to the Orient by the seventh century. It was also clear that some of their thinkers had become aware of "a new world in the west, beyond the Sea of Darkness." Prince Henry of Portugal, also known as "Henry the Navigator," had sent out his first caravels about 30 years before Columbus started his "great venture." He is known to have assisted mariners in the circumnavigation of Africa. That venture by Vasco de Gama was guided by an Arab pilot named Ahmad ibn Majid who used an Arab map not previously seen in western sea-ports. Quite possibly similar charts brought men to the outer edge of the Azores and perhaps carried them beyond, as writer Lynne Jobe has suggested.⁶

The Catholic monarchs, Ferdinand and Isabella, lived in Seville in an Arab palace, the Alcázares Reales. At the end of the fifteenth century the town in which the sponsors of Christopher Columbus lived was still dominated by the Great Mosque. Charles V and other Spanish monarchs continued to dwell in the Alcázares. Interestingly, that palace complex was decorated with Islamic tiles, many bearing symbolic representations of the nearby Pillars of Hercules (the Straits of Gibraltar), all entitled Plus Ultra, the Latin for "There is More Further On." This was a modification of a well-known classical phrase Ne Plus Ultra, "There is Nothing More."

The Arabs, looking west from Spain and Portugal called what they saw Bahr al-Zulamat, "The Sea of Darkness." The classical scholars of the medieval period referred to it in similar terms as, Tenebrosum Mare. Either descriptive seems apt as heavy cloud banks characterize this part of the Atlantic for most of the year. Notwithstanding all this ill-omen, there is reference to a mysterious island named Yunan in the Arabic writing of Zakariyya al-Qazwini. Although Yunan bears the name of old Grecian holdings, it may bear better relationship with Atlantis: "Now the sea has taken possession of it. Among its wonders is the fact that anyone who thinks of something in that land never forgets it, or at least

⁶See "What If..." by Jobe in "Aramco World" magazine, Vol. 43, No. 1, 1992.

remembers it for a very long time. Merchants who have gone there by sea say that when they came to that place, they remembered things long forgotten. This is why it is the birthplace of philosophers whose like has rarely been found elsewhere." Historian Paul Lunde thinks that this island was within the Mediterranean, "a semi-mythic land of enhanced memory, cut off by the sea, comparable to another island between the coasts of Yemen and Ethiopia that was said to possess a fountain of wisdom that cleared the minds of those who drank its waters."

We are reminded of the Celtic Fountain of Regeneration, also known as the Cauldron of the Deep, whose waters were proof against aging. In the latter days this kettle was purloined by the land "gods" and supposedly lies buried beneath Uisneach, or Hu's Hill, at the geographic and political centre of Ireland. We are told that this symbol of power was the navel of the Fomorian creator-god, and when cut away, killed the spirit of the people's of the deep. Even before they possessed the kettle, the powerful Tuathan magicians somehow tapped its potencies to restore life to their warriors killed in battle. Hearing this, the Fomorians sent a reconnaissance into Tuathan territory and they located the magical "Spring of Health." Being unable to destroy it, they filled it with earth, and raised a cairn over it, a stone-pile still called the "Cairn of Octriallach," after the leader of the expedition. That done the Fomorians returned to the battlefield at Magh Tuireadh and their Octriallach permanently put down Ogma, one of the sons of Dagda, the chief of the gods.

There is a possible linguistic link between Yunan, or Ionia, and Ireland, which Ptolmey called 'lovepvia., and the Latins Iverna. This is a name for the Grecian seat of the Muses and corresponds with the Gaelic Iardonn, as well as the Cymric Iwerddon, both identifying "The Western Lands of Don." When lands of eternal youth were not found at this place, the Mediterrean equivalent of Tir nan Og was pushed westward into the Atlantic. Several late medieval maps mark and island in the Atlantic, and entitle it the "The Island of love," or "Island of Jove." Frequently it carried the futher note: "Here nobody dies."

There is an enigmatic passage in Zakariyya al Qazwini's Monuments of the Countries which may have some bearing on the subject: "Yunan. he writes, "was the birthplace of all the Greek plilosopers. But now the sea

has taken it by force. Among its wonders was the fact that anyone learning something in that land never forgot it, or at least, remembered it for a very long time. Merchants who went there by seasay that when they came to that place they remembered things long forgotten. Since the loss of this place philosophers the like of these have never been seen anywhere."

The island to which this thirteenth century author refers is the Arabic for Ionia. The Grecian people of Ionia migrated from this "lost land" and settled Chios, Samos and the Cyclades as well as parts of the coast of Asia Minor. To the Ionians we credit the earliest development of literacy and philosophy among the Greeks. The Ionians lost their independence and influence in the sixth century B.C. The "Ionian migration" is very reminiscent of the movement of the Tuatha daoine from their northern isles to Ireland. For Qazwini this Ionia represented the source of these people, "a semi-mythical land, cut off by the sea - a partial Atlantis, comparable to a similar island between the coasts of Yemen and Ethiopia that was said to possess a fountain of wisdom that cleared the minds of those who drank its waters."

The classical scholar, F.G. Plaistowe, says that this word confers with Ianus or Janus, which derives from the Greek Zeus "the Two-faced," who was also called Juppiter: "An old bifrous (two-faced) deity, who as the sun-god marked the course of the year. January was sacred to him and he was the god of beginnings and entrances, doors &c. The doors of his temples were kept shut in times of war, and open in times of peace. Hence the Latin Ianuarius, "January." Elsewhere it is noted that the genitive of Jupiter was Jovis, "the nominative and genitive for the god Djovis, akin to the English Tues-day, the chief divinty of the ancient Romans.

As we note elsewhere Tues, Tyrr or Thor confers with the Gallic god Eusgenus who is the Gaelic 'Uisdean the Welsh sun-god Hu . This is the Norse Ey also represented as Ay and in Gaelic as Aod, the "Day." Side forms are Eòin from which we have the more modern Iain and the English Ian or John. From this also, the feminine Joan. The chief Celtic island named Iona lay in the West Isles of Scotland and some have guessed that it was named after the Hebrew Iona, a "Dove," since St. Columba who installed a Christian monastery there was nicknamed Colum, a "Dove," his

birth-name Crimmhann, a "Wolf" being thought inappropriate to his mission. The island was always a religious shrine, but the earliest form for it was Ioua, and this was used in pre-Christian times when the island was clearly identified as Innis nan Druinidh, the "Island of the Druids."

The exact meaning of Iona is lost but it may refer to the feminine genitive plural of the Irish Gaelic *ionadh*, which is given as *ionai*, "her wonder; her surprise." conferring with *ionad*, a "place." The word may be broken down into roots which suggest something on the line of "not commonplace."

At the northern end of Iona there are ruins of a dun just north of the Ridge of Courcil. "The Well of Eternal Youth is on the north slope and it is said that if a woman bathes her face and hands in it before sunrise she will become young again...This is an interesting remnant of the days before Columba when the people worshipped the sun (Aod or Lugh) and an unknown God. It is often supposed that this god lived in water (since he went into the western ocean each night), so that fountains and wells were considered sacred, and thought to contain magical powers..." A quarter of a mile north-east there is a similar well which was formerly approached by sailors seeking to buy winds to move their ships.

Mela's map of north-western Europe represents Ireland as *Juverna*, but that form is later seen altered to *Ivernia* or *Hibernia*. There all sorts of derivative spellings including *Ibern*, *Ybernia*, and *Ibernia*. When medieval mapmakers realized that Ireland was not the fabled land of never-ending youth, the island was pushed into the Atlantic. By 1525 it was nestled into an embayment of Maritime Canada, where Wolfenbuttel identified it as *Y. des: Juhan*, the "Isle of Ian" or "John." It was distinguished as a holy island two years later when Maggiola named it *Ia. de S. Joan*. In the following years it was occasionally secularized, and its gender fluctuated. The name also changed slightly from *Ivan* to *S. Juan* to *Saint tehan*, with every other possible and impossible spelling between these samples. It was sometimes placed in waters due south of Nova Scotia, and was sometimes shown due north, and not infrequently it was represented in both places at once. The sum of all this is that Cape Breton Island or modern day Prince Edward Island was intended. By the time of Champlain (1604) the name had settled on the latter island, but either

would be apropos. Cape Breton is noted as a "beginning place" or "entrance" to the Underworld (near Cape Dauphine), and here it is rumoured Glooscap first came to the northeast, later using nearby Kelly's Mountain as a jumping-off point for the netherworld. He is also scheduled to return here at some future time to settle the score with the whites on behalf of the Algonquin nation. A site near Charlottetown also works quite well as Iona-west since it once harboured a standing stone within a fountain of youth.

It was not until the mainland of North America was encountered in 1513, that the Legend of the Fountain of Youth became a subject of conversation and astonishment at the Spanish court. The peninsula of Florida is clearly marked on the de Cosa map of 1502, but it was the experiences of Ponce de León that eventually led to the idea that there was very possibly a continent in the western ocean. Earlier visitors to that general region had heard the Indians say that there was a fountain that could restore the dead and reverse the aging process on an island named Bimini. Juan Dias de Solis, among others, was said to have stumbled upon it "at a distance of 325 leagues from Hispanola (Spain)." Writing of similar discoveries Italian historian Peter Martyr d-Anghiera said, "those who have explored an island which is called Boyuca or Ananeo, have found there a fountain which has the virtue that by drinking its water, old men are rejuvenated." Somewhat later this coast was identified with that explored by de León.

Running into the land at the place where he thought this island might be located, the latter explorer named the northern part of the peninsula Florida, allegedly because he arrived at Pascua florida, or Easter Sunday. The southern part, which he interpreted as an island, he called Bimini, a name now applied to a different place in the Bahamas. Ponce de León did not discourage the rumour that there was a fountain of regeneration as he needed all the backing he could get to get royal permission to found a colony in Florida. His story was upheld when Peter Martyr met a Lucayo Indian, who attested to the fact that his elderly father had gone to Ilkorida and come away a new man. This Indian, the captured by Spanish slave-raiders was taken to Spain, learned Spanish and was baptized Andres Barbudo, a name derived from the unusual fact that he was bearded, unlike most southern Indians.

This story was backed by other reputable men including Vázquez de Ayllón, a high official in the Spanish court. Most of these witnesses attested that they had been prevented from actually seeing the spring by the ferocity of the Indians, who had effectively beaten off several packs of Spanish "tourists." De Ayllón managed to contact an Indian captured in a raid in southern Georgia. "This man, named Chicorano is by no means stupid," wrote Peter Martyr, "and was able to learn Spanish with relative ease." Clever or not, Chicorano told a number of "tall-tales" to anyone who would listen. His repertoire of mythic places and peoples included a place he called Duhare where the residents were all white-skinned and had red hair. Their king was a giant named Datha, and their queen of almost equal stature, had five sons, all nearly their equal in height. Near this kingdom was Xapida, where pearls were taken in great quantity and where more giants tended herds of domesticated deer, which they milked, using the product in cheese-making.

He identified a third mainland kingdom called Inzingnanin. Long ago, he said, a people had come there by sea. This race had inflexible tails, like crocodiles. In order to sit in comfort they constructed chairs with a hole in the middle. A sea-people, like the Fomors, they ate raw-fish, but because this product was lacking in their new locale they quickly died of a deficiency disease. It was in Duhare, however, that Chicorano said that the Spaniards would find the fountain they sought. Here all men were of the same age, and were continually renewed from drinking the water.

Utgardr, "the garden of confusion," was sometimes called Jotunheim, the "home of the heavy eaters," these people being identified with the Vanr, or sea-giants, who were defeated by the gods and banished to the northwestern boundary of the world. Odin is supposed to have gone there seeking wisdom from the giant named Mimir, and Thor travelled there during one of earth's cold spells. The people of Jotunheim governed the north wind and were blamed for sending south the biting blasts that nipped crops before they matured. Thor went to see them with the intention of forcing them to show more civilized behaviour. Accompanied by Loki, he set out on his chariot riding up on the south wind for an entire day.

At the edge of giant-land he came upon a peasant hunt, where the inhabitants were poor but very hospitable. They had only two goats to provide for their needs and Thor saw that these would hardly be adequate for his own appetite. He therefore took on the role of cook, intending to bring a little magic to his work of preparing food. In the pot the goat's meat multiplied so that there was plenty to serve everyone, but Thor cautioned the giants against throwing the bones on the ground or breaking them. As they ate the meat was torn away the god collected the bones in the goat skins which lay nearby on the floor.

The peasant and most of his family ate heartily and did as they were told, but one son, being more ravenous than the others, broke a bone and sucked the marrow from it, such things having once been considered a delicacy. In the morning Thor arose struck the goat skins with his hammer and reinvigorated the two goats except that one was perceived to be lamed. Noticing this defect Thor was inclined to slay the whole family, but the guilty boy owned up to his sin. In the end the peasant appeased Thor's growing wrath by enslaving the boy and a sister Roskva to the god.

Charging the peasant with care of the goats and adding these giants to his company Thor and Loki walked from here into "a bleak and forbidding country, always enveloped in a nearly impenetrable grey mist." Through the fog the party at last spotted a house which had one side that seemed "nearly all portal." Finding the doors open, the travellers entered and being very tired fell to the floor and slept until they were awakened by "a peculiar noise and a prolonged trembling of the ground." Thinking that the roof would surely fall in this earthquake, Thor and his companions took refuge in a side-room where they again fell asleep. At dawn, the people emerged from the place and had not gone far when they came upon a resting mountain-giant, whose snores had produced the sounds they heard and whose sleep-movements had rocked the ground. Thor's people stood amazed as the giant groped about in the twilight looking for some object laid aside while he slept, and this proved to be his mitten, which was the "house" in which the visitors had sheltered. Eventually, the giant Skrymir caught sight of the tiny people, and learning that they were on their way to Utgardr volunteered to act as a guide. They all walked on for another day and before Skrymir lay down to sleep he offered them some of

the provisions from his carry-all, but they had to go without food since not even Thor could untie the giant's knots which guarded the mouth of the bag.

Troubled by the giant's snoring Thor struck him three frightful blows with his hammer, but the giant responded by brushing at his face as if wayward leaves were falling there. In the morning the mountain-giant parted from his new friends, noting that they could come to Utgardr castle by taking the ice-bridghe. Beyond they found a castle of ice and slipping between the bars of the porticullus found their way to Ut, the king of giants. In spite of the small size of Loki and Thor, the Jotun recognized them as the mighty foes of his race and invited him to show their powers.

Thor, having fasted much to long, declared he would meet any wager in return for a decent meal. The king ordered that a wooden trough full of meat be brought to the great hall, and placing Loki at one end and his cook Logi at the other, commanded that the two show who could eat best. Loki did an admirable job, but by the time he had pigged out at centre trough, he found that Logi had eaten all of the bones from both meals and consumed the wooden trough as well.

Contemptuously Ut nettled Thor to show well he could drink. Bringing in a large drinking-horn, Ut told Thor that normal giants could empty the vessel at a single draught. Thor tried the ale but when he thought the horn empty it appeared filled again to the rim. Afterwards Thor's servant, the lad called Thialfi said he would run a race to prove his power, but he soon fell behind Ut's runner who was named Hugi. Thor now agreed to a test of strength and trightening his magic bet, which increased his powers, he strained without effect in an attempt to raise the giant's cat. In thge end Thor was reduced to wrestling Ut's elderly nursemaid and this ended as badly as the other tasks.

In the morning the guests were escorted to the southern boundary of Utgardr, where the giant-king said they hoped that Thor would leave his kingdom in peace in the years to come. In a more open mood, the giant admitted that he found Thor impressive, and said that he had only been able to defeat him by indirection and magic. Loki's (Fire's) opponent was, after all he noited Logi (Wild Fire) which was always more consuming. As

for Thialfi he had raced against Hugi (Thought) and what is faster? The drinking horn had magical links with the ocean, whose "ale" could never be taken in a single drink. The cat was the shape-changed Middle Earth serpent, whose tale-biting act ties him to the sea-bottom. Eli, the nurse, was irresistible Old Age personified. In truth, Thor could not have beat these odds. Ut warned that if any of the gods contended with the Jotuns at a future time similar delusions would be brought to bear. At this Thor raised his hammer against the castle in the north, and would have destroyed it, but it vanished in the mist, forcing him to leave the north winds intact.

Thor found it difficult to overlook this slight and when he later found the giant Hrungnir, rattling sabres with the gods at the very gates of Asgardr, he raised his thunder-hammer to strike him down. He was prevented from doing so by the other gods, who cited the sacred rites of hospitality, and the bad taste in desecrating their own home with blood. Wrapped in his wrath Thor retreated but demanded to meet the giant in a holmgang or duel within the bounds of Jotunheim. When his fellow giants heard that he had accepted the challenge they constructed a nine mile high creature of clay who they named the Mist Wader as his second. Thor selected the giant-servant Thialfi as his helpmate. On the day of the duel, Thialfi made fairly quick work of the Mist Wader, for his hear was a cowardly mare, who fled leaving the creature inanimate. Thor stuck at Hrungir's stone club with his hammer, and the flint of which it was made pulverized. A bit of this material embedded itself in Thor's forehead but before he fell his hammer went at the giants head and killed him.

At home Thor's lover, the goddess Sif tried to remove the splinter and they finally had to send for the sorceress Groa. By reciting powerful runes the enchantress loosened the chip. Feeling he would soon be free of this nasty encumbrance Thor decided to reward the lady by telling her that he had managed to rescue her lost son from the far side of the Elivagr Stream. Delighted with this news, Groa lost her place in the rune words and the flint became caught in Thor's flesh where it remained.

Thor was even less enamoured of the giants after this and when his hammer was stolen he was certain he knew who had taken it. Consulting with Loki, he explained they were now all at hazard since the giants could

use the thunder-hammer to successfully storm Asgardr. Loki volunteered to spy out the thief and Freya would loan him her shape-changing falcon-feathers. The goddess agreed, and as a black bird, he flew north to the palace of the frost-giant named Thiazi, the chief of northern thunder storms. By artful questioning he deduced that Thrym-thurse monster did have the hammer and that he had decided not to risk using it but had buried it deep in the ground. The giant confided that he might return the hammer if he could have the goddess Idun as his bride.

There was a problem in this: Idun, the goddess of beauty was already mated and did much care for "the dreary northlands." When Freya approached her with the idea, her blood-pressure spread her neck arteries so seriously she burst the necklace she was wearing. In addition, Idun was the protector of the groves which grew the apples which the gods used against aging. Some say that Thor and Loki shape-changed themselves into Idun and her attendant to trick the frost-giant, but knowing Loki, it seems that an alternate tale is more nearly true. It is said that Loki watched for Idun in the lonely groves of Brunnaker. There he told her of several new grafts of apple which were found in an orchard not far distant. She followed him out of Asgard, and not long after he left her stranded near the borders of Utgardr. Seeing her there the leering Thiazi came and took her in his eagle shape, and carried her away to his cheerless castle. Isolated Idun began to lose weight, but all the time refused to eat herself and offered him none of her magic apples which were the source of renewed life and health for men and the gods. The gods were not mindful of Idun's whereabouts since she was a known recluse, but as she faded and aged so did they, and no apples of youth came to their tables. Investigation revealed she had last been seen with Loki, and Odin soon demanded, and got, a confession.

The gods now menaced Loki and he had to assure them that Idun would be returned. Donning the falcon-shape again he flew to the palace of Thrymheim and found the goddess there, mourning her exile from her beloved Bragi. Changing Idun into a nut, Loki took her up in his beak and rapidly flew back to Asgardr. He was soon pursued by an eagle, the giant Thiazi, returning from a fishing expedition on the northern sea.

Within Asgardr the gods had built a guiding fire near their gates, and

seeing Loki pursued they stood by with extra fuel until he was through the smoke. As soon as he and Idun were out of harms way they threw combustibles on the pyre and Thiassi pursued through flames. The inferno incinerated his feathers and he lost altitude plunging into the flames. The Aesir were overjoyed at the outcome but had broken the hospitality of their gate and when Thiassi's daughter Skadi turned up looking for compensation they were forced to allow her to marry one of the gods.

Skadi, the goddess of winter, selected by lot Niord, one of the old race of sea-giants attached to Odin's court, but could he could not stand the dangers of her chaotic realm, where they went in the winter, and she had no liking for his soft palace at the sea-shore. They parted by mutual agreement and she mated at last with Uller, the god of winter, who is the alter ego of Odin. She is said to have departed for the islands west of Scandinavia where she settled the in the Hebrides and became the spirit of the land named Skadi Land or Scotland.

The Jotunns were also known as the Thurses, or "Thirsty Ones," and remembrances of excursions to this northern place seem to have continued into the Middle Ages. In the Germanic countries the heavy-drinkers consorted in Scharanfennland. Nansen says that this mythic country had its counterpart in Fyldeholmen, the "keep of the full-ones." Thus we find the phrase "go to Fyllehilm" meaning "to go on a drinking bout." As Nansen says, this phrase shows a certain Norse preoccupation with alcoholic drink as the most important feature of any land of desire, and from this, perhaps, the naming of Winland during the Norse age of Atlantic exploration..

In the Farosese lay known as Gongu-Rólv's kvæthi a giant carried the human named Rolv to Möyaland, the "Great Land" of Irish myth. There the hero found Lindinmjá, a fair maiden with whom he slept for three nights. On the third she lost her virginity. The other maidens in that place wanted to throw him into the sea, or at least torture him, but the "injured" maiden used her magic to call the bird named Skúgv to her. She commanded this giant creature to carry her lover from harm, and this was accomplished in seven days and seven nights of travel. He was eventually deposited in Norway on the high mountain called Trondhjem, "Troll's home."

This tale reminds us of the Gaelic Tir na-m-Ban, the "Land of Whiteness" or "Females," where virginity was protected for its utility in enacting magic. Sometimes reference was made to "Islands of Virgins," where men were not welcome. At maturity some of these ladies travelled to Tir na Fer, the "Land of Men," so that they could become impregnated and continue their social order. Unwanted male children were exposed to death on the barrens after the women returned to their home island. This was exactly the situation on the island of Sena, off the coast of Brittany where it will be remembered that there were priestesses who held all-female orgies, to which men were not invited but "had to visit the men on a neighbouring coast, and return after having had intercourse with them."

JAZA' IR AL-KHALIDAT

The Arabs also knew that there were islands in the Great Ocean and called some of them Jaza'ir al-Khalidat, the Eternal Islands, perhaps after a Greek model. Some of their tales mention these islands casually as if they were legendary rather than mythic, and some said there were six in all, although if they are the Carnaries (as we suspect) there were actually seven. Some writers pointed to the fact that there once stood a bronze statue at the Port of Cádiz, Spain, warning mariners to turn back while sober second thought was possible.

Not all men took the warning for in 942 an Arab historian named al-Mas'udi said that, "It is generally accepted that the sea- the Dark Atlantic - is the source of all other seas. They tell marvelous stories of it, which we have entered in our book entitled, The Historical Annals, where we speak of what was seen there by men who entered it at the risk of their lives and from which some have returned safe and sound. Thus, a man from Cordoba named Khashkhash got together a number of young men from the same city and they set sail on the ocean in ships they fitted out. After a rather long absence, they returned with rich booty. The story is famous, and well-known to all Spaniards."

Unfortunately, the Annals, which presumably gave a detailed account of this passage and what was seen in the far west, is lost. We are not certain what direction Khashkhash took, and he may have done

little more than plunder the shores of Spain, France or Britain. Probably, he travelled further afield for Arab historians were by then aware of the geography of northwestern Europe, and this sea-voyage is couched in the context of an All-Encompassing Sea.

These mariners may be those mentioned by al-Idrisi's account of a voyage taken by eighty men from Portugal sometime before the year 1147 (the date when this Muslim realm fell to the Christians). The mugharrirun who took this voyage became famous enough to have a street in Lisbon named after them at the present time: "It was from the city of Lisbon that the mugharrirun set out to sail the Sea of Darkness in order to discover what was in it and where it ended...These men, all ordinary people, got together and built a large ship and stocked it with enough food and water for several months. Then they set sail with the first gentle easterly and sailed for about eleven days until they came to Sheep Island. There were so many sheep there it was impossible to count them, and they ranged freely, with no one to watch them. The party landed and found a spring with a wild fig-tree beside it. They caught some of the sheep and killed them, but the flesh was so bitter they could not eat it. They did take some sheepskins and sailed further south until they sighted an island. They could see it was inhabited and under cultivation. They headed toward it in order to explore and when they were still offshore, found themselves surrounded by boats, which forced their ship to land beside a sea-side city. They saw there men who were all light complexioned, with very little facial hair. The hair on their heads was lank and they were very tall; their womenfolk generally beautiful. They were imprisoned here for three days but on the fourth an Arab-speaking man entered and asked them about their intentions. They told him everything and he told them that he was the king's interpreter and that they had nothing to fear. The next day they were taken to the king where they explained that they had set out to see the wonders of the ocean. The king laughed at this, saying: "My father has already tested the ocean for its "wonders." Some of his slaves embarked westward for a month until they came to a place where there was no more light. They came back having seen nothing of any importance or use." The king then ordered his people to treat them well so that they might have a good impression of his land. Later when the west wind began to blow they were placed in a boat which had been prepared for them and were taken on a three day trip to an adjacent

mainland. Bound hand and foot they were placed on a beach where they struggled unsuccessfully to get free: "When dawn broke we found ourselves in great pain and thirst because we were so tightly tied. Then we heard noises and the sound of people, and we all cried out. Some people approached, and seeing our difficulty, released us. They asked us what had happened and we told them the whole story. They were Berbers. One of them asked us: "Do you know how far you are from your own country?" "No," we answered. "A full two months journey!" he replied. Our leader responded *Wa asafi!* "Woe is me!" and to this day that place is known as *Asfi.*'

Asfi is a port on the southern coast of Morocco. The first place these Arabs visited was *Jazirat al-Ghanam*, the Island of Sheep, a persistent image in many of the early voyages. In related writings *al-Idrisi* says that the Sheep Island was very large and shrouded in shadows. These details seem to place it in the north rather than the south Atlantic, for the Canaries and associated islands are less forbidding places and were never known to have wild populations of sheep. Near Sheep Island the writer says was *Raqa*, the island home of the *Roc*, a red bird the size of an eagle, "which catches fish with its claws and never flies far from its home. Here is found the fruit of a tree, somewhat like a large fig, which when eaten is the antidote for any poison. A king of the Franks (French), hearing of this valuable commodity, sent men to bring him samples, but that ship was lost in the sea."

Paul Lunde thinks that Sheep Island was within the Azores, and that the species of bird mentioned might have been a goshawk. Unfortunately for his argument, he has to admit that "the sheep are a problem. No large animals are indigenous to the Azores and no sheep or goats could have been brought to the islands."

THE SEARCH FOR NORUMBEGA

While the British Empire in America owed its origins to the Italian, *Giovanni Caboto*, the French Empire got its start from a larger number of explorers: In 1506 *Jean Denys de Honfleur* cruised through these same waters and further extended the mapping of the St. Lawrence estuary. In 1521 *Alvarez Fagundes* made a more careful mapping of the Gulf for the

King of Portugal, but the Portuguese were now so single-mindedly pursuing interests in the Far East, they made no effort at exploitation of what was found. Partly in reaction to Spanish interest in the New World, Francis I of France took up the cause of a Florentine navigator named Giovanni de Verrazano. Verrazano had already made a killing by capturing Spanish treasure en route from Mexico. As a result of this success, the king listened when he said, "It is my intention, in the course of a voyage, to reach Cathay and the eastern extremity of Asia." Under commission, he spent his time trying to find a passage through the coast that stretched between Florida and Labrador. He did not solve that problem, but did help settle the geography of the region, allowing the French to plan their settlements.

Before Verrazano sailed the outlines of Nova Scotia, and Cape Breton, and portions of the eastern coasts of Newfoundland and Labrador had been charted but it was still generally agreed that these were islands, or mainland extensions of Asia. In 1523 Verranzo sailed from Dieppe but was driven back to France by storm so that he finally set sail in January of the following year. He eventually made land at Cape Fear, in what is now North Carolina. Following the sea northeastward he finally rounded a broad isthmus and concluded that the sea (Pamlico Sound) just beyond was "that which washes the shores of India, China and Cathay." A good deal more sailing proved he was wrong. Verrazano also tried the Hudson River and stopped off at Newport (which he named "Refuge"). By the sixth of May his ship had moved into the Bay of Fundy, "without ever losing sight of land." This place he dubbed, "the land of evil men...They are as cruel and vicious as others have been courteous...so barbarous that we were never able to communicate with them. As we pulled away the men began demonstrating every form of scorn and obscenity." This was early New England, possibly the Casco Bay region which was adduced, "sterile, capable of producing neither fruit nor grain." Unfortunately, the mountains of this land were the only ones Verrazano considered "rich in mineral matter." In making his hasty departure the explorer had noticed that the natives were wearing "pendant earrings of copper." He brought back "a selection of gold, potions and other aromatic liquors," without naming their source.

There is no evidence in Norse writings that they mined the region.

The "ancient workings" which many explorers found from this time forward were often thought to be the work of earlier Europeans, but the Indians are known to have gone after metals although they were never as interested in gold and silver but sought utilitarian minerals. Lewis Spence has noted that "Traces of ancient mining operations are met with in California and Lake Superior district, the skeletons of the primitive miners being found, stone hammer in hand, beneath the masses of rock which buried them in their fall."

In spite of these enticements Verazanno could not get the eye of King Francis I who was busy fighting a war in 1424 and 1425. While the Florentine cooled his heels, the Spaniards did their best to change Nova Gallia, or New France into New Spain. Putting to sea in 1425 Estevan Gomez steered direct to Newfoundland and almost exactly retraced Verrazano's route in reverse, returning to Spain in the following year. He renamed everything he saw Estevan Gomez Land and antagonized the natives of Maine by taking away a few of these surly fellows. He was followed in 1526 by Lucas Vasquez de Ayllon who was no more adept than any of the others at finding a passage to China.

Meanwhile, in 1527, Henry VIII had second thoughts about Newfoundland and dispatched two vessels on "an official mission" whose nature is not known. Following the most recent maps, one of these ships visited Newfoundland, Cape Breton and the coast of "Arembec", a badly translated twin for Verrazano's land which the latter had called "Norembeque" (now entitled New England). The other ship also started at Newfoundland and made a coastal tour south to the West Indies. Both returned home without the wealth of the East Indies on board.

Verranzo got his sailing orders and financing in 1527 but it might have been better for him if he had remained in France. Some say he was hanged by Spaniards and others that he and his crew were cannibalized while visiting the West Indies. In the next little while his contributions to cartography vanished. The names Angoulesme and Refuge and Francesca (to honour Francis I) fell out of use by 1562. Only three names, Norembeque, Nouvelle France and Arcadie, remained as a reminder of his days of exploration.

Verranzo's brother Girolama misconstrued Noreumbegue as Oranbega, both names once having been used to designate what is now Rhode Island. Later, it was placed on maps as Norombega or Norumbega, being sited further north in the Maine woods.

The extent of Norumbega varied from one map to the next. Some gave it the status of a city, others that of a region, and it was placed in locations as widely separated as Florida and Cape Breton. Verrazano hinted that Norumbega was an extremely wealthy place, which explains why Champlain and Lescarbot made efforts to locate it. It was still shown on maps in 1677 long after their time.

Although France was late in seeking the New World its king was not disinterested in the possibilities of finding a sea-route to Asia, and barring that, the establishment of a French empire in the west. His Bishop, the Abbe de St. Michel, therefore, introduced him to a mariner named Jacques Cartier. The clergyman assured his monarch that Cartier was the best man to represent his interests "by virtue of his voyages to Brazil and the New Land." Certainly, Cartier knew of the location of the fabled isle. When he visited the Montreal region of Quebec he compared a species of wild grain he found growing there to "the millet which groweth in Brezil." There is also a suspicion that he kidnapped, or offered free passage to Europe to an Indian. In 1528 the baptismal records for 1528 at St. Malo, France, show that his wife stood as godmother to a young child, or woman, who was registered as "Catherine de Brezil."

Cartier's mandate, which was delivered to him in 1534 was very unimaginative: "You are to voyage to that realm of Terres Neufves to discover certain isles and countries where there are said to be quantities of gold and other riches." After landing at Newfoundland, Cartier cruised the Strait of Belle Isle, dismissing the adjacent Province of Quebec as "surely the land God gave Cain." About June 25th, the voyagers arrived at an island they named "Isle Bryon," usually presumed to be somewhere near the Magdalen Islands. He found the land here the best seen to date and wrote that "one acre of it is worth the whole of Newfoundland." Birds were plentiful here as were shore animals "beasts as large as oxen and possessing great tusks like elephants. When approached they leap suddenly into the sea." There were also fine trees and rich tracts of soil on which

they found "wild corn (i.e, grain), peas in flower, currants, strawberries, roses and sweet herbs." Except for the absence of grapes, this place sounds very like the Norse Vinland, and suggests that that place was somewhat south of Newfoundland. Cartier noticed strong currents about this island in the Gulf and suspected that there must be an opening further south between Newfoundland and Cape Breton.

His sailing from here took him down the western coast of Newfoundland, past the Magdalen Islands and on to what he thought was mainland (but was probably, in fact, Prince Edward Island). He by-passed this land and toward the end of June swung in toward the north-eastern shore of New Brunswick and the Gaspé, passing into every crack of land in an attempt to move westward.

At a stop on Chaleur Bay Cartier met natives who made it clear that their expedition was not the first to these waters. They showed no shyness but approached saying "Napen ton damen assur tah andtu dameru acertar and others word which we did not understand." The later phrase has since been interpreted as Portuguese pidgin trade-language. In spite of smiles all round, the French were frightened by the horde of erst-while merchant-men and retreated to their ships, finally firing "fire-lances" above the canoes of the locals to discourage them from further approaches. A little later they encountered "a group of women knee-deep in the sea, dancing and singing." Here the French came ashore with "mittens, knives, necklaces and other such ware," and traded all that these people had "keeping nothing back except their stark naked bodies, although what they gave us had low value." From Cartier's description we might easily mistake this land for Hy Breas-il: "Their country is hotter than Spain, and the most beautiful a man could see, level and flat, the smallest space covered with trees even where it is sandy. Here too is wild wheat, which has an ear like rye, and grain that looks like oats. The peas are as thick in the wild as those cultivated abroad, and there are both red and white grapes with the white blossoms on them, as well as strawberries, mulberries, red and white roses, and other flowers of a pleasant, sweet and agreeable smell. There are also fair meadows and good grasses and lakes full of salmon."

This expedition might have passed eventually into the Saint

Lawrence River, but experiencing heavy seas near its mouth, elected to return to Newfoundland. The sea-crossing appearing favourable, he returned to St. Malo during the month of September. This reconnaissance was not entirely without result. In addition to trade goods, Cartier brought back two natives who informed him of the existence of a great northern river at the head of the Gulf of St. Lawrence.

The second voyage went no further toward penetrating the "Asian Sea" but this time Cartier did enter the body of water which was at first entitled the River of Canada, or Hochelaga, but which Cartier renamed St. Laurent after the name of the saint whose day it was when he first came to it. The travellers reached the Isle of Orleans on September 9th and named the Isle of Orleans, the "Isle of Bacchus," because of the abundance of grape vines found growing there. Another coffin nail for historians who have insisted that grapes have never grown north of Cape Cod.

On the 16th the ships arrived at a location now known as Cape Diamond and there Cartier met Indians with whom he had carried on trade in the earlier season, and they took him up this river to the community they called Hochelaga. All the while they filled his ears with tales of a new mythical kingdom, the Land of Saguenay, "an inhabited country rich in red copper." At Hochelaga, Cartier climbed Mount Royal and viewed "the most impetuous cataract it might be possible to see" (The Lachine Rapids) and northward a tributary river (The Ottawa) which the Indians said was the site of Saguenay. It was by this trade route, the natives explained, that gold, silver and copper came into their community. The French were assured that it was only "a months sailing to go to the land where cinnamon and cloves are gathered." Unfortunately, it was also noted that the river was faced with "agajuda" enemies "all armed to the teeth." Forced to overwinter in this harsh place, Cartier had the time to interview Chief Donnacona, who added that Saguenay was "a place where one might find infinite quantities of gold and rubies and where there were white men, much like the French, all dressed in woolen cloth rather than skins." Once there Cartier was assured he might find, "marvels to time-consuming to relate."

Cartier was not the only Frenchman convinced of the reality of this kingdom. Jean Alfonse, master mariner and pilot to the Roberval

expedition of 1542 (latter the first white man to reach Baffin Bay) claimed intimate knowledge of the place, saying it was inhabited by tall men who spoke a Latinate language and worshipped the sun. Their civilization was so wealthy that the women went about in clothing decorated with sable fur.

Further details concerning Saguenay and its capital city of Sagana were given by a letter from one Lagarto to John III, King of Portugal: "And beyond the falls the King of France says the Indian King told him that these is a city called Sagana, where there are many mines of gold and silver and men who dress and wear shoes like our own. There, also, is an abundance of cloves, nutmeg and pepper."

In the spring Cartier buried the bodies of twenty-five companions who had died of scurvy, and to guarantee the good-will of the Indians, kidnapped Donnacona, his two sons and a number of other important individuals, adding them to a small cargo of a dozen nuggets of gold (supposedly samples from Saguenay) carved in the semblance of goose-feathers. Back in France Cartier found Francis 1 involved in warfare with Spain and this may explain why nothing further happened until 1535 when he and his men were instructed to "enter deeper into these new lands." Under a new general commander, le Sieur de Roberval, Cartier did just that; recovering what he thought to be "a most precious cargo" in August 1542. As the forts were being erected in preparation for winter workmen uncovered "great stores of stones, which we deemed to be Diamants." A mine was also found which was declared to contain "the best yron in the world." Further, "on the water side" of this place the explorers recovered "certaine leaves of fine gold as thhicke as a man's nayle."

One report enumerates ten barrels of gold ore, seven of silver, and seven quintals (about a bushel) of precious pearls and stones" as on hand for shipment to France. Laden down with this material from the hinterland Cartier met Roberval at Newfoundland during the middle of the month of June. Roberval was headed west, to establish a colony, but Cartier pointed out the fact that the Indians had become "strangely hostile" and returned without authorization to France. Later Roberval wryly commented that his co-explorer "stole privily away" so that his crew would get "all the glory of the dicoverie of these parts to

themselves." It is more likely that Cartier was thoroughly "bushed" from the difficulties he had encountered and was provoked by Roberval's delay in carrying out his part of the work.

A preliminary appraisal of Cartier's "gold" in Newfoundland had assayed it as of good quality, but in France it was soon discovered to be iron pyrites or "fool's gold." The diamonds proved to be a good grade of quartz crystals. Afterwards anything of little value was proverbially reduced to same status as these "Canadian diamonds." Surprisingly, Samuel de Champlain repeated this mistake while visiting this same locale "le riviere des Canadas." He said he saw "diamonds in the slate rock, better than those of Alancon (France)." Apparently, he took no samples. Much later on Sir John Franklin noted that he found diamonds when he and his men were attempting to penetrate the North West Passage in the Arctic seas.

Back on the Island of Montreal, Roberval investigated the Saguenay River for a distance of ten miles, and then spent his own cold miserable winter in the New World. His narrative says nothing of his return to France, but we know that the colony was abandoned and he was home by the autumn of 1543.

In England, merchants had seen little return from considerable investments in western expeditions. Among clerics the idea was beginning to develop that "the countries lo the North of Florida (needed) to be reduced to Christian civility by the English nation." In addition, many of the landed class began to perceive the New World as a potential dumping ground for the unemployed, the "Luste youthes turned to no profitable vse." This was more than a fancy for there was recurrent inflation in England at that time, and the rising cost of living was leading landless peasants in the direction of riot. During the reign of Henry VIII the problem of the indigent poor is seen reflected in the fact that hanging was the most common cause of death.

It was reasoned that the establishment of colonies would eliminate causes of thievery and discontent, while opening these new allied markets that might revive England's foreign trade. Shipping would be encouraged and the merchant marine strengthened to meet the demands of an east-

west trade. Since the merchant marine was not then distinct from the Royal Navy this would effectively increase the British ability to repel foreign fleets. There was also the growing importance of the North American fishery and the suspicion that it might be more economically operated from outposts in America. The route of Cathay was, of course, still sought, but the search had been pushed into northern waters by Portuguese control of the southern routes. Initially, this last directive was more important than any other, but when it became evident that North America had no natural embayments connecting the Atlantic and Pacific Oceans, the other aims came into play in the conquest and occupation of America.

The next push in the direction of China was made not toward the west, but into the northeast, where men hoped to circumnavigate Russia. A joint stock company sent out three ships along this route in 1553, but they all stalled in the northern ice. Other ships soon confirmed the impassable nature of this part of the Arctic. The company, seeing that it could trade into the land of Ivan the Terrible, entitled itself the Muscovy Company, reflecting its renewed mandate.

It was recognized that Russia lacked the trade potential of China and the Indies and the western route was still being considered. The original enthusiasts of a northern route to China were now disinterested or dead, with the exception of Dr. John Dee, a brilliant Welshman who had managed to find favour at the English Court. He was known there as an astrologer and necromancer, and gossip said that his supernatural powers were obtained through compact with the dark side. More important to our story is the fact that he was a master of theoretical navigation and an accomplished geographer, publishing numerous tracts, handbooks and essays on unknown lands.

He had put his money in the search for the northeast passage, but when that failed, he became an enthusiast for a new search in the northwest. In this he had the support of gentlemen such as Sir Humphrey Gilbert and his half-brother Walter Raleigh. Between them they built a case for reaching China by travelling north of Labrador and this was represented in Gilbert's 1576 publication, Discourse of a Discovery for a New Passage to Cathaia. In it, the author summarized the evidence for

such a passage.

This book was actually put together ten years before it saw print. It was brought forward primarily to support Michael Locke and Martin Frobisher who were now soliciting the Muscovy Company for support in renewing the search for a sea-trail to China. Frobisher got Queen Elizabeth's support and a lead by obtaining a license to make the attempt. Lack of patrons delayed him at first, but Gilbert's discourse on the economic advantages of a Northwest Passage helped to finalize an expedition consisting of three ships, which set sail in June 1576.

One of their ships was lost in storm off the coast of Greenland, and the ship Michael gave up the tour and scurried back to its English port. Only Frobisher in the Gabriel went on, finally entering Frobisher Bay on Baffin Island. Not realizing that this was an embayment, Frobisher mapped it as the "Frobisher Straits," thinking this was probably the passage to the East. Here, he landed and made contact with the Innu, who were so friendly they were ultimately invited aboard. Expecting a friendly reception five sailors rowed ashore never to be seen again. This was their only small boat and its loss left the remaining thirteen explorers with no easy way of reaching shore. Frobisher, forced to return to England, enticed a native aboard ship and kidnapped him in retaliation for the loss of his men.

On the first voyage a brief reconnaissance at Frobisher Bay brought back a "black ore." The preliminary assay suggested a high gold content so there was great excitement when the Gabriel returned to Britain. A new company, the Company of Cathay, was immediately put together. Locke was appointed governor after contributing £300 to the new business. Even Queen Elizabeth was impressed by rumours of the viability of the company, and she put down £1,000 towards its expenses.

With this help it was not hard for Frobisher to make a second voyage to Frobisher Bay, where he dropped anchor in July 1577. This time he remained for only five weeks, sailing away with 200 tons of rock which he brought back for assay. Preliminary results were mixed, but encouraging enough for another voyage to be mounted in May 1578.

The third voyage was a major undertaking involving more than four hundred men and twenty ships. In all eleven hundred and thirty-six tons of "ore" were mined and loaded for shipment to England. One ship, containing about a third of rock which had been taken was wrecked off the coast of Ireland. At home attempts to process the gold failed so that the rock was finally judged to be without value. It is known that the bearing-rocks came from several locations, and that silver was found as well as gold, but there are still arguments concerning the exact nature of the black rock which they carried back across the Atlantic, the quantity of gold and silver actually seen, and the matter of the variability of the assays. These questions are examined in Martin Frobisher's Northwest Venture by D.D. Hogarth.

This mining expedition left Baffin Island in August and sailed east into very storm waters: The three voyages had now run up a total of £20,000 in costs, and a fair part of this was unpaid. Locke was immediately thrown into debtor's prison and the stockholders of the company went bankrupt. In response Frobisher, himself, took a ship back to sea, and turned pirate. He was later able to redeem himself in the eyes of the Crown when he fought against the Spaniards at the time of the Spanish Armada. He died in the service of his country at Brent in 1594.

Fay-gold was illusive stuff, frequently reverting to a base metal when it was carried away by humans. Equally hard to re-locate was Buss Island, which was first seen by a passenger aboard one Martin Frobisher's "busses" on his third voyage in 1578. In that year Frobisher and his backers had put together the largest fleet of ships turned loose on the Atlantic to that date. The fifteen ships, of which eleven were newly commissioned, included the Emmanuel, a "wave-kisser" known semi-affectionately as a "busse." These vessel strongly-built two- and three-masted craft had an excellent reputation in the herring fisheries of Holland and England. Since the Emmanuel hailed from Somersetshire, England, she was alternately named the Busse of Bridgewater.

When the fleet arrived at Baffin Island they encountered the worst weather experienced on any of the voyages and were led to conclude that "the wynter there must need be extreme, where they found so unseasonable a summer." In spite of this the ore-carriers were loaded by

August, the Emmanuel being declared full to the "Sea Marke" with 110 tons of rock.... Earlier in the summer she had damaged her prow and "leaked badly" so that she was left out of the initial sailing roster which saw ships leaving Baffin Island in a howling gale. When the weather settled the next day, she followed their lead into the Atlantic headed toward England.

On September 12, James Newton, the Captain of the Emmanuel reported that "The Busse, of Bridgewater, as she came homeward, to ye South East-warde of Freseland, discouered a greately llande in the latitude of - Degree, which was neuer yet founde before, and sayled three days alongst the coast, the land seeming to be fruiteful, full of woods, and a champion countrie."

It has been suggested that the failure to give an exact location suggests that the information was second hand but it seems more likely that the island was seen as having potential value. Not much attention was made of Newton's discovery until Thomas Wiars, a passenger on the Emmanuel, told his story of the find in Richard Hakluyt's book Principall Navigations... Wiars gave a great deal more information saying that the new island was ten days sail southeast of Frisland, a distance of about 150 miles. He said they sighted it first on September 12, and discovered it was 25 leagues long, the southern part being "at 57 degrees and 1 second part, or thereabout." By-passing it, they saw "two harboroughs, " and they left sight of it the following day. It was apparently within the ice-flows, for this reporter said that the ship was "not cleare of yce till the 15th day of September." Ten days later the Emmanuel arrived at Galway, Ireland.

James Hall, the chief pilot in the service of Denmark, was the next mariner to chance on Buss Island. In 1605, he looked for it in the supposed position but saw nothing and concluded that it had to be "placed in a wrong latitude on the marine charts." The following July his ship was forced to double about ice-flows and this time he found it "lying more to the Westwards that it is placed on the marine charts."

In 1609 Henry Hudson kept a lookout for Buss Island "but could not see it." The next sightings came in 1671 when the island was seen by two

different expeditions: Captain Thomas Shepherd found it located at 58 degrees 39 min. bearing west by north, 296 sea-leagues from Mizen-head, Ireland. This captain brought home a map of Buss showing Rupert's- and Shaftsbury's Harbour, and two offshore islets. He reported that "the Island affords stores of Whales, easie to be struck, Sea-horse, Seal, and Codd in abundance; and supposes thatt two voyages could be made in a year. The sea is clear from Ice, unless in September. The land is low and level to the Southward, and some hills and mountains in the N.W. end...This Island hath also beenm seen by Captain Gillam in his Passages to and from the North-West."

As for Gillam, The English Pilot reported that he had seen Buss in August 1668 during "dark and foggy weather." He observed "many Flocks of small birds...the land bearing away at 59 deg. 35 min." His observations were made from the ketch Nonsuch trading into Hudson's Bay for the newly-organized Hudson's Bay Company. Elsewhere it was said that the island in question was seen "betwixt Iseland and Grooenland." It is not said what this mariner saw on the island, or nearby, but the Hudson's Bay Company was caused by these reports to seek a charter to the island. On May 13, 1675, this place was granted to the Company on payment of a £65 fee. In order to explore the new mid-oceanic property, Captain James Golding and Captain Shepherd were ordered to put in their on their way to Hudson Bay. As it happened their crossing was hazardous, and their arrival in Canadian waters so delayed that that order was set aside.

When Buss was first charted it was located at 58° N. latitude at between 27° and 31° W. longitude, following the location given by Wiars. By the eighteenth century numerous voyages made it clear that there was nothing at this place in the ocean so some cartographers eliminated it altogether. Others considered it a part of Frisland, and De l'Isle showed it on his 1720 map as "Isle de Buss, ci devant Frislande," the "Isle of Buss which was formerly Frisland." Later a legend on another map read "The submerged Land of Buss, nowadays nothing but surf, a quarter of a mile long. Most likely it was originally the great island of Frisland." Afterwards reference was often made to the "Sunken Land of Buss." Johan Anderson (1746) tells of an unnamed skipper who sounded the waters of the supposed location and discovered "an inexplicable surf extending over a short distance, notwithstanding a depth of 100 fathoms." Again in 1776

Liutenant Richard Pickersgill said that a Greenland master told him of sailing in these same waters wherre he was "alarmed by breakers" although his soundings showed 59 fathoms. Pickersgill himself took soundings over what he supposed to be this lost island and noted "a shag, gulls, and other signs of land not far hence." Pickersgill was convinced that he might have re-discovered Buss "if we had had more time." The shoal that he passed over he named Lion's Bank after his vessel, H.M. Brig Lion. Unfortunately he failed to give co-ordinates, but some mariners think he was further east than he supposed, probably over the western portion of Rockall Bank which is two hundred miles northwest of Ireland. The search went on for remains well into the nineteenth century, but Sir John Ross found the bottom at 180 fathoms while Sir William Perry sounded it out at more than 1120 fathoms. This "sinking island" had submerged still deeper. Even so, Captain DeCarteret looked for the place in 1903 when he way laying the Atlantic Cable. He did note "a moutainous district" on the sea bottom mid-way between Newfoundland and Ireland, but here the bottom was at 1550 fathoms. The last representation of Buss on a world map, appeared in Keith Johnson's Physical Atlas, published in 1856. There it was shown as a nameless speck in the vast Atlantic at 57°N latitude, 25° W. longitude.

Equating Buss Island with Frisland was hardly helpful since that later was often regarded as a siumilar land of fable. Like Buss, Frisland was ultimately removed from the sea-charts. Donald S. Johnson thinks that the latter is "a curious hybrid." a place with "the geography of the Faroe Islands and the contour of Iceland, Some held that Frisland and its satellite islands became submerged but others thought that this island must have been a misappropriated part of Greenland, Iceland or the islets associated with the Faroes, the the Orkneys, the Hebrides, the West Isles or Ireland. The only problem is that none of these are in a mid-Atlantic location and it is difficult to believe that so many master-mariners were wrong in locating this island.

This does not mean that Canadian waters were empty of vessels in this period: the first Basque fishermen were probably on the banks of Atlantic Canada when Cartier first set sail in 1534. It is estimated that their whaling stations eventually supported a population of 900 and that they were at it for seventy years, until Champlain's colonization of

Acadia. The Basque whaling enterprise was, in fact, Canada's first major industry, a fact that might have remained cloaked except for the research of Dr. Selma Barkham. An immigrant to Canada in 1950, she married a McGill architectural student who had an interest in Basque buildings. That took the pair to southern Europe, where Barkham dogged Spanish libraries, pursuing her own interest in early Canadian history. In 1972, she found the first references to the Canadian ports favoured by Basque fisherman in obscure marine insurance policies. These discoveries brought support from the Public Archives of Canada and she went back to the Old World looking for places that might be archaeologically useful. In 1977, following a decade of research, she found her first artifact of their times, a 400-year old harpoon head on a marine terrace at Schooner Cove, in southern Labrador. In every bay mentioned in the old manuscripts, her research team found Basque tiles and bits of earthenware ceramics of correct date. Turfed-hummocks of grass were unearthed to reveal Basque whale-oil works, and throughout the region the discoverers located huge piles of whalebone.

None of these artifacts were as striking as the wreckage of the ship San Juan which Barkham knew of from research in the archives at the town of Ofiate: Here she learned that two Basque whalers had invoked a power of attorney to recover their share of whale oil from a wrecked ship captained by Joanes de Portu. She found that it had gone down at Buytres (Les Buttes), a whaling station at present-day Red Bay. On their first dive there in 1978 they brought up an oak plank and later sifted the silt from the largely intact form of a vessel, the earliest shipwreck known in Canadian waters. The San Juan was only 90 feet from the shore of Saddle Island in 40 feet of water. Nearby, on land, a team found the remains of two fishing stages and a former dwelling.

As James Tuck has noted, the Basques established the whale and whale-oil trades. His research suggested that these summer residents lived a sopartan and dangerous life. In midsummer 1982, he unearthed a mass burial site on Saddle Island which appears to have served the Red Bay residents as a burial ground. In 1983 he found more mass graves, "properly laid out," excepting two corpses "without coffins." It is not known if some of these men were victims of the sinking, but records from the past tell us what happened to the San Juan: Carrying 1,000 barrels of

oil in her hold, the ship was moored for a return to France on the night of a gale. Unfortunately, some sailor had failed to secure her mooring lines, and in the wind the ship swung to broad beam and struck rocks. She is said to have gone down immediately although her masts and fore-castle existed for a time in the pounding surf.

The object of the Basque hunts were bowheads and right whales which are now conspicuously absent from Newfoundland waters.. Not much wonder! When a French sealing-captain named Sieur de Coutremanche came to Red Bay in 1705 he found the sight of thousands of whale skulls littering the beach "unsightly," and disturbing at some very deep level. Barkham thinks that the Basques killed 20,000 whales of both species every summer and they did this for seven decades. Even if the Basque fishery was not lost to extinction of the whales, it was destined to an end. Many of the fishing boats sent to Newfoundland and Labrador were pressed into military service when the Spanish Armada sailed against England in 1588. That enterprise dealt a crippling blow to the Spanish economy as a whole. In the end venture capital fizzled out and the Labrador project was at an end.

While the Basques were entrenching themselves at the north of Newfoundland, Sir Humphrey Gilbert acquired a patent to colonize the island, and was aided in propagandizing the virtues of the place by Richard Hakluyt Junior and Senior. Fortunately he had not been entangled financially in the dealings of the Company of Cathay, and when it collapsed he gave up propagandizing for a northwest passage. Before his Discourse came to print he was given a part in the English conquest of Ireland. During a large-scale military operation in 1566, he expressed his opinion that conquered nations could only be made obedient through fear. Afterwards he followed his own dictum, killing every living thing within keeps that refused to submit to his demand for absolute surrender. The Irish lords who eventually bowed before him had to come to him through a walkway lined with pikes bearing the heads of their relatives.

Afterwards Gilbert acted as a member of Parliament, saw further military service, and returned to England in 1577. At this time he prepared a discourse for the Queen satirizing "how her Majesty might annoy the king of Spain by fitting out a fleet of warships under pretense of a

voyage of discovery and so fall upon the enemy shipping destroying his trade in Newfoundland and the West Indies and possess both regions."

It was laid out that a second expedition should follow the first, ravaging the Spanish West Indies, finally occupying Cuba and Santa Domingo, where English colonies would supplant those of the Spaniards. Elizabeth tacitly assented. Her carefully written reply gave Gilbert a patent to lands in the west and encouragement to "discover searche find out and viewe such remote heathen and barbarous landes countries and territories not actually possessed by any Christian Prince or people as to him..."

In this first English colonial charter, Elizabeth distanced herself from the original proposal specifically reminding Gilbert not to attack foreign shipping and colonies. There may have been a hidden agenda, but whatever the case, a fleet was assembled. Gilbert intended to sail westward in the summer of 1578, but his ships were not in place until August. Other technical difficulties led to an abortive sailing in November. Gilbert hoped to set out again the next summer but the Privy Council would not renew sailing orders since they needed some of his ships for other duties.

In June 1583, Gilbert finally put to sea with a fleet of five ships housing a complement of 260 men. It was his intention to travel the northern route and make a stop-over at Newfoundland, proceeding southward from there as soon as possible, in order to avoid confronting the "continuall fogge and thicke mists, the tempest and rage of weather" which characterize these waters in winter. The expedition included not only "shipwrights, masons, carpenters and smiths," but also, "minerall men and refiners," and entertainers, "Morris dancers, Hobby horse, and Maylike conceits to delight the Savage people, whom we intend to winne by all faire means possible."

Almost immediately the expedition fell on hard times: Within two days of sailing the lead ship Raleigh was forced to turn back to England since a majority of the sailors became ill with a contagious disease. The Golden Hinde had to be substituted as the craft from which the others took their instructions and bearings. Through the month of June, the

remmaining ships never experienced "a faire day without fogge or raine, and the windes bad, much to the West Northwest." Originally they had planned to hold south as much as possible, moviing into northern waters at the end of the trip. The contrary winds and fog made it impossible for the ships to travel as a unit and they were driven so far north they soon encountered "mountaines of ice driven upon the sea." They were soon caught in the Labrador Current where they observed icebergs being carried southward tro the weather of us." As other travellers had noted "some current doth set that way from the north." They moved with the floes and seven weeks out of England sighted land at about 51°N. They were not able to see northern Newfoundland for long because of heavy fog, but perceived that the land consisted of "hideous rockes and mountaines, bare of trees and void of any green herbe.."

Following the eastern coast southward the Golden Hinde rejoined the ship Swallow in Conception Bay. To Gilbert's surprise she was found restocked with provisions of clothing which had been pirated from a foreign fishing vessel. Continuing on their track, these two vessels joined the Squirill off Saint John's harbour, where they all berthed on August 3. At this time there were thirty-six vessels berthed, of Portuguese, Spanish, French and English registration, all engaged in fishing. In addition there were four English warships sent in the day before to secure a landing for the passenger ships.

On land the intending colonists set up a few rough wooden huts and their leader unrolled a parachament and read his patent authorizing him to take possession of Newfounndland in the name of his monarch. The banner of England was then set up and a twig and sod presented to Sir Humphrey in true feudal fashion. This grant gave Gilbert the theoretical control over lands two hundred leagues in every direction, which means he then owned Nova Scotia, New Brunswick, Cape Breton and Prince Edward Island as well as less desirable properties to the north.

Sir Humphrey had with him two hundred and fifty Devonshire men, including the blue-blooded son of Sir Otho Gilbert of Compton Castle, Torbay. His mother was said to be a direct descendant of the "Emperors of Byzant." Sir Otho died, and his widow remarried Walter Raleigh, a genntlemen "of an ancient but impoverished line." This explains why this

youthful man, who was later to obtain fame at the Elizabethan court, sailed with Gilbert.

In the two weeks Gilbert was resident at Newfoundland he sent out men to gather as much information about the island as they could find. Even in that short time, he had the typical problems which arose at landfall after a long voyage. Some of his men deserted and went native hoping to avoid further travel. One gang of his folk overpowered a ship loaded with fish, set the original crew out on shore, and sailed off. Elsewhere some of the men continued to suffer from sickness and some died. The overall effect was the reduction of Gilbert's men to the point where he could no longer adequately staff all four ships. He loaded the sick sailors and passengers aboard the Swallow and directed them to return to England. On August 20, he took the remaining three ships and sailed south of Cape Race. They were becalmed there and spent some time laying out "hookes and lines to take Codd." In less than two hours they added to their provisions to the extent that they had no worry over food.

Gilbert intended to sail to Sable Island, where it was rumoured that cattle and pigs thrived in the wild, having been set ashore there some thirty years before. As they headed off across the Gulf of Saint Lawrence the weather was, at first, "indifferent good," but on August 29, a gale and fog fell on the vessels. On the following morning they all found themselves in shallow white water. Their largest ship, the Delight, ran up on rocks before she could get sea room. The other ships could not make rescue and it was later learned that the captain and almost a hundred men perished in that accident. Only a handful escaped in a small boat, and they were able to make their way to safety over the next six days.

The remaining ships were still endangered as the weather continued "thicke and blustery." They beat up and down the coast of southern Nova Scotia always attempting to reach deeper water. The loss of Delight meant that the bulk of their provisions were gone. The Squirrel was particularly destitute and Sir Humphrey was, at last, persuaded to return to England "before they all perished."

All the ships put about on August 31 and amidst very rough seas, they returned to Cape Race in record time. Sir Humphrey had been aboard

the Squirrill because it was their smallest ship and best adapted to exploring bays and coves, but he now transferred to the Golden Hind so that the resident-surgeon could treat a minor foot ailment. The captain of the Hind advised Gilbert not to return to the smaller ship but he said he was unwilling to "foresake my little company going homeward." This was an unfortunate choice for the Squirrill nearly floundered off the Azores, and was lost to the other ships in a squall. In spite of a long search no trace of wreckage or survivors was found. What was left of the Newfoundland shack-town was now abandoned by the remaining explorers. Upon Gilbert's death, Walter Raleigh, succeeded to his half-brother's patents, and obtained a charter for colonization from Queen Elizabeth.

When Sir Walter mounted his own expedition in the next year he took note of Gilbert's difficulties in mounting a settlement in the north, and directed the two commanders of his fleet to sail by way of the Canary Islands on the southern route looking for a more temperate place than Newfoundland. By the tenth day of July, the two barques were in American waters and soon after landing on an off-shore island they encountered Wingina, the native king of Wingadacoa, from which the name Virginia. The intending colonists observed that the queen of this land had "about her forehead a band of white coral, and so had her husband, but many times, In her ears she had bracelcts of pearls hanging down to her middle, and these were of the bigness of good peas. The other women of the better sort had pendants of copper hanging in either ear. The king himself had on his head a broad plate of gold, perhaps copper, for being unpolished we knew not the metal; he would not hoivever by any means suffer us to take it off his head. (The adults) were black-haired for the most part, and yet we saw children that had very fine auburn and chestnut-coloured hair." These people exchanged trade goods with the Europeans, offering "leather, coral, and divers kinds of dyes all very excellent.."

Like most of the American coast this place proved to be a land of grapes: "Their drink is commonly water, but while the grape lasteth they drink wine...but it is sodden with ginger in it, and black cinnammon and medicinable herbs and trees." At this place, the explorers found that the natives had encountered white men twenty six years before (1459). They said that these people had been shipwrecked but with the help of the locals had put together make-shift sailing ships and departed after three

weeks on the island. Shortly after, men of the tribe had found their boats abandoned on a nearby island and saw nothing more of them.

Eventually the colonists moved on to another island called Roanoak where they assisted the king of Wingadacoa in pursuing a war against a neighbouring tribe. This first reconnaissance returned to England before year's end, but a second expedition consisting of seven vessels was outfitted and returned to the Virginian coast in the next season. Here the colonists received a rude shock after they answered the theft of a silver chalice by burning the corn crops of the nearest town. That fall one hundred and eight men were settled on Roanoake, and left to their own resources. They had great difficulties with the native population during the cold season and finally had to abandon their settlement the following June when relief came from England.

Sir Walter made another attempt at Chesapeake Bay the next year, establishing a town called Raleigh. Checking on the whereabouts of the skeleton staff left at Roanoke they found abandoned huts and no living people. From the reluctant statements of various natives they concluded that all these men had been exterminated by some combination of disease and hostility. Unfortunately the new town of Raleigh was built as England braced for its historic meeting with the Spanish Armada and attention was diverted from the needs of this colony. In the end, having spent £40,000 without any return on the investment, Raleigh signed away his interests to Thomas Smith, Richard Haklyut, and others, who had the financial means to continue the project. Unfortunately, these men lacked the will to support the colonists, and by the time help was sent to them in 1590 the colony was seen to be deserted. Aside from the word "Croatan" inscribed on the bark of a tree no trace was found of any colonist. The heart-sick Raleigh mounted five missions to try to find these countrymen, but they were gone, and it could only be hoped that they were incorporated into some local tribe rather than left as the victims of warfare or famine.

As we have noted elsewhere Frobisher made three expeditions into the Canadian arctic between 1576 and 1578. Aroused by these expeditions John Davis explored the area west of Greenland in three additional expeditions made between 1585 and 1587. He explored the coast north as far as 72°, and cruised both sides of the strait named after him. He also

discovered and examined Cumberland Sound on Baffin Island, and on his return to England wrote a book entitled The Worldes Hydrographical Description,. giving momentum to further seraches for passages to the east.

The British might not have noticed the successes of the Basque folk except for the fact that a British privateer captured the trade ship Bonaventure as she was passing the Scilly Isles, September 6, 1591. The revelation of her inventory astounded the English merchants. Her cod, walrus hides and walrus ivory tallied one thousand four hundred and thirty pounds, exclusive of the value of the ship. Strangely there was no overt reaction to this in thenext year, but in 1593, Peter Hill of Surrey sent his ship "Marigold," to have a look at the St. Lawrence estuary. Unfortunately the captain of that ship was tardy in sailing and had to end the season "doing a little desultory cod-fishing down the Nova Scotia coast," a process so unproductive he ended attempting to seize "prizes" off the Azores. In that same year, a small ship named "Grace" cruised Newfoundland and made a tidy profit by salvaging iron bolts from French wrecks, at the same time picking up "seven or eight hundred whale fins," which they found abandoned on a beach.

In 1595 Stevan de Bocall suggested going to Newfoundland "to seize Basque whalers". A confederate also noted that Bocall "knows where the copper be...that whereof I have been shown, but never saw better in my life." These mines might have been in Newfoundland but historian David Quinn thinks they "may have been within the Bay of Fundy," because of the persistence of this theme in company propoganda. At a later date Bocall, who was a Huguenot with a deep-seated hatred for French Catholics, openly said that their prize was on the Island of Grand Manan. If anyone pursued this resource there is no evidence of it in written literature. As far as we know the ancient mine has not been rediscovered butAnna P. Sabina has noted that native (almost pure) copper is found on the island "in scattered nodules and irregular patches in cavities in trap rock along the western shore and along the east side from Whale Cove to Northern Head." Interestingly, this region is one of particular significance to the local Indians, being a place where these is a "hole" between the worlds. Sabina says that the best specimens of copper are , however, in the vicinity of Southwest Head which is in the southern part of the place.

Apparently ignoring the mineral wealth, the English formed an association to subdue the Magdalens and to steal the Basque walrus and fish landings for the year 1597, but one of the English boats collided with Cape Breton rocks and the other arrived when the season was past. Although the privateers did steal a French ship, they only succeeded in replacing their loss, and had no year-end profits.

Edward Hayes and the younger Haklyut got together the expedition which explored New England in 1602. Having had such troubles with the Gulf of St. Lawrence, these Brits deliberately omitted mention of the place from his advertising prospectus, emphasizing instead the mineral wealth of the Bay of Fundy and suggesting the establishment of a trading post at Elizabeth's Isle off the coast of Massachusetts. Throughout the second half of this century, the French continued to come to Newfoundland each year. Most were in contact with the Indians, and from time to time brought back a few trinkets which kept interest in exploration barely alive. The most important economic developments of the sixteenth century did not centre on precious metals but on the exploitation of the fisheries and the fur trade.

During the initial era of the fur-trade, an expedition was undertaken by Etienne Bellenger who went first to Cape Breton and travelled from there two hundred leagues down the coast until he came to villages in which there were "houses made of bark." Here he bartered at ten or twelve villages bringing away ore said to contain silver as well as several varieties of fur. Bellenger paid forty crowns from trade trinkets which realized four hundred crowns so he returned to France a happy man.

His voyage had geographical significance since he noticed Grand Manan Island, charting it as Menane, which was supposed derived from the Penobscot Menahan. This island was first described by Hakluyt, who extended the name to what is now the Bay of Fundy. Grand Manan Island was often referred to by the local Indians as ktanagook, "the most important island," which may explain why it was represented as being the le Grand Menan on the maps of Champlain and later voyagers. The shortening of this name led to the Bay of Fundy being termed Grand Bay. On at least one early map the Fundy is designated, in full, as Le Grand Baie

de Norumbega, "the Great Bay of the Northern Forests." De Monts preferred La Baye Francoise after the style of the Roman Mare Nostrum (Our Sea), but none of these names persisted. Basque and Portuguese fisherman of the sixteenth century called the waters between Nova Scotia and New Brunswick Fondo, a shortened form of profundo, meaning "deep," but Ganong thought that Fundy was derived from an English misspelling of fendu, "split," a word that has reference to the fact that the Bay is ultimately divided into the Minas Basin and Chignecto Bay at its headwaters.

Another form of Grand is seen in the Norse goddess Groa, the "Green-maker," who attempted to remove a flint splinter (representing the cold season) from the forehead of Thor. Unfortunately she lost the train of her incantations and the stone remained embedded. Guerber says she confers with moon-goddesses elsewhere in Europe, one of these being the Gaelic summer-goddess Mhorrigan. This sorceress is probably represented in the Gaelic word grugach, wrinkled which resembles grùig, one having an "attitude problem," churlish, grudging, gruc, sulky, the Eng. "grudge." Note also gróbag, a poor shrivelled woman, thus the Cailleach bheurr, who is the over-wintering form of Mhorrigan. A giantess of Fomorain descent. Also gràg, the croaking of crows, which were her totem-animals, gris, gravel, gris, horror, the Eng. grisly, grugach, the "hairy-one," a sith or brownie, the word may also suggest "gnarled trees," in particular the thornbush. The English word grey is part of this family. In Gaelic mythology this goddess is obliquely referred to as the grisionn, i.e. the gris-fhionn, the "brindled furry-one or the "grey-white-one." She is thus, the creature identified elsewhere as the Bafinn, or "death-woman," literally the "white-death," the banshee or Fate of all men and the gods.

Groais Island seems to be located off the northeastern coast of Newfoundland on the earliest charts but somewhat later Newfoundland itself is seen represented as Grand Isle while the adjacent Cabot Strait is sometimes marked as Grand Bay. Newfoundland, Prince Edward Island and Grand Manan have all, at times, been identified as "beginning places" in aboriginal mythology. In each case, tales tell of Glooscap, the god-hero of the Algonquins, entering the Underworld through caverns located here and emerging at some other place far away. In each case this tale is seen as a metaphor for death and rebirth, the god attaining power over death

en-route.

In 1602 the East India Company of England hired George Weymouth to follow up Davis's work "in the good and luckie ship Discovery." The ship may have had good luck in its past, but this time out the crew mutined and Weymouth was forced to return home having uncovered very little new information. The next voyage from the British Isles did not take place until 1606. In the interval, the Danes, supported by Christian IV, assembled three separate expeditionary forces, all hoping to make contact with the long lost Greenland settlements. Their attempts were futile, but one of their leaders, an Englishman named John Knight, later found employment with the Moscow Company, which had headquarters in London. His voyage under their auspices nearly cost him his ship, which did manage to regain its home port after making extensive repairs on some foreign shore. Twice, afterwards, he sailed into the northeastern ocean hoping to find a passage around Russia that connected with the Orient, but these attempts were frustrated by floe-ice and he did not get as far into the arctic as Henry Hudson.

THE SEARCH FOR L'ACADIE

At this juncture a new man came to the fore in the French realm: a Breton marquis. Mesgouez, Seigneur de La Roche, a former page and favourite of the Queen Mother to Henry III. La Roche was the first assigned "the holy work of advancing the Catholic faith" along with the exploration of "Canada, Hochelaga, Terres-neuves, Labrador, riviere de la grand Baye de Norumbega" and anything else not already inhabited "by the subjects of any Christian Prince." He also held a monopoly of the fur-trade in New France but was soon passed over in favour of Pierre Chauvin de Tonnetuit who was given control of a trade that included "Canada, the coast of Acadia, and all other parts of New France."

Chauvin, a native of Dieppe, had served the new king, Henry IV as the head of his Calvinist troops. This explorer put together a fleet of four ships in 1600, placing Francois Grave "a man most knowledgeable about voyages at sea," in charge of the ocean-crossing. A casual passenger to

New France was Pierre Du Gua de Monts, a gentleman of Italian origin and a Huguenot like most of the crew. Another travelling companion was an able cartographer named Samuel de Champlain whose notes and maps give us what knowledge we have of this foray into the New World.

The first settlement was made at Tadoussac, Quebec but the merchant adventurers were not entirely satisfied with their location and the climate. Further they were unable, at that time, to conquer the Saint Lawrence Rapids and began to suspect that Asia was inaccessible by this route. In the summer Champlain and Grave made a reconnaissance of the Gaspé probably to obtain fish. In the few days they were there they gained a general impression of the region. From the Indians, Champlain learned that there was a giant inhabiting the region, "un monstre epouvantable (horrible) ...many savages have assured me this is true: Near Chaleur Bay to the southward lies an Island (Miscou?) the haunt of the monster called Gougou. It has the form of a woman but most hideous and of such size that the tops of our masts would not reach to her waist. They say she has often devoured and still seeks people, carrying them away in a huge pouch. Some have even said the pouch alone is so large it might well contain our sailing-ship. this creature makes horrible noises and the Indians regard her with complete terror, many assuring me they have seen her from a distance. The Sieur Prevert de Malo has said he once passed near the haunt of this frightful beast and attests that he heard it making strange hissing noises... What makes me believe what they say is the general fear in which it is held. If I were to record all of the stories that are told concerning the Gougou they would certainly be taken as untrue, but I hold that this isle is the dwelling place of a devil that torments these people in the manner described."

Marc Lescarbot, a French lawyer and versifier, who was less widely travelled than Champlain (he wintered at Port Royal 1606-07) took a swipe at Champlain and the Indians when he wrote: "To speak frankly, the story of the Gougou originated with Monsieur de Prevert who told a fable wrought of very similar stuff saying he had spotted the devil playing lacrosse with a savage on a headland. While he could see the savage and his stick he could only see the stick of the Old Gentleman... As to the Gougou...though a few savages speak of it with dread, it has the same weight as the Phantom monk of Paris, which some feeble-minded folk at

home truly believe exists. The truth is, these tribes are at constant war and it is no wonder they have attacks of panic terror and hypochondria, thinking they see and hear things that do not exist."

Champlain fell out with Lescarbot for writing the "Histoire de la Nouvelle France," thus rushing to print his views as an "first-hand witness," to events in Acadia. As the semi-official chronicler Champlain had reason to be miffed, noting that Lescarbot was hardly an "ocular witness." having only once stirred from the security of Port Royal to visit the old encampment at St. Croix, "here the only thing he noticed was the fleas he picked up at an Indian concave."

More practically, Champlain was informed of a river flowing into Bay Chaleur which might be followed into the interior where there was "a type of metal resembling silver." This material, he was told, lay in the earth in bands "a foot and a half deep." As far as we know nothing of great significance has been found along the Restigouche River,

The Indians also told Champlain about the Souriquois River (the Saint John), which they said emptied into a large southern bay (the Bay of Fundy). Here they told him the Chief was Secoudon, a man who had once accompanied Sarcel de Prevert in a search for mineral wealth. According to them, those two had found a copper mine "near the sea on the South side (of the Bay of Fundy) at the entry to a place called Bassin des Mines.."

Back in Quebec he read Prevert's reports on the region. The explorer said he had indeed found a "high mountain, where there are huge quantities of verdigris marking tailings from an ancient copper mine." Prevert said that native copper fell from cliffs in the region and that "upon a nearby island" he saw "a silver metal" which he felt was "neither tin nor lead but which resembles silver." Before he had returned to France Prevert gave the Indians chisels and wedges instructing them to sample and bring him pieces from the mine sites in the ensuing year. While in the region Prevert also noted "a mountain of black pigment which the Savages use to paint themselves," and ended by saying, "All this country is very beautiful & flat, and is a place where one may find any kind of tree."

There is copper in small quantities within the basalt rocks of North

Mountain at Peter's Point, but these are contained in relatively unproductive (geodes). Native copper is similarly found between Cape Split and Blomidon and there are deposits on Brier Island but de Prevert's mine (if it existed) has never been found. The possibilities were actually much better for the northern shore of "The Basin of Mines," or Minas Basin.

From the Indians Champlain had the impression that similar mines were to be found "in the lands of the Almouchiquois (living on the coast of Maine). Those who told him this assured him that the Souriquois (Micmacs) would not dare intrude into these places unless they had the backing of the French to "drive off our enemies."

Reading Prevert's description of a more southern coast, Champlain's thoughts may have turned to the old preoccupation with the quest for a passage to Asia. The Lachine Rapids having proven a complete barrier to navigation, the explorer might have begun to hope that there would be easier access at some other point along the seaboard. "It would be a great benefit," he wrote, "to find along the coast to Florida (be this he meant the eastern seaboard) some passage which would lead to the great salt water lakes beyond the rapids, both for ease in navigation and the shortening of the route..."

The expedition of which Champlain was part made first landfall in the new land at La Heve on the southwestern coast of Nova Scotia. Four days later drifting into the next small bay to the west they were greatly surprised to find a ship at anchor. The stranger was a fur-trader pursuing his business in complete ignorance of the monopoly granted to these newcomers. The latter, citing his patent, seized the ship and its cargo, consoling the commander of the rival ship by naming the bay after him, le Baie de Rossignol. Unfortunately the name did not take and the embayment is now Liverpool Harbour. Pontgrave's supply ship had equally good fortune at Canso where she seized the goods of four Basque fur-traders. Having left food and goods with Champlain's people, Pontgrave set sail for Tadoussac, leaving the others to sail, prize ship and all, round the tip of Cape Sable.

At Saint Mary's Bay, the expedition lay over for two weeks

exploring the adjacent shores in small craft. Here some of the explorers thought they had stumbled on traces of iron and silver, but were prevented from checking it out as their priest Nicolas Aubry went missing. Their search for him was intensive, and suspicions fell on the Huguenot minister who travelled with the party. In the end the Roman Catholic cleric was left in the wilderness, but it was his good luck that a small party was sent out to have a second look at the minerals of Saint Mary's Bay. While the voyagers were fishing they saw, "a small black object in motion on the shore (it proved to be a hat moved on the end of a stick) and "heard a strange sound somewhat like a human voice." Rowing to the spot they found Aubrey who had, by then, wandered for sixteen days in the wilderness.

In his book Holy Grail Across The Atlantic Michael Bradley has given Aubrey a role in contacting a group of Knights Templar hidden in the woods of central Nova Scotia, and claims that no one could have been lost for two weeks and a half on Long Island (3x15 miles). There are problems with this, a major impediment being the quarrels of the official church with this discredited cult. Bradley has obviously not been lost in the local barren lands and underestimates the time that would be needed to penetrate far inland to the community now entitled the Cross. Aubrey was certainly not a skilled woodsman having been characterized rather as "a scholastic who despite the remonstrances of friends, had joined the expedition to the new world." If he was on a mission to a hidden "castle" in the woods he went very poorly prepared for it was agreed that he returned from his jaunt, "haggard, a shadow of his former self. Champadore carried him back to St. Croix where he was greeted as a man risen from the grave."

On June 16, 1604, having left Aubrey temporarily stranded on an island, three ships entered the large southern bay which Champlain called Baie Francaise (The Bay of Fundy). Not far into it, the explorers came upon "the most beautiful harbour I have seen in all these parts (Annapolis Basin) which was soon afterwards granted as a seigneurie to Poutrincourt. In spite of this the ships moved on, looking at the northern shore of Nova Scotia, "noting the location of iron mines all the way." (many of these have since been developed and abandoned). They landed eventually near present day Advocate Harbour on the point of land which

Champlain named Chignecto or "The Cape of Two Bays." From here he could see Isle Haute, "The High Island," where investigations revealed nothing of great worth. On the northern shore of Minas Basin, Champlain may have spotted tracings of copper at Swan Creek, on Two Islands or at Cape D'Or. "The Cape of Gold," was represented on some early French maps as Cap Dore, a word suggesting "gilded," or "blocked," and this may have been the original intention of the name since the cliffs there are massive and catch the failing western light. In any event, there is no gold there and the copper that occurs is not sufficient to create a "gilded" face as some writers have suggested.

^ If Champlain was "coy" about his discoveries at the head of the bay, it may have been because he wished to divert attention from minerals found in the general area. He may have intended a red-herring in naming nearby Advocate Harbour, Les Port des Mines.. In his day, the gravel bars at the mouth were apparently open to the sea and his chart shows a shallop anchored inside. There was certainly no gold,(or much else of worth, anywhere near the harbour.) The whole issue of mineral wealth became more clouded when Champlain named the channel between the Cape D'Or and Cape Split, Channel des Mines., and called the inner embayment, Les Bassin des Mines, or "Minas Basin."

After this initial look-see, the ships sailed along the southern coast of New Brunswick, had a look at the region around the mouth of the Saint John River and finally entered Passamaquoddy Bay settling on St. Croix Island in a river they gave the same name.

The explorers had noted minor outcroppings of iron all around the Bay but the Indians at St. Croix told them of another abandoned mine some eight leagues down the river to the southwest. Since the summer was still at hand, Champlain took as a guide named Messamouet (a Micmac chief they had picked up at La Have, N.S.), who said he could find the legendary mine of pure copper. The French had confidence in this man since he had spent time in France prior to 1580 and was known as an accomplished seaman. Champlain said "I set out in a small pinnace of about six tons burden, having with me nine sailors. Some eight leagues from the island (St, Croix) in the direction of the River Saint John, we did find a copper mine which was not pure, but fairly good. According to the

miner's report it would yield 18%. After that the explorers sailed on and reached the spot their guide had suggested, but could find no signs of copper at that place and returned to the island "leaving this search for another time."

Marc Lescarbot, who was serving as the colony's physician, later wrote that this trip was, nevertheless, a success since the travellers brought back "diamonds" and some "clear and blue stones." A miner said that the latter were "as precious as turquoises," and this seems to have been the case as a French goldsmith later offered Lescarbot fifteen gold crowns for a single specimen. The collection was, in the end, presented to the French king.

There is an outside chance that the explorers brought back diamonds, but the only known kimberlite pipes, which contain the mineral, are in Arkansas. Alluvial diamonds have been found in the Appalachian Mountains, especially in North Carolina. They have also been taken from a circular belt of glacial moraines located south of the Great Lakes, and they may be found elsewhere, although they would be a rarity at the Passamaquoddy. The clear and the blue stones bespeak rock crystal and amethysts, but neither is rare enough to command the price mentioned above, and the colours of amethyst are more thought of as fitting the range of colours from pale to dark violet or purple. There is a blue quartz, whose colour is created by the scattering of light due to inclusions of rutile, but again this is hardly more than a semi-precious mineral.

The "stones" may have been tourmalines which occur in all colours from transparency through opaque, from blue to dark purple, and have been actively collected and mounted at Paris, Maine since 1972. Mineralogist John Sinkankas has this to say of the local deposits: "Splendid gem-quality "litha tourmaline" (are taken) from pegmatites in Maine, notably at Mount Mica, Oxford County; greens from this locality are unmatched in respect to freedom from dingy olive green colouration, which often proves a serious defect in gems from other localities." This same writer notes that Haddam Neck, Connecticut is home to "excellent green and some pink crystals." A known deposit of low-grade tourmalines is found at Lower Tower Hill, Charlotte County, New Brunswick, and we have collected pencil-sized crystals of black tourmaline at the Ledge, near St. Stephen.

In addition to these locations, tourmaline is found in southwestern Nova Scotia. It is a minor irony that tourmaline was discovered in Brazil, South America. The blue, nearly transparent gem-stones of our region are therefore sometimes termed "Brazilian sapphires" while green specimens are loosely labelled as "Brazilian emeralds."

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Having a sample of the wealth of the Indies in hand, Champlain spent the next summer looking for the city and land of Norumbega proper; "the land of oranges, almonds, sweet smelling trees and gold", the place purportedly inhabited by "men who are adroit and skilful; and who use cotton cloth." The explorer had consulted a number of mariners who gave him co-ordinates at 43 degrees, 40 minutes, 30 seconds. These took him to the mouth of the Penobscot River, which he ascended, finding nothing more exciting than a few deserted cabins in the woods. A seemingly wiser man, he concluded: "Those who have told me of this place have their information from others no better informed than themselves."

Farther Biard, a one-time companion of Champlain, and the author of the Jesuit Relations noted that, "The old geographers speak confidently of a certain Norumbega and give the names of cities and strongholds in that place of which today no trace or report remains." Another contemporary, Marc Lescarbot, guessed that the Spanish cartographers, "had been drawing the long-bow" (i.e. stretching things) in their tales of America,

“especially in describing that great and powerful city which they have named Norumbega, which they have placed about the forty-fifth parallel of latitude...If this town ever existed I would fain know who destroyed it during the last eighty years; for there is nothing in its vicinity but scattered wigwams made of poles covered with bark or skins. And the name of both the settlement and river where they are found is properly Pemitegoet.”

Champlain suspected that he had been sent on a fool’s errand when he sought Norumbega at the Pentagouet River, but he may not have penetrated the country behind it deeply enough to reach the fabled land of white men. Passing upstream he found the country “agreeable enough,” but found no trace of a town or village, “excepting a few deserted cabins of the Souriquois or Micmacs.” At this place Champlain met two Souriquois who introduced themselves as Bessabe and Cabahis. He was able to make them understand that he was a scout for French and that he intended them no harm. At a later meeting he questioned the latter man about the source of the River “Norumbega.” The chief said that further upriver the waters widened into a lake, which his people crossed to a portage that was not far from the waters of the river known as Etchemin. Another river, he explained left the lake at the north and could be followed “to within a league of Quebec.”

The easterly portage is very clearly marked on Father Joseph Aubry’s “Map of Acadia and Canada,” penned in 1713. It passes through territory marked as Abenaqui and touches lakes at the headwaters of an unnamed river, which is clearly the Saint Croix (the three large West Isles lay at its mouth). It may be significant that this portage connects with the Saint Croix very near a place the Indians termed Canoose, the land of “giants.” We strongly suspect that the unkempt visitors who squatted on this Indian territory were of Norse extraction. They were described as having bodies completely covered with hair (not unlike the Gougou) and were avoided since they were said to be cannibalistic. They were also reputed to be constantly at war with one another and legend says that they were pursued by Glooscap, the remnants of their tribe being either swallowed up by the earth or retreating into the underground from which they had come. This sounds very like an attempt at an unintended settlement, possibly by men shipwrecked on this coast. Being unfamiliar

with the country, the French nearly died of scurvy during their first winter on Saint Croix Island, and the Norse may have been in a similar position. Perhaps they persisted long enough to erect the village of Norumbega, but if it was in this region, which has some very swampy real estate, not much would remain to show that white men once passed that way.

While we are speaking of the St. Croix, take note that the ore mineral, pyrrhotite was found near St. Stephen in 1930. This is one of the nickel ores, associated with iron and thus not easily refined. (Gold was found and briefly mined at Canoose.)

Champlain may have attempted to mislead potential rivals for the wealth of Norumbega. He did say that "I think that this River (the Penobscot) is that which several pilots and historians call Norumbega. It is large and extensive as described with many islands at its mouth..." It is not recorded that the Indians ever called the river by that name; they knew it as the Pemetig, which indicates, "the place with islands standing before it." Bynaming this river Norumbega the French may have sought to divert attention from the St. Croix, or the Island of Grand Manan, places they revisited after they abandoned Saint Croix Island. What wealth they found could have come from up, rather than down river. Whatever the case, the French maintained an interest in the region and in 1613 became a presence on the north-eastern coast of the Penobscot, at a splendid location now called Bar Harbour. After a bit, Champlain dropped the habit of referring to Le Riviere de Norumbega, and began to call the present-day Penobscot, Peemteguet, "the place in the river where rapids are born." The English preferred Penobscot, derived from the Indian Penaouasket, "the place where the earth is covered with stones."

In the second year, the group to which Champlain was attached explored the coast as far south as Cape Cod. Within the hook of land there they encountered dangerous shoals which they entitled Mallebbarre, "the Evil Bar." In three degrees of travel they found nothing that seemed to equal Port Royal as a potential site for a settlement, so in August they went back to the Bay of Fundy and rafted the buildings at St. Croix to Port Royal on the north shore of the present-day Nova Scotia. De Monts had not altogether given up the idea of establishing his people in a much warmer

climate, and interest in finding the Norumbegan copper mines had not abated.

In 1605 Champlain was encouraged to make what use he could of the open season to pursue explorations. Champlain stopped off at the river St. John to meet de Prevert's guide, the Chief Secoudan, with whom he agreed to set out in search of copper. They were again accompanied by their miner, a man named Jacques, who was reputed to be "very skilful at his trade." Poutrincourt who was with the group found, "some pieces of copper, obtained with great difficulty." The miner was enthusiastic at the assay, but Champlain said that this antique mine was "on the shores of the Basin of Minas," and might have been useful "if the water did not cover the openings twice a day, and if they did not lie in such hard rocks."

Leaving this disappointing place, Champlain said that his party "made a circuit of the bay in order to visit the Port of Mines." "The whole bay," he discovered, "is about twenty leagues in circumference, and at its head is a small stream which is very shoal and has little water. There are a number of other small streams and certain places where there are good harbours, but only at high tide, which rises by five fathoms. In one of these harbours, three or four leagues north of Poutrincourt Cape (Blomodin, and thus near Cape Sharp) we found a very old cross, all covered with moss, an unmistakable sign that formerly Christians had been here." With the temperate season at an end, Champlain went back to Port Royal where he and the others put in a second uncomfortable and disease-plagued winter.

By March of the next year, Champlain was back on the Bay, and travelled eighteen leagues on his first day on the Bay. He anchored on an island south of Petit Manan, in Maine waters, and during the night his barque dragged anchor and sustained damages that took four days to repair. That fall they went back to Cape Cod and antagonized the Indians by erecting a cross at the entrance to the Kennebec River. The Indians reacted by burying the cross and killing four Frenchmen who had the impudence to stay on shore. Poutrincourt restored the cross to its former position, but the explorers began to suspect that they might be safer in the north.

While the Bay of Fundy settlers thrashed about others profited: A group of Indians informed the patent holders at Port Royal that "the Basques, contrary to the king's prohibition, have bartered with the savages at Cape Breton and carried off more than six thousand beaver pelts. An alternate source of revenues was becoming apparent.

The land which Champlain now called Acadia continued to frustrate the greed of the French, but learning from their earlier experience, they ingratiated themselves with the Sagamos Membertou, and he reciprocated, partly because he had many enemies and was "well content to cosy with the French in order to live in safety." For his part, the high-chief made "a present to the King (of France) of his copper mine, since he saw that we (the French) held metals in high regard, and since, he said, princes should be liberal and honourable with one another." Champlain's final map of the Bay, penned in 1632, shows a place named Cap des Mines, which may represent this gift. This new spot on his map is shown north of Chignecto Bay on the New Brunswick mainland and is indicated by a cross. The "Cape of Mines" can only be present-day Cape Enrage, which makes the mine, the New Horton copper mine, or one in that vicinity. The New Horton deposit was explored in 1898 and led to development of the Verona Mine. It was reworked in 1930 and the remains are found on the west side of the New Horton road about 5-6 miles south of the village of Albert.

On the 24 of May in 1607, a pinnace appeared at Port Royal informing the colonists that Sieur de Mont's monopoly on furs and the other goods of the countryside had been revoked. The colonists therefore sent their own ship out on a final trading trip, ostensibly to the St. Croix, while Champlain and Poutrincourt claimed they made a final attempt to locate Prevert's elusive copper mine. Meanwhile the pinnace took the remaining colonists to Canso for repatriation to France. Only Poutrincourt and eight men remained at Port Royal as a skeleton staff.

In his shallop with nine men, Champlain re-explored the Acadian Atlantic coast in more detail than had previously been the case. They had been at La Have, Nova Scotia on the first trip to Acadia in 1604 using a nearby cape which they entitled Cap La Have, "The Emaciated Cape," as a convenient mark as they sailed in past Sable Island. There is no problem in the identification of the Cape itself which is not named on Champlain's

earliest map of the shoreline, but is identified on modern sea-charts as Cape La Have Island. From here, he cruised eastward, observing and mapping Mahone Bay, St. Margaret's Bay, Sambro, Chebucto Bay (the seat of the future city of Halifax), Jeddore, Country Harbour, and St. Mary's River. At the peculiarly named Tor (Thor) Bay he met an elderly Basque fisherman who claimed to have been fishing the waters of that region for forty-two years (since 1565). His 80-ton vessel was seen to carry a hundred thousand dried codfish, and he told the Frenchman that he made an acceptable living. In August Champlain joined Lescarbot and others on board the ship "Jonas," which was not quite ready to quit the country. This gave Champlain time to explore Cape Breton before they left for Roseoff, Brittany in September.

CALEDONIA RECOVERED

The French now abandoned Acadia for the Saint Lawrence River and their new settlement at Quebec. The first English intrusion into the area had taken place in 1602 when Bartholomew Gosnold sailed from Maine to Cape Cod. He had veered off for home, bringing with him a cargo of sassafras roots and cedar wood. Martin Pring followed his example in the next year, cruising within the waters of Massachusetts Bay. George Weymouth came for a look in 1605, running his ship from Cape Cod to the Kennebec. His glowing account of conditions in the region caused Popham to spend a brief unhappy winter at the mouth of the Kennebec River in 1607. The year of this failed settlement saw the establishment of the English at Jamestown in Virginia. In 1609, Henry Hudson explored the Hudson River on behalf of Dutch interests; he also made men aware of Hudsons Bay and created the entry route to a great fur-trading empire in interior Canada. Six years before the Pilgrim fathers thought of leaving Holland John Smith cruised the waters of New England, giving the region its name. In this same year of 1613 a Virginian privateer, Captain Samuel Argyll, attacked a French settlement of Jesuits at Mount Desert, Maine and went on to level Port Royal in present-day Nova Scotia. Not long after that Acadia was given to the English in the first of several peace treaties

penned between the contenders.

The experience of Henry Hudson supports the idea that quite a few early explorers might have unintentionally fallen within the grasp of the Labrador Current and been swept on tour of the Gulf of Maine and the Bay of Fundy. The first recorded voyage of Henry Hudson was made for the Russia Company of England in 1607. His object then had been the finding of that ever-elusive sea-path to the Moluccas and the Malayan archipelago. Failing in this, he nevertheless reached a higher latitude than any previous explorer. He was not especially interested in the seaboard of America and his second venture in 1608 was directed at "finding a passage to the Indies by the northeast, but he went no further than Nova Zembla, in the high arctic, before he returned to England. Undaunted he sought new employment with the Dutch East India Company. Like later polar explorers his fame went before him to Holland, where he was received as an expert pilot and famed navigator. Hudson's scheme was however opposed by Balhazar Moucheron, one of the members of the company, and as a result he received command of a small vessel named the Half Moon and a crew of only twenty men. His second mate was Robert Juet, whose journals are the basis for what is known of this third voyage.

Henry Hudson cleared Amsterdam in March of 1609 and passed North Cape within the first month of sailing. His object this time was to regain the island of Nova Zembla and travelling north east of it hoped to attain China and the lands beyond. This was technically impossible, and after contenting with head winds, continual northern fog, and ice packs, so that he was even prevented from reaching his previous latitude, he fell back, and took a more westerly direction so that he eventually by-passed the Faeroe islands during the month of May.

Having taken water in the islands he sailed on southwest, in the hope of finding Buss Island, supposedly discovered by Martin Frobisher in 1578. Having failed to locate it, he continued on this course for nearly a month, being prevented from re-establishing a more northerly direction by a series of gales, one of which carried his foremast away. By July he had unintentionally come upon the now well-known Newfoundland Banks, where he paused to take on more than a hundred large cod. After two or three cloudless calm days the wind sprang up again in the prevailing

southwestern direction often found at this time of year. Blown before it he came upon land shrouded in fog on July 12 (probably come part of Nova Scotia). the fog was so thick he dared not try the land, but he did keep sight of it, more-or-less, for several more days. At length the weather cleared and he was able to ascertain that his ship was now at 44°. He ran into a bay and then into a river behind it (Penobscot Bay, Maine).

We suspect that this may have been the experience of many summer-travellers into Atlantic Canadian waters from the time of the Old Norse forward. The sweep of wind and current is invariably down the southern coast of Nova Scotia where the Gulf of Maine and Bay of Fundy gyres of current, will carry an unpowered fog-bound ship counter-clockwise from northern Nova Scotia, to New Brunswick to the Fundy Isles and the coast of New England.

Hudson and his folk made an excellent first contact with the natives, but after they had repaired their mast and readied themselves for sea, Juet and six other men took a shallop and sailed up river where they "...drave the salvages from their houses, and took the spoil of them." After that they sailed southward pursuing information given them by Captain John Smith that there was a passage to the Pacific Ocean somewhere south of Virginia. Within days the Hudson expedition came upon the unmistakable outline of Cape Cod. Wishing to the sound the shore before approaching it with the Half Moon, he sent some of his men into the shoaler waters in a small boat. they found five fathoms of water at a place very close to the shore and here the large ship dropped anchor. Juet tells us that men sent ashore found "goodly grapes and rose-trees," which they brought on board. This is a further bit of evidence often used to identify Cape Cod as Vinland. On Cape Cod he later encountered three aboriginals, who were invited on board and given refreshements. Juet observed that the "savages" had "green tobacco and pipes, the bowls of which were made of clay and red copper."

After this, the Hudson expedition encircled Cape Cod and passed on "to the King's River in Virginia, where our Englishmen are." Two years before there had been one hundred and five Englishmen here under the command of Newport, but they were no longer on site. In any event he could not reach their supposed settlement because of a contrary gale. He

therefore continued south, but for some reason rest his course for the north. Presumably he had gone far enough south to confirm a growing suspicion that he could not reach the Pacific by sailing in this direction. Retracing his steps he stumbled into Delaware Bay on August 28 and was in New York waters by September. At Sandy Hook Bay again met with the Indians and again marvelled at their copper ornaments. There is a tradition that some of the sailors visited Coney Island and came back reporting they had seen a vast number of plum trees with grapevines clinging to them. On the eleventh day of September the Half Moon anchored in New York Harbour. Having discovered the Hudson River, the voyages probably thought they had gained their entryway to the Pacific. It is generally supposed that Hudson's vessel penetrated as far as Albany before it became apprent that they were in a navigable river rather than in an embayment coherent with the Pacific Ocean. In the process of exploring the river Hudson's people thoroughly antagonized the natives, and were forced to retreat from their openly hostile acts. On October 4 Hudson spread his sails in New York Harbour and made for the Old World arriving at Dartmouth, England, within a month. There is no doubt that the Dutch did benefit from Hudson's work on the Hudson River, for the next year they were seen trading there.

In April 1610, Hudson had renewed English financial support and a specific mandate to "sail to the ocean called the South Sea," after examining in detail the various gulf "which Davis saw but durst not enter." By Jone of that year Hudson had located the Hudson Strait and by fall entered James Bay by way of Hudson Bay. In the former place he decided to spend the winter.

Rations became short that season and the crew had about two week's of food left when the ship carrying them broke out of the ice on June 4, 1611. By June 22 the crew had mutined to prevent his carrying out further exploration. Hudson and his supporters were all placed in s small boat and set adrift, and nothing was heard of them from that time. Only eight of the mmutinous crew managed to get back to England but they told of a navigable strait leading eastward, a fact that led to further attempts on the Orient.

Althought the mutineers were condemned to death, they were reprevied because of their first-hand knowledhe of Hudson and James

Bays. Some of these men accompanied tHomas Button when he charted the western coast of the larger Bay and showed that there was no entrance to the east in those parts.

Hudson's discovery did raise the Northwest Company, founded in 1612. Button's vessels had been sent off by founding members before the charter was legally declared, but his report to them diod not diminish the company's suspicions that s northwestern passage did exist. Button's cousin Captain William Gibbons tried to pursue this notion but could not even enter Hudson Bay because of heavy ice. Expeditions were mounted in 1615 and 1616 under Robert Boyle and these voyages conclusively proved that there was no ice-free route to the Far East that could be penetratyed by sailing ships. On Boyle's return to England the word spread that no passage existed and interest waned forfifteen years until it was briefly revived byFoxe and James, whom sailed into the waters that carry their names in 1631.

In the intervale the Danes tried again. In 1619 they ran into extremely hostile, not entirely typical, northern weather under Jens Munk. These voyagers landed at Churchill where they were more-or-less forced to winter. Provisions were adequate but like Champlain, Munk's men contracted scurvy and a third of the crewmen died. By July those that remained were able to board one of the two ships and get back to Bergen, Norway.

In the latter days the French had rationalized their imperialism by saying that they were compelled to Christianize the Indians. The English never pretended a similar interest. In books of this time, inhabitants of Great Britain, were encouraged to seek fortunes in the wilderness by statements such as this: "If an Indian is seen wearing a headpiece of copper which bows easily, this flexibility proves it to be tarnished gold." The Indians were known to wear similar "brass," or "copper," devices across their chests which were up to a foot in length and three or four inches wide. In English state papers it was unequivocally stated that, "in every village a few pearls may be found (and indeed the region does offer up fresh and salt water pearls); in some house a peck. There are also banqueting houses made of crystal (like those of the Fomors?), with massive pillars of silver and some of gold. Pieces of gold as big as a

man's fist are to be picked up at the heads of rivers."

In our day much has been made of the greed of white men, but notice this bitter comment from the pen of Nicholas Denys in 1672: "The island of Cape Breton was once esteemed as a place for hunting moose. They were formerly found there in great numbers, but at the present there are none. The Indians have destroyed everything, and have since abandoned the island, as they can no longer get the wherewithal for life. It is not that small game are unavailable, these animals are abundant, but will not suffice to support a people. Besides they say it costs too much in powder and ball. With one shot of a gun they may kill a huge moose, but the same shot will only bring down a small goose or two, perhaps three, and this is not as satisfactory to their families as big game."

If fabled Norumbegan homesteads ever stood upon the landscape of Maine or New Brunswick they have long since gone to earth. As for gold and silver they were not unknown in native myth. On his leaving Glooscap said: My dear good children, now I'm going north to fix your house because your house here is distressed. Soon you will share this land with the white people, those who dearly love the white and yellow metals. In years to come you will come to like these same metals, which now have no names. In your new home are mountains of gold and nobody can get there but yourselves. All these things have come exact except the coming back of Glooscap. That has never happened yet, but we are expecting it. (paraphrasing Chief William Paul Shubenacadie, BM, p. 90).

No artifacts of this mythic northern city have been recovered but there is the legend of the golden "calf," which was spoken of among the Indians of Ekpahawk, just above Fredericton on the Saint John River. This casting, covered with gold, was supposedly "the size of a yearling heifer" During the Revolutionary War which began in 1776, the American Col. John Allen stirred up the Indians against the English, and attempted to persuade the Saint John tribes to sweep the valley clean of white settlers. He failed at this, but the British military were aware that the Indians were hostile and sent an expedition to Ekpahawk, demanding that the Indians sign a peace treaty. Allen was able to convince the natives that they should leave their village and retreat with him to Machias, Maine. They supposedly possessed the golden calf at this time, and loaded it into

a canoe to take it out of harms way. In the vicinity of the place now called Meductic, the chief had second thoughts about removing the tribal totem from New Brunswick for he had been told that their new "father," General George Washington was currently seeking all the gold he could find, and became fearful that the calf might be melted down to create coins to pay the soldiers fighting against King George III. He and a help deliberately lagged behind the others in their canoe and paused to bury the image. There were quarrels over whether this should be done or not and in the process the chief of the tribe was killed. The other Indian buried him near the treasure and made a map of the interval marking the location of the calf with a drawing of the creature. He then retreated back to Epahawk (Apohaqui?) eventually passing his map down to others. According to some people a white man from Houlton recovered the artifact in the 1950's. It used to be supposed that there was not enough native (easily accessible) gold to fashion a figure of this sort without high technology, but in the current year (1993) gold adhering to the underside of lead deposits has been discovered at New Germany, N.S. This appears to be a massive body, the thin flakes being found in places as widespread as Canso, Truro, Kentville and Long Point, N.S.

Champlain had visited the Tusket Islands at the Nova Scotia entrance to the Gulf of Maine, but had not lingered there to discover that the Big Tusket Island was named Agglassawakade, in the Micmac language and that it was a place where the natives came to hunt, fish and bury their dead. This island, like a few other having a similar use, had a special importance to the early inhabitants. Large piles of shells and bones were found at this place, and on nearby Turnip Island, suggesting that this was a good hunting ground.

A surprising latter-day find on the island was burial-stones, which some geologists say may have been carried there from as far away as Arizona. Other think they bear a similarity to agate formations on the face of Blomidon, a place Indians visited regularly in search of the decorative and useful stones. The most intriguing rock brought back from Tusket was a "black onyx" given to a fisherman by an Indian friend. Onyx is a banded form of chalcedony, a mineral which is a semi-crystalline, translucent form of common quartz. Commonly it is of a uniform grey or blue colour, having a lustre resembling wax. Related forms are the agate,

chrysoprase, carnelian and heliotrope. Like the amethyst, the onyx is semi-precious, excepting any odd banded varieties.

Sackville writer Allison Mitcham suggested that this mineral might have been associated with past volcanic eruptions in the neighbourhood of the Blue Mountains, which are located within the physiographic province known as the Nova Scotia Uplands. We have seen only three written references to this region, which lies roughly within a triangle between Annapolis, Liverpool and Shelburne. It has been said that this place is the "navel" of the Algonquin world. Thomas Chandler Haliburton (1796-1852) said that it once contained "the consecrated groves in which the vows and sacrifices of the Indians were offered to the spirits of the air (the Thunderbirds). " Another writer says, "There are said to be traces of (active) volcanic eruptions in these hills, and the Savages still retain a superstitious awe of this scene of the religious rites of their forefathers."

Balor of the Evil Eye may well have built his crystal palace from the stones collected in the west. Sabina says that the chief wealth of the Bay of Fundy is neither copper nor gold but inclusions in the black basalt rocks that surround its shores. Almost all of the collectible stones are of the quartz family, and she says "good specimens can be found in almost any part of the shoreline where the basalt rocks are exposed." In New Brunswick this is chiefly on the west of Grand Manan Island and at Quaco Head. The shores of northern Nova Scotia are a treasure-trove: There are banded jaspers a foot wide at Mink Cove, amethysts and agates in "large veins" at Outer Sandy Cove, jaspers and carnelians in bands three inches wide at Trout Brook, and smoky quartz (up to 100 pounds in weight) at Paradise Brook on the Annapolis River. The hub of everything is at Glooscap's oogotol. The shoreline between Capoe Split and Cape Blomidon has been recorded as "the most prolific and popular collecting area in the Bay of Fundy. Amythest Cove says it all but exceptionally fine geodes containing all sorts of valuables fall away from the cliff faces every spring. These are the source of bloodstone, carnelians, agates (including moss agates), malacite and many minerals less well known. Partridge Island on the north of the Minas is also noted for amethysts.

The designation Nova Scotia, the charter name for New Scotland,

replaced Acadia when James I of England granted "all lands between New England and Newfoundland to a Scottish nobleman named Sir William Alexander. A coat-of-arms and a flag were given to this armchair adventurer in 1625 and he immediately went about selling the title of "Baronets of Nova Scotia." Most of the new baronets had no intention of breaking sod in the New World but a "Scots Settlement" was set up near the abandoned French Fort at Port Royal in present-day Nova Scotia. Another group of fewer than a hundred men established themselves at Rosemar in Cape Breton. Both places turned out to be money-pits and had to be abandoned when the country was handed back to the French by a peace-treaty signed in 1713. If the plan had worked as intended, three major shires would have been erected: Caledonia (New Brunswick); Alexandria (Nova Scotia) and Galloway (Cape Breton Island). For a short time it had looked as if the Atlantic Ocean might regain its earlier designation as the Caledonian Ocean.

The Scots that were left behind from this failed scheme were easily assimilated by the French, whose interest shifted at this time from the Saint Lawrence back to Acadia. The prospects for new settlements looked even more promising after the peace was firmed up by the Treaty of St. Germain en Laye in 1632, Unfortunately two Frenchmen, named de Razilly and La Tour, who had been given concessions on opposite sides of the Bay of Fundy fought as intolerantly against one another as the French had with the English. Acadia was legally restored to France by the Treaty of Breda but it was not completely reoccupied until 1670.

The sparseness of the population did not prevent the New England colonies from fearing the great military fortress of Louisbourg which the French built on Cape Breton Island. To oppose it the British built their own fortifications at Halifax in 1649. Although Louisbourg was eventually reduced to rubble, Prince Edward Island and Cape Breton were still occupied by the French one hundred years after this date. The French continued to snipe at the mainland colonists and the British interest was not secure until the whole place was surrendered to them in 1761 and a treaty arranged with the Indians two years after.

In an attempt to fill Acadia with settlers, the British government had invited men of many nationalities to take up land grants during the

times of trouble. Among these were fifteen hundred German, Swiss and Dutch settlers who settled at the head of Lunenburg Bay just east of La Have in the year 1753. If Michael Bradley interpretation of local history has validity, at least several families of German extraction were in place as early as 1623. The Nauss family of Lunenburg supposedly springs from one of a number of skilled carpenters hired to build a mansion some miles inland on a costal river near present-day Lunenburg. Bradley was shown sketches of the dwelling by a relative of this builder. She had been told that the mansion was built within the walls of a much older decayed structure and that it was partly of wooden construction because of the difficulty involved in obtaining good mortar to reset the old stones. At that, the place sported a golden dome and seven turrets. Inset in the foyer was the lion of Scotland, much as it appears on the Nova Scotian flag. This makes some sense in the Bradley story when it is realized that he considered the Royal Stewart line to be the Grail refugees.

We are not interested in that particular tale but in the somehow related legend of Nicholas Sphor, who arrived in Lunenburg County one hundred and forty years after the supposed construction of the Grail refuge. Sphor, a very poor man in his own country, was one of a few who decided not to make a living from the sea. He therefore set out to explore the nearby La Have River ascending it by boat for a distance of about seven miles. Sphor found that trees were everywhere, growing right to the waters edge. He was almost ready to give up his quest for the seemingly inaccessible land when he pushed his way through an overhang and emerged in a magic kingdom. Here in the wilderness, miles from civilization, was a huge clearing containing many well-constructed houses. Beyond the dwellings was a warehouse, and a blockhouse guarding the water approach, the guns still standing on their swivels.

Feeling the intruder, but nevertheless curious, Sphor wandered into the warehouse and marvelled at the huge bell that hung in its belfry. He noticed that all the buildings were in good repair and of excellent workmanship. The houses were unlocked, the furniture, clothing and household gear of numerous families still in place, the gardens still in place and well-kept. Finally it dawned on the poor man that this was an abandoned settlement, and he went immediately to Halifax to see if a land grant could be obtained for this mystery settlement. In Halifax he found

the English authorities anxious to fill up the interior of the province and they gave him one thousand acres at the place that became Horseshoe Cove. In haste Nicholas Sphor assembled his family and took possession of his find.

Nicholas Sphor could never see why this settlement was hidden so far from the commerce of the sea. With hindsight it is easy to suppose that some of Champlain's compatriots never left Acadia. This was not Norumbega but it might have been a fur trading post. In those days, with Acadia changing hands almost daily, settlements at the coast were in danger of being burned out at each new change in the seat of power. The French had the advantage of natural camouflage at Horseshoe Cove. While the French had some claim on the country this must have been a place of some wealth and good fortune. When the English took final control the place had to be finally surrendered. It is possible that the French owners expected that the parent country would soon regain control and that the fur trade could possibly be reactivated. The Indian allies of the French had no wish to despoil the settlement and may even have managed it upkeep until it was discovered. In 1761, with the French out of the picture, Nicholas Sphor had become the legal owner of a vast baronial estate, which may very well have been the place described in the Nauss papers.

Unfortunately Sphor was more attracted to his new image than hard work and commenced to treat his family as servants. He spend most of his time admiring his land and possessions and marching about in the colourful French costumes of an earlier decade. Only the need for food forced him to supply wood to the garrisons at Halifax, but Sphor was careful to leave his rich clothing at home and to make no mention of the nature of his property in the woods.

One night Sphor was awakened by the sound of shouting from his woodlot, and went there with pistols to confront Indians engaged in a burial ceremony. He threatened them, but they approached with weapons and he retreated to the main house. When the mourners finally drifted away, Nicholas cut down the dead body from its open-air platform and buried it. Soon after he and a son headed down river to raft a pile of firewood to Lunenburg for shipment to Halifax.

When the two men returned he found the mutilated bodies of his wife, dog and remaining children. At the sight, Sphor bolted down the river and told people in the township of the massacre. Armed Lunenburgers accompanied him back up river where they buried the dead and tried to track the Indians who had done the damage. They actually killed many tribesmen and took six prisoners. Four were hanged in front of the main house at Horseshoe Cove. Two were sent to the authorities at Halifax.

Nicholas went afterwards to live in Lunenburg and never set foot on the accursed land again. One day he went missing from the village and was found at his old property dead on the grave of his wife. In the years that followed the mansion in the woods was allowed to decay and was silent except for the wayward ringing of the bell as it swung in its tower. When it was heard men said, "Old Nick is about again; always ringing his bell!"

In 1795, the property was purchased by Captain John Smith, a wealthy man who was rumoured to have fled the American justice system. He was particularly disliked for his knowledge of several languages, his physical prowess, his beautiful wife and the two powerfully built mulatto servants who accompanied him. He had the remains of the old buildings ravaged, and built in their place a number of hunting lodges, which became an attraction for off-duty officers from Halifax.

Unfortunately, Smith was falsely accused of having a hand in the death of a travelling peddler. As it happened the man was actually killed by a bear, but before that was realized, Smith was arrested incarcerated and accused of using black magic to make a prison break. Captain Smith was eventually found innocent and returned to his property, but his business was irreparably damaged and Horseshoe Cove again became the most shunned spot on the La Have River.

Bradley's missing mansion was not supposed to be on the La Have River, but is clearly at one with it. The ruins which he said he found, but whose location he holds secret, were at a place designated as the "Cross." There is, of course, a Cross Island in the Atlantic, almost mid-way

between Mahone Bay and La Have. John Robert Columbo says there was also a place bearing this name at an inland location, and that the community is so named "on old maps." Since the infamous Oak Island lies in these waters, Bradley associates its "treasure," with that of the grail-bearers.

By the sixteenth century it was obvious that men had no additional mystery isles to populate and no possibility of penetrating North America westward to reach Asia. Surprisingly, the old dreams were not allowed to fade, and in pursuit of a Northwest Passage around the continent, men sighted mirages as convincing as that of Hy Brazil in the fog. In 1818 the British explorers James and John Ross were still chasing China when they sailed beyond Baffin Island toward the Pacific. Arising one morning they found the whole horizon filled by a great chain of mountains which they concluded blocked any possibility of completing their voyage. In 1906, Admiral Robert Peary, on his way to the North Pole, saw these same "mountains" and christened the land beyond Crocker Land.

Afterwards, Donald B. Macmillan led a frustrating expedition to explore the place, his cause backed by the American Museum of Natural History. This group established their base at Etah, Greenland and travelled from there to Cape Thomas Hubbard where Peary said he had seen this equivalent of Atlantis North. Blowing snow obscured their vision but the explorers pressed on for several days. Finally one morning they did arise to be greeted by sunlight and the hills, valleys and ice caps of Crocker Land, "a tremendous place extending through 150 degrees of the horizon." Fearing a breakup of the ice the sledges were pressed forward but there was more snow. Between showers the travellers caught glimpses of mountains glittering in sunlight but at other times the snow parted to reveal an empty plain of ice. On the seventh day, having covered 137 miles on polar ice, the party estimated they had overshot Crocker Land. Finally, on a cloudless morning Macmillan mounted a pressure ridge, surveyed the horizon through 360 degrees and came down to announce that Crocker Land was apparently an illusion. With this expedition "Meta Incognita," the last "unknown bourne" in North America, supposedly disappeared from the eyes of men.

1. Emiliani and others, "Paleoclimatological Analysis of Late Quaternary Cores from the Northeastern Gulf of Mexico", Science (September 26, 1975).