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SONS OF THE ISLES.

There is a spell woven by restless seas,

A secret charm that haunts our Island air,

Holding our hearts and following everywhere

The wandering children of the Orcades;

And still, when sleep the prisoned spirit frees,

What dim void wastes, what strange dark seas we dare,

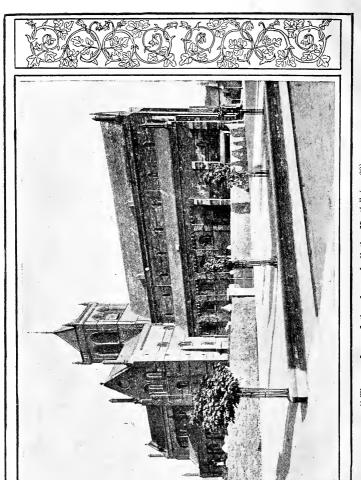
Till where the dear green Isles shine low and fair

We moor in dreams beside familiar quays.

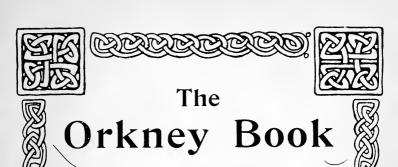
Sons of the Isles! though ye may roam afar,
Still on your lips the salt sea spray is stinging,
Still in your hearts the winds of youth are singing;
Though in heavens grown familiar to your eyes
The Southern Cross is gleaming, for old skies
Your hearts are fain and for the Northern Star.

Duncan J. Robertson.

("Chambers's Journal." By permission.)



"The wonder and the glory of all the North" (p. 69).



Readings for Young Orcadians

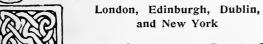


John Gunn, M.A., D.Sc.

Author of "Sons of the Vikings," "The Boys of Hamnavoe," etc.



Thomas Nelson and Sons





DA 88Ø 06 G83 19Ø9

PREFACE.

This is a book about Orkney, for use in Orkney, designed and for the most part written by natives of Orkney. It owes its origin to the Edinburgh University Orcadian Association, the members of which realized the desirability of preparing for use in the schools of Orkney a book adapted to the special

conditions of the Islands.

Educationists now recognize that Knowledge ought, like Charity, to "begin at home:" this is true of every branch of knowledge—history, geography, literature, and the rest. They might even adopt with an educational reference the saying of the wise man, "Wisdom is before him that hath understanding; but the eyes of a fool are in the ends of the earth." An attempt has accordingly been made in this book to present to the young folks of Orkney a general view of their homeland, some description of its past and its present, and some knowledge of its naturalistic and its humanistic aspects, with the object of awakening their interest in their own Islands, in order that from this centre their knowledge may advance the more surely to the sweep of a wider horizon. For, like Charity again, while Knowledge must begin at home, it must not remain at home.

While the scope of the book is wide, the treatment of each class of subjects is necessarily suggestive rather than exhaustive. All that is possible within the limits of a single small volume is to present illustrative specimens rather than a complete collection of studies. Hence there is abundant opportunity for the teacher to supplement the book by specializing in one direction or in another according to individual preference. The aim has been rather to supply the irreducible minimum, suitable to all, in the hope that the book may find its way into every school in the county, and be read by every Orkney boy and girl before

their schooldays are over.

The Committee of the Edinburgh University Orcadian Association who have superintended the issue of the book acknowledge gratefully the courtesy with which copyright material has been placed at their disposal. They wish to record their obligations to the Controller of His Majesty's Stationery Office, to Messrs. J. M. Dent and Co., Messrs. Longmans, Green, and Co., Messrs. Macmillan and Co., Messrs. W. and R. Chambers, and the Walter Scott Publishing Company, for the use of the extracts to which their names are respectively appended, and to Messrs. Thomas Nelson and Sons for much copyright material, including numerous illustrations. They also desire to express their thanks to the Honourable Mrs. John Dundas of Papdale, and to Messrs.

Preface.

Duncan J. Robertson, J. Storer Clouston, and Edmund Selous for literary contributions which are in themselves sufficient to give a high value to the collection, as well as to place on record their indebtedness to the late Mr. James Tomison for the article

on "The Birds of Sule Skerry."

The matter contained in the unsigned articles has been contributed by many Orcadians, specialists in their several departments, whose names are sufficient guarantee for accuracy—Messrs. James W. Cursiter, F.S.A.Scot., for Archæology, including illustrations; James Drever, M.A., for Norse history and language; John Tait, M.D., D.Sc., for Zoology; John S. Flett, M.A., D.Sc., for Geology; Magnus Spence, F.E.I.S., for Meteorology and Botany; John Garrioch, M.A., for Seaweeds; John W. Bews, M.A., B.Sc., and George W. Scarth, M.A., for botanical and descriptive material; Robert C. Wallace, M.A., B.Sc., for descriptive material; and John Gunn (Kirkwall) for the list of Orkney birds in the Appendix.

As regards the artistic features of the book, special acknowledgment is due to Messrs. Thomas Kent, for his generosity in placing at the disposal of the Editor the whole of his unique collection of Orkney views, all the photographs reproduced being from his studio, with three or four exceptions; T. Marjoribanks Hay, R.S.W., for his drawing of St. Magnus Church, Egilsay; Stanley Cursiter, for the decorative initial letters, the title-page, and the cover design; and Miss Rose Leith, for the border designs of the grouped photographs; and to J. G. Bartholomew, LL.D.,

for the two-page map of the county.

Finally, the thanks of the Committee are due to the generous and patriotic friends, among whom special mention ought to be made of the Glasgow Orkney and Shetland Literary and Scientific Association, whose donations of money have enabled them to produce this book, for a volume whose circulation must necessarily be limited to a small area could be issued at so low a price only on condition of the initial cost of manufacture being met by those

interested in its production.

The Editor, who must accept responsibility for the general scope and plan of the book, as well as for the actual form and part of the contents of the unsigned articles, desires personally to acknowledge the valuable assistance he has received from the members of the Committee, especially Dr. John Tait and Mr. James Drever, and from the other friends who have helped by their sympathetic criticism and advice, to all of whom, as well as to himself, the work has been in every sense a labour of love; and he ventures to express the hope that the results of that work, as here visible, may find favour in the sight of all young Orcadians, and of many who are no longer young.

J. GUNN.

EDINBURGH, 1909.

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THE ORKNEY BOOK.

Part I.—The Story of the Past.

PREHISTORIC ORKNEY.

T what period of the world's history were our islands first inhabited, and who were their first inhabitants? These are questions which we cannot now answer. History is always made before it is written, and long ages must have passed in the history of these islands before any written records

began to be kept.

Yet there are some records of that dim, forgotten past, which patient research has gathered together, and which can be made to tell us a few fragments of our Island story. If we look into one of the museums where relics of the past are preserved, we may find such things as flint arrow-heads and knives, stone axes and hammers, bronze spear-heads, and other tools and weapons of the early inhabitants of our

islands. These silent witnesses tell us a little about what manner of men they were, and how they lived their long-forgotten lives.

The use of stone implements marks a very primitive stage of life, yet one which may not be entirely savage. There are tribes now living which are still in their Stone Age. A recent traveller tells of having seen an inhabitant of the South American Andes skin a hare very neatly with a small flint knife. This knife is now in Kirkwall, and is precisely similar to many which have been dug up in Orkney.

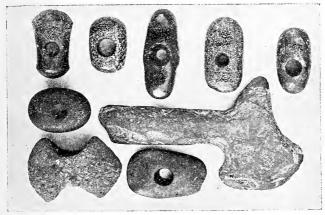


Flint Arrow-heads and Knives.

Flint is not a common stone in the Orkney Islands. It is found in occasional lumps and pebbles among the clay which has been carried from other places by the glaciers and icebergs of the Ice Age. Flint is common in the southern parts of Great Britain, however, and the arrows and knives found in our islands may have been brought from the south, or the art of making them may have been learned from tribes among whom flint was a more common material. This kind of stone, the fine steel of the

Stone Age, was used for small implements over a wide area of the world.

Orkney must have had a large population in those early days. The number of ancient graves which have been found seems to indicate this, especially if we suppose that most of those graves with their heaped-up mounds are the resting-places of chiefs and great men rather than of the common people. The graves which remain are of varied



Stone Hammers and Axes.

types, from the simple cist of upright stones roofed with horizontal slabs and covered with earth, to the large mound with its carefully built chambers.

The variety of the objects found in those graves, from the rudest flint and bone implements to those which are carefully finished, and finally to objects made of metal, shows that the burials belong to different periods. They tell us of long ages of increasing though now forgotten civilization. Some of the mounds, indeed, show by their contents that they cover the remains, not of the original and unknown inhabitants, but of the Norse conquerors, and thus really belong to the period whose history has come down to us in writing. But in the very mound where the Norse warrior was laid to rest, there are sometimes also found the relics of burials of a much ruder age. Such mingling of the materials of our unwritten history makes the story which they tell a very difficult one to read.

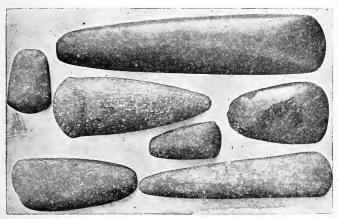
There are few remains in our islands more striking than the chambered mounds, or Picts' houses, as they are called. The most complete and probably the most recent of them is that known as Maeshowe. They consist of a mound of earth heaped over a rude building, sometimes of one apartment, but frequently of several, the entrance being a long, low, narrow passage, through which it is necessary to stoop or crawl in order to gain an entrance.

Possibly those Picts' houses were built at first as houses to dwell in, though later used as tombs. It is not uncommon to-day to find buildings used for burial which were designed for other purposes. If ever our race and all its records were to vanish as completely as the primitive inhabitants of the Orkney Islands have done, we can imagine some future explorer of the ruins of St. Magnus Cathedral writing a learned treatise to prove that the largest building in our islands was erected as a burial-place for our dead.

Those mound dwellings, or Picts' houses, may seem to us a very strange form of house to live in. Where can we find to-day houses of such a type, and with so very inconvenient a form of entrance? The

Eskimos, as travellers tell us, are in the habit of building just such houses with blocks of snow, and they find this the best type in the extreme cold of their Arctic climate. Possibly the Picts' house type of dwelling was used in Orkney and in other places for similar reasons.

The brochs, or Pictish towers, as they are also called, are buildings of a different kind, which are

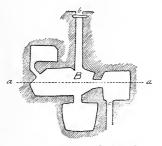


Polished Stone Celts.

also fairly common in Orkney. They are probably of later date than the Picts' houses. Considerable skill, as well as co-operation in labour, must have been required for their erection.

The most complete broch in existence is that of Mousa in Shetland. Of those which are found in Orkney, only the lower portions now remain. Over seventy such ruins have been examined, the best specimens being in Evie (Burgar), Birsay (Oxtro),

Harray, Firth (Ingashowe and Stirlinghowe), St. Ola (Birstane and Lingro), St. Andrews (Dingishowe and Langskaill), Burray (East and West Brough), South Ronaldsay (Hoxa), Shapinsay (Borrowston), and



Plan of Chambered Mound, Wideford Hill, b, Entrance. c, Blind Passage.

Stronsay (Lamb Head).

The typical broch is a large round tower, fifty or sixty feet in diameter, and probably as much in height. The wall is about fifteen feet thick, and solid at the base, except for some vaulted chambers which are made in it. Higher, the wall is hollow, or rather consists of an outer and an inner wall,

with a space of four or five feet between them. This space is divided into a number of stories or galleries by horizontal courses of long slabs of stone, which form



Chambered Mound, Wideford Hill. Section on line a, a of plan.

the roof of one story and the floor of that above it, and at the same time bind the two walls firmly together. A stairway gives access to the various stories, and light is admitted by small windows opening into the interior space of the tower, no windows being made in the outer

wall. A single door in the lower wall forms the only entrance to the inner court of the broch.

These towers were probably constructed for the purpose of defence, and against a primitive enemy they would serve as well as did the castles of a later age before the invention of gunpowder. Indeed, we read of the broch of Mousa being actually used as a fort in the time of the Norsemen.

Who the builders of these towers were we cannot discover. They are undoubtedly very ancient; yet their builders and occupiers were by no means savages. From the remains which have been found in them we



Broch of Mousa, Shetland.

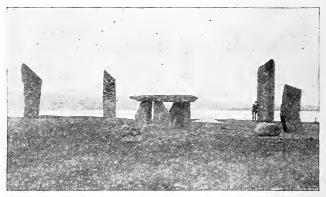
1. Exterior. 2. Section. 3. Section with inner wall removed.

learn that they were used by a people who kept domestic animals, who cultivated the ground, and who could spin and weave the wool of their flocks into cloth. No weapons of the Stone Age are found in the brochs.

It is certain that they were built, and that most of them may have fallen into ruins, long before the Norsemen came. Many of the places where they stand were named by those settlers from the broch which was found standing there. The words borg, as in Burgar, and howe (haug), as in Hoxa (Haug's aith, or isthmus), are found in many place-names.

It is certain, too, that the brochs were not then occupied, or we should have found some account of their siege and capture in the Sagas which tell of Norse prowess by land and sea.

Another type of ancient remains which is common in our islands is the standing stones. These are found in many places, either singly or in groups or circles. Regarding these relics of a distant past much has been written, but little is known.



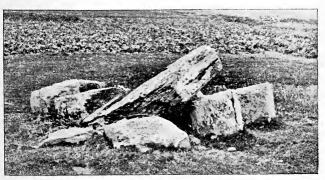
The Stone Circle of Stenness as now Restored.

An upright stone is the simplest and most effective form of monument, and is that which we most commonly use to this day to mark the resting-places of our dead. To the ancient Orcadian it was a matter of more difficulty to quarry and to transport and erect such monuments, and doubtless they would be set up only in memory of some great event, such as a notable victory, or the fall of a great chieftain.

The great stone circles, such as those of Stenness and of Brogar, are supposed to have served a different

purpose. They are believed by many to have been the temples of some primitive people, who met there to worship their gods. It has also been supposed that the people who erected those circles were sunworshippers, as the situation of certain prominent stones seems to have been determined by the position of the rising sun at midsummer.

But in these matters we cannot be certain of our conclusions. Most of our great churches and cathedrals are placed east and west, with the high altar



Fallen Cromlech or Table Stone, Sandwick.

towards the east, and even the graves in our churchyards are usually similarly oriented; but this does not prove that we are sun-worshippers, whatever our forefathers may have been before they accepted Christianity. We may indulge in much speculation about them, and form our own opinions as to what they originally meant, but those hoary monoliths remain a mystery, and the purpose of their erection we can only guess.

THE BEGINNINGS OF OUR HISTORY.



N the history of the ancient world some vague and fragmentary references are made to our islands, but from these little real knowledge of them can be gathered. As early as the time of Alexander the Great we come upon some notices of certain northern islands, which must be either Orkney, or the

Hebrides, or Shetland, or the Faroes, but we cannot determine which. The Phœnicians, who were the great sea-traders and explorers of the early world, seem to have had a little knowledge of these northern

archipelagoes.

In the time of the Roman occupation of Britain we have definite mention of the Orcades, but nothing which shows any real knowledge of them. They were visited by the fleet of Agricola after his invasion of Scotland, as recorded by Tacitus. About three centuries later, the poet Claudian sings of a victory by the Emperor Theodosius, who, we are told, sprinkled Orcadian soil with Saxon blood. We are not told, however, who the people called Saxons really were, or whether they were the inhabitants of the islands or not. They may have been early Viking raiders who had fled hither and been brought to bay among the group.

Early Church history has also some references to Orkney. After St. Columba had left the shores of Ireland to carry the message of Christianity to the Picts and Scots in Scotland, another Irish missionary, Cormac, went on a similar voyage among the Orkney Isles. Him, therefore, we may regard as the apostle to the northern heathen. St. Adamnan, the biographer of St. Columba, tells the story, and the name of Adamnan himself is still commemorated in the name of the Isle of Damsay.

After the visit of Cormac, the Culdee missionaries established themselves in various parts of Orkney, as the place-names given by the Norsemen show. In several of these names we find the word $p\acute{a}pa$, a form of pope, which was the name applied to the monks or clergy of the Culdee Church. Like Columba himself, who made the little island of Iona his head-quarters, his followers seem to have preferred the seclusion of the smaller islands. To this habit are due such names as Papa Westray and Papa Stronsay. Other Church settlements have left their traces in names such as Paplay and Papdale.

Another place-name which records an old-world mission station is that of *Deerness*. At first sight this name seems rather to indicate that abundance of deer were found there; and some writers tell us, by way of proving this, that deer's horns have been found in that parish. But as deer's horns have also been found in many other places in the county, the proof is not convincing. We must remember that the Norse invaders were likely to name the place on account of its appearance from the sea. They may, of course, have noticed a chance herd of deer near

the cliffs; but one thing is certain to have caught their eye—the unusual sight of a building of stone on the Brough of Deerness. Some remains of this building, and of a later one on the same site, still exist; and it was long regarded as in some way a sacred place, to which pilgrimages were made. This building was in fact one of those outposts of early Christianity—a Culdee monastery. When the Norse invaders came, they doubtless found it occupied by some of the Culdee clergy—diar, as they would be called by the strangers—and so the headland was named the Priests' Cape, or Deerness

It is quite possible that deer existed in Orkney down to the Norse period, but they were much more likely to be found in the hilly regions of the west Mainland, which was the earls' hunting-ground. We read of an Earl of Orkney going over to Caithness for the chase of the deer, which seems to suggest that they were then scarce, if not extinct, in Orkney.

Among the remains of the Culdee settlements which are still found are monumental stones with Christian emblems inscribed on them, or with Irish Ogham writing, and ancient bells, probably used in the churches. The curious round tower which forms part of the old church of St. Magnus in Egilsay is of a type common only in Ireland. The name of that island is probably derived from an earlier church which the Norsemen found there, and heard called by its Celtic name, ecclais. It has been supposed by some that the name Egilsay means Egil's Island, so called after some man named Egil; but the probability is that it meant the Church Island.

All that we can learn, then, from the ancient relics

of its first inhabitants, and from the brief references to the islands by old historians, amounts to very little. We know that Orkney was thickly inhabited by some ancient people, living at first the primitive life which is indicated by the use of stone implements. We may suppose that they had at one time a religion in some way connected with sun-worship. We know that they built earth-houses somewhat like the snowhouses of the Eskimos, many of which still remain, and that, in some cases at least, these have been used as places of burial by later inhabitants. We know that at one period strong circular towers were built, probably as fortresses, by a people of some degree of civilization. We know that in the time of St. Columba Christian missionaries or monks visited the islands, whose inhabitants were then probably of the race known as Picts, and whose chiefs are said to have been subject to the Pictish king of Northern Scotland. Some at least of those Culdees we may suppose to have been hermits rather than missionaries, although they may have combined the two characters. How many centuries of time are covered by these facts and suppositions we do not know, but they sum up all that can be said with certainty regarding Orkney before the coming of the Norsemen.

There is one very curious fact about the beginnings of the Norse records: they make no mention whatever of any inhabitants being found in the islands. The place-names afford evidence, as we have seen, of the presence of Culdee monks, but of other population there is no trace. The new-comers seem to have settled as in an uninhabited land, each Viking selecting and occupying his land without let or hindrance.

The Beginnings of our History.

22

If there had been a native population, and if these had been either expelled or exterminated by the invaders, we should surely have been told of it by the Saga writers, who would have delighted in telling such a tale. It has accordingly been supposed that at the time of the Norse settlement the islands were uninhabited save by the hermits of the Culdee Church. When or how the former Pictish inhabitants disappeared it is impossible to say. Possibly some early Viking raids, of which no history remains, had resulted in the slaughter of many and the flight of the rest to the less exposed lands south of the Pictland or Pentland Firth. Whatever the reason may be, the chapter of our Island history which opens with the Norse settlement is in no way a continuation of anything which goes before, but begins a new story.



Carved Stone Balls,

THE NORSEMEN AND THEIR SAGAS.

T is late in the eighth century before the Northman or Norseman appears on the stage of history. From the day when Cæsar's victorious legions brought the Gauls, the Germans, and the Britons under the sway of the imperial city, these nations of Western Europe are never again entirely lost to

history. But Scandinavia and the countries round the Baltic remained unknown to Rome and to the world for long centuries afterwards. "There nature ends," one of the Roman writers has said, when speaking of these northern lands. This brief yet expressive sentence well indicates how completely outside the Roman world lay the countries which were the cradle of our race.

There is another side to all this, which we find it difficult to picture clearly in our minds. To the inhabitants of Scandinavia and the lands round the Baltic, the southern parts of Europe were equally unknown. We find in a Scandinavian writer of the ninth century a description of an expedition which was made by one of the Viking chiefs to this unknown world. In the course of his travels he came upon a city which to the Norseman seemed mysterious and dread—a city of Niflheim, the under-world.

This city, as we learn from contemporary Western writers, must have been Paris. Paris, now the gay capital of Europe, and even then a city of importance and of fame, was so unknown to the Norsemen of the early ninth century that it was deemed a part of Niflheim, the under-world!

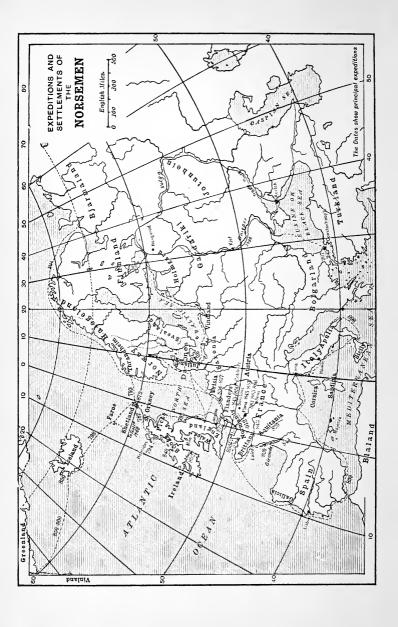
During the period when the northern nations were hidden from the eye of history, many changes must have been going on among them. The building and management of ships could not have been learned in a day, and even when we first catch sight of the Norsemen they were the finest and most daring seamen in the world, and their ships probably the most perfect hitherto seen. Many voyages among their own islands and in the Baltic must have preceded the longer voyages to Britain, to Iceland, to Greenland, and to America. Numerous wars there must have been, quite unknown to history, before the northern warrior became the terrible fighter of the Viking Age.

We can imagine the delighted wonder with which the northern warriors first gazed upon the rich and fertile shores of South-Western Europe. We can imagine how they contrasted the fair fields and great cities of the south with the bleak and sterile shores of the north from which they came. What motives first led to their leaving their native shores it is difficult to say. Thirst for adventure, the pinch of poverty at home, the desire of possessing gold and treasure, all conspired to make them seek their fortunes in the wide and unknown lands which lay beyond the sea. When the first adventurers brought home accounts of the lands which they had seen—the fruitful fields, the great cities, the rich

merchandise, and the yellow gold—great numbers of their fellow-countrymen would be seized with a longing to visit those wonderful shores where wealth was to be had for the taking. The roving spirit once roused spread rapidly over the northern lands. The storm of Viking fury burst on the lands of Western Europe almost without warning.

In the Anglo-Saxon Chronicle, under the date A.D. 787, we read: "In this year King Beorhtric took Eadburh, King Offa's daughter, to wife. And in his days first came three ships of Northmen from Haerethaland, and the reeve rode down to them and would drive them to the king's vill, for he knew not what men they were, and they there slew him. These were the first ships of Danish men that sought the land of the English." Thus we read of the first mutterings of the storm which was so soon to burst on the coasts of Western Europe. During the succeeding two centuries and a half the English learned to know well what men these were who came out of the wild north-east. The monks' litany, "From the fury of the Northmen deliver us, O Lord!" tells us what they thought of them.

We can trace two distinct roads which the Viking raids followed. One, traversed chiefly by the Danes, led along the shores of Northern Europe to England, the English Channel, France, Spain, and the Mediterranean; the other, traversed chiefly by the Norsemen, led straight across the North Sea to the Orkneys, thence along the west coast of Scotland, to Ireland and the west of England. The islands lying off the coasts of Scotland, England, Ireland, and France were seized by the invaders, and from these as bases their raids



extended far and wide. Monasteries felt the utmost fury of their attacks, for there they knew they would find abundance of spoil. At first the invaders confined themselves to plundering expeditions. The Norsemen early turned their attention to settlement and commerce; the Danes, on the other hand, remained for a longer period intent on plunder alone.

Civil wars in Western Europe had rendered the nations there incapable of effective resistance to the ruthless invaders. The Vikings descended now at one point, now at another. When they met with a more stubborn resistance than usual, they merely retired to their ships with whatever plunder they had seized, and sailed away to make an attack somewhere else. They wintered on the islands which they had seized, and as soon as spring was come they descended once more on the devoted lands. Ireland suffered severely at their hands. The Orkneys and the Hebrides became nests of Vikings; in fact, colonies of them must have been established there at a very early date. In these islands they were safe from all interference—a law to themselves; for as yet there was no arm in Europe long enough and strong enough to reach them. Nowhere could a more convenient base have been found for Viking raids on the British and Irish shores.

The first half-century of the Viking Age saw the Danes settled merely in outlying parts of the east coast of England. The Norsemen, on the other hand, had already seized on Orkney, Shetland, the Hebrides, and large tracts of Eastern Ireland. The first fifty years of the Viking Age may be called the first period of Norse colonization in the west.

It would be a great mistake, however, to suppose that the Norsemen were merely turbulent sea-robbers, or that the only result of their migrations was to hinder the progress of civilization in Western Europe. As settlers in other countries, they brought new strength and vitality to the land of their adoption; but instead of remaining separate colonies, they were soon absorbed into the native population, and had no further history of their own.

Yet there were two great settlements abroad which left a deep mark on European history. The one was the colonization of the north of France, afterwards called Normandy. There the Norsemen soon adopted the language and the religion of the country, but retained so much of their native characteristics that the subsequent Norman Conquest of England may be regarded as really a Norse inroad of a specially successful type. The other settlement was that in the south of Italy and Sicily, later known as the kingdom of the Two Sicilies, which occupied an important place in history during the Middle Ages.

Even the British settlements for the most part had only a brief period of separate history, and soon became merged into the general stream of national life. In Orkney and Shetland, however, where there was probably no native population at the time of the Norse invasion, the colony developed along its own special lines, and has left behind it a history which for centuries remained distinct from that of the rest of Great Britain

The history of the Orkney Islands during the period of the Norse occupation is preserved for us in the Icelandic Sagas. Iceland was one of the earliest and

most important Norse colonies, and there the old Northern language was preserved better than anywhere else. The Sagas are stories which, in the times of long ago, were told around the fires in Iceland and other Norse colonies to while away the long winter evenings. At festivals and merry-makings, during long voyages, or by the winter fireside, the Norseman listened eagerly to the recital of deeds done by his kinsmen in other times and in other lands. Storytelling was a popular pastime, and the man who knew many Sagas was ever a welcome guest.

Many of the Sagas have now been translated into English, and all of these are well worth reading. The greatest of all the Sagas is generally thought to be the Saga of Burnt Njal. It is one of the noblest stories to be found in any language, and it is besides nobly told. In this Saga we find the best account of the great battle of Clontarf. Among the other great Sagas are the Saga of the Settlers on the Ayre, the Saga of Laxdale, the Saga of Egil the son of Skallagrim, the Saga of Grettir the Strong, and the Saga of the Volsungs. The two last are mythical Sagas; they do not tell of real historical personages, but are paraphrases of old songs and legends which have come down from a more distant past. The Anglo-Saxon Saga of Beowulf tells some of the same stories, and is not a real Saga in the sense of a true story told by the fireside.

The stories of the earls and chiefs of Orkney form part of the great store of Saga literature, and these have come down to us in the form of the "Orkneyinga Saga." It must be remembered, however, that this is merely the summary of a great number of stories which had been told long before by men who had no doubt taken part in the events related. It was a Saga-man's pride to tell the truth—at least as it was told to him—and so we may in the main rely on the Orkney Saga as a true account of events which happened, although sometimes it may be exceedingly difficult to assign the correct dates. The Orkney Saga is not usually reckoned among the great Sagas. It partakes more of the nature of a general history than of a single and complete story. This Saga is the chief source of our knowledge of the history of our islands during Norse times.

The Orkney Saga consists of several parts, each of which might be called a separate Saga—the Earls' Saga, Magnus's Saga, and Rognvald's Saga. The first relates the history of Orkney from its conquest by King Harald Fairhair of Norway down to the death of Earl Thorfinn, about the time of the Norman Conquest of England. The second relates the lives of Thorfinn's sons, Paul and Erlend, but more especially of the holy Earl Magnus, of his murder, and of the wonderful things that happened afterwards through his holiness. The third part tells of the earls after St. Magnus, chiefly Earl Rognvald the Second, and the great Viking, Sweyn Asleifson of Gairsay, generally known as "the last of the Vikings." The whole history given in the Orkney Saga includes the events of the three centuries from 900 to 1200.

In addition to what we learn from the Orkney Saga, we glean a few facts about the history of our islands from other Sagas, such as the Sagas of the Kings of Norway, usually called the "Heimskringla." There are also many Norse poems which scholars say

must have been written in Orkney, or in some other of the western Norse colonies, and from these we can learn much about the life of the people, their thoughts, and their beliefs, though very little about the actual history of the islands. We do not know who were the authors of these poems, but some of them were really great poets, greater, perhaps, than any then living in any other part of Europe.

Finally, there are occasional glimpses of our Norse ancestors to be caught in the pages of the chronicles and histories of the nations. Unfortunately, these references are so often distorted by fear or hatred, or so confused through scanty and imperfect knowledge, that they add very little to what we already know from Norse records. One good purpose, indeed, they serve: they show that the Saga-men were in the main truth-tellers, so that we can place reliance on their stories, even where these are not found in the records of other nations. The Saga-men also fill up many gaps in the history of those countries which the Norsemen visited, and thus they render our knowledge of the Viking Age more complete, more detailed, and more accurate, even as regards countries which were to them foreign lands.



Ancient Bronze Spear-head; Horn Mounting still preserved.

THE BEGINNING OF THE EARLDOM.

EFORE our story begins, Norway was divided into a number of small kingdoms. About the year 890 A.D.

doms. About the year 890 A.D. a king called Harald, who ruled over one of these small kingdoms, resolved to make himself master of all Norway. He made a vow

that he would not cut his hair until he was acknowledged king throughout the whole country. This ambitious aim took some time to accomplish, and as the years passed his thick locks grew long and shaggy. Thus he got the name of Harald Shockhead.

One after another, however, he subdued the smaller kingdoms, compelling the earls and chiefs to acknowledge him as their king, or to leave the country. Then began what may be called the second period of Norse colonization in the west. Many of the proudest and boldest of the Norsemen, deeming it a disgrace to serve a king who was at best only their equal, preferred to trust themselves and all their belongings to the ocean, and take whatever fortune might await them.

Those nobles who fled from Norway, regarding Harald as their enemy, soon began to spread terror along the shores of Norway itself, returning to plunder, and slay, and burn, as their fellow-countrymen had so often done in the west. Their chief haunts were among the Orkneys and the Hebrides. Thither they betook themselves with their booty when winter came on. There they lived and feasted all through the winter, and when spring came they descended once more on the coasts of Norway. Ireland and the west coast of England also suffered from these raiders, and in France a determined effort to conquer the country was at this time made by the Norsemen. Hrolf or Rollo, the Norseman, became master of the north of France, and gave to it a new name—Normandy, the land of the Normans or Norsemen.

The last great effort made by these Norse nobles to break the power of King Harald was foiled by their defeat at Hafursfrith. A great league had been formed against Harald. Vikings from over the sea crowded back to Norway to avenge their own injuries and to help their kinsmen. The two fleets met at Hafursfrith in the south of Norway, and a long and stubborn battle ended in victory for Harald. This battle had far-reaching results. It was the end of the struggle for independence in Norway. Harald was then left free to turn his attention to the chastisement of the Vikings in the west. The result was the foundation of the Norse Empire in the west, and the colonization of Iceland and Greenland by those Norsemen who still scorned to own the sway of the Norwegian king.

With a large and splendidly equipped fleet, Harald swooped down on the Vikings in Orkney and the (1.384)

Hebrides. Their resistance was feeble enough. Some yielded themselves to the king; others fled before him. Nowhere was there anything like a pitched battle. As far south as the Isle of Man, Harald pursued his career of conquest. Turning north once more, he established Norse jarldoms or earldoms in Orkney and the Hebrides, to be subject henceforth to the Norwegian crown. Then, considering that his vow was fulfilled, Harald at last had his long hair cut, and was afterwards known as Harald Fairhair.

One of Harald's chief friends and supporters was Rognvald, Earl of Moeri and Romsdal, who was called by the men of his time, "The mighty and wise in council." This Rognvald was the father of Rollo of Normandy. He had other sons named Ivar, Thorir, Rollaug, Hallad, and Einar, and he had a brother called Sigurd. The family makes a very large figure in the history of those times. In one of Harald's battles in the west fell Ivar, Rognvald's son. Harald assigned to Rognvald the newly created Jarldom of Orkney in order to compensate him in some measure for the loss of his son. But Rognvald had already large estates in Norway. He thought that these were quite enough for one man to govern. Accordingly he handed over the Orkneys to his brother Sigurd, who thus became the first Jarl or Earl.

Sigurd, the first Earl of Orkney, sometimes called Sigurd the Mighty, was a strong and energetic ruler. When King Harald departed for Norway, the earl at once began to strengthen himself in his new dominions. He first allied himself with Thorstein the Red, son of the Norse king of Dublin, and with

the Norsemen in the Hebrides, and then invaded Scotland in an attempt to add to his earldom Caithness and Sutherland. The Scots naturally offered a determined resistance. Their leader was Maelbride or Melbrigda—called Melbrigda Tusk because he had a large projecting tooth—Earl or Maormor of Ross.

After the war had lasted for some time, the two earls agreed to meet and settle their quarrel, each taking forty men with him. On the day fixed for the meeting, Sigurd, suspecting, as he said, the good faith of the Scots, mounted two men on each of his forty horses, and came thus to the place appointed. As soon as the Norsemen appeared in sight, Melbrigda saw that he had been trapped, and turning to his men, said, "We have been betrayed by Sigurd, for I see two feet on each horse's side. The men must therefore be twice as numerous as the horses that bear them. Nevertheless let us harden our hearts and sell our lives as dearly as we can."

Seeing the Scots prepared to die hard in the place where they were, Sigurd divided his force and attacked them at once in front and in flank. The battle was fierce and bloody, but it ended in the total extermination of the small band of Scots. Sigurd, exulting over his fallen foe, cut off Melbrigda's head and fixed it to his saddle. On his way home, in spurring his horse his leg struck against the great projecting tooth which had given Melbrigda his nickname, and the tooth pierced his leg. Blood-poisoning followed, and a few days later Earl Sigurd died in great pain on the banks of the Dornoch Firth. He was buried at a place now called Cyder Hall (Sigurd's Howe), near Skibo Castle.

Sigurd was succeeded in the earldom by his son Guttorm. Guttorm ruled the islands for one short and uneventful winter, and then died childless. some time the earldom was without a ruler. Vikings once more began to make the Orkneys their headquarters, and to harass the more peaceful inhabitants of the islands. When King Harald heard that the Orkneys were without a ruler, he asked Earl Rognvald to make haste to send them another earl. Rognvald then had the title of Earl of Orkney conferred on his son Hallad, who sailed for the west as the third earl. But Hallad was weak and indolent. western earldom was too turbulent and difficult to govern. He soon wearied of his dignity, and at last, deserting his earldom, went back to Norway. After his ignominious withdrawal from the earldom, the islands came under the rule of two Danish Vikings.

Although Hallad preferred a simple farmer's life to an earl's dignity, there were others of Rognvald's sons who were more ambitious. Einar especially was eager to redeem the family honour by the expulsion of the Vikings from the islands. Accordingly Einar was chosen as Earl of Orkney, and after King Harald had conferred on him the title, he set out for his earldom. The old Earl of Moeri had never regarded his youngest son with much favour, and, to tell the truth, neither desired to see the other's face again.

Einar was the best and greatest of the early Norse earls. In appearance he was tall and manly; his face was somewhat disfigured by the loss of an eye, but in spite of this he was reputed to be very sharp-sighted. His father had prophesied that Einar would never become a great chief; yet he became the most

famous of all Earl Rognvald's sons, with the exception of Rollo of Normandy.

The earldom was in a state of great disorder when Einar arrived. The Vikings had to be expelled, the government had to be settled and established, and the people had to learn to trust and obey their new earl. All these things were accomplished in a marvellously short space of time. The new earl also taught his people many useful arts. Wood was scarce: Einar knew that the people of Scotland used peat for fuel, and he taught the Norsemen in the islands to do the same. From this he got the name of Torf-Einar.

Soon a serious trouble arose. King Harald's sons had now grown up to be very turbulent and overbearing men. They quarrelled with their father's chiefs and earls. Two of them, Halfdan Highleg and Gudrod Bright, attacked and slew Rognvald, Earl of Moeri. Harald was enraged that his sons should thus murder his best and most faithful counsellor and friend. He marched against them with an army, and ordered them to be seized and brought before him. Gudrod gave himself up to his father, but Halfdan seized a ship and sailed west to the Orkneys.

Halfdan's sudden arrival in the earldom caused panic for a time. Einar was quite unprepared for an invasion. He accordingly thought it wiser to escape to Caithness until he had time to collect his forces. In the meantime Halfdan seized the government of the isles, taking the title of King of Orkney and Shetland. The same summer saw Einar back in the Orkneys with a fleet and an army to regain his earldom. The two fleets met somewhere off the island

of Sanday. A fierce battle took place, and Halfdan's force was practically annihilated. In the dusk of the evening he himself leaped overboard and escaped.

Next morning the shores were searched for fugitives. All who were found were slain, but Halfdan himself had disappeared. While the search was still proceeding, Einar was observed to stop suddenly and gaze across the sea towards the island of North Ronaldsay, or Rinansey, as it was then called.

"What see'st thou, jarl?" asked one of his companions. "I know not what it is," was the reply. "Sometimes it appears to rise up, and sometimes to lie down. It is either a bird in the air or a man on the rocks, and I will find out."

This object which the earl saw was Halfdan, who had probably just dragged his weary limbs from the water, and was now struggling up over the rocks to the land. The earl's men pursued and captured him. He was at once brought before the earl, who ordered him to be slain, to avenge his father's murder, and as a sacrifice to Odin for the victory.

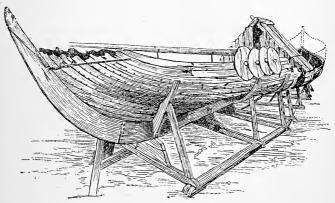
Angry as King Harald had been because of the murder of Earl Rognvald, the death of his son at the hands of Rognvald's son was not likely to be very agreeable to him. Harald therefore determined to make a second expedition to the west.

When Einar heard of Harald's intended visit to the Orkneys, he thought that he would be safer out of the king's way, and accordingly he crossed the Pentland Firth. Messengers went backwards and forwards between the king and the earl for a while, arranging terms of settlement. At length the king demanded that the earldom should pay a fine of sixty marks.

To that Einar agreed, and King Harald Fairhair bade farewell to his western dominions for ever.

It was no easy matter for the Orkneymen to raise the sixty marks, and the earl called a Thing or council to discuss the matter. At length the earl offered to pay the whole fine himself, on condition that all the freehold or udal lands of the Orkneymen were handed over to him in pledge for the amount that each had to pay, and to this the islanders agreed.

In this way the earl came into possession of all the udal lands in the Orkneys; and it was not till the time of Earl Sigurd the Stout, a century later, that the udal rights were restored to the Orkneymen. Earl Einar spent the rest of his days in peace. The earldom was well ruled. Vikings were afraid to plunder the dominions of so powerful a chief; and after a long and honourable reign the good earl died on a sickbed—what the Vikings called a "straw death"—about the year 933.



Remains of a Viking Ship found in Sweden.

THE DARK CENTURY.

HE tenth century may fittingly be called the dark century of Orcadian history. We know very little of it except occasional glimpses afforded by obscure references in the Sagas; and the little that we do know

tells of treachery and bloodshed and murder to an extent unusual even in the troubled annals of Orkney.

After the death of Torf-Einar the earldom came into the hands of his three sons, Thorfinn—usually called Thorfinn Skull-splitter—Arnkell, and Erlend. The disturbed state of Norway, consequent on the death of Harald Fairhair about the year 945, caused turmoil and confusion throughout all those lands which had been conquered and settled by the Norsemen. Harald left behind him a brood of wild, reckless sons, each of whom thought he had a right to a share of his father's dominions. They filled the whole land with turbulence and bloodshed.

Eric Bloody-axe had been Harald's favourite son, and he at first took over the chief rule in Norway. He was a brave and skilful warrior, but passionate, avaricious, and treacherous in his disposition. The same qualities were possessed in an even greater degree by his queen, Gunnhilda. Their deeds of violence soon estranged the hearts of their subjects.

Hakon, Harald's youngest son, who had been brought up in England under the care of King Athelstan, came to Norway to claim his share of his father's dominions. Hakon was at this time only in his fifteenth year, but he was daring and ambitious, and was the darling of the Norsemen both at home and abroad. Eric Bloody-axe and Gunnhilda were, on the other hand, regarded everywhere with hatred and detestation. When, therefore, Hakon invaded Norway and attempted to wrest the sovereignty from the hands of his elder brother, the latter was deserted by his people and was forced to flee from the country.

Eric crossed first to Orkney, where he gathered a band of followers as reckless as himself, and then held on to England and began to ravage the land in the usual Viking fashion. Close friendship had long existed between Athelstan and Harald Fairhair. Athelstan professed similar friendship for Harald's sons, and now offered Eric the lordship of Northumbria. Eric was not so foolish as to reject this offer. Gunnhilda and he with their family abode in peace in Northumbria for about a year.

With the death of Athelstan fortune began once more to frown upon the exiled king. King Edmund thought it by no means desirable that the Norsemen should hold so large a portion of his kingdom. Knowing the insecurity of his tenure, Eric's reckless spirit flashed at once into open rebellion. He left Northumbria, sailed to Orkney, seized the Earls

Arnkell and Erlend, forced many other Orcadian chiefs to join him, and made a Viking raid on the west coast of England. The raiders met with resistance and a battle was fought; in this battle fell Eric himself, both the Orkney earls, and most of the other leaders.

When news of this disastrous expedition reached Gunnhilda, who had remained with her family in Northumbria, she in turn embarked for Orkney. She and her sons claimed the earldom, seized the taxes, and spread wrong and oppression over all the western colonies. For a short time the islands suffered the same misgovernment as Norway had already suffered at her hands. But war now broke out between Norway and Denmark. This seemed to afford her a chance of regaining the Norwegian crown, and Gunnhilda and her family sailed eastwards once more. Ragnhilda, her daughter, was left behind in Orkney to continue for a time her mother's acts of treachery and bloodshed.

There are few worse characters in history than Ragnhilda as depicted by the Saga. She seemed to have a mania for plots and murders. Married first to Arnfinn, one of the sons of Earl Thorfinn, she caused him to be murdered at Murkle in Caithness, for no reason that we can find out, and then married his brother Havard. On the death of his father Thorfinn, shortly afterwards, Havard became earl. He is known in history as Havard the Harvest-happy, because during his time the islands were blessed with good harvests. Havard also met his death at the instigation of his wife. Ragnhilda persuaded Einar Oily-tongue, his nephew, to murder the earl, promis-

ing to marry him and secure for him the earldom when the deed was done. Einar set on Havard in Stenness, and slew him after a hard struggle. But it was apparently no part of Ragnhilda's plan to marry Einar Oily-tongue. She now professed the greatest indignation and grief at the murder of Earl Havard, and called for vengeance on his murderer. Einar Oily-tongue had a cousin, also called Einar. He in turn fell a victim to the wiles of Ragnhilda. By promising or at least hinting that she would marry the man who avenged the murder of Earl Havard, she succeeded in getting the second Einar to murder the first, and ended by marrying Ljot, the third son of Earl Thorfinn, who was the real heir to the earldom.

This was by no means the end of Ragnhilda's wickedness. Ljot had a brother, Skuli, who was not at all satisfied that the former should have the whole earldom. It was an easy matter to make trouble between the two brothers. In the end Skuli left the islands for Scotland, and became Earl of Caithness and a vassal of the Scottish king. Bad feeling continued between the brothers, and was carefully fostered by Ragnhilda. Ultimately they met in arms in Caithness, Skuli with a Scottish army, and Ljot with the forces of the earldom. The Scots were defeated and Skuli slain.

Ljot now added Caithness to his earldom, but the Scots again and again strove to reconquer it. Finally a great battle was fought at Skidmire in Caithness. The Norsemen gained the day, but the earl was fatally wounded. There remained one son of Thorfinn Skull-splitter, named Hlodver, who now became

earl over an earldom exhausted and impoverished by twenty years of misgovernment and bloodshed, and embroiled in an arduous struggle with Scotland for the possession of Caithness.

The Orkney earldom, however, was now on the eve of a great expansion. Under the son and grandson of Hlodver, Sigurd the Stout and Thorfinn the Mighty, the Norse dominion in the west attained its widest bounds, and the earldom of Orkney its greatest importance. For more than half a century, with little or no interference from Norway, the Orkney earls helped to mould the history of Ireland and of Scotland; and until the union of England and Denmark took place under Canute, the Norse Earls of Orkney were probably the most powerful chieftains in the British Isles.

It was in the time of Earl Sigurd that Christianity was first introduced among the Norse inhabitants of Orkney. Olaf, Tryggvi's son, King of Norway, had embraced the new faith, and his methods of promoting the religion which he professed were characteristic of his time and race. The story of the conversion of Earl Sigurd and his followers is thus given in the Saga:—

"Olaf, Tryggvi's son, sailed from the west to the Orkneys; but because the Pentland Firth was not passable, he laid his ship up under the lee in Osmund's Voe, off Rognvald's Isle. But there in the voe lay already Earl Sigurd, Hlodver's son, with three ships, and then meant to go a-roving. But as soon as King Olaf knew that the earl was there, he made them call him to come and speak with him. But when the earl came on board the king's ship, King Olaf began

his speech." (We pass over his long historical review of the establishment of the Orkney earldom and its dependence upon the kings of Norway, and give only his closing sentences.)

"'Now, as so it is, Earl Sigurd, that thou hast come into my power, now thou hast two choices before thee, very uneven. One is that thou shalt take the right faith and become my man, and allow thyself to be baptized and all thy undermen; then shalt thou have a sure hope of honour from me, and to have and to hold as my underman this realm, with earl's title and full freedom as thou hast erewhile had it; and this over and above, which is much more worth, to rule in everlasting bliss with all-ruling God—that is sure to thee if thou keepest all His commandments. This is the other choice, which is very doleful and unlike the first—that now on the spot thou shalt die, and after thy death I shall let fire and sword ruthlessly rage over all the Orkneys, burn and brand homesteads and men, unless this folk will have salvation and believe on the true God......'

"But when Earl Sigurd had heard so long and clever a speech of King Olaf, he hardened his heart against him, and spoke thus: 'It must be told thee, King Olaf, that I have firmly made up my mind that I will not and may not and shall not forego that faith which my kinsmen and forefathers had before me; for I know no better counsel than they, and I know not that that faith is better which thou preachest than this which we have now had and held all our lives.'

"And with that the king saw the earl so stiffnecked in his error, he seized his young son, whom the earl had with him, and who had grown up there in the isles. This son of the earl the king bore forward on the prow and drew his sword, and made ready to cut off the lad's head, with these words, 'Now mayst thou see, Earl Sigurd, that I will spare no man who will not serve Almighty God, or listen to my exhortations and hearken to this blessed message; and for that I will now on this very spot slay this thy son before thine eyes, with this same sword which I grasp, unless thou and thy men serve my God; for hence out of the isles will I not go before I have forwarded and fulfilled this His glorious errand, and thou and thy son, whom I now hold, have taken on you baptism.'

"And in the strait to which the earl was now come, he chose the choice which the king would have, and which was better for him, to take the right faith. Then the earl was baptized, and all the folk in the Orkneys. After that Earl Sigurd was made after this world's honour King Olaf's earl, and held under him lands and fiefs, and gave him for an hostage that same son of his of whom it was spoken before; he was called Whelp or Hound. Olaf made them christen the lad by the name of Hlodver, and carried him away with him to Norway. Earl Sigurd bound with oaths all their agreement, and next after that Olaf sailed away from the Orkneys, but set up there behind him priests to mend the folk's ways and teach them holy wisdom; so they, King Olaf and Sigurd, parted with friendship. Hlodver lived but a scanty time; but after that he was dead Earl Sigurd showed King Olaf no service. He took to wife then the daughter of Malcolm the Scot King, and Thorfinn was their son"

So does the Saga tell this dramatic tale; and we

may notice that the earl's allegiance to the new faith was as fickle as his fidelity to the king, for a few years later we find him fighting in the ranks of the heathen against the Christian king, Brian of Ireland, under the shadow of his raven banner, a flag endowed by his mother's spells with the twofold magical power of ensuring victory to those who followed it, but death to him who bore it.

The story of "King Brian's battle," or the battle of Clontarf, is one of the most stirring in the old records, and we give it here as told by the Saga-man:—

"Then King Sigtrygg [of Ireland] stirred in his business with Earl Sigurd, and egged him on to go to the war with King Brian. The earl was long steadfast, but the end of it was that he said it might come about. He said he must have his mother's hand for his help, and be king in Ireland if they slew Brian. But all his men besought Earl Sigurd not to go into the war, but it was all no good. So they parted on the understanding that Earl Sigurd gave his word to go; but King Sigtrygg promised him his mother and the kingdom. It was so settled that Earl Sigurd was to come with all his host to Dublin by Palm Sunday.

"Then King Sigtrygg fared south to Ireland, and told his mother, Kormlada, that the earl had undertaken to come, and also what he had pledged himself to grant him. She showed herself well pleased at that, but said they must gather greater force still. Sigtrygg asked whence this was to be looked for. She said that there were two Vikings lying off the west of Man; and they had thirty ships, and 'they are men of such hardihood that nothing can withstand them. The one's name is Ospak, and

the other's Brodir. Thou shalt fare to find them, and spare nothing to get them into thy quarrel, whatever price they ask.'

"Now King Sigtrygg fares and seeks the Vikings, and found them lying outside off Man. King Sigtrygg brings forward his errand at once; but Brodir shrank from helping him until he, King Sigtrygg, promised him the kingdom and his mother, and they were to keep this such a secret that Earl Sigurd should know nothing about it. Brodir, too, was to come to Dublin on Palm Sunday. King Sigtrygg fared home to his mother and told her how things stood. After that those brothers, Ospak and Brodir, talked together; and then Brodir told Ospak all that he and Sigtrygg had spoken of, and bade him fare to battle with him against King Brian, and said he set much store on his going. Ospak said he would not fight against so good a king. Then they were both wrath, and sundered their band at once. Ospak had ten ships and Brodir twenty. Ospak was a heathen, and the wisest of all men. He laid his ships inside in a sound, but Brodir lay outside him. Brodir had been a Christian man and a mass-deacon by consecration; but he had thrown off his faith and become God's dastard, and now worshipped heathen fiends, and he was of all men most skilled in sorcery. He had that coat of mail on which no steel would bite. He was both tall and strong, and had such long locks that he tucked them under his belt. His hair was black.

"It so happened one night that a great din passed over Brodir and his men, so that they all woke, and sprang up and put on their clothes. Along with that came a shower of boiling blood. Then they covered themselves with their shields, but for all that many were scalded. This wonder lasted all till day, and a man had died on board every ship. Then they slept during the day. The second night there was again a din, and again they all sprang up. Then swords leapt out of their sheaths, and axes and spears flew about in the air and fought. The weapons pressed them so hard that they had to shield themselves; but still many were wounded, and again a man died out of every ship. This wonder lasted all till day. Then they slept again the day after. The third night there was a din of the same kind. Then ravens flew at them, and it seemed to them as though their beaks and claws were of iron. The ravens pressed them so hard that they had to keep them off with their swords, and covered themselves with their shields. This went on again till day, and then another man had died in every ship.

"Then they went to sleep first of all; but when Brodir woke up, he drew his breath painfully, and bade them put off the boat, 'For,' said he, 'I will go to see Ospak.' Then he got into the boat and some men with him. But when he found Ospak he told him of the wonders which had befallen them, and bade him say what he thought they boded. Ospak would not tell him before he pledged him peace, and Brodir promised him peace; but Ospak still shrank from telling him till night fell, for Brodir never slew a man by night.

"Then Ospak spoke, and said, 'When blood rained on you, therefore shall ye shed many men's blood, both of your own and others. But when ye heard a great din, then ye must have been shown the

crack of doom, and ye shall all die speedily. But when weapons fought against you, that must forebode a battle. But when ravens pressed you, that marks the devils which ye put faith in, and who will drag you all down to the pains of hell.'

"Then Brodir was so wrath that he could answer never a word. But he went at once to his men, and made them lay his ships in a line across the sound, and moor them by bearing cables on shore, and meant to slay them all next morning. Ospak saw all their plan. Then he vowed to take the true faith, and to go to King Brian and follow him till his death-day. Then he took that counsel to lay his ships in a line, and punt them along the shore with poles, and cut the cables of Brodir's ships. Then the ships of Brodir's men began to fall aboard of one another. But they were all fast asleep; and then Ospak and his men got out of the firth, and so west to Ireland, and came to Kincora. Ospak told King Brian all that he had learnt, and took baptism, and gave himself over into the king's hand. After that King Brian made them gather force over all his realm, and the whole host was to come to Dublin in the week before Palm Sunday.

"Earl Sigurd, Hlodver's son, busked him from the Orkneys, and Flosi offered to go with him. The earl would not have that, since he had his pilgrimage to fulfil. Flosi offered fifteen men of his band to go on the voyage, and the earl accepted them; but Flosi fared with Earl Gilli to the Southern Isles. Thorstein, the son of Hall of the Side, went along with Earl Sigurd, and Hrafn the Red, and Erling of Straumey He would not that Hareck should go, but

said he would be sure to tell him first the tidings of his voyage. The earl came with all his host on Palm Sunday to Dublin, and there, too, was come Brodir with all his host. Brodir tried by sorcery how the fight would go. But the answer ran thus, that if the fight were on Good Friday, King Brian would fall but win the day; but if they fought before, they would all fall who were against him. Then Brodir said that they must not fight before the Friday.....

"King Brian came with all his host to the burg; and on the Friday the host fared out of the burg, and both armies were drawn up in array. Brodir was on one wing of the battle, but King Sigtrygg. on the other. Earl Sigurd was in the mid-battle. Now, it must be told of King Brian that he would not fight on the fast-day, and so a shieldburg was thrown round him, and his host was drawn up in array in front of it. Wolf the Quarrelsome was on that wing of the battle against which Brodir stood. But on the other wing, where Sigtrygg stood against them, were Ospak and his sons. But in mid-battle was Kerthialfad, and before him the banners were borne. Now the wings fall on one another, and there was a very hard fight. Brodir went through the host of the foe, and felled all the foremost that stood there, but no steel would bite on him. Wolf the Quarrelsome turned then to meet him, and thrust at him twice so hard that Brodir fell before him at each thrust, and was well-nigh not getting on his feet again. But as soon as ever he found his feet, he fled away into the wood at once.

"Earl Sigurd had a hard battle against Kerthialfad, and Kerthialfad came on so fast that he laid low all who were in the front rank, and he broke the array of Earl Sigurd right up to his banner, and slew the banner-bearer. Then he got another man to bear the banner, and there was again a hard fight. Kerthialfad smote this man too his death-blow at once, and so on one after the other all who stood near Then Earl Sigurd called on Thorstein, the son of Hall of the Side, to bear the banner, and Thorstein was just about to lift the banner. But then Amundi the White said, 'Don't bear the banner! for all they who bear it get their death.' 'Hrafn the Red!' called out Earl Sigurd, 'bear thou the banner.' 'Bear thine own devil thyself,' answered Hrafn. Then the earl said, 'Tis fittest that the beggar should bear the bag;' and with that he took the banner from the staff and put it under his cloak. A little after, Amundi the White was slain, and then the earl was pierced through with a spear. Ospak had gone through all the battle on his wing. He had been sore wounded, and lost both his sons ere King Sigtrygg fled before him. Then flight broke out throughout all the host. Thorstein, Hall of the Side's son, stood still while all the others fled, and tied his shoestring. Then Kerthialfad asked why he ran not as the others. 'Because,' said Thorstein, 'I can't get home to-night, since I am at home out in Iceland.' Kerthialfad gave him peace.....

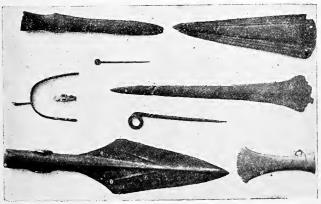
"Now Brodir saw that King Brian's men were chasing the fleers, and that there were few men by the shieldburg. Then he rushed out of the wood, and broke through the shieldburg, and hewed at the king. The lad Takt threw his arm in the way, and the stroke took it off and the king's head too; but

the king's blood came on the lad's stump, and the stump was healed by it on the spot. Then Brodir called out with a loud voice, 'Now man can tell that Brodir felled Brian.' Then men ran after those who were chasing the fleers, and they were told that King Brian had fallen; and then they turned back straightway, both Wolf the Quarrelsome and Kerthialfad. Then they threw a ring round Brodir and his men, and threw branches of trees upon them, and so Brodir was taken alive......After that they took King Brian's body and laid it out. The king's head had grown to the trunk......

"This event happened in the Orkneys, that Hareck thought he saw Earl Sigurd, and some men with him. Then Hareck took his horse and rode to meet the earl. Men say that they met and rode under a brae; but they were never seen again, and not a scrap

was ever found of Hareck."

From the "Njala Saga," translated by Sir G. W. Dasent, D.C.L. (By permission of the Controller of H.M. Stationery Office.)



Ancient Bronze Weapons and Ornaments.

EARL THORFINN AND EARL ROGNVALD.

ARL SIGURD, as has been mentioned, took as his second wife the daughter of Malcolm the Second, King of Scots. They had but one son, Thorfinn, called the Mighty, the greatest of his race, who became the most powerful of all the Orkney earls. When he

was but five winters old Thorfinn was sent to his grandfather Malcolm to be brought up at the Scottish Court, and on his father's death he was made Earl of Caithness and Sutherland.

Einar and Brusi, sons of Sigurd by his first wife, then ruled over the islands. Einar was ambitious and warlike, Brusi mild and peaceful. When they shared the earldom between them, Brusi was content with a third part, while Einar took over the remainder; and so matters stood for a time.

When Thorfinn grew up to manhood, he was not content with his large domains in Scotland. He put forward a claim to one-third of the Orkneys as his rightful share. Einar would have disputed the claim; but Brusi resigned his share to Thorfinn, and an agreement was made that when Einar died his share should be handed over to Brusi. So peace was kept

for the time. But when Einar died, Thorfinn seized half of the whole earldom.

Brusi was unable to resist the great power of Thorfinn, so he resolved to go east to Norway, and ask Olaf the king to do justice between him and his brother. Thorfinn also went to Norway to plead his own cause. King Olaf, unwilling to increase the power of a subject already too powerful, decided in favour of Brusi. But when the two earls returned to the islands, Brusi found the task of ruling his dominions and defending them against the Vikings too heavy for him, and Thorfinn no doubt took care that there should always be plenty of trouble for him to face.

At last Brusi was glad to hand over two-thirds of the earldom to Thorfinn, on condition of his undertaking to defend the islands; and this arrangement lasted till Brusi's death.

In the meantime, Rognvald, Brusi's son, had been growing up at the Court of Olaf, King of Norway, and he was a close friend of Magnus, Olaf's son, who afterwards became king. When Rognvald heard that Brusi, his father, was dead, and that Earl Thorfinn had seized the whole earldom, he prepared to fare westward and claim his share of the land. Thorfinn was now the most powerful ruler in all the western lands. He had defeated the Scots in a great seafight off Deerness; he had subdued the Western Isles; he had conquered great realms in Scotland; and he had made himself master of the half of Ireland.

At the time when Rognvald came to the Orkneys, however, Thorfinn had wars on his hands in the Western Isles and in Ireland, and he was glad to offer Rognvald two-thirds of the islands in return for his friendship and his help. So for a time the two earls lived in friendship with each other.

Then evil men made mischief between them, and Thorfinn demanded back the third of the land which had belonged to Earl Einar. Rognvald refused, and sailed away to Norway to ask help from King Magnus. With a fleet of Norwegian ships he came back to Orkney, and was met in the Pentland Firth by the ships of Earl Thorfinn. Earl Rognvald's ships were fewer in number, but their larger size at first gave him the advantage. Earl Thorfinn was hard pressed; but at last he persuaded his brotherin-law, Kalf Arnesson, whose ships were lying by watching the fight, to come to his aid and row against Rognvald. Then the tide of battle turned against Earl Rognvald, and only by the darkness of the night was he enabled to escape, and once more to find his way to Norway.

Again King Magnus came to his help; but this time Earl Rognvald tried to take Thorfinn by surprise, so he sailed away to Orkney in the dead of winter with only one ship. Before there was any news of his coming, he surrounded the house where Earl Thorfinn was feasting, and set it on fire. Only the women and children were allowed to go free; but while the warriors were in confusion, seeking some way of escape, the great earl broke a hole through the side of the house where the smoke was thickest, and, carrying his wife, Ingibiorg, in his arms, he escaped in the darkness to the seashore, took a boat, and rowed across to Caithness.

Now it seemed that Rognvald's success was com-

plete, for he thought that Earl Thorfinn was surely dead. When Christmas-time was at hand, he prepared to hold a great feast at Kirkwall, and with some of his men he took a ship to Papa Stronsay to bring over a cargo of malt for the brewing. They stayed there for the night, and sat long over the fire telling of all their adventures. Meanwhile, however, Earl Thorfinn had come back from Caithness to seek revenge. In the darkness he and his men surrounded the house where Earl Rognvald sat, and set it on fire. All except the earl's men were allowed to come out, being drawn over the pile of wood which Thorfinn's men had placed before the door.

While this was being done, a man suddenly leaped over the pile, and over the armed men beside it, and

disappeared in the darkness.

"That must be Earl Rognvald," cried Thorfinn, for no one else could do such a feat." Then they all ran to search for Earl Rognvald in the darkness. The barking of his dog betrayed the earl's hiding-place to his enemies, and soon he was found and slain among the rocks upon the shore.

Next morning Thorfinn and his men took Earl Rognvald's ship and sailed to Kirkwall. And when Rognvald's men who were in the town came, unarmed, expecting to meet the earl, they were set upon by Earl Thorfinn's men, and thirty of them were slain. These men were of the bodyguard of King Magnus, and only one of them was allowed to go back to Norway to tell the tidings to the king.

Then for eighteen years Thorfinn ruled the earldom, till the day of his death. He was by far the greatest of the Orkney earls. He built Christ's Kirk in

Birsay, and in his time the Bishopric of Orkney was founded. During his later years the islands enjoyed peace, and many wise laws were made; and when the great earl died there was much sorrow in the Orkneys. So the poet sings in his honour:—

"Swarthy shall become the bright sun,
In the dark sea shall the earth sink,
Finished shall be Austri's labour,
And the wild sea hide the mountains,
Ere there be in these fair islands
Born a chief to rule the people—
May our God both keep and help them—
Greater than the lost Earl Thorfinn."

Paul and Erlend, the two sons of Thorfinn, succeeded to the earldom, and for some time they ruled in harmony together. They fought for King Harald Hardradi against Harold, Godwin's son, at the battle of Stamford Bridge in Yorkshire in 1066, but were allowed to return in peace to their earldom. Trouble arose between the brothers when their sons grew to manhood, and Magnus Barefoot, King of Norway, made a descent upon the islands. He carried the two brothers into exile, appointing his own son Sigurd as "King" of Orkney, which post he held until his father's death made him King of Norway. Hakon, Paul's son, and Magnus, Erlend's son, afterwards called St. Magnus, then became joint earls.

Their joint rule had the usual result, quarrels and misunderstandings, and was brought to an end by the murder of Earl Magnus in Egilsay in 1115. The story is told in the Saga of Earl Magnus, from which the next chapter is taken.

THE SLAYING OF EARL MAGNUS.

T. MAGNUS, the isle earl, was the most peerless of men, tall of growth, manly, and lively of look, virtuous in his ways, fortunate in fight, a sage in wit, ready-tongued and lordly-minded, lavish of money and high-spirited, quick of counsel, and more beloved

of his friends than any man. Blithe and of kind speech to wise and good men, but hard and unsparing against robbers and sea-rovers, he let many men be slain who harried the freemen and land-folk. He made murderers and thieves be taken, and visited as well on the powerful as on the weak robberies and thieveries and all ill deeds. He was no favourer of his friends in his judgments, for he valued more godly justice than the distinctions of rank. He was open-handed to chiefs and powerful men, but still he ever showed most care for poor men.....

"Those kinsmen, Magnus and Hakon, held the wardship of the land for some while, so that they were well agreed.....But when those kinsmen had ruled the land some time, then again happened, what often and always can happen, that many ill-willing men set about spoiling their kinship. Then unlucky

men gathered more about Hakon, for that he was very envious of the friendships and lordliness of his kinsman Magnus.

"Two men are they who are named, who were with Earl Hakon, and who were the worst of all the talebearers between those kinsmen, Sigurd and Sighvat Sock. This slander came so far with the gossip of wicked men, that those kinsmen again gathered forces together, and each earl faced against the other with a great company. Then both of them held on to Hrossey [the Mainland], where the place of meeting of those Orkneyingers was. But when they came there, then each drew up his men in array, and they made them ready to battle. There were then the earls and all the great men, and there, too, were many friends of both who did all they could to set them at one again. Many then came between them with manliness and good-will. This meeting was in Lent, a little before Palm Sunday. But because many men of their well-wishers took a share in clearing up these difficulties between them, but would stand by neither to do harm to the other, then they bound their agreement with oaths and handsels. And when some time had gone by after that, then Earl Hakon, with falsehood and fair words, settled with the blessed Earl Magnus to meet him on a certain day, so that their kinship and steadfast new-made peace should not be turned aside or set at naught. This meeting for a steadfast peace and a thorough atonement between them was to be in Easter week that spring on Egil's Isle [Egilsay]. This pleased Earl Magnus well, being, as he was, a thoroughly whole-hearted man, far

from all doubt, guile, or greed; and each of them was to have two ships, and each just as many men: this both swore, to hold and keep those terms of peace which the wisest men made up their minds to declare between them.

"But when Eastertide was gone by, each made him ready for this meeting. Earl Magnus summoned to him all those men whom he knew to be kindesthearted and likeliest to do a good turn to both those kinsmen. He had two long-ships and just as many men as was said. And when he was ready he held on his course to Egil's Isle. And as they were rowing in calm over the smooth sea, there rose a billow against the ship which the earl steered, and fell on the ship just where the earl sat. The earl's men wondered much at this token, that the billow fell on them in a calm where no man had ever known it to fall before, and where the water under was deep. Then the earl said, 'It is not strange that ye wonder at this; but my thought is, that this is a foreboding of my life's end, may be that may happen which was before spoken about Earl Hakon. We should so make up our minds about our undertaking, that I guess my kinsman Hakon must not mean to deal fairly by us at this meeting.' The earl's men were afraid at these words, when he said he had so short hope as to his life's end, and bade him take heed for his life, and not fare further trusting in Earl Hakon. Earl Magnus answers, 'We shall fare on still, and may all God's will be done as to our voyage.'

"Now it must be told about Earl Hakon, that he summoned to him a great company, and had many

war-ships, and all manned and trimmed as though they were to run out to battle. And when the force came together, the earl makes it clear to the men that he meant at that meeting so to settle matters between himself and Earl Magnus that they should not both of them be over the Orkneys. Many of his men showed themselves well pleased at this purpose, and added many fearful words; and they, Sigurd and Sighvat Sock, were among the worst in their utterance. Then men began to row hard, and they fared furiously. Havard, Gunni's son, was on board the earl's ship, a friend and counsellor of the earl's, and a fast friend to both alike. Hakon had hidden from him this bad counsel, which Havard would surely not join in. And when he knew the earl was so steadfast in this bad counsel, then he jumped from the earl's ship and took to swimming, and swam to an isle where no man dwelt.

"Earl Magnus came first to Egil's Isle with his company, and when they saw Hakon coming they saw that he had eight war-ships; he thought he knew then that treachery must be meant. Earl Magnus then betook himself up on the isle with his men, and went to the church to pray, and was there that night; but his men offered to defend him. The earl answers, 'I will not lay your life in risk for me, and if peace is not to be made between us two kinsmen, then be it as God wills.' Then his men thought that what he had said when the billow fell on them was coming true. Now for that he felt sure as to the hours of his life beforehand, whether it was rather from his shrewdness or of godly foreshowing, then he would not fly nor

fare far from the meeting of his foes. He prayed earnestly, and let a mass be sung to him.

"Hakon and his men jumped up in the morning, and ran first to the church and ransacked it, and did not find the earl. He had gone another way on the isle with two men into a certain hiding-place. And when the saint Earl Magnus saw that they sought for him, then he calls out to them and says where he was; he bade them look nowhere else for him. And when Hakon saw him, they ran thither with shouts and crash of arms. Earl Magnus was then at his prayers when they came to him, and when he had ended his prayers then he signed himself [with the cross], and said to Earl Hakon, with steadfast heart, 'Thou didst not well, kinsman, when thou wentest back on thy oaths, and it is much to be hoped that thou doest this more from others' badness than thine own. Now will I offer thee three choices, that thou do one of these rather than break thine oaths and let me be slain guiltless.'

"Hakon's men asked what offer he made. 'That is the first, that I will go south to Rome, or out as far as Jerusalem, and visit holy places, and have two ships with me out of the land with what we need to have, and so make atonement for both of our souls. This I will swear, never to come back to the Orkneys.' To this they said 'Nay' at once. Then Earl Magnus spoke: 'Now seeing that my life is in your power, and that I have in many things made myself an outlaw before Almighty God, then send thou me up into Scotland to some of both our friends, and let me be there kept in ward, and two men with me as a pastime. Take thou care then that I may

never be able to get out of that wardship.' To this they said 'Nay' at once. Magnus spoke: 'One choice is still behind which I will offer thee, and God knows that I look more to your soul than to my life; but still it better beseems thee than to take my life away. Let me be maimed in my limbs as thou pleasest, or pluck out my eyes, and set me in a dark dungeon.' Then Earl Hakon spoke: 'This settlement I am ready to take, nor do I ask anything further.' Then the chiefs sprang up and said to Earl Hakon, 'We will slav now either of you twain, and ye two shall not both from this day forth rule the lands.' Then answers Earl Hakon: 'Slay ye him rather, for I will rather rule the realm and lands than die so suddenly.' So says Holdbodi, a truthful freeman from the Southern Isles, of the parley they had. He was then with Magnus, and another man with him, when they took him captive.

"So glad was the worthy Earl Magnus as though he were bidden to a feast; he neither spoke with hate nor words of wrath. And after this talk he fell to prayer, and hid his face in the palms of his hands, and shed out many tears before God's eyesight. When Earl Magnus, the saint, was done to death, Hakon bade Ofeig his banner-bearer to slay the earl, but he said 'Nay' with the greatest wrath. Then he forced Lifolf his cook to kill Earl Magnus, but he began to weep aloud. 'Thou shalt not weep for this,' said the earl, 'for that there is fame in doing such deeds. Be steadfast in thine heart, for thou shalt have my clothes, as is the wont and law of men of old, and thou shalt not be afraid, for thou doest this against thy will.

Church of St. Magnus, Eyilsay. (From a painting by T. Marjoribanks Hay, R.S.IV.)

(1,384)

and he who forces thee misdoes more than thou.' But when the earl had said this he threw off his kirtle and gave it to Lifolf. After that he begged leave to

say his prayers, and that was granted him.

"He fell to earth, and gave himself over to God, and brought himself as an offering to Him. He not only prayed for himself or his friends, but rather there and then for his foes and banemen, and forgave them with all his heart what they had misdone towards him, and confessed his own misdeeds to God, and prayed that they might be washed off him by the outshedding of his blood, and commended his soul into God's hand, and prayed that God's angels would come to meet his soul and bear it into the rest of Paradise. When the friend of God was led out to slaughter he spoke to Lifolf: 'Stand thou before me, and hew me on my head a great wound, for it beseems not to chop off chiefs' heads like thieves'. Strengthen thyself, wretched man, for I have prayed to God that he may have mercy upon thee. After that he signed himself [with the cross], and bowed himself to the stroke. And his spirit passed to heaven.

"That spot was before mossy and stony. But a little after, the worthiness of Earl Magnus before God was so bright that there sprung up a green sward where he was slain, and God showed that, that he was slain for righteousness' sake, and inherited the fairness and greenness of Paradise, which is called the earth of living men.....There had then passed since the birth of Christ one thousand and ninety and one winters."

From the "Orkneyinga Saga," translated by Sir G. W. Dasent, D.C.L. (By permission of the Controller of H.M. Stationery Office.)

THE FOUNDING OF ST. MAGNUS CATHEDRAL.

FTER the death of Hakon, the slayer of Earl Magnus, the earldom was divided between his two sons, Harald the Smooth-talker, and Paul the Speechless. There were many bitter quarrels between the brothers, until the death of the

former left Paul as sole ruler. That happened in this wise.

When they had been reconciled after one of their quarrels, Harald invited Paul to a feast in his house at Orphir. On the morning before the feast, Earl Harald found his mother and his aunt working at a very beautiful shirt, which, they said, was a present for his brother Paul.

"Why should such a splendid garment be given to Paul and not to me?" asked the earl, taking it up in his hand to look at it. Then before the women could prevent him, he threw off the light cloak he was wearing and put on the gorgeous shirt. No sooner had it touched his skin than he was seized with violent pains, and with a sickness of which he died a few days later. The shirt had been poisoned in

order to cause Earl Paul's death, but it was Earl Harald who fell a victim to his mother's cunning and treacherous design.

Earl Paul did not long reign in peace. A new claimant soon appeared for part of the lands. This was Kali, the son of Kol and of Gunhild, the sister of the murdered St. Magnus, who had been brought up at the court of King Harald of Norway. He was a man of noble appearance, bold and skilful in war, and a born leader of men. He was in addition a noted skald or poet, and many of the songs which he made have come down to us in the Sagas.

He now changed his name to Rognvald, which had been a popular name in the isles since the days of Rognvald, Brusi's son, and he is known in history as Rognvald Kali, or Rognvald the Second.

Having the promise of help from Harald, the Norwegian king, Rognvald sent a message to Earl Paul, demanding that share of the islands which Earl Magnus had held. Earl Paul, who was a good ruler, and had many friends among the Orkneymen, replied that he would guard his inheritance while God gave him life. Rognvald then gathered ships and set sail for Shetland, but his fleet was destroyed in Yell Sound by the ships of Earl Paul, and he had to escape to Norway in a merchant vessel.

Earl Paul thereupon placed beacons on some of the highest hills in the islands, in order that he might have warning of any attempt by Rognvald to make a descent by way of Shetland, and the most important of these beacons was on the Fair Isle.

When Rognvald, angry and disappointed, arrived in Norway, he took counsel with his father Kol and

with an old man named Uni, who was reckoned a very wise man; and as he had many friends among the men of Shetland, it was decided to make a new attempt in the spring. By the aid of King Harald and of his friends a new fleet was then got ready.

When the ships were assembled, Rognvald stood up on the deck of his war-dragon to address his men. "Earl Paul and the Orkneyingers," he said, "have taken my inheritance, and refuse to give it up. My grandfather, the holy Earl Magnus, was treacherously slain by Paul's father Hakon, and instead of giving compensation for the wicked deed, Earl Paul would wrong me still more in the matter of my inheritance. However, if it be the will of God, I intend to fare to the Orkneys, and there win what is mine by right, or die with honour."

All the men cheered this speech, and when they were silent Kol rose to speak. He advised his son not to trust in his own strength for success. advise thee, Rognvald," he said, "to make a vow that if St. Magnus secures to thee thine inheritance, thou wilt build and dedicate to him in Kirkwall a minster of such size and splendour that it shall be the wonder and the glory of all the North."

Rognvald thought this the best of advice. Rising once more, he vowed to build in Kirkwall a splendid cathedral in honour of St. Magnus, and to remove thither with all reverence the remains of the sainted earl. No sooner had this solemn vow been taken than the wind became fair for sailing. The fleet at once put to sea, and reached Shetland in a few days.

Now Rognvald's real difficulties began. How could he take Earl Paul by surprise, as he wished to do, with the beacon on the Fair Isle ready to give the alarm as soon as his ships came in sight? The wisdom of Kol and of Uni came to his aid. The former had a plan to cause the beacon to be lit on a false alarm, and the latter to prevent its being lit when it was needed.

Kol set sail from Shetland towards evening with a fleet of small boats. When they came in sight of the Fair Isle, they hoisted their sails half way up the masts, and with the oars the men kept back the boats so as to make them sail very slowly. At the same time they gradually hoisted their sails higher and higher, so that to those in charge of the beacon it might seem that a fleet was rapidly approaching When it was dark the boats returned to the land.

The trick was successful. The Fair Isle beacon flared up to the sky, those on North Ronaldsay and on Westray followed, and soon every hilltop in the islands showed its warning light. The Orkneymen took their weapons and hurried to Kirkwall, where Earl Paul had appointed them to gather in such a case, and all was ready to meet the enemy; but no enemy appeared. Those who had charge of the beacons came with the news of a fleet approaching; and after long waiting other men were sent to look for its coming, but they looked in vain. Quarrels soon began to arise as to who was to blame for the false alarm, for the men were angry at having been taken from their farm work to no purpose; so the earl had to make peace among them, and set other men to build up the beacons again and to watch them.

Now came Uni's turn. He sailed to the Fair Isle with three companions, and pretended to be an enemy

of Rognvald, saying many hard things against him and his men. His three companions went out every day to fish, but Uni himself stayed on shore. gradually made friends with the people of the isle, and especially with those who had charge of the beacon. At last he offered to watch it for them, saying that he had nothing else to do, and his offer was accepted. Uni then poured water on the beacon, and kept it in such a state of dampness that it should be impossible to light it when it was needed.

Thus by the time that Rognvald was to set out from Shetland, Uni had everything prepared. As soon as his ships were seen from the Fair Isle, the men who had charge of the beacon tried to light it, but in vain. There was no time to warn Earl Paul. and Rognvald landed in Westray without any alarm being given. The bishop now interfered between the rivals, and a truce was agreed to in order that terms of peace might be arranged. 24

And now things took a strange and unexpected turn, so that Rognvald won the islands without any fighting. While Earl Paul was on a visit to his friend Sigurd of Westness, in Rousay, he went out before breakfast one morning and mysteriously disappeared. Sigurd sought him everywhere in vain. At last they discovered that he had been seized and carried off to Scotland by Sweyn Asleifson, and he never returned. Earl Paul's men gradually came over to Earl Rognvald, and he became ruler over the whole earldom.

Earl Rognvald now set about fulfilling his vow and raising a great cathedral in Kirkwall in honour of St. Magnus. In 1137 the work was begun under the superintendence of Kol, but many a long year was to pass ere it should be finished. As the work went on it soon became very costly to the earl. In his difficulty he once more went to his father Kol for advice. Kol said that Rognvald should declare himself the heir of all landholders who died, and that their sons should have to redeem their lands from him. A Thing was called, and this law was passed; but the freemen also had the choice given them of buying their lands outright, so that the earl might not inherit them in the future. Most of the landholders took that plan, and now there was once more plenty of money for the cathedral.

When the work was so far advanced that part of the cathedral could be roofed in, the remains of St. Magnus, which had already been removed from Christ Church in Birsay, were laid to rest in the new minster. Many great men have been laid in the same place since then. Earl Rognvald himself was buried there, and there too the remains of King Hakon rested for a time before their removal to Bergen.

While on a visit to Norway, Earl Rognvald made the acquaintance of a Crusader who had returned from the Holy Land, and he determined that he also would become a "Jorsalafarer," or pilgrim to Jerusalem. The story of this strange voyage, in company with the Bishop of Orkney and many of his countrymen—half Vikings, half Crusaders—is well told in the "Saga of Earl Rognvald," and in our next chapter we give part of the narrative.



On the "Viking Path."

THE JORSALAFARERS.

ARL ROGNVALD busked him that summer to leave the Orkneys, and he was rather late boun; for they had a long while to wait for Eindrid, as his ship did not come from Norway which he had let be made there the winter

before. But when they were boun, they held on their course away from the Orkneys in fifteen big

ships.

"They sailed away from the Orkneys and south to Scotland, and so on to England, and as they sailed by Northumberland, off Humbermouth, Armod sang

a song,-

'The sea was high off Humbermouth When our ships were beating out, Bends the mast and sinks the land 'Neath our lee off Vesla-sand; Wave with veil of foam that rises Drives not in the eyes of him Who now sits at home; the stripling From the meeting rideth dry.'

"They sailed thence south round England and to France. Nothing is said of their voyage before that they came to that seaburg which is named Nerbon There these tidings had happened, that the earl who before had ruled the town was dead. His name was Germanus; he left behind him a daughter young and fair, whose name was Ermingerd. She kept watch and ward over her father's inheritance, with the counsel of the most noble men of her kinsfolk. They gave that counsel to the gueen that she should bid the earl to a worthy feast, and said that by that she would be famous if she welcomed heartily such men of rank who had come so far to see her, and who would bear her fame still further. The queen bade them see to that. And when this counsel had been agreed on by them, men were sent to the earl, and he was told that the queen bade him to a feast with as many of his men as he chose to bring with him. The earl took this bidding with thanks; he chose out all his best men for this journey with him. And when they came to the feast, there was the best cheer, and nothing was spared which could do the earl more honour than he had ever met before.

"One day it happened as the earl sat at the feast that the queen came into the hall and many women with her; she held a beaker of gold in her hand. She was dressed in the best clothes, had her hair loose as maidens wont to have, and had put a golden band round her brow. She poured the wine into the earl's cup, but her maidens danced before them. The earl took her hand and the beaker too and set her on his knee, and they talked much that day.

"The earl stayed there very long in the best of cheer. The townsmen pressed the earl to settle down there, and spoke out loudly about how they would give him the lady to wife. The earl said he would fare on that voyage which he had purposed, but said that he would come thither as he fared back, and then they could carry out their plan or not as they pleased. After that the earl busked him away thence with his fellow voyagers. And as they sailed west of Thrasness they had a good wind; then they sat and drank and were

very merry.

"They fared till they came to Galicialand in the winter before Yule, and meant to sit there Yule over. They dealt with the landsmen, and begged them to set them a market to buy food; for the land was barren and bad for food, and the landsmen thought it hard to feed that host of men. Now these tidings had happened there, that in that land sat a chief who was a stranger, in a castle, and he had laid on the landsmen very heavy burdens. He harried them on the spot if they did not agree at once to all that he asked, and he offered them the greatest tyranny and oppression. And when the earl spoke to the landsmen about bringing him food to buy, they made him that offer, that they would set them up a market thenceforth on till Lent, but they must rid them in some way or other of the men in the castle; but Earl Rognvald was to bear the brunt in return for the right of having all the goods that were gotten from them.

"The earl laid this bare before his men, and sought counsel from them as to which choice he should take; but most of them were eager to fall on the castlemen, and thought it bid fair for spoil. And so Earl Rognvald and his host went into that agreement with the landsmen. But when it drew near to Yule, Earl

Rognvald called his men to a talk, and said,—

"'Now have we sat here awhile, and yet we have

had nothing to do with the castlemen, but the landsmen are getting rather slack in their dealings with us. Methinks they think that what we promised them will have no fulfilment; but still that is not manly not to turn our hands to what we have promised. Now, kinsman Erling, will I take counsel from you in what way we shall win the castle, for I know that ye are here some of you the greatest men for good counsel; but still I will beg all those men who are here that each will throw in what he thinks is likeliest to be worth trying.'

"Erling answered the earl's speech: 'I will not be silent at your bidding. But I am not a man for counsel, and it would be better rather to call on those men for that who have seen more, and are more wont to such exploits, as is Eindrid the Young. But here it will be as the saying goes, "You must shoot at a bird before you get him." And so we will try to give some counsel, whatever comes of it. We shall to-day, if it seems to you not bad counsel or to the other shipmasters, go all of us to the wood, and bear each of us three shoulder-bundles of fagots on our backs under the castle; for it seems to me as though the lime will not be trusty if a great fire is brought to it. We shall let this go on for the three next days and see what turn things take.'

"They did as Erling bade; and when that toil was over, it was come right on to Yule. The bishop would not let them make their onslaught while the Yule high feast stood over them.

"That chief's name was Godfrey who dwelt in the castle; he was a wise man, and somewhat stricken in years. He was a good clerk, and had fared far and

wide, and knew many tongues. He was a grasping man and a very unfair man. He called together his men when he saw Rognvald's undertakings, and said to them,—

"'This scheme seems to me clever and harmful to us which the Northmen have taken in hand. It will befall us thus if fire is borne against us, that the stone wall round the castle will be untrustworthy. But the Northmen are strong and brave; we shall have to look for a sharp fight from them if they get a chance. I will now take counsel with you what shall be done in this strait which has befallen us.' But his men all bade him see to that for them. Then he began to speak, and said, 'My first counsel is that ye shall bind a cord round me and let me slide down from the castle wall to-night. I shall have on bad clothes, and fare into the camp of the Northmen, and know what I can find out.'

"This counsel was taken as he had laid it down. And when Godfrey came to Earl Rognvald he said he was an old beggar carle, and spoke in Spanish; they understood that tongue best. He fared about among all the booths and begged for food. He found out that there was great envy and splitting into parties amongst the Northmen. Eindrid was the head of one side, but the earl of the other. Godfrey came to Eindrid and got to talk with him, and brought that before him that the chief who held the castle had sent him thither. 'He will have fellowship with thee, and he hopes that thou wilt give him peace if the castle be won. He would rather that thou shouldst have his treasures, if thou wilt do so much in return for them, than those

who would rather see him a dead man.' Of such things they talked and much besides. But the earl was kept in the dark; all this went on by stealth at first. And when Godfrey had stayed a while with the earl's men, then he turned back to his men. But this was why they did not flit what they owned out of the castle, because they did not know whether the storm would take place at all; besides they could not trust the landfolk.

"It was the tenth day of Yule that Earl Rognvald rose up. The weather was good. Then he bade his men put on their arms, and let the host be called up to the castle with the trumpet. Then they drew the wood towards it, and piled a bale round about the wall. The earl drew up his men for the onslaught where each of them should go. The earl goes against it from the south with the Orkneyingers, Erling and Aslag from the west, John and Gudorm from the east, Eindrid the Young from the north with his followers. And when they were boun for the storm they cast fire into the bale.

"Now they began to press on fast both with fire and weapons. Then they shot hard into the work for they could not reach them by any other attack. The castlemen stood loosely here and there on the wall, for they had to guard themselves against the shots. They poured out too burning pitch and brimstone, and the earl's men took little harm by that. Now it turned out as Erling had guessed, that the castle wall crumbled before the fire when the lime would not stand it, and there were great breaches in it.

"Sigmund Angle was the name of a man in the earl's bodyguard; he was Sweyn Asliefson's step-

son. He pressed on faster than any man to the castle, and ever went on before the earl; he was then scarcely grown up. And when the storm had lasted awhile, then all men fled from the castle wall. The wind was on from the south, and the reek of the smoke lay towards Eindrid and his men. And when the fire began to spread very fast, then the earl made them bring water and cool the rubble that was burned. And then there was a lull in the assault.

"After that the earl made ready to storm, and Sigmund Angle with him. There was then but a little struggle, and they got into the eastle. There many men were slain, but those who would take life gave themselves up to the earl's power. There they took much goods, but they did not find the chief, and scarcely any precious things. Then there was forthwith much talk how Godfrey could have got away; and then at once they had the greatest doubt of Eindrid the Young, that he must have passed him away somehow, and that he (Godfrey) must have gone away under the smoke to the wood.

"After that Earl Rognvald and his host stayed there a short time in Galicialand, and held on west off Spain. They harried wide in that part of Spain which belonged to the heathen, and got there much goods. After that they sailed west off Spain, and got there a great storm, and lay three days at anchor, so that they shipped very much water, and it lay near that they had lost their ships. After that they hoisted their sails and beat out to Njorfa Sound [the Strait of Gibraltar] with a very cross wind. They sailed through Njorfa Sound, and then the weather

began to get better. And then, as they bore out of the sound, Eindrid the Young parted company from the earl with six ships. He sailed over the sea to Marseilles, but Rognvald and his ships lay behind at the sound; and men talked much about it, how Eindrid had now himself given proof whether or not he had helped Godfrey away.

"Nothing is told of the voyage of the earl and his men before they came south off Sarkland, and lay in the neighbourhood of Sardinia, and knew not what land they were near. The weather had turned out in this wise, that a great calm set in and mists and smooth seas—though the nights were light—and they saw scarcely at all from their ships, and so they made little way. One morning it happened that the mist lifted. Men stood up and looked about them. Then the earl asked if men saw anything new. They said they saw nought but two islets, little and steep, and when they looked for the islets the second time, then one of the islets was gone. They told this to the earl. He began to say, 'That can have been no islets. That must be ships which men have out here in this part of the world, which they call dromonds; those are ships big as holms to look on. But there, where the other dromond lay, a breeze must have come down on the sea, and they must have sailed away; but these must be wayfaring men, either chapmen or faring in some other way on their business.'

"After that the earl lets them call to him the bishop and all the shipmasters; then he began to say: 'I call you together for this, lord bishop and Erling, my kinsman: see ye any scheme or chance of ours that we may win victory in some way over those who

are on the dromond.' The bishop answers: 'Hard, I guess, will it be for you to run your long-ships under the dromond, for ye will have no better way of boarding than by grappling the bulwarks with a broad-axe; but they will have brimstone and boiling pitch to throw under your feet and over your heads. Ye may see, earl, so wise as you are, that it is the greatest rashness to lay one's self and one's men in such risk.'

"Then Erling began to speak: 'Lord bishop,' he says, 'likely it is that ye are best able to see this, that there will be little hope of victory in rowing against them. But somehow it seems to me that though we try to run under the dromond, so methinks it will be that the greatest weight of weapons will fall beyond our ships, if we hug her close, broadside to broadside. But if it be not so, then we can put off from them quickly, for they will not chase us in the dromond.'

"The earl began to say: 'That is spoken like a man and quite to my mind. I will now make that clear to the shipmasters and all the crews, that each man shall busk him in his room, and arm himself as he best can. After that we will row up to them. But if they are Christian chapmen, then it will be in our power to make peace with them; but if they are heathen, as I feel sure they are, then Almighty God will yield us that mercy that we shall win the victory over them. But of the war spoil which we get there, we shall give the fiftieth penny to poor men.' After that, men got out their arms and heightened the bulwarks of their ships, and made themselves ready according to the means which they

had at hand. The earl settles where each of his ships should run in. Then they made an onslaught on her by rowing, and pulled up to her as briskly as they could.

"But when those who were aboard the dromond saw that ships were rowing up to them, they took silken stuffs and costly goods and hung them out on the bulwarks, and then made great shoutings and hailings; and it seemed to the earl's men as though they dared the Northmen to come on against them. Earl Rognvald laid his ship aft alongside the dromond on the starboard, but Erling, too, aft on the larboard. John and Aslak, they laid their ships forward each on his own board, but the others amidships on both boards; and all the ships hugged her close, broadside to broadside. And when they came under the dromond, her sides were so high out of the water that they could not reach up with their weapons. But the foe poured down blazing brimstone and flaming pitch over them. And it was as Erling guessed it would be, that the greatest weight of weapons fell out beyond the ships, and they had no need to shield themselves on that side which was next to the dromond, but those who were on the other side held their shields over their heads and sheltered themselves in that way.

"And when they made no way with their onslaught, the bishop shoved his ship off and two others, and they picked out and sent thither their bowmen, and they lay within shot, and shot thence at the dromond, and then that onslaught was the hardest that was made. Then those on board the dromond got under cover, but thought little about what those were doing

who had laid their ships under the dromond. Earl Rognvald called out then to his men, that they should take their axes and hew asunder the broadside of the dromond in the parts where she was least ironbound. But when the men in the other ships saw what the earl's men were about, they also took the like counsel.

"Now, where Erling and his men had laid their ship a great anchor hung on the dromond, and the fluke was hung by the crook over the bulwark, but the stock pointed down to Erling's ship. Audun the Red was the name of Erling's bowman; he was lifted up on the anchor-stock. But after that he hauled up to him more men, so that they stood as thick as ever they could on the stock, and thence hewed at the sides as they best could, and that hewing was by far the highest up. And when they had hewn such large doors that they could go into the dromond, they made ready to board, and the earl and his men got into the lower hold, but Erling and his men into the upper. And when both their bands had come up on the ship there was a fight both great and hard. On board the dromond were Saracens, what we call Mahomet's unbelievers. There were many blackamoors, and they made the hardest struggle. Erling got there a great wound on his neck near his shoulders as he sprang up into the dromond. That healed so ill that he bore his head on one side ever after. That was why he was called Wrvneck.

"And when they met Earl Rognvald and Erling, the Saracens gave way before them to the forepart of the ship, but the earl's men then boarded her one after another. Then they were more numerous, and they pressed the enemy hard. They saw that on board the dromond was one man who was both taller and fairer than the others; the Northmen held it to be the truth that that man must be their chief. Earl Rognvald said that they should not turn their weapons against him, if they could take him in any other way. Then they hemmed him in and bore him down with their shields, and so he was taken and afterwards carried to the bishop's ship, and few men with him. They slew there much folk, and got much goods and many costly things. When they had ended the greatest part of their toil, they sat down and rested themselves.

"Men spoke of these tidings which had happened there. Then each spoke of what he thought he had seen; and men talked about who had been the first to board the dromond, and could not agree about it. Then some said that it was foolish that they should not all have one story about these great things; and the end of it was that they agreed that Earl Rognvald should settle the dispute, and afterwards they should all back what he said.

"When they had stripped the dromond they put fire into her and burnt her. And when that tall man whom they had made captive saw that, he was much stirred, and changed colour, and could not hold himself still. But though they tried to make him speak, he never said a word and made no manner of sign, nor did he pay any heed to them whether they promised him good or ill. But when the dromond began to blaze, they saw as though blazing molten ore ran down into the sea. That moved the captive man much. They were quite sure then that they had

looked for goods carelessly, and now the metal had melted in the heat of the fire, whether it had been

gold or silver.

"Earl Rognvald and his men sailed thence south under Sarkland, and lay under a seaburg, and made a seven nights' truce with the townsmen, and had dealings with them, and sold them the men whom they had taken. No man would buy the tall man. And after that the earl gave him leave to go away and four men with him. He came down the next morning with a train of men and told them that he was a prince of Sarkland, and had sailed thence with the dromond and all the goods that were aboard her. He said, too, he thought that worst of all that they burnt the dromond, and made such waste of that great wealth that it was of no use to any one. 'But now I have great power over your affairs. Now you shall have the greatest good from me for having spared my life and treated me with such honour as ye could; but I would be very willing that we saw each other never again. And so now live safe and sound and well.' After that he rode up the country, but Earl Rognvald sailed thence south to Crete, and they lay there in very foul weather.

"The earl and his men lay under Crete till they got a fair wind for Jewry-land, and came to Acreburg early on a Friday morning, and landed then with such great pomp and state as was seldom seen there. The earl and his men stayed in Acreburg a while. There sickness came into their ranks, and many famous men breathed their last. There Thorbjorn the Swarthy, a liegeman, breathed his last.

"Earl Rognvald and his men then fared from

Acreburg, and sought all the holiest places in the land of Jewry. They all fared to Jordan and bathed there. Earl Rognvald and Sigmund Angle swam across the river and went up on the bank there, and thither where was a thicket of brushwood, and there they twisted great knots. After that they fared back to Jerusalem.

"Earl Rognvald and his men fared that summer from the land of Jewry, and meant to go north to Micklegarth [Constantinople], and came about autumn to that town which is called Imbolar. They stayed there a very long time in the town. They had that watchword in the town, if men met one another walking where it was throng and narrow, and the one thought it needful that the other who met him should yield him the path, then he says thus, 'Out of the way; out of the way.' One evening as the earl and his men were coming out of the town, and Erling Wryneck went out along the wharf to his ship, some of the townsmen met him and called out, 'Out of the way; out of the way.' Erling was very drunk, and made as though he heard them not, and when they ran against one another, Erling fell off the wharf and down into the mud which was below: and his men ran down to pick him up, and had to strip off every stitch of his clothes and wash him. Next morning when he and the earl met, and he was told what had happened, he smiled at it.

After that they fared away thence. And nothing is told of their voyage before they come north to Engilsness [Cape St. Angelo]. There they lay some nights and waited for a wind which would seem fair to them to sail north along the sea to Micklegarth.

They took great pains then with their sailing, and so sailed with great pomp, just as they had heard that Sigurd Jewry-farer had done.

"When Earl Rognvald and his men came to Mickle-garth they had a hearty welcome from the emperor and the Varangians. Menelaus was then emperor over Micklegarth, whom we call Manuel. He gave the earl much goods, and offered them bounty-money if they would stay there. They stayed there awhile that winter in very good cheer. There was Eindrid the Young, and he had very great honour from the emperor. He had little to do with Earl Rognvald and his men, and rather tried to set other men against them.

"Earl Rognvald set out on his voyage home that winter from Micklegarth, and fared first west to Bulgarialand, to Dyrrachburg. Thence he sailed west across the sea to Poule. There Earl Rognvald and Bishop William and Erling, and all the nobler men of their band, landed from their ships, and got them horses and rode thence first to Rome, and so homewards on the way from Rome until they come to Denmark, and thence they fared north to Norway. There men were glad to see them, and this voyage was most famous, and they who had gone on it were thought to be men of much more worth after than before."

From the "Orkneyinga Saga," translated by Sir G. W. Dasent, D.C.L. (By permission of the Controller of H.M. Stationery Office.)



A Great Viking (From the picture by H. W. Koekkoek.)

SWEYN ASLEIFSON, THE LAST OF THE VIKINGS.



HE sudden disappearance of Earl Paul, by which Earl Rognvald had been left in sole possession of the Orkneys, was, as we have said, due to a certain Viking, Sweyn Asleifson of Gairsay. This Sweyn is one of the most remark-

able men in all Orcadian history. Among the Vikings of old he was the greatest, and he was the last. Of him the Saga says: "He was the greatest man in the western lands, either in old time or at the present day."

For the slaying of one of Earl Paul's men Sweyn had had to escape out of the isles. He abode for a time in the Hebrides, and afterwards sought refuge in the dales of Scotland, where Margaret, the daughter of Earl Hakon, was married to Maddad, Earl of Athole. He had promised to help Harald, their son, to become Earl of the Orkneys, and it was with a view to this that he kidnapped Earl Paul.

On that morning Earl Paul had gone out early from Westness to hunt the otter near Scabro Head. Sweyn had sailed over from Thurso, keeping to the west of Hoy and the Mainland, and was now rowing into Evie Sound, for he had heard that Earl Paul was staying with Sigurd of Westness. As they rowed near the land, Sweyn ordered all his men to lie hid except those at the oars, that the ship might look like a peaceful merchant-vessel.

When the earl saw the ship rowing near the rocks, he called out to the men that they should go on to Westness with their wares for Earl Paul. Then Sweyn, who was lying hid, bade his men ask where the earl was.

"The earl is here on the rocks," was the reply.

"Row quickly to land at a place where they will not see us," said Sweyn to his men; "and let us arm ourselves, for we have work to do."

The ship was rowed to the shore, as he had said, and Sweyn and his men armed themselves and fell upon Earl Paul and his company. These, being unarmed, were soon disposed of. The earl was seized and taken aboard the ship, and Sweyn immediately set sail for Scotland by the way he had come.

Sigurd marvelled when the earl did not return from his hunting, and men were sent out to look for him. They came upon the bodies of the slain—nineteen of the earl's men and six strangers—but the earl himself had disappeared. It was at first thought that Earl Rognvald had had something to do with his disappearance, and it was many days before men knew what had become of the vanished earl.

In the meantime Sweyn had carried Paul to Athole, and placed him in the keeping of Maddad and Margaret. His after fate is unknown. The story which Sweyn afterwards told is that Paul did not wish to return to Orkney, so shameful had been the

manner of his leaving it; and that he wished it to be reported that he had been blinded or maimed, in order that men should not seek to bring him back. Sweyn himself came back to Orkney with this story; and he acknowledged Earl Rognvald, and became very friendly with him.

As the great Earl of Warwick has been called "the king-maker" in England, so Sweyn may be called the "earl-maker" in Orkney. He it was who caused Harald, the son of Maddad, to be made earl, and he also supported Earl Erlend in his claims while Earl Rognvald was in the Holy Land. He gained the friendship of David, King of Scots, Viking though he was, and the terror of the Scottish and Irish seas. Many of Sweyn's Viking raids are told in the Orkney Saga, one of the most famous being that known as Sweyn's "Broadcloth Cruise." The following account is given of this cruise, and of the death of Sweyn:—

"These tidings happened once on a time, that Sweyn Asleifson fared away on his spring-cruise, and Hakon, Earl Harald's son, fared with him; and they had five ships with oars, and all of them large. They harried about among the Southern Isles. Then the folk were so scared at him in the Southern Isles that men hid all their goods and chattels in the earth or in piles of rocks. Sweyn sailed as far south as Man, and got ill off for spoil. Thence they sailed out under Ireland and harried there. But when they came about south under Dublin, then two keels sailed there from off the main, which had come from England, and meant to steer for Dublin; they were laden with English cloths, and great store of goods was aboard them.

"Sweyn and his men pulled up to the keels and offered them battle. Little came of the defence of the Englishmen before Sweyn gave the word to board. Then the Englishmen were made prisoners. And there they robbed them of every penny which was aboard the keels, save that the Englishmen kept the clothes they stood in and some food, and went on their way afterwards with the keels; but Sweyn and his men fared to the Southern Isles and shared their war-spoil.

"They sailed from the west with great pomp. They did this as a glory for themselves when they lay in harbours, that they threw awnings of English cloth over their ships. But when they sailed into the Orkneys, they sewed the cloth on the fore-part of the sails, so that it looked in that wise as though the sails were made altogether of broadcloth. This they called the Broadcloth Cruise.

"Sweyn fared home to his house in Gairsay. He had taken from the keels much wine and English mead. Now when Sweyn had been at home a short while, he bade to him Earl Harald, and made a worthy feast against his coming. When Earl Harald was at the feast, there was much talk amongst them of Sweyn's good cheer. The earl spoke and said: 'This I would now, Sweyn, that thou wouldst lay aside thy sea-rovings; 'tis good now to drive home with a whole wain. But thou knowest this, that thou hast long maintained thyself and thy men by sea-roving; but so it fares with most men who live by unfair means, that they lose their lives in strife, if they do not break themselves from it.'

"Then Sweyn answered, and looked to the earl, and

spoke with a smile, and said thus: 'Well spoken is this, lord, and friendly spoken, and it will be good to take a bit of good counsel from you; but some men lay that to your door, that ye too are men of little fairness.' The earl answered: 'I shall have to answer for my share, but a gossiping tongue drives me to say what I do.'

"Sweyn said: 'Good, no doubt, drives you to it, lord. And so it shall be, that I will leave off searoving, for I find that I am growing old, and strength lessens much in hardships and warfare. Now I will go out on my autumn-cruise, and I would that it might be with no less glory than the spring-cruise was; but after that my wayfaring shall be over.' The earl answers: 'Tis hard to see, messmate, whether death or lasting luck will come first.' After that they dropped talking about it. Earl Harald fared away from the feast, and was led out with fitting gifts. So he and Sweyn parted with great love-tokens.

"A little while after, Sweyn busks him for his roving cruise; he had seven long-ships, and all great. Hakon, Earl Harald's son, went along with Sweyn on his voyage. They held on their course first to the Southern Isles, and got there little war-spoil; thence they fared out under Ireland, and harried there far and wide. They fared so far south as Dublin, and came upon them there very suddenly, so that the townsmen were not ware of them before they had got into the town. They took there much goods. They made prisoners there those men who were rulers there in the town. The upshot of their business was that they gave the town up into Sweyn's power, and agreed to pay as great a ransom as he chose to lay

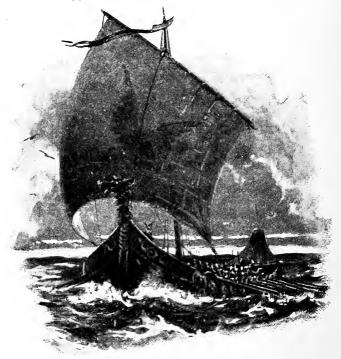
upon them. Sweyn was also to hold the town with his men and to have rule over it. The Dublin men sware an oath to do this. Next morning Sweyn was to come into the town and take the ransom.

"Now it must be told of what happened in the town during the night. The men of good counsel who were in the town held a meeting among themselves, and talked over the straits which had befallen them; it seemed to them hard to let their town come into the power of the Orkneyingers, and worst of all of that man whom they knew to be the most unjust man in the western lands. So they agreed amongst themselves that they would cheat Sweyn if they might. They took that counsel, that they dug great trenches before the burg-gate on the inside, and in many other places between the houses where it was meant that Sweyn and his men should pass; but men lay in wait there in the houses hard by with weapons. They laid planks over the trenches, so that they should fall down as soon as ever a man's weight comes on them. After that they strewed straw on the planks so that the trenches might not be seen, and so bided the morrow.

"On the morning after, Sweyn and his men arose and put on their arms; after that they went to the town. And when they came inside beyond the burggate, the Dublin men made a lane from the burggate right to the trenches. Sweyn and his men saw not what they were doing, and ran into the trenches. The townsmen then ran straightway to hold the burg-gate, but some to the trenches, and brought their arms to bear on Sweyn and his men. It was unhandy for them to make any defence, and Sweyn

lost his life there in the trenches, and all those who had gone into the town. So it was said that Sweyn was the last to die of all his messmates, and spoke these words ere he died: 'Know this, all men, whether I lose my life to-day or not, that I am one of the Saint Earl Rognvald's bodyguard, and I now mean to put my trust in being there where he is with God.' Sweyn's men fared at once to their ships and pulled away, and nothing is told about their voyage before they come into the Orkneys."

From the "Orkneyinga Saga," translated by Sir G. W. Dasent, D.C.L.
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THE DECAY OF THE EARLDOM AND THE END OF THE WESTERN KINGDOM.

FTER the death of Earl Rognvald, the islands were ruled for almost fifty years by Harald Maddadson. Harald's later days were full of troubles. With the decay of his powers the glory of the earldom also faded away. In 1194, when Sverrir was King of Norway, a rebellion took place, with the object of

placing Sigurd Erlingson on the throne. Sigurd's party, known as the "Eyjarskeggjar" or "Islandbeardies," had their headquarters in the Orkneys. There they collected their forces, and there the rebellion was organized. The rebels were completely overthrown in a great battle fought near Bergen. Sverrir summoned Earl Harald before him in 1196 to answer for his share in the matter. As a punishment for permitting plots against him to be hatched in Orkney—plots which the gray-haired old earl had been powerless to prevent—the king compelled him to surrender the government of Shetland. For nearly two centuries thereafter Orkney and Shetland were separate, the former ruled by the earl, the latter by a governor appointed by the Norwegian crown.

(1,384)

The result of this was twofold. In the first place it weakened the power of the Orkney earldom; in the second place it caused the earldom to draw nearer to Scotland, and to come more and more under Scottish influence. But the aged earl's cup of sorrow was not yet full. He quarrelled also with the Scottish king. As a consequence of this quarrel he was stripped of his Scottish possessions, and his son Thorfinn perished miserably, a prisoner in Roxburgh Castle. When Earl Harald died in 1206, full of years and of sorrows, the earldom was but the shadow of its former self.

After Harald's death, his two sons, John and David, succeeded to the earldom. David did not live long, and John was then left sole earl. This earl, the last of the old Norse jarls, was Earl of Orkney, excluding Shetland, holding that earldom from the Norwegian king, and Earl of Caithness, including Sutherland, holding that from the King of Scotland. Matters continued in this state generally till the pledging of the islands in 1468, the only change being that Shetland was again added to the Orkney earldom in 1379, when Henry, the first of the St. Clairs, became earl.

The days of Earl John, like those of his father, were stormy, and disaster after disaster fell upon the isles. The burning of Bishop Adam at Halkirk in Caithness brought down on the earl the vengeance of King Alexander the Second of Scotland. The earl had no hand in the murder, but he was near by, and, in the opinion of King Alexander, might have prevented the tragedy. Then a feud arose between the earl and some of the leaders of a Norse expedition to

the Western Isles. The earl was attacked suddenly in Thurso, and there murdered. This took place in the year 1231. The murderers took refuge in the Castle of Weir, where they were besieged by the earl's friends and adherents. Ultimately both parties agreed that the case should be submitted to the Norwegian king.

The chief men of the islands embarked for Norway to be present at the trial of the murderers, which ended in their conviction and punishment. But a terrible disaster for the Orkney earldom followed. All the leading men of the islands left Norway in one ship, and set sail for Orkney late in autumn. Stormy weather set in shortly after their departure. Fears which were entertained for the safety of the ship proved to be only too well founded: the ship was never heard of again. With her went down nearly all the nobility of the earldom. This disaster, which happened in 1232, was irremediable. Well does the Saga of Hakon Hakonson say, "Many men have had to suffer for this later." The earldom never recovered from the loss of its best blood, and but for this loss the after course of events might have been very different. Henceforth the Orkney earldom plays but a subordinate part in the history of the North.

In 1232 King Alexander of Scotland granted the Earldom of Caithness to Magnus, son of Gilbride, Earl of Angus. Magnus was at the same time confirmed in the Earldom of Orkney by the King of Norway. But King Alexander made Sutherland a separate earldom, William Friskyn being created first earl. Thus within a period of forty years the

earldom, which had at one time rivalled the power of Scotland itself, and had been at once the centre and the defence of the Norse Empire in the west, was stripped of more than half its territories.

The Scottish king had a deep purpose to serve in thus weakening the northern earldom. He was already casting covetous eyes on the Hebrides, and every blow struck at the power of the Orkney earl was a step towards the conquest of the Western Isles. In the heyday of Norse ascendency there was danger of the western Norse colonies swallowing up Scotland rather than of Scotland swallowing up these colonies. But Hakon of Norway was now too busy at home repressing internal disorders to give much thought to the ambitions of the Scottish king, and the Orkney earl was too weak to form a serious obstacle, besides which he was more than half Scottish himself.

For many years the chiefs of the Hebrides and the Western Isles had been wavering in their allegiance to the Norwegian crown. King Alexander was also doing his utmost to undermine Norse influence in the west. While he was carrying on intrigues with the western chiefs, he at the same time kept sending embassies to Norway to treat with Hakon for the purchase of these islands. Hakon's answer was brief and decided: He was not yet so much in want of money that he needed to sell his lands for it.

The next King of Scotland, Alexander the Third, had the same ambitions as his father, and as resolutely pursued his schemes for the subjugation of the Hebrides. He was, moreover, a young, energetic, and warlike king. He found the island chiefs very

troublesome neighbours. His father's policy of intrigue was too slow for him, and he determined to take by force what he could not obtain by treaty.

In 1262 the Scots invaded the Norse dominions in the west. Hakon, who had now pacified his own kingdom, was at last roused to make a serious effort to preserve his over-sea dominions. In the summer of 1263 he "let letters of summons be sent round all Norway, and called out the levies both of men and stores as he thought the land could bear it. He summoned all the host to meet him early in the summer at Bergen."

A mighty fleet assembled in obedience to the king's command, and, under the leadership of Hakon himself, set sail from Norway in the end of July 1263. After delaying through the summer in Shetland and Orkney, this ill-fated expedition reached the Firth of Clyde in late autumn. Alexander the Third, knowing well that he could not hope to meet the Norsemen at sea, prepared to give them as warm a reception as possible wherever they might land. In the meantime he pretended to be anxious for peace. Negotiations were opened between the two kings. Alexander temporized: winter was approaching.

Hakon's patience at last gave way, and breaking off negotiations, the Norsemen began to harry the country, receiving willing aid from the various half-Celtic chieftains, who enjoyed nothing so much as an opportunity of ravaging the fertile Lowlands. But that ally whose coming Alexander had been awaiting came at length; on the first of October a great storm from the south-west arose suddenly during the night. Hakon's ships began to drag their anchors. They

fouled each other in the darkness, and several were driven ashore on the Ayrshire coast. When morning dawned, Hakon found his own ship within bowshot of the shore, while the Scots were already plundering one which had stranded near by.

During a lull in the storm Hakon managed to land a detachment of his men to protect the stranded galley. But the storm increased in fury once more The Norsemen on shore were outnumbered probably by ten to one, and no help could be sent from the ships. The Vikings threw themselves into a circle bristling with spear-points. Onset after onset of the Scots forced the ring of spears slowly back towards the shore, but they could not break it. All day long the battle raged—the Norsemen with the angry sea behind them, and no hope of succour from their fleet; the Scots determined to drive the invaders into the sea, or slay them where they stood.

As evening began to fall the storm moderated, and Hakon was able to send reinforcements on shore. The Scots were borne backwards by the onset of the fresh warriors. But night was falling, and the Norsemen were anxious to get back to their ships, for the storm was not yet over. They accordingly hastened to take advantage of the breathing-space which they had won, and retired to their ships.

Such was the famous battle of Largs, which both Scots and Norsemen claim as a victory. In itself it was little more than a skirmish; but the events of that night and day, the storm and the battle together, gave the deathblow to Norse dominion in the west. The heart of King Hakon failed him. His men also were discouraged. The shattered remains of the

once splendid fleet set sail for Orkney, and the great invasion of Scotland was over.

Broken in spirit and shattered in health, Hakon reached Orkney only to die. Part of his fleet was ordered to proceed to Norway, and part was laid up for the winter in Scapa Bay and Houton Cove. Scarcely had these matters been attended to when his fatal sickness seized the king. In the Bishop's Palace in Kirkwall he spent his last hours. Here at midnight, on Saturday, December 15, 1263, in the sixtieth year of his eventful life, died Hakon Hakonson, the last of the great sea-kings of Norway.

The remains of the king were carried to the

cathedral, where they lay in state, and were afterwards temporarily interred in the choir near the shrine of St. Magnus. When spring came, Hakon's body was exhumed and taken to Bergen in Norway, where it was finally laid to rest in the choir of Christ Church.

After the death of Hakon, his son Magnus, now King of Norway, sent ambassadors to the Scottish king to treat for peace, and a treaty was signed at Perth in 1266. By this treaty Norway resigned her rights in the Hebrides, in consideration of Scotland's paying down four thousand marks, besides a tribute of one hundred marks to be paid annually in St. Magnus Cathedral, Kirkwall. This tribute, called the Annual of Norway, was the direct cause of the troubles which preceded the marriage of James the Third of Scotland and Princess Margaret of Denmark.

A large proportion of King Hakon's forces had to be maintained in Orkney during the winter succeeding Largs. To provide for this, the lands of the earldom were divided into sections, and charged with the maintenance of the soldiers in proportion to the amount of "skatt" each section owed the king. The Skatt Book of the earldom was prepared—a list of the lands therein, and the amount of skatt which they paid. It was the Domesday Book of the Orkneys. On this Skatt Book were based the Scottish Rentals, which came into such prominence in the history of the Scottish oppressions during the sixteenth century.



Ruins of the Bishop's Palace, Kırkwall.

THE ANNEXATION TO SCOTLAND.

HE history of Orkney during the two centuries which intervened between the battle of Largs and the annexation to Scotland contains little of interest. The earldom was held by Scottish families, first the Strathernes,

and then the St. Clairs. The sympathies of the earls were with the Scots, the people were mainly Norse, and as a natural consequence quarrels frequently arose between the earls and their subjects. Another source of trouble was the fact that the earls generally held possessions in Scotland, and were thus subjects of Scotland as well as of Norway. The islands were neglected by both countries, being of little importance to Norway as governed by foreigners, and of little interest to Scotland as owned by a foreign country.

Several of the earls took a prominent part in the affairs of Scotland, and were men of mark and highly esteemed by the Scottish sovereigns. Thus Magnus, the last of the Angus line, was one of the eight Scottish noblemen who, in 1320, subscribed the famous letter to the Pope asserting the independence of Scotland; and Henry, the second of the St. Clairs,

was entrusted by King Robert the Third with the task of conveying the young Prince James to a safe asylum in France, when that prince was made prisoner by the English.

In the history of Orkney itself the only man of note among the Scottish earls was Henry, the first of the St. Clairs, the builder of Kirkwall Castle. Henry became earl in 1379. Under his rule Orkney and Shetland were once more united. He is the only one of the Scottish earls who can be at all compared with the old Norse jarls of Orkney. In everything except name he was king of his island dominions, ruling them as he pleased without much thought of either Norway or Scotland.

It was in the time of William, the third of the St. Clair earls, that the transference of Orkney and Shetland to Scotland took place. The circumstances which led to this important event must now be related.

After the battle of Largs a treaty of peace between Norway and Scotland had been signed at Perth in 1266, Norway resigning the Hebrides in return for an immediate payment by Scotland of four thousand marks, and in addition a tribute of one hundred marks to be paid annually in St. Magnus Cathedral, Kirkwall. For every failure to pay this tribute—known in history as the Annual of Norway—Scotland was liable to a penalty of ten thousand marks. This treaty was afterwards confirmed by Hakon the Fifth and Robert the Bruce at Inverness in 1312.

In 1397 Norway, Sweden, and Denmark were united under one sovereign. When, in 1448, Christian the First became king of the united realms, payment

by Scotland of the Annual of Norway had been neglected for some forty years. According to the Treaty of Perth, Scotland was therefore liable to a penalty of over four hundred thousand marks. Christian's exchequer was empty; here was an opportunity of replenishing it. About 1460 Christian made a threatening demand for payment of the whole sum due.

The sum demanded was so large that it would have been no easy matter for Scotland to pay it, however willing she might be. Christian had concluded an alliance with France, and France had always been the firm friend of Scotland. When a rupture between Denmark and Scotland seemed inevitable, the French king employed all his influence to secure a compromise. He suggested that a marriage should be arranged between Prince James of Scotland, afterwards James the Third, and Margaret, Christian's daughter, trusting that the negotiations in connection with the marriage would lead to the friendly settlement of the matters in dispute.

Prolonged negotiations took place between the two countries. Scotland at first demanded the remission of the Annual of Norway with arrears, the cession of Orkney and Shetland, and a dowry of a hundred thousand crowns. To these terms Christian refused to listen. The death of James the Second at the siege of Roxburgh Castle suspended negotiations for a time. Some years after the accession of James the Third they were resumed. The final result was the Marriage Treaty of 1468, which brought about the transference of Orkney and Shetland to Scotland.

The main provisions of the Marriage Treaty were these:—(1.) That the Princess Margaret's dowry should amount to fifty thousand florins; ten thousand to be paid within the year, and the islands of Orkney to be pledged for the remaining forty thousand.—Only two thousand florins were paid, Shetland being pledged in the following year for the remaining eight thousand. (2.) That the rights of Christian as King of Norway should be exercised in the islands by the Scottish king until the forty thousand florins were paid. (3.) That the islanders should enjoy their own customs and laws while under Scottish rule.

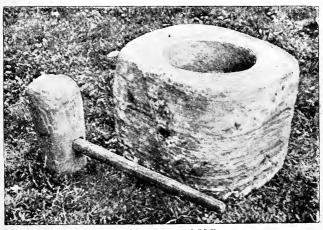
Christian would not consent to the permanent cession of the islands to Scotland under any conditions. In fact nothing but the direst financial straits can account for his even pledging them. But he had just finished a costly war in Sweden, his exchequer was empty, and the Scotlish marriage seemed to him very desirable.

On this Marriage Treaty of 1468, and on the agreement afterwards made with Earl William, Scotland bases her claim to the islands of Orkney and Shetland. It is certain that Christian intended to redeem the islands, and even as late as 1668 the plenipotentiaries of Europe assembled at Breda declared that Denmark—it ought to be Norway—still retained the right to redeem them.

Scottish influence in Orkney had been increasing for many years previous to the annexation. The needy dependants of the various Scottish noblemen who held the earldom found the islands a happy hunting-ground for their avarice or for their need. There was thus a strong party in Orkney in favour

of the annexation to Scotland. But the large majority of the inhabitants could not but regard the change of masters with dismay. Scotland was an alien power, and had usually been a hostile one. Her laws and institutions had little in common with those of the northern earldom. Besides this, her tenure being only temporary, she had no inducement to promote the welfare of the islands, but on the contrary her obvious interest was to make as much profit as possible from her opportunity.

From 1468 onwards, till long after the termination of Scottish and the beginning of British rule, the lot of the islanders was far from enviable. The transformation of the leading Norse earldom into a minor Scottish county was the work of those years. The process by which this was accomplished was a long-continued series of injuries and oppressions, the story of which forms too long a tale to be fully told here.



Knocking Stone and Mell.

UDAL AND FEUDAL.

RKNEY and Shetland were handed over to Scotland, but care was taken to secure the rights of the inhabitants of the islands by the provision in the treaty of 1468 that they should be governed according to their own laws and

usages. These were different from those of Scotland in several important particulars. Unfortunately, the new Scottish rulers did not know the laws of the earldom, and did not care to learn them.

With regard to the holding of land, the laws of Scotland were entirely different from those of Orkney. In Scotland land was held according to the feudal system, in Orkney according to the udal system. Under the feudal system the king was nominally the owner of all the lands in the kingdom. The various landlords held their lands from him as their superior, in exchange for certain services to be rendered or payments to be made, and by a written title, without which they had no legal claim to the land.

The udal system has been described as "the direct negation of every feudal principle." The udaller held his land without any written title, subject to no service or payment to a superior, and with full possession and every conceivable right of ownership. The udaller was a peasant noble; he was the king's equal and not his vassal. He owed king or jarl no services, duties, or payment for his udal lands, which he held as an absolute possession, inalienable from him and his race.

It must not be supposed that all the land in Orkney was held udally, or that all the inhabitants were udallers. There were some udallers who held part of their land as tenants, and many of the islanders held no udal land at all. All landholders, whether udallers or tenants, had to pay a tax, called "skatt." This was a tax levied to meet the expenses of government and defence. Skatt was paid sometimes to the King of Norway, sometimes to the Earl of Orkney, but it was legally the property of the crown. Hakon, when he lay dying in Kirkwall, levied skatt on the landholders of Orkney for the support of his troops during the winter. In this he was only exercising the undoubted right of the crown of Norway. But the skatt was never a rent, and never carried with it the acknowledgment of king or jarl as the real landowner.

When Orkney came under Scottish rule, the King of Scotland became entitled to the skatt. Some Scottish nobleman or churchman was usually appointed to collect the revenues of the crown in the earldom. This nobleman or churchman was paid a commission on what he collected, together with any trifles he might extort "in ony manner of way." Sometimes the revenues of the earldom were farmed out to the collector, an annual sum being paid by him into the royal

treasury as rent. This arrangement afforded much room for extortion, and all the more so because the crown collector was ignorant, or could pretend to be ignorant, of Orkney law and of the udal system.

In 1471 the Scottish crown purchased from Earl William all the lands and revenues which he held as Earl of Orkney. In 1472 Bishop William Tulloch was appointed to collect the revenues of the crown in Orkney. The period of Scottish oppression at once began. The bishop was deeply imbued with feudal prejudices. He had a rental drawn up, in which he registered the lands of udaller and tenant indiscriminately, with a studied confusion of their different rights. Both udal and feudal payments were exacted as rents from all holders of land.

The udaller had no one to whom he could appeal to right his wrongs and protect him against oppression. He had no written titles. The bishop ruled the bishopric as bishop, and he ruled the earldom as representative of the crown. The churches were filled with Scottish priests subservient to his will. The struggle was hopeless from the beginning, but it took a century to reduce the peasant nobles of Orkney to the position and rank of tenant farmers, and in the meantime the various rulers of the islands reaped a rich harvest.

Bishop Tulloch's rule lasted for seven years, and was followed by six years under Bishop Andrew. Then in 1485 Henry St. Clair was appointed representative of the crown in Orkney. The St. Clairs had always been popular in the islands, and the islanders rejoiced at the appointment of Lord Henry. He redressed a number of grievances, but the funda-

mental change of udal into feudal which had begun went on unchecked. It was too profitable a confusion

to be put right.

After the death of Lord Henry St. Clair at Flodden, turmoil and confusion reigned in the earldom. His widow, Lady Margaret Hepburn, held the crown lands in Orkney for nearly thirty years, but she was quite unable to rule the islands. A report got abroad that the king intended to give Orkney a feudal lord. In 1529 the trouble came to a head. James St. Clair, the most popular of that popular family, was made Governor of Kirkwall Castle, and put himself at the head of the discontented faction. Open rebellion followed. Lord William St. Clair, son of Lady Margaret remained loyal, and had to escape to Caithness.

Allied with the Earl of Caithness, Lord William invaded the islands with a considerable force. The invaders were met at Summerdale in Stenness by the rebels under James St. Clair, and were defeated with great slaughter. Many old stories about this battle still exist. The Caithness force landed in Orphir, and on their march they are said to have encountered a witch, whom they consulted as to the omens of success. She walked before them, unwinding together two balls of thread, one blue and the other red. She asked them to choose one of the balls as the symbol of their fortune, and they chose the red. The red thread was the first to come to an end.

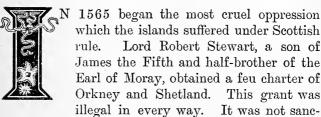
Unwilling to accept this omen, they demanded that the witch should give them yet another sign. She thereupon informed the Earl of Caithness that whichever side lost the first man in the fight would lose the day. Soon afterwards a boy was met herding cattle, and by order of the earl he was slain. Only after the deed was done did they discover that the boy was not an Orcadian but a native of Caithness.

Already prepared for defeat by these bad omens, the invaders came upon the Orcadian force at Summerdale. The Orcadians assailed them with showers of stones, and the Caithness force was quickly destroyed. Only one Orcadian is said to have fallen. He, having dressed himself in the clothes of one of the fallen enemy, was slain in the dusk of the evening as he returned home. His mother mistook him for one of the invading force, and felled him by a blow with a stone in the foot of a stocking.

Such are some of the tales tradition has woven round this fight. It was the last stand of the udallers, and the last pitched battle fought on Orcadian soil, if we except the siege of Kirkwall Castle during the rebellion of the Stewarts.

After the battle of Summerdale the islands still remained in a very unsettled condition, until in 1540 James the Fifth thought his presence necessary to restore tranquillity. The king stayed with the bishop in Kirkwall, though not in the ancient Bishop's Palace, which had witnessed the death of King Hakon. The visit of the king led to the removal of many abuses. But his death in 1542, and the long minority of his daughter, Mary Queen of Scots, brought back the former evils in an aggravated form. For twenty years the records of the islands are records of murder, violence, and oppression. The udallers were now a comparatively feeble folk, but their worst period of oppression was still to come.

THE STEWART EARLS.



tioned by Parliament, and it disposed not only of the actual property which the crown of Scotland had acquired in the islands, but of the lands and services of the udallers or free landowners, which had never belonged to Norway or Denmark, and could not therefore have been acquired by Scotland. In exchange for the revenues of the Abbey of Holyrood, the new earl also obtained possession of the lands and revenues of the Bishopric of Orkney.

To oppress the udallers so as to compel them to accept feus from him was the unvarying object of Earl Robert's policy. He aggravated the burdens of the islanders by making them use weights and measures of his own devising, and increased their liabilities to him by a coinage of his own valuation. He raised the rents of the tenants to the limits of endurance, made every occasional or special payment

an annual burden, imposed parish taxes as household taxes, and by pretended decrees of the Thing, or council, evicted many udallers without a show of justice. Heavy tolls and duties were laid on all fishermen and traders who came to the islands, and secret encouragement was given to pirates, whose booty was shared by the earl.

The more bitter the complaints of the islanders, the more grievous became their oppression. prevent these complaints reaching the ears of the authorities in Edinburgh, the earl forbade any one to cross the firths or ferries without his permission. It began also to be whispered that Earl Robert was plotting to sever once more the connection between Orkney and the Scottish crown. He had made additions to the old palace at Birsay, and on a stone over the principal gate he had caused to be inscribed: DOMINUS ROBERTUS STEWARTUS FILIUS JACOBI QUINTI REX SCOTORUM HOC OPUS INSTRUXIT—that is, "Earl Robert Stewart, son of James the Fifth, King of the Scots, erected this building." Those who know a little Latin will observe that by his using the nominative case rex, it is Earl Robert himself and not James the Fifth whom he describes as "King of the Scots." This was probably a mere mistake in the earl's Latin, but a much graver meaning was attached to it by the Scottish King and Parliament when the whisper of treason somehow reached their ears.

The complaints of the udallers might be unheeded, but the accusation of treason was a much more serious matter. The earl was summoned to Edinburgh to answer the charges against him. He was kept for some time a prisoner in Linlithgow Castle, but the storm quickly blew over. No trial ever took place. That ordeal Earl Robert escaped by the help of his powerful friends and relatives; and not only so, but in 1581 he was once more granted the Earldom of Orkney and Shetland, with extended powers.

When Robert Stewart died, the islands were granted to his son, Patrick Stewart, the most cruel oppressor of all. Skilful in tyranny and extortion as Earl Robert had been, his son showed still more ability and ingenuity in his evil courses. The multiplication of enactments and penalties for the most trivial offences, confiscation, torture, and judicial murder—these were the additions Earl Patrick made to the machinery of oppression used by his father. He had palaces built for him at Scalloway and at Kirkwall by the same forced labour that had already reared Earl Robert's palace in Birsay. But Earl Patrick's career is best described in the words of Mackenzie:—

"Earl Patrick—still remembered in Orkney tradition as 'Black Pate'—was a man of kingly ideas, and had his lot been east in Egypt instead of in Orkney, would have done very well as one of the Pharaohs. 'Heaven is high and the Czar is far away,' says a Russian proverb. Orkney is far from Holyrood and farther from London, and the earl did his own pleasure in his domain, without having the fear of the distant king before his eyes.

"Most astounding and extraordinary was the system of tyranny and extortion which he carried on. He accused one and another of the gentry of the islands of high treason, and tried them in his own court. But it was not his object to punish these gentlemen as traitors against the king. In that case their for-

feited estates would go to the king, which would be no profit to the earl. The earl was not so simple. The frightened udallers were glad enough to compound with the formidable earl by making over to him a portion of their lands to save the remainder and their own necks.

"The Orkney potentate dealt in exactions of every description. He extorted taxes and duties. He created ferries and levied exorbitant tolls on them. He compelled the people to work for him all manner of work. He forced them to row his boats and man his ships, to toil in his quarries, to convey stones and lime for the building of his palace and park walls, and to perform whatever other kinds of slave-labour he chose to demand, 'without either meat or drink or hire.'

"The Czar though far away sometimes hears at last. The doings of this tyrant of the isles attracted the attention of the law. He was seized and put in ward in Dumbarton Castle. What schemes were in his proud, fierce head it is difficult to guess. This is known, that, under his instructions, his son Robert occupied the castle of Kirkwall with armed men, fortified the cathedral, and stood ready to hold his own.

"As soon as it became known in Edinburgh that Orkney was in rebellion, the king's Secret Council dispatched the Earl of Caithness to bring it under. Two great cannons were wheeled down from Edinburgh Castle and shipped at Leith along with a strong military force. The expedition landed safely within a mile and a half of Kirkwall. The great cannons were pointed against the castle. They shot and got their answer in shot. The siege continued about a month, when the rebels gave in. Caithness returned

to Edinburgh with Robert Stewart and other prisoners, and the two great cannons passed up the High Street in triumph, to the sound of drum and trumpet, with the keys of Kirkwall Castle hanging at their muzzles.

"Robert Stewart was condemned to death and hanged at the Market Cross along with five of his accomplices. The people pitied him greatly, for it was his father's scheming that had led him to destruction. His father's execution soon followed. The ministers who tried to prepare him for death, finding him so ignorant that he could not say the Lord's Prayer, asked the Council to delay his execution for a few days, till he could be better informed. The request was granted, and then he went his way into the great darkness."

The rebellion of Earl Patrick led to the abolition of the Thing and the ancient laws of Orkney and Shetland, but there was little change for the better in the government of the islands. They were assigned to one nobleman after another, no one having any interest in their improvement. It was, indeed, not till the eighteenth century that any very great effort was made to give them the benefits of good government and a chance to regain somewhat of their ancient prosperity.



Pot Querns and Saddle Quern.

THE EIGHTEENTH AND NINETEENTH CENTURIES.

URING the long period of oppression by the Scottish earls, the state of our islands had been indeed deplorable, and recovery was slow. The spirit was crushed out of the people. Industry was vain when plunder was sure to follow. Agriculture

could not advance when the alien landlord claimed all the profit. An Orkney writer of the eighteenth century gives a sad picture of the condition of the country in his day:—

"The inhabitants, in general, are very polite, hospitable, and kind to strangers; but I am sorry to say that so little is industry encouraged in our country that no means can be assigned by which the lower class of people can get their bread. By reason of having no employment they must live very wretchedly; they become indolent and lazy to the last degree, insomuch that rather than raise cabbage for their own use they will steal from others; and instead of being at pains to prepare the turf, which they have for the mere trouble of cutting up and drying, yet, rather than do so, they will steal it from those who are

richer or more industrious than themselves..... Every Saturday, which day they are privileged to beg, a troop of miserable, ragged creatures are seen going from door to door, almost numerous enough to plunder the whole town were they to exert themselves against it in an hostile manner—at least, if their valour was in proportion to their distress."

The dawn of a brighter day came slowly, and it is difficult now to trace the steps by which the prosperity of the islands was restored. Agriculture remained in a very primitive state till the nineteenth century had well begun. An Orkney "township" had a very different appearance in those days from what we now see. The farms were not divided from one another; each patch of cultivated ground belonged to all the farmers in the township, who shared it on the "runrig" system, each "rig" being worked by a different owner.

The only pasture was the natural grass of meadow and hill, and this also was common property. A "hill-dyke," usually of turf, surrounded the corn-land, and formed a somewhat indifferent protection against the flocks of sheep, cattle, horses, and pigs which found their summer food on the "hill." The names "Slap" and "Grind," borne by farmhouses in many districts, remind us of the gateways in these old hill dykes.

With the corn-land subdivided in this way, and the pasture-land undivided, there was no inducement for any farmer to improve his methods of agriculture. Farm implements were of the rudest kind. The soil was scratched rather than tilled by means of wooden ploughs with only one stilt or handle, a model of which may be seen in the museum in Stromness. There were no carts; loads were carried pannier-fashion on the backs of horses, along the rough tracks or bridle-paths which served for roads.

Of the old style of farmhouse scarcely a relic now remains. One entrance usually served the farmer and his cattle, who lived under the same roof, though in separate apartments. In the kitchen, or "but-end," the fireplace was simply a raised hearth in the centre of the room, with a low wall or "back" against which the peat-fire was built. There was no chimney, but a large opening in the roof allowed the smoke to escape in a leisurely fashion. Behind the "back" there was often accommodation for poultry, calves, and other domestic animals. The better class of houses had beyond the kitchen a parlour, or "benend," which was used only on great occasions.

Rough and primitive as was their manner of life, yet at the beginning of last century the Orcadians had already made a very considerable advance in prosperity. A writer of the time tells us that the small farmers had more money among them than could be found among people of similar station in any other part of the British Isles.

It was not till the second quarter of the century that the land was divided up into separate farms, and modern methods of agriculture began to be employed, with rotation of crops and improved implements. A little later the beginning was made of the system of roads which now spreads in a network over the islands.

While agriculture was yet in its infancy, the islands were much benefited by various forms of industry and occupation which have now mostly fallen into disuse, as the need for their help has passed away. One of these industries, introduced towards the end of the eighteenth century, was the spinning of flax and the weaving of linen. Flax was largely grown in the islands at one time, and the dressing, spinning, and weaving of it was a common occupation.

About the beginning of the nineteenth century the manufacture of straw-plait was introduced, and soon took the place of the linen industry. It is said that over six thousand women and girls were at one time employed in straw-plaiting. Though the workers were paid but little, and that usually not in money but in goods, the straw-plaiting increased considerably the wealth and the trade of the county.

The manufacture of kelp was introduced early in the eighteenth century, and gave occupation to many of the inhabitants. Large profits were made in this business, not so much, of course, by the actual workers as by the landlords and other agents who exported the kelp. At one time, indeed, it seemed as if the attention given to this industry was to prove a hindrance to the advance of agriculture, which is the only foundation of true prosperity in these islands; and when other substances began to take the place of kelp, the decline of this trade was really a benefit to the islands.

Fishing has always been an important industry in Orkney, but it was not till near the middle of the nineteenth century that the improvements in boats and in gear made the fisheries a really valuable asset to the islanders. Fishing, however, cannot be called one of those temporary industries which we men-

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tioned. The herring fishery and the white fishing, as well as other branches of this industry, have continued to increase, and next to agriculture, fishing is the great natural source of wealth for the people.

During the centuries now under our notice, Orkney had a closer connection with the seafaring life than it has to-day. When all trade was carried on by sailing ships, and when westerly winds were quite as common as they now are, vessels passing through the Pentland Firth for America or elsewhere found Stromness a convenient port of call, and its harbour was often crowded with shipping. This was especially the case during the French wars of the eighteenth century, when the English Channel was avoided by shipping as being too near the enemy's shores. Fleets of trading ships used to gather at Stromness while waiting a convoy of men-of-war to accompany them across the Atlantic.

An interesting relic of those busy times in Stromness is the old Warehouse and Warehouse Pier at the north end of that town. This store was built about the middle of the eighteenth century for the convenience of the rice ships from America, as being the safest place for them to discharge their cargoes. Before the end of the century, however, the Stromness Warehouse was deserted in favour of Cowes in the Isle of Wight. A writer of the time makes out a strong case in favour of Stromness and against the English Channel, but the fact that Cowes is nearer to London seems to have settled the matter in favour of that port.

During these prolonged naval wars, it is said that

as many as twelve thousand Orkneymen served in the navy. Many of them went as volunteers, but probably most of them served against their will, as the pressgang was very active among the islands. Many a young sailor who began his voyage on a peaceful trader was soon transferred to one of His Majesty's ships. Traditions of those troublous times are still preserved among many families in the islands. Hundreds of these men were never heard of again, for those were not the days of telegraphs and war correspondents. The years passed, and the son or the brother did not return, but when or how he fell his friends never knew. It was a heavy war-tax the islands paid; the full extent of it has never been disclosed.

About 1740 the ships of the Hudson's Bay Company began to visit the islands, not only to wait for a wind to start them on their annual voyage, but to engage labourers and tradesmen to carry on the fur trade among the Indians of the west and north of Canada. The connection thus begun is not yet quite extinct, but in the earlier part of the nineteenth century there was a constant stream of young men flowing to the Far West. At one time from fifty to a hundred men left Stromness for Hudson Bay every summer. Some remained as pioneers and colonists; some returned after a sojourn of five years or more, with a tidy sum of money to start them as farmers or tradesmen at home. Many of them who settled in the Great Lone Land rose to high positions in the Company's service. The most famous of this band of empire-builders was Dr. John Rae, the discoverer of the fate of the ill-starred Franklin Expedition, and a noted Arctic explorer, whose monument may be seen in the nave of St. Magnus Cathedral.

The Company then ruled over the greater portion of what is now the Dominion of Canada. The names of Fort York, Moose Factory, and Red River were as familiar to the Orkney boys of those days as Edinburgh, Glasgow, and Aberdeen are to us to-day. But Canada changed even more than Orkney during the latter part of the nineteenth century, and the great Hudson's Bay Company have now handed over their vast territories to the rule of the Dominion. The fur trade still exists in the North-West, and there are Orkneymen still in the employment of the Company; but the days have gone by when this was one of the chief industries of the wander-loving sons of our islands.

After the "Nor'-Wast," as the Hudson Bay service was called, the "Straits" had the next claim on our youth. The Davis Strait whale-fishing fleet made an annual visit to our islands to complete their This was in the spring or "vore," when the crops were in the ground, and many men, both young and middle-aged, looked to the annual whaling trip to the north as a means of gain, just as their Norse ancestors did to the annual "vore-viking" raid on the richer shores of the South. This also has passed away; the harpoon and whale-lance are rarely seen in the islands; whales and whaling fleet alike have almost become extinct. But while agriculture was still in its infancy in Orkney, the "Straits" gave much-needed employment and modest gains to many of our hardy forefathers.

The general tendency of life in Orkney has been away from dependence upon the sea for a living, and towards agriculture and the trade and commerce which it brings with it. In its methods of farming and in its general prosperity the county now compares well with any other part of the kingdom. But most of this progress has been made during the last half century or so.

It was in 1833 that the Aberdeen, Leith, and Clyde Shipping Company, now the North of Scotland and Orkney and Shetland Navigation Company, first decided to send one of their steamers—the Velocity -to call at Kirkwall. The call was made once a fortnight, and only during the months of June, July, and August. The mails were then carried across the Pentland Firth in a small boat. The growth in traffic since that time is indicated by the fact that the trade and commerce of the islands now requires the weekly call of two steamers at Kirkwall and three at Stromness, with a daily mail steamer to both towns, in addition to numerous occasional trips of other steamers and sailing vessels, especially during the fishing season, while four smaller steamers maintain communication between the various islands.

The Orkney farmer still has a somewhat niggardly soil and a stormy climate to contend with. His acres are few, and his boys will often turn to richer lands to seek their fortune. But life in these islands to-day is easy and comfortable compared with what it was during any of the ten centuries whose history we have passed in brief review.

The boys and girls who aim at seeking wealth and fame in other lands, though by other means than

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those of their Viking ancestors, may now set forth on their voyage as well equipped by education and otherwise as the youth of any country in the world. Those who remain at home will still find a worthy task in carrying on the improvement of the homeland, as their fathers have done; for whatever stage of progress we may attain, it is never merely an end, but also a beginning.



Old-fashioned Fireplace.

Part II.—The Isles and the Folk.

A SURVEY OF THE ISLANDS.

On Wideford Hill.

HERE is no better view-point from which to make a general survey of the Orcadian Archipelago than Wideford Hill. It is less than half the height of the Ward Hill of Hoy, but it is at once more central and more easily

accessible. The Ward Hill of Orphir exceeds it in height by nearly one hundred and fifty feet, and affords a much finer view to the westward; but Wideford Hill is more isolated from other hills, and from its summit we can obtain a better general outlook over the islands.

Wideford Hill rises to a height of seven hundred and forty feet, and, standing within two miles of Kirkwall, it may be easily approached either from the main Stromness road over the Ayre, or from the old road above the site of the Lammas market. If we choose the right kind of day, when a cool northerly breeze gives us a horizon free from haze, and when

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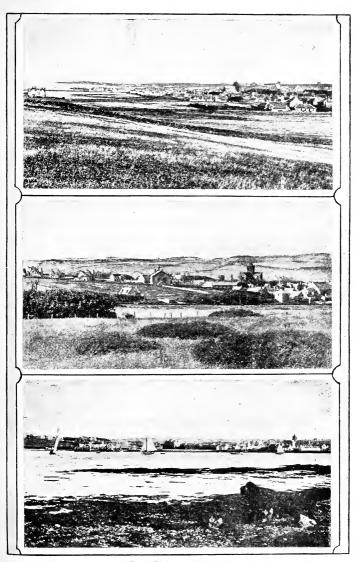
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thin gray clouds veil the sun only at intervals, we shall see from Wideford a panorama which surpasses in loveliness and in human interest that seen from many a mountain top.

The charm of Orkney scenery lies in its colour rather than its form, in its luminous distances rather than its immediate foreground, in its restfulness rather than its grandeur. The landscape does not overwhelm the beholder with a sense of his puny insignificance, as great mountains are apt to do; it wins his love by suggestions of peace and of home.

But let us look around and note what we see. Far to the southward lies the silvery streak of the Pentland Firth, very innocent now in its summer calm. Beyond it stretch the low shores of Caithness; and in the blue distance we see Morven and the mountains of Sutherland, the "southern land" of the Norsemen. Nearer is the green expanse of South Ronaldsay, much foreshortened to the view, with the lighthouse towers of the Pentland Skerries showing beyond, and the island of Burray at its nearer end. To the right, over Scapa Flow, rises the long brown ridge of Hoy, separated by streaks of shimmering sea from Flotta, Fara, Cava, and its other neighbours. Very stern and solemn look its heath-clad heights as the passing shadows fall across them.

The whole of the East Mainland lies at our feet—Deerness, bright and sunny, with the Moul Head stretching boldly out to sea; nearer is St. Andrews, and Holm, half hidden by the ridge of high ground in the north of that parish; and, nearer still, St. Ola, deeply cut into by the Bays of Kirkwall and Scapa, which look as if they only awaited the next spring



Round about Kirkwall.

tide to join hands across the narrow isthmus, the Peerie Sea lying ready to do its part.

Kirkwall, the "Kirk Voe" of the Norsemen, is more worthy of its name to-day than when the little church of St. Olaf was the chief object in the landscape. Approach it how we may, the great Cathedral of St. Magnus arrests our attention. Seen from Wideford Hill the tower does not break the skyline, as it does from the sea; yet the mass of sombre reddish masonry asserts itself, and dominates the pearl-gray cluster of walls and roofs that spreads around, as it has done for nearly eight hundred years.

"Tame" and "uninteresting" are the words often used to describe the appearance of our island capital. It does not seem so to-day. As the eye sweeps down over the purple shoulder of the hill to the green fields below, and passes over the silver gleam of the water with broken reflections of tower and gable beyond, it rests upon a picture filled with many charms of line, mass, and colour, from which the deep cool green of tree and shrub is not wholly wanting. Open to the north and the south by the "Viking path" of the sea, and joined to the east and the west by more modern paths, the thin white lines of curving roadway, Kirkwall shows itself the natural focus of our island commerce and social life, and the centre of a wide and fair landscape.

Northward and westward next we turn our view. Kirkwall Bay opens out into the "Wide Fiord," which doubtless gave our hill its name, and westward into the "Aurrida Fiord," or Sea-trout Firth, which first gave its name to the parish of Firth, and then received in exchange its present name, the Bay of

Firth. Its shores are low and well cultivated, but to the north rises the dark brown ridge formed by the hills of Firth and of Rendall, which hide from our view most of the parish of Evie and parts of Harray and Birsay.

To the left of this ridge, through the central valley of Firth and Stenness, a charming vista opens out. A rich and fertile sweep of low ground forms the basin of the great lochs, and on the long peninsula between them we can distinguish the Standing Stones rising as needle points against the blue expanse of the Loch of Stenness. The green mound of Maeshowe, too, is clearly visible. Far away, over the cultivated slopes of Sandwick, we see the soft shimmer of the Atlantic, and to the northward the undulating skyline of the Birsay Hills.

Due west from where we stand the view is shut in by the long ridge of the Keelylang Hills and the bold outline of the Ward Hill of Orphir, and the fairest part of the West Mainland, Stromness, with its bays and islets, is beyond our ken. To enjoy a view of these we must take our stand upon the Ward Hill itself, but this will come into the programme of another day.

Of the island-studded sea to the north and east we have not yet spoken. We can hardly disentangle the maze of sounds and bays, of holms and promontories, except by the aid of a map, and if we are wise we shall have one in our pocket. With this before us the maze becomes clear. The bold hills of Rousay stand clear of the Mainland to the north, with the lower islands of Gairsay, Wyre or Veira, and Egilsay near at hand. Westray is all but hidden,

but the blue ridge of Eday stands boldly forth, shutting out from view the greater portion of Sanday and North Ronaldsay. The tall lighthouse pillar on the Start, however, is clearly seen.

Close to Kirkwall Bay, and protecting it from the eastern sea, lies the fertile island of Shapinsay, with Balfour Castle standing in clear view among its gardens. Beyond we see the bold outline of Stronsay, and to the south of it Auskerry and its lighthouse.

Now we let our eye rest on the horizon, a sharp and clear line where we can trace the smoke of trawlers and other craft which are themselves hidden by the great curve of the ocean plain. There, right over Balfour Castle, something catches our eye. It might be the smoke of a passing steamer, but it does not change its form as we look; it stands clear and sharp, a tiny blue pyramid showing over the horizon. There is only one thing it can be—the Fair Isle, distant some sixty miles from where we stand! Only on rare occasions is this lonely sea-girt rock so free from cloud and mist that its top is thus to be distinguished. Yet if we know where to look for it, we may occasionally see it as we do to-day; and it is useful to remember that from Wideford Hill its bearing is directly over Balfour Castle.

Among the North Isles.

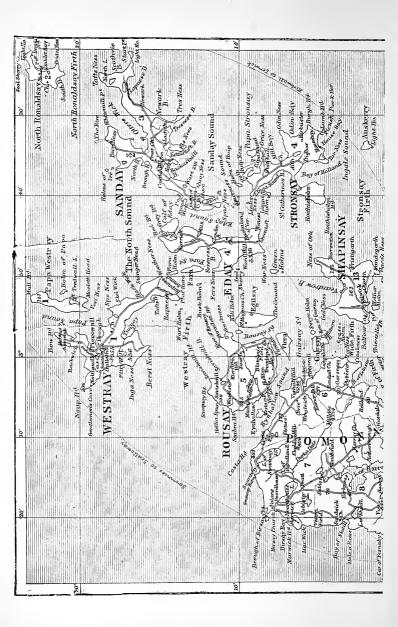
A glance at the map of Orkney will show that most of the important islands lie north of the Mainland. The term "North Isles," however, is generally used to mean only the more distant of these—Stronsay, Eday, Sanday, North Ronaldsay, and Westray,

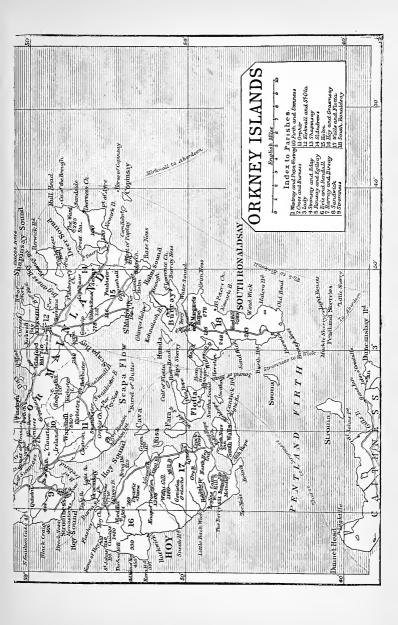
with the smaller islands adjacent to them. These can be visited by steamer from Kirkwall in one day, with the exception of North Ronaldsay; and at the same time a good view can be obtained of the nearer islands—Shapinsay and Rousay, with the smaller group of Egilsay, Wyre, and Gairsay. North Ronaldsay may also be seen on the far north-eastern horizon.

Leaving Kirkwall pier in the early morning, we sail northwards out of the bay, when the String opens on our right, and Shapinsay is close at hand. There, sheltered by Helliar Holm, we notice the bay of Ellwick, where, in 1263, King Haco moored his hundred ships when on that ill-starred expedition which ended at Largs. West of the bay stands Balfour Castle, the finest specimen of modern domestic architecture in the islands, surrounded by its noted gardens.

The sea to the west of Shapinsay is dotted with shoals and skerries; but as we pass Gairsay on the left and sail round Galt Ness, the north-western point of Shapinsay, we find open water before us, and steer north-east towards Eday, passing the Green Holms on our way.

Eday, the first island at which we call, is hilly and heath-clad, with abundance of peat. Ever since the days of Torf Einar, no doubt, it has yielded a supply of peat for such unprovided islands as Sanday, up to modern times when coal has come into more general use. Even yet the peat industry is considerable, and Eday peats have been recently seen in use for drying malt in a distillery near Edinburgh. The most interesting part of Eday,





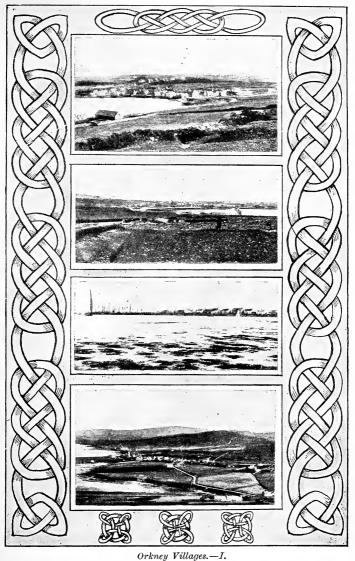
however, is the north end of the island, where our steamer will call later in the day.

From Eday we cross to Stronsay, keeping to the north of that island, and then turning southwards to the village of Whitehall in Papa Sound, protected on the north-east by the small island of Papa Stronsay. This sheltered roadstead so near the open eastern sea has long been an important centre of the herring fishery. About the middle of last century as many as four hundred Orkney boats and many from the Scottish mainland found anchorage in Papa Sound. In modern times Stronsay has again risen in importance as a fishing station.

Stronsay is one of the best agricultural districts in Orkney, and is noted for the size and the excellence of its farms. Near Lamb Head, in the extreme south-east of Stronsay, are the remains of a very extensive pier, erected before the time of the Norsemen.

Leaving Whitehall pier, we next sail due north across Sanday Sound to Kettletoft Bay in Sanday. This bay and that of Otterswick in the north afford safe anchorage; but the low, flat island, with its numerous projecting points and skerries, presents many dangers to navigation. As early as 1529 a lighthouse was erected on the extreme eastern point of the island, and was called the Star, from which, it is said, the headland derived its name, Start Point. Long after that time, however, the island was noted for the number of shipwrecks which occurred on its shores.

Sanday is emphatically the "Sand Island." Its soil is sandy and generally fertile, and its surface is low and flat. Only in the south-west is there



1. St. Margaret's Hope, South Ronaldsay. 2. Pierowall, Westray.
3. Whitehall, Stronsay. 4. Finstown, Firth.

any rising ground, where the highest point in the island reaches a height of a little over two hundred feet.

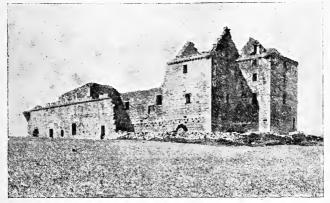
From Kettletoft pier our course is now south-west, until we double Spur Ness, the most southerly point of Sanday; then turning northwards, we make for Calf Sound, at the north end of Eday. This sheltered channel, between Eday and the Calf of Eday, is memorable as the scene of the capture of the pirate Gow in 1725.

Gow, or Smith, was a native of Stromness, where "Gow's Garden," a name given to a patch of ground on the east side of the harbour, afterwards occupied by a shipbuilding yard, seems to mark the site of his father's house. The name Gow, however, which is the Gaelic equivalent of Smith, indicates a Scottish rather than an Orcadian descent. In 1724 Gow was sailing as second mate on board the George, an English vessel of two hundred tons, mounting eighteen guns, and trading on the Barbary coast. He and several others of the crew mutinied, murdered the captain, and started on what proved to be a very brief career of piracy.

After a few months' cruising, Gow carried his ship, now named the *Revenge*, into Stromness to refit; but as he soon made the place too hot for safety, he put to sea in February 1725. Having sailed north round Westray, he turned south towards Eday, and in beating through Calf Sound ran his ship aground on the Calf, opposite Carrick House, then occupied by Mr. James Fea of Clestran. To him Gow applied for help to get his ship off the rocks; but the opportunity was too good to be missed. and Fea by various stratagems succeeded in making

prisoners of Gow and his crew. They were handed over to the authorities, and afterwards suffered the penalty of their crimes in London.

Nearly a century later, in 1814, Sir Walter Scott made his memorable visit to Orkney and Shetland, and the legends which he collected regarding Gow formed a centre round which he wove his well-known story, "The Pirate."



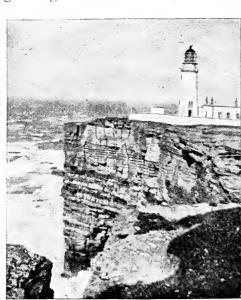
Noltland Castle.

Carrick was at one time the site of a thriving manufacture of salt, but that too is now a tale of the past.

On leaving Carrick our steamer passes out of Calf Sound between the Red Head on the west and the Grey Head on the east, so named from the colour of their sandstone cliffs. The stone of the former has been much in favour for building purposes, as St. Magnus Cathedral can testify, and has on occasion found its way as far south as London.

A north-westerly course now brings us to Pierowall

in Westray, our last port of call. The long, low island guarding it on the north-east, fertile and well cultivated,



Noup Head Lighthouse.

Papa Westray. Towards its south end is a small lake. on a holm in which are the ruins of a chapel dedicated to St. Tredwall, a place of great sanctity in former days, and a special shrine for such pilgrims as suffered from sore eyes. Long

after the Reformation, indeed, we are told that the minister of the island had much difficulty in preventing his flock from resorting thither to pay their devotions to the saint before assembling in the church.

The chief point of interest in Westray is Noltland Castle, now roofless indeed, but scarcely yet a ruin. It was built early in the fifteenth century by Bishop Tulloch, and afterwards passed into the hands of Sir Gilbert Balfour, Master of the Household to Mary Queen of Scots. After the escape of the unfortunate queen from Lochleven Castle, he was

ordered to prepare Noltland for her reception. Had the ill-fated Mary turned northwards instead of

southwards when the day went against her at Langside, and had she sought shelter among these northern islands instead of trusting to the tender mercies of her cousin and rival, Queen Elizabeth, what a romantic



North Ronaldsay Lighthouse.

chapter might have been added to the history of Orkney!

Westray contains much good arable land, and supports a large population. On the west side the scenery is bold and romantic; and from Fitty Hill, which is over five hundred and fifty feet in height, the view extends to Foula in Shetland and the Fair Isle. The cliffs facing the Atlantic are lofty and picturesque. About a mile south of Noup Head, the western extremity of the island, is the Gentlemen's Cave, where five Orcadian adherents of "Prince Charlie" are said to have found shelter for several months after the "'Forty-five."

From Fitty Hill we may obtain a distant view of North Ronaldsay, the most northerly and perhaps the most verdant island of the group. Separated from its nearest neighbour, Sanday, by the wild and stormy North Ronaldsay Firth, the crossing of which in the usual open boat is often dangerous, even when possible, this island impresses the visitor as being very much cut off from the world. But in such matters all depends upon comparison, and doubtless there are many who regard the whole of our islands as similarly remote and inaccessible.

A stone dyke surrounds the island of North Ronaldsay, outside which a number of native sheep pick up a living on the "banks" and even in the "ebb." On the most northerly point, near Dennis Head, stands one of the finest of our lighthouses; for North Ronaldsay, like Sanday, has been the scene of many a shipwreck.

Our return from Westray to Kirkwall is made direct, and we now keep to the west of Eday, passing Faray and its Holm, and having the heath-clad hills of Rousay clear in view to the westward. Rousay far surpasses the other islands of the northern group in its hill and cliff scenery, its highest elevation reaching eight hundred and twenty feet, and its western shore presenting many romantic effects in stack and cave. Among its other attractive features are the Loch of Wasbister, in the north; the Burn of Westness and Westness House, overlooking the sacred isle of Eynhallow and the tumultuous Roost of Burgar; and the modern mansion of Trumbland, looking out on the calm sound and the green island of Veira or Wyre.

Nearer our course, however, lies the long, low stretch of Egilsay, the "Church Island" of the Norsemen, where the saintly Earl Magnus was done to death. The present ruined church, with its farseen round tower, though of later date, doubtless occupies the site of that earlier church which was the scene of his murder.

Wyre, too, soon opens out to view, with its ruined chapel, and the mound which marks the traditional site of "Cubbie Roo's Castle," the home of the once formidable Kolbein Hruga, whose name is even yet used to terrify into good behaviour some obstreperous youngster, in the awful threat, "Cubbie Roo'll get thee!"



Westness, Eynhallow, and Costa Head.

Gairsay, with its rounded hill over three hundred feet high, next claims our attention, and the name of Sweyn Holm, lying off its eastern shore, recalls to us Sweyn Asleifson and the great drinking-hall which he built on the island when he made it his winter home: the summer home of the stout old Viking was on board his long-ship. But now the tower of St. Magnus rising ahead reminds us that our day's sail is at an end, and we are shortly alongside Kirkwall pier once more.

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Stromness Harbour.

Among the South Isles.

For a visit to the South Isles of Orkney, Stromness is our best starting-point. It is the natural centre of communication for this group—or rather for the western division of the group, for South Ronaldsay and Burray may be visited equally well from Kirkwall by way of Scapa Bay. The small steamer which makes the regular round of the islands will serve us for the beginning of our tour, but we must soon branch off from the ordinary route if we are to see much of interest.

The green island of Graemsay, with its beach of gleaming white sand, looks very attractive as we sail out of Stromness harbour. Its chief attraction to visitors is the lofty tower of the East Lighthouse, which serves, along with the lower West Lighthouse,



Graemsay East Lighthouse.

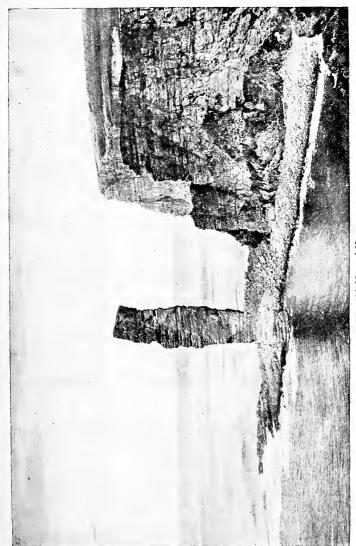
to guide ships through the swift tideway of Hoy Sound. The official name, indeed, for these lights is not Graemsay, but Hoy.

Graemsay is separated from Hoy by Burra Sound, and here we shall leave our steamer, landing at Linksness, the best starting-point for the long walk and climb which we have before us. Hoy is next to the Mainland in size, but little of its surface is cultivated, and roads are few and far between. So we strike westward, and, leaving cultivation behind, make for the Meadow of the Kame, keeping the Ward Hill and its neighbour the Cuilags on our left. There is a famous echo here, which we may stop to test before beginning the climb to the Kame itself—a long ridge some twelve hundred feet high, which runs from the Cuilags to the sheer precipice on the north.

The coast-line we now reach is one of the loftiest in the British Isles, rising at St. John's Head to a perpendicular height of 1,140 feet. With due care we may approach the edge and look down this fearful and giddy height, but it is not a place for foolhardy daring. The view of this stupendous cliff, with the white surges breaking a thousand feet below in a slow and strangely noiseless movement, and the seagulls flitting like midges in their mazy dance midway between us and the blue water, is something which cannot be described and cannot be forgotten.

Beyond St. John's Head the ground falls to half the height or less, and a couple of miles brings us to the far-famed Old Man of Hoy. This wonderful pillar stands well out from the cliff, on a ledge of rock which connects with the land near sea-level. The height of the pillar is four hundred and fifty feet: that of the cliff on which we stand is about tifty feet less. Tradition tells us that the Old Man of Hoy has suffered considerably from the battering of wind and wave even within recent times. is said that he formerly stood on two legs, but that many years ago part of the divided base fell before the Atlantic breakers, and left him standing on one leg, as we now see him. Doubtless time and the weather will one day lay him low, but in the meantime he looks fairly solid and durable.

Another mile or more and we reach Rora Head, the most westerly point of Orkney, and turn southeastward towards Rackwick Bay, and now one of the finest views in all the islands meets our gaze. Beyond the deep glen at our feet stretches the great western sea-wall, gleaming red in the sunshine. In the bay below us the rollers are breaking in ceaseless foam over a strip of shining sand and gravel. The little township of Rackwick is a patchwork of



The Old Man of Hoy.

green and gold, contrasting strangely with the dark glen and the towering hills behind.

The glen itself, we find as we make the descent into it, is a bit of true highland scenery—the only bit, indeed, which Orkney has to show. Its rugged, lonely grandeur is unique in these islands. Heather and bracken, wild rose and honeysuckle, juniper, dwarf birch, and willow mingle in such luxuriance as to suggest a more favoured latitude. The glen of Berriedale, which opens out of the main valley to the west, is sometimes called the "Garden of Orkney," but it is a garden of nature's own.

Hoy is for the most part of a sterner aspect, as we shall quickly find if we cross the valley and dare to attack the Ward Hill. The only risk we shall run in doing so will be that of stiff limbs for several days to come, unless, indeed, a sudden descent of cloud or mist should find us unprovided with a guide who knows the "lay of the land." The sturdy luxuriance of the heather is likely to be our chief difficulty in the climb.

Standing at last on the summit of the Ward Hill, we find ourselves at a height of 1,564 feet above the sea, on a somewhat bare and stony plateau, and not far from the highest point there is, curiously enough, an excellent spring of water. A very clear day is necessary if we are to enjoy the sight of all that this elevation commands. We shall then see the whole archipelago spread out before us as on a map—a marvellous panorama of sea and land. Even the Fair Isle shows its conical head above the northeastern horizon. The north coast of Scotland stretches out westward to Cape Wrath, and in the blue distance

to the southwards many a peak of the Northern Highlands can be distinguished.

If we descend the hill on its southern slope, we shall find a short though a steep way to the next point of interest in Hoy—the Dwarfie Stone. The description of this curious relic of the industry of some unknown workman has been well given by Hugh Miller, whose name may still be read carved on its bare interior, while the legendary interest may best be gathered from Sir Walter Scott in his notes to "The Pirate."

South of the valley in which the Dwarfie Stone lies, the ground rises to a long stretch of moorland, broken only by burns and lochs, till it dips down to the fringe of low, cultivated ground round Longhope, in the parish of Walls. This part of the island, however, is too distant to be included in our day's excursion, and may be visited direct by steamer from Stromness some other day.

Longhope, as we shall then see, is a sheltered bay nearly four miles long and about one mile in average width, and forms a magnificent natural harbour. Before the days of steam as many as a hundred and fifty vessels might be seen at anchor here, sheltered from the westerly gales which barred their passage through the Pentland Firth. The martello towers on either side of the entrance remind us of a time when storms were not the only danger to our shipping. Protection of a kind more necessary to-day is afforded by the strong revolving light on Cantick Head, and on occasion by the Longhope lifeboat, the heroism of whose hardy crew has often shown itself in deeds of noble daring such as no sea-roving Viking of the ancient days could have surpassed.

At the western extremity of Longhope stands the mansion house of Melsetter, with its extensive gardens. On the farther side of the bay is South Walls, a peninsula which is literally "almost an island," as the waters of Aith Hope almost meet those of Longhope across a narrow "aith" or isthmus.

Opposite the entrance to Longhope, whence we start on our return journey to Stromness, we pass the island of Flotta, the "flat island" of the Norsemen, thriving and well cultivated, especially towards the east, where it curves round Pan Hope. To the south of it lies the green island of Switha, to the north-east the tiny Calf of Flotta, and to the north-west, off Mill Bay, the island of Faray. Farther north, and close to the shore of Hoy, lies Risa, or Risa Little, a favourite nesting-place of many of our sea-birds. The last island we notice on our homeward sail is Cava, a couple of miles eastward of which we see the beacon which marks a skerry known as the Barrel of Butter.

The eastern group of the South Isles is more closely connected with the East Mainland, being divided from Holm by Holm Sound, where lie the two green islets of Lamb Holm and Glims Holm. Immediately to the south is Burray, the *Borgarey* of the Norsemen, so called, doubtless, from the two brochs or *borgs* whose ruins still exist in the north of the island. To the west of Burray lies the peat-covered islet of Hunda.

South of Burray, across the narrow channel of Water Sound, lies the large and populous island of South Ronaldsay. At the head of the little bay of the same name stands the neat and thriving village

—almost a town—of St. Margaret's Hope, pleasantly situated among its fertile gardens and fields, and with a substantial pier to accommodate its increasing traffic.

Westward from "The Hope" lies Hoxa, a peninsula cut off by Widewall Bay on the south. On the narrow isthmus or "aith" stands a green mound, the "haug," or howe, from which the name of Haugseith or Hoxa is derived. On the shores of Widewall Bay at low water we may see the submerged peat-moss and decaying remains of large trees which mark a bygone stage in the climate of the islands, and likewise tell of gradual subsidence of the land.

From south to north, South Ronaldsay measures about seven miles. The surface is well cultivated, and the highest point, the Ward Hill, is only some three hundred and sixty feet high. The bay of Burwick, in the south-west corner of the island, was formerly the landing-place for the south mails, which were carried across the Pentland Firth in an open boat. Some of the rock scenery in the southern part is very fine, especially "The Gloup," near Halcro Head, an open pit near the shore into which the sea enters by a subterranean channel.

To the south-west we see the lonely, storm-swept island of Swona with its half-dozen or so of houses, and to the south rise the twin lighthouse towers on the Pentland Skerries, only one of which is now used as a light. Here we reach the southern extremity of the county, some forty miles in a straight line from North Ronaldsay, the extreme northern point.

ROUND THE MAINLAND.

First Day.

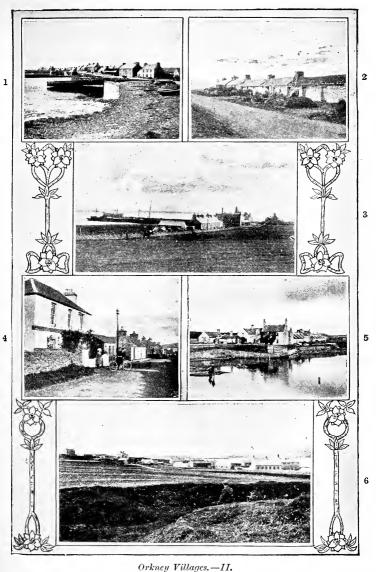


HE best way to see the Mainland, and the only way to appreciate its extent and the variety of its scenery, is to make use of the excellent roads by which it is now traversed and encircled. On this tour the bicycle will be our

best conveyance; and if we can secure the company of a congenial friend, we may spend a few days very pleasantly and profitably on a ride round the Mainland.

We shall begin with the East Mainland. Leaving Kirkwall by the Deerness road, we shortly afterwards find ourselves skimming down the long brae of Wideford—not Wideford Hill, but the farm of Wideford, about two miles south-east of the town. On our left is the wide expanse of Inganess Bay, with its beach of sand and shingle, where we can recall seeing on one memorable occasion a school of whales stranded after a great whale hunt: that was in our early school days, now rapidly becoming a part of the time known as "long ago."

We next pass the long, low peninsula of Tanker-



1. St. Mary's, Holm. 2. Orphir. 3. Kettletoft, Sanday. 4. Finstown. 5. Balfour Village, Shapinsay. 6. Evie.

ness, which lies between Inganess Bay and Deer Sound. On its south side, between the loch and the shore, stands the Hall of Tankerness, its position marked out by one of those rare patches of dark green which indicate that trees may still be made to grow in Orkney under intelligent fostering care. The cliffs near Rerwick Head are worth a visit. There are several caves, one of which, tradition affirms, gave refuge for weeks to one of the Covenanters who were shipwrecked at Deerness in 1679.

After passing through the parish of St. Andrews, we reach that of Deerness. Deerness is literally a peninsula—very nearly an island indeed. The isthmus which joins it to the Mainland is not only narrow but low and sandy, and in former days mariners approaching from the south sometimes overlooked its existence when making for shelter, and came to grief accordingly. On this narrow neck of land is found an ancient mound or haug, which bears the name of Dingishowe.

Deerness is on the whole flat, the highest point in the peninsula, the Ward, being only 285 feet above the sea. Yet the view from the road, which crosses the centre of the parish, is very extensive. To the south we notice the island of Copinsay, formerly much frequented for gathering sea-birds' eggs, and its "Horse," a steep black rock rising high out of the water.

If time permits, it will be worth our while to cycle to Sandside, and thence walk along the cliffs to the Moul Head. The scenery here is fine, and we shall find the Broch, with its ancient ruined chapel, specially interesting. A church existed here before

the Norse period, and was doubtless the cause of the name *Deir-ness*, or the ness of the Culdee priests, being given to the district. Not far distant we see another object which recalls priestly memories—a gray stone pillar erected to commemorate the shipwreck by which two hundred Covenanters lost their lives when on their way to be sold as slaves in the American Colonies or "Plantations."

The story is a dark and tragic one. There is some reason to believe that the shipwreck was not entirely an accident; it is said that the ship was not even provisioned for so long a voyage, and that the fate designed for the unhappy prisoners was not slavery but death by shipwreck whenever circumstances favourable for such an "accident" should arise.

On returning to the St. Andrews road we may strike off towards the south and make our way homewards through the parish of Holm. The most fertile part of this parish lies in a broad valley sloping towards the south, where the crops ripen early. As we descend into this valley, the mellow light of an autumn afternoon reveals to us a view of rare sweetness and charm.

Amid the river-like tidal stream of Holm Sound lie the green islets of Glims Holm and Lamb Holm or Laman, with Burray and the darker Hunda, and the imposing stretch of South Ronaldsay beyond. To the westward, Hoy rises in deep-blue shadow, reflected in the still surface of Scapa Flow. Over the gleam of the Pentland Firth we see the flat shores of Caithness, while the more distant peaks of the Sutherland mountains rise sharp and clear above the horizon.

But there are a few miles of road yet to cover, so we hold on our way towards the sea-shore, where the steep-gabled mansion of Graemeshall stands beside its pretty reed-fringed loch. A mile beyond lies the village of St. Mary's, with its pier and its line of cottages stretching along the beach; and after taking a passing glance at this well-known fishing-station, we turn our faces northwards. We have a long hilly ride in front of us here, and by the time we reach the end of it our interest in the charming views is not so keen as it was. Then comes the welcome change of gradient; we spin down the "Distillery Brae," and soon our circuit of the East Mainland is completed.

Second Day.

Our second day's circuit will take us round the central part of the Mainland, which is divided from the East Mainland by the isthmus of Scapa, and from the larger mass of the West Mainland by the lochs of Stenness and Harray and the wide isthmus between the latter and the Bay of Firth.

We leave Kirkwall by the "Head of the Town" and keep to the old Scapa road for about a mile, when we turn sharp to the right and soon begin the long ascent of nearly three hundred feet to Greenigo. This is followed by a corresponding dip down to the valley of Kirbuster, whose loch lies on our right; but as fishing is not our programme at present we keep to the road as it ascends once more, and soon find ourselves entering upon the broad fertile slope which forms the most thickly inhabited part of the parish of Orphir.

Westward we see the road stretching across this well-cultivated district, dotted with houses large and small, which gather here and there in groups and clusters almost ranking as villages. Time does not press, and we are out for the purpose of seeing all we can, so we decide to leave the main road here and take a by-road to the right which skirts the east side of the Ward Hill. It is fairly steep, and the riding cannot



Orphir.

be called good, but it has the advantage of bringing us within a mile of the Ward Hill itself, the top of which we shall find a pleasant halting-place.

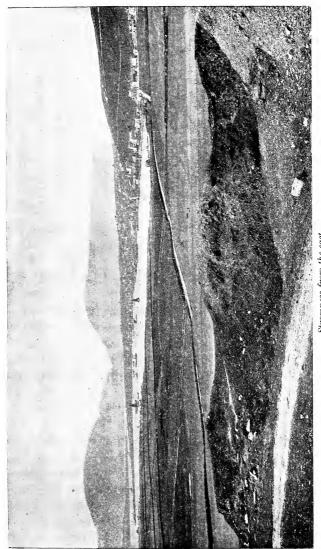
Leaving our bicycles by the roadside, we face a pretty stiff climb through luxuriant heather and bracken, and soon find ourselves on the highest of a group of hill-tops, 880 feet above the sea. If we are favoured with a clear atmosphere, the scene before us will amply repay the labour of our ascent.

The view from the Ward Hill is supplementary to that from Wideford Hill. Parts of the landscape to the east and north are shut out by Wideford Hill itself, by the long Keelylang ridge, and by the broadbacked mass between Harray and Evie. To the south the scene is somewhat similar to that seen from Wideford Hill; to the westward, however, the panorama now before us is unique.

Ireland, or Ayre-land, as it once was, sloping gently downwards to its bay, lies at our feet, a patchwork of farms and fields in varying tints of green and yellow and brown. Beyond it, the picturesque "western capital," Stromness, fringes its landlocked harbour, secure in the shelter of the protecting hills behind. To the left lies Graemsay with its lighthouses, an "emerald set in a sapphire sea," and beyond it the frowning cliffs and the purple ridge of Hoy dominate the scene.

Away towards the west the horizon line, more than thirty miles distant as we now see it, cuts sharp and straight against the soft blue sky. If we have a good glass, we may make out on this line, just above the town of Stromness, the Stack of Suleskerry.

But our day's ride is yet mostly before us, so we descend from the Ward or "watch-tower," mount our bicycles, regain the main road, and continue our way through the smiling landscape which lies in front of us. Orphir was an important district in the old Norse days, and a residence of the Orkney Earls stood on the sea-shore near the parish church; and adjoining that church may still be seen part of a much earlier church, one of the few circular temples in this



Stromness from the east.

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(1,384)

country which were built in the time of the Crusades on the model of the Church of the Holy Sepulchre at Jerusalem. In the little cove sheltered by the Head and the Holm of Houton, some of King Hakon's ships found shelter during the winter after the battle of Largs, while the king himself lay dying in the ancient palace at Kirkwall.

After a particularly stiff ride over Scorriedale, we enter upon a long and somewhat uninteresting



Ruins of circular church, Orphir.

stretch of road through Clestran and Ireland, and at last reach the main road from Kirkwall to Stromness, close to the Bridge of Waith, which crosses the narrow strait between the Loch of Stenness and the sea. We can see just above this bridge the traces of a still older one, and the name Waith probably indicates that this was originally a "wading-place" or ford at low tide.

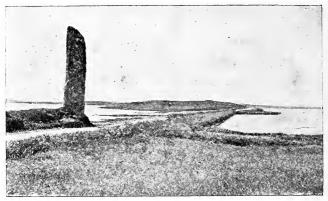
But we are not to cross the bridge to-day; we turn back towards Kirkwall to complete our tour of the Central Mainland. The road runs along the side of the loch, through the pretty district of Clouston, and past the comfortable hotel which has been erected there for the convenience of such summer visitors as are attracted by the trout-fishing of the loch. The largest trout ever seen was caught in the Loch of Stenness, and if the proverb is true that "there are as good fish in the sea as ever came out of it," the same may yet be proved true of this loch.

We halt only long enough to obtain a welcome cup of tea, and then continue our ride. Less than a mile brings us to the road which leads over the Bridge of Brogar to the Standing Stones, and we decide on making a brief pilgrimage to this the most ancient shrine in the islands—if, indeed, it was a shrine. But as the afternoon is wearing towards evening, and we have been here several times before, we merely sit down on the short heather beside the circle long enough to let the mystery and "eeriness" of the scene sink into our minds and set us wondering silently what it all meant in the far-off days when it was new.

We need not wait here in the hope of finding out, so we ride back past the tall "sentinel" stone and the smaller circle of Stenness to the main road. Another mile brings us abreast of Maeshowe, and with the spirit of the past upon us we stop once more. We obtain the key of this famous chambered mound from the farmhouse opposite, in order that we may spend a few minutes more in "wondering."

There is nothing about Maeshowe, or even about

the Standing Stones, to attract the superficial mind, but to those who "wonder," and who can see things which vanished from outward view many centuries ago, those places are almost holy ground. They embody and embalm some of the deepest thoughts of a long-vanished people; and though we can hardly guess what these thoughts were, the monuments are sacred relics to us. They are milestones, we may say, marking early stages in the long advance of our race.



The Sentinel Stone, Stenness.

After leaving Maeshowe we face an incline just heavy enough to recall our thoughts to the present, and soon we are passing through the pretty glen which opens on the Bay of Firth. The patches of shrubbery and trees round Binscarth on our left give a pleasing variety to the scenery, and show us once more the possibilities and the limitations of our islands as regards the cultivation of woods.

The village of Finstown, the half-way house between Kirkwall and Stromness, has a beautiful

situation, which can be better appreciated from the hillside above it than from the road, and it is well placed for attracting a share of the ordinary business of the districts around. It has a prosperous look, and its name reminds us that it claims to be more than a mere village.

Before us on our left lies the wide, shallow Bay of Firth, or "The Firth," as it might more correctly be called, which gives its name to the surrounding



Maeshowe.

district. To the Norsemen it was the "Sea-trout Firth," and must have been important for its fishing. In more recent times it had a famous oyster-fishery; but that too has become a thing of the past, though by the exercise of a little foresight and public spirit it could easily be restored.

In the bay lie the Holm of Grimbister and the island of Damsay, or "St. Adamnan's Isle." The latter, as its name indicates, was the site of a Culdee monastery, and is mentioned in the later Saga story.

Damsay has also its share of the legendary tales which are connected with many of the old ecclesiastical centres in the island.

On our right the old Kirkwall road branches off, passing over the southern shoulder of Wideford Hill; and beside it, on a rising ground, we see the manse of Firth, the home of the soldier-poet Malcolm, whose father was minister of the parish. Soon our road bears to the left to avoid the steep, dark mass of Wideford Hill; we cross the broad stretch of Quanterness, and a bend to the right brings us once more in view of Kirkwall, lying beyond the Peerie Sea, whose still waters mirror the dark mass of St. Magnus, now gleaming with a dusky red in the glow of sunset

Third Day.

Our third day's tour is of a different character; we are to make our way through Rendall and Evie to Birsay. As we shall spend the night there, our bicycles must be loaded with a few necessary articles; but old campaigners always march light, and our baggage is reduced to its absolute minimum.

The first stage of our journey takes us to Finstown, along the main Stromness road which we traversed yesterday. Then we turn sharp to the right, and cross the bridge over the mouth of the "Oyce," which reminds us of the Peerie Sea and its Ayre. The district in front of us, the "North Side" of Firth, consists of a broad slope, almost a plain, fringing the bay, and the steep escarpment of a long range of hills on our left. Most of this range is 500 feet in height, and parts exceed 700 feet.

There is a certain monotony about the road, due to its straightness; but there is really no reason why it should turn either to the right hand or to the left, so we pedal away, mile after mile. When opposite the Bay of Isbister we pass a very pleasing valley, that of Settascarth, through which a road crosses the long ridge into the parish of Harray. Then we reach the parish of Rendall, and find a long ascent in front of us, as the road runs straight up the "dale" whence the name of the parish arises. We pass between the high, steep ridge on the left and a group of hills on the right which lie between us and the sea, forming a broad peninsula between the Bay of Isbister and Woodwick.

When we reach the summit of this rise, we are quite ready to halt for a while and enjoy the new panorama which opens out to the northward. The inner group of the North Isles—Rousay, Egilsay, Wyre, and Gairsay—lie at our feet, as it seems; and the more distant members of the group can be easily made out. Rousay is the dominant feature in the landscape, and its steep brown hills, descending in step-like "hammars," make an impressive background to the green fringe of farmland and the liquid blue of the sea.

As we resume our way along an undulating road, we pass through a district which, despite its northerly exposure, seems able to support a large population, and numerous tidy cottages cluster here and there along the roadside. By-and-by the cultivated strip becomes narrower, the sandy beach of Aikerness gives place to the rocky shores of Burgar, and the road turns inland with a steep incline to dip down on the other side of the ridge towards the Loch of Swannay.

Here we shall find it well worth our while to make a somewhat longer halt than before, and, leaving our bicycles, we turn to climb Costa Hill, and to view the wild cliffs at Costa Head. From the hill we look down upon the mysterious green islet of Eynhallow, the "Holy Island," where the ruins of an ancient monastery have been traced, and round which more than the usual crop of legends has sprung up. A fair contrast it offers to the bold, rocky cliffs of Rousay just beyond.

If it happens to be the time of spring tides, and the ebb is running out, we shall see at this place one of the most impressive sights which our coasts present. However calm be the sea, as soon as the tide begins to gather strength, the channels on either side of Eynhallow for some distance out to sea become a mass of heaving, foaming billows, reminding one of the long stretch of boiling rapids below the Falls of Niagara.

And that is just what this "roost" is—rapids on the course of the tidal river which is now sweeping westward through Eynhallow Sound. When we look at our pocket map, we see that on each side of the islet the depth of water is only about five fathoms. In about a quarter of a mile it becomes ten fathoms, and within a mile of the west end of the island twenty fathoms. Thus the tidal river first passes over a ridge on each side of Eynhallow, where it is less than thirty feet deep, and then plunges down a slope which dips nearly one hundred feet in a mile

If there is a long swell rolling in from the Atlantic, as there often is on our western shores, the turmoil is increased, and the boiling fury of Burgar Roost, as it is called, is a sight which it is worth going far

to see. The roost which is formed in Hoy Sound with a strong ebb-tide is due to similar causes, but there the dip in the sea-bottom is not so steep. When the tide turns, the change seems almost magical, and in a short time there may be not a ripple on the water to mark the scene of this mad dance of the billows.

The cliffs at Costa Head are the highest on the Mainland, but we can only see them from above,



Birsay, the Barony.

and thus we lose much of their wild grandeur. We enjoy, however, an impressive view of the cavepierced shores of Rousay, and of the stern ramparts of Noup Head, in Westray, with its sentinel lighthouse.

Sooner or later we must return to our bicycles, and now we coast rapidly down to the Loch of Swannay, sweep round its northern shore, and, crossing the burn, climb the opposite slope towards the part of Birsay quaintly named, "Abune the Hill," or "Above the Hill," as the map-makers have it. Instead of following the road which strikes southward through the centre of the parish, we turn towards the west, and by means of an older road make our way to the Barony of Birsay, where we shall find accommodation for the night.

But we have still a long evening before us, and after due rest and refreshment we shall find time to explore our surroundings. The place is full of historical interest. The old name of Birgisharad, in which we may trace the names of Birsay and Harray, indicates that here was the chief hunting-ground of the Norse Jarls. The mixture of hill and loch and stream, the valleys being then perhaps furnished with coverts of brushwood where now there is only pasture or crops, made this northern part of the Mainland the best hunting-ground in the county.

Birsay may be said to have been the capital of the Earldom at one time. It was the favourite residence of the Earls, and it was also the ecclesiastical centre, and the residence of the first bishop of the islands. When the sainted Earl Magnus was slain, it was in Christ's Kirk in Birsay that his body first found burial. On the Brough we may still see the ruins of a very ancient chapel dedicated to St. Peter.

The Stewart Earls, of dishonoured memory, found Birsay an attractive locality. They raised on the site of its old Norse castle a palace built after the plan of Holyrood in Edinburgh, the ruins of which still form one of the chief features in the landscape. The whole district, in short, is full of those remains which we have called milestones of the past, marking stages in the history of our race.

The shore near the Barony is interesting. We may walk to the Brough at low water, but we must take care not to be caught and imprisoned by the returning tide. The cliffs rise to the southward, and in Marwick Head reach a height of nearly three hundred feet.

The chief attraction for tourists is the Loch of Boardhouse and its trout fishing. This loch receives the drainage of a wide stretch of country, its chief feeder being the Hillside Burn, which rises in the hills between Rendall and Harray, flows north-west for



The Brough of Birsay.

some five miles to the Loch of Hundland, and under the name of the Burn of Kirbuster reaches the larger loch in about another mile. This drainage basin is next in importance and area to that of the "Great Lakes" of Orkney, the Lochs of Stenness and Harray.

If we have time and energy left to climb Ravie Hill, on the south side of the loch, we shall get an excellent idea of the "lay of the land," and the relation of these two loch basins. We may notice in particular that the Harray basin extends northward

almost to the hill on which we stand, and includes a number of small lochs near it which look as if they ought to belong to the Boardhouse or Birsay system.

If scenery rather than geography is our study, we shall be equally well repaid for this walk. From its isolated position, Ravie Hill commands a very extensive view, despite its moderate elevation. The panorama of hill and valley and plain, of land and lake and sea, which is spread out around us, is really one of the finest in Orkney, and we can quite understand how the picturesque Barony came to occupy so important a place in the past. Even at the present day its rich soil and pleasant situation give it some right to be called the "Garden of Orkney." But meantime we must make our way back to our inn, for the sun is dipping in the western sea, and to-morrow will bring us fresh tasks to perform.

Fourth Day.

Our fourth and last day's exploration will be confined to the western shore of the Mainland, between Birsay and Stromness. As we leave the Barony and ride along the south side of the loch we are tempted to stop and view once more the landscape from Ravie Hill, before we finally turn our back upon this romantic corner of the Mainland. While we watch the people at work in the fields, and listen to the restful sounds of country life, it is hard to picture the past whose relics stand yonder, plain in our view.

If Birsay were to display before our eyes this morning a pageant of her past history, the procession would be a varied one. The hunting-parties of the Norse Earls, the coming of the first bishop to teach

the new faith, the building of the first Norse church, the burial of Earl Magnus, the procession of pilgrims seeking miraculous healing at his tomb, the removal of the sacred relics to the church of St. Olaf at Kirkwall to await the building of a more magnificent shrine, the ruinous favour of the Scottish Earls, the raising of a second Holyrood in the old Barony whose stately splendour was the measure of the robbery and extortion suffered by the people, the passing of this incongruous pomp and the return of welcome obscurity and quiet—truly a long and picturesque procession!

We resume our journey, however, and soon reach Twatt, where the road divides. The branch to the left leads to the important district of Dounby, on the borders of the three parishes of Birsay, Harray, and Sandwick, and then passes through the whole length of Harray to join the Kirkwall and Stromness road.

Harray is an interesting parish. It is the only parish in Orkney which does not touch the sea. Its soil is on the whole fertile, the surface being diversified by moraines brought down by glaciers from the steep hills to the east. The farms are generally small, but the farmers are mostly in the happy position of being owners as well as occupiers, and the number of "lairds" in this parish has long been proverbial in Orkney.

We decide, however, on taking the road to the right, as we wish to see something of the famous "west shore." Three or four miles brings us to the head of the Harray Loch; but instead of descending to the mill of Rango we turn to the right at the cross-roads, and shortly reach the hamlet of Aith,

beside the Loch of Skaill, our charming "Loch in Orcady." Here we turn once more to the right, following a road which skirts the loch and leads us almost to the shores of the Bay of Skaill, a fine sweep of sandy beach, but exposed to the full fury of the Atlantic.

At its southern corner we examine a large "Pict's House," now opened up—the "Weem of Scarabrae." Then we decide to climb the slope beyond and visit the "Hole o' Roo," a famous cave piercing a bold



Marwick Head, Birsay.

headland, which from the horizontal lie of the rock strata looks as if it had been built of gigantic flagstones by a race of Titans.

We are now entering on the finest stretch of cliff scenery in the islands, with the exception of Hoy, and from here to Stromness, a distance of some eight miles, the walk is one to remember and to repeat. But now for the first time we find our bicycles a hindrance instead of a help, and we are at a loss what to do with them. We may decide to turn back to the main road, ride to Stromness, and, leaving them there, explore the coast on foot, which is the most satisfactory plan. If we decide to take them on with us, we shall find that considerable stretches of the ground are level enough to permit of a rough ride on



The Castle of Yesnaby.

the turf, and for the last three miles of the distance there is a fair road.

The next point of interest after leaving Row Head is the Noust of Bigging, sheltered by its Brough, an excellent place from which to watch the Atlantic breakers when a heavy sea is running. A little way to the south is the Castle of Yesnaby, one of those isolated stacks of rock which have withstood the battering of the ocean while the cliffs around have

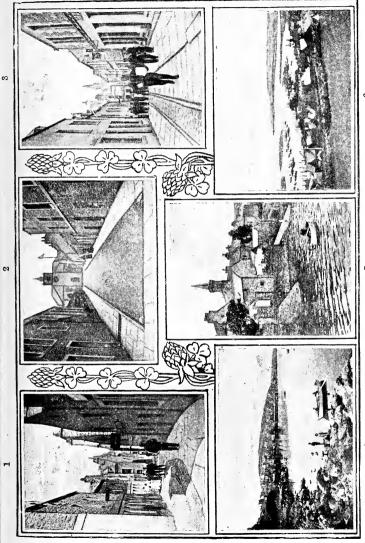
crumbled and fallen. Its slender base, however, proclaims that its fate is only a matter of time.

In another mile and a half, after passing Lyre Geo and Inganess Geo, two impressive examples of how rocks decay, we reach the Castle of North Gaulton, a singularly slender and graceful pillar of rock. Then we cross a stretch of low ground, after which there is a steep climb up to the summit of the Black Craig. The height of the hill is 360 feet, and that of the cliff little less, while its sheer plunge down into the waves makes it look higher than it really is.

As we descend towards the south we pass over a district which is sacred in the eyes of geologists, for it was here that Hugh Miller discovered the fossil remains of the Asterolepis or "star-scale" fish, a monster of the ancient days when the rocks of this hill were being laid down as mud and sand on the bottom of a primeval lake. The great geologist describes this district as "the land of fish," and the rock strata fairly swarm with fossils.

The shore in front is now low and tame, but the whole district from hill to sea is fertile and well peopled. That it was so in the past also we see sufficient proof. For there, on the shore of Breckness, stand the ruins of a mansion built by Bishop Graeme, who knew well where to build; and a mile beyond it, in the lonely churchyard by the lonely sea, rises a fragment of an ancient church. There stood the church of Stromness in former days, and there also the manse; while the names of Innertown and Outertown doubtless refer to their relative nearness to this centre of parish life.

But times have changed, and it is no longer fertility of soil but convenience for trade which draws men together in close neighbourhood, and so the



1. Dundas Street. 2. Church Road. 3. Victoria Street. 4. From the South End. 5. From the Harbour. 6. From the Hill.

Round about Stronness.

12

modern Stromness arose on the shore of that romantic little bay which spreads out beneath us as we cross the ridge to the left. That landlocked sea, and not the rocky hillside, was the source of its life and growth; and as we note the frequent steamships and the clustered fishing-fleet we realize that it is still the sea which brings prosperity to the little gray town.

Here, then, our circuit of the Mainland fitly ends, for in the opinion of many the town of Stromness, the "ness of the tide-stream," is the fairest spot in all the islands. However this may be, it is indeed fair, and the Stromness boy will wander far and sail over many seas ere he will find a fairer scene than his island home;—fair when it lies before him under the pearl-gray light of its northern sky; fairer still, perchance, when the golden haze of memory gilds the landscape, and the joyous vision of the outward eye has given place to the wistful retrospect of the imagination.



The Black Craig.

SKETCHES BY HUGH MILLER.

The Dwarfie Stone.



E landed at Hoy, on a rocky stretch of shore composed of the gray flagstones of the district. They spread out here in front of the tall hills composed of the overlying sandstone, in a green, undu-

lating platform, resembling a somewhat uneven esplanade spread out in front of a steep rampart. With the upper deposit a new style of scenery commences, unique in these islands. The hills, bold and abrupt, rise from fourteen to sixteen hundred feet over the sea-level; and the valleys by which they are traversed—no mere shallow inflections of the general surface, like most of the other valleys of Orkney—are of profound depth, precipitous, imposing, and solitary. The sudden change from the soft, low, and comparatively tame to the bold, stern, and high serves admirably to show how much the character of a landscape may depend upon the formation which composes it.

A walk of somewhat less than two miles brought me into the depths of a brown, shaggy valley, so profoundly solitary that it does not contain a single human habitation, nor, with one interesting exception, a single trace of the hand of man. As the traveller approaches by a path somewhat elevated, in order to avoid the peaty bogs of the bottom, along the slopes of the northern side of the dell, he sees, amid the heath below, what at first seems to be a rhomboidal piece of pavement of pale Old Red Sandstone, bearing atop a few stunted tufts of vegetation There are no neighbouring objects of a known character by which to estimate its size. The precipitous hill-front behind is more than a thousand feet in height; the greatly taller Ward Hill of Hoy, which frowns over it on the opposite side, is at least five hundred feet higher; and dwarfed by these giants it seems a mere pavier's flag, mayhap some five or six feet square by some eighteen inches to two feet in depth. It is only on approaching it within a few yards that we find it to be an enormous stone, nearly thirty feet in length by almost fifteen feet in breadth, and in some places, though it thins wedgelike towards one of the edges, more than six feet in thickness-forming altogether such a mass as the quarrier would detach from the solid rock to form the architrave of some vast gateway or the pediment of some colossal statue. A cavelike excavation, nearly three feet square, and rather more than seven feet in depth, opens on its gray and lichened side. The excavation is widened within. along the opposite walls, into two uncomfortably short beds, very much resembling those of the cabin of a small coasting vessel. One of the two beds is furnished with a protecting ledge and a pillow of stone hewn out of the solid mass; while the other, which is some five or six inches shorter than its neighbour, and presents altogether more the appearance of a place of penance than of repose, lacks both cushion and ledge. An aperture, which seems to have been originally of a circular form, and about two and a half feet in diameter, but which some unlucky herd-boy, apparently in the want of some better employment, has considerably mutilated and widened, opens at the inner extremity of the excavation to the roof, as the



The Dwarfie Stone.

hatch of a vessel opens from the hold to the deck; for it is by far too wide in proportion to the size of the apartment to be regarded as a chimney. A gray, rudely-hewn block of sandstone, which, though greatly too ponderous to be moved by any man of ordinary strength, seems to have served the purpose of a door, lies prostrate beside the opening in front.

And such is the famous Dwarfie Stone of Hoy, as

firmly fixed in our literature by the genius of Sir Walter Scott as in this wide valley by its ponderous weight and breadth of base, and regarding which—for it shares in the general obscurity of the other ancient remains of Orkney—the antiquary can do little more than repeat somewhat incredulously what tradition tells him—namely, that it was the work many ages ago of an ugly, malignant goblin, half earth, half air, the elfin Trolld—a personage, it is said, that even within the last century used occasionally to be seen flitting about in its neighbourhood.

I was fortunate in a fine, breezy day, clear and sunshiny, save where the shadows of a few dense, piled-up clouds swept dark athwart the landscape. the secluded recesses of the valley all was hot, heavy, and still; though now and then a fitful snatch of a breeze, the mere fragment of some broken gust that seemed to have lost its way, tossed for a moment the. white cannach of the bogs, or raised spirally into the air, for a few yards, the light beards of some seeding thistle, and straightway let them down again. Suddenly, however, about noon a shower broke thick and heavy against the dark sides and gray scalp of the Ward Hill and came sweeping down the valley. I did what Norna of the Fitful Head had, according to the novelist, done before me in similar circumstances—crept for shelter into the larger bed of the cell, which, though rather scant, taken fairly lengthwise, for a man of five feet eleven, I found, by stretching myself diagonally from corner to corner, no very uncomfortable lounging-place in a thunder-shower. Some provident herd-boy had spread it over, apparently months before, with a littering of heath and

fern, which now formed a dry, springy couch; and as I lay wrapped up in my plaid, listening to the raindrops as they pattered thick and heavy atop or slanted through the broken hatchway to the vacant bed on the opposite side of the excavation, I called up the wild narrative of Norna and felt all its poetry.

The Dwarfie Stone has been a good deal undervalued by some writers, such as the historian of Orkney, Mr. Barry; and, considered simply as a work of art or labour, it certainly does not stand high. When tracing, as I lay abed, the marks of the tool, which in the harder portions of the stone are still distinctly visible, I just thought how that, armed with pick and chisel, and working as I was once accustomed to work, I could complete such another excavation to order in some three weeks or a month. But then I could not make my excavation a thousand years old, nor envelop its origin in the sun-gilt vapours of a poetic obscurity, nor connect it with the supernatural through the influence of wild, ancient traditions, nor yet encircle it with a classic halo borrowed from the undying inventions of an exquisite literary genius.

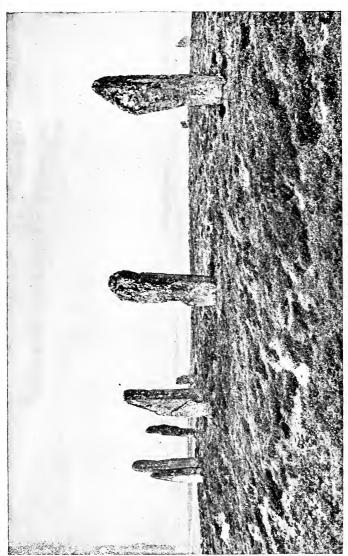
The pillow I found littered over with the names of visitors; but the stone—an exceedingly compact red sandstone—had resisted the imperfect tools at the command of the traveller, usually a nail or a knife, and so there were but two of the names decipherable—that of an "H. Ross, 1735," and that of a "P. Folster, 1830." The rain still pattered heavily overhead, and with my geological chisel and hammer I did, to beguile the time, what I very rarely do—added my name to the others, in characters which, if both they and the Dwarfie Stone get but fair play, will be

distinctly legible two centuries hence. In what state will the world then exist, or what sort of ideas will fill the head of the man who, when the rock has well-nigh yielded up its charge, will decipher the name for the last time, and inquire, mayhap, regarding the individual whom it now designates, as I did this morning when I asked, "Who was this H. Ross, and who this P. Folster?"? I remember when it would have saddened me to think that there would in all probability be as little response in the one case as in the other; but as men rise in years they become more indifferent than in early youth to "that life which wits inherit after death," and are content to labour on and be obscure.

The sun broke out in great beauty after the shower, glistening on a thousand minute runnels that came streaming down the precipices, and revealing through the thin, vapoury haze the horizontal lines of strata that bar the hillsides, like courses of ashlar in a building. I failed, however, to detect, amid the general many-pointed glitter by which the blue, gauze-like mist was bespangled, the light of the great carbuncle for which the Ward Hill has long been famous—that wondrous gem, according to Sir Walter, "that, though it gleams ruddy as a furnace to them that view it from beneath, ever becomes invisible to him whose daring foot scales the precipices whence it darts its splendour."

The Standing Stones.

The Standing Stones—second in Britain, of their kind, only to those of Stonehenge—occur in two groups; the smaller group (composed, however, of the taller stones) on the southern promontory, the



The Standing Stones-I'he Ring of Brogar.

larger on the northern one. Rude and shapeless, and bearing no other impress of the designing faculty than that they are stuck endwise in the earth, and form, as a whole, regular figures on the sward, there is yet a sublime solemnity about them, unsurpassed in effect by any ruin I have yet seen, however grand in its design or imposing in its proportions. Their very rudeness, associated with their ponderous bulk and weight, adds to their impressiveness. there is art and taste enough in a country to hew an ornate column, no one marvels that there should be also mechanical skill enough in it to set it up on end; but the men who tore from the quarry these vast slabs, some of them eighteen feet in height over the soil, and raised them where they now stand, must have been ignorant savages unacquainted with machinery, and unfurnished, apparently, with a single tool.

The consideration, too, that these remains—eldest of the works of man in this country—should have so long survived all definite tradition of the purposes which they were raised to serve, so that we now merely know regarding them that they were religious in their uses—products of that ineradicable instinct of man's nature which leads him in so many various ways to attempt conciliating the Powers of another world—serves greatly to heighten their effect.

The appearance of the obelisks, too, harmonizes well with their great antiquity and the obscurity of their origin. For about a man's height from the ground they are covered thick by the shorter lichens—chiefly the gray-stone parmelia—here and there embroidered by the golden-hued patches of the yellow parmelia of the wall; but their heads and shoulders, raised beyond

the reach alike of the herd-boy and of his herd, are covered by an extraordinary profusion of a flowing beard-like lichen of unusual length—the lichen calicarus (or, according to modern botanists, Ramalina scopulorum), in which they look like an assemblage of ancient Druids, mysteriously stern and invincibly silent and shaggy as the Bard of Gray, when

"Loose his beard and hoary hair Streamed like a meteor on the troubled air."

The day was perhaps too sunny and clear for seeing the Standing Stones to the best possible advantage. They could not be better placed than on their flat promontories, surrounded by the broad plain of an extensive lake, in a waste, lonely, treeless country, that presents no bold competing features to divert attention from them as the great central objects of the landscape; but the gray of the morning or an atmosphere of fog and vapour would have associated better with the misty obscurity of their history, their shaggy forms, and their livid tints than the glare of a cloudless sun, that brought out in hard, clear relief their rude outlines, and gave to each its sharp, dark patch of shadow. Gray-coloured objects, when tall and imposing, but of irregular form, are seen always to most advantage in an uncertain light -in fog or frost-rime, or under a scowling sky, or, as Parnell well expresses it, "amid the livid gleams of night." They appeal, if I may so express myself, to the sentiment of the ghostly and the spectral, and demand at least a partial envelopment of the obscure. Burns, with the true tact of the genuine poet, develops

the sentiment almost instinctively in an exquisite stanza in one of his less-known songs, "The Posie,"—

"The hawthorn I will pu', wi' its locks o' siller gray, Where, like an aged man, it stands at break o' day."

Scott, too, in describing these very stones, chooses the early morning as the time in which to exhibit them, when they "stood in the gray light of the dawning, like the phantom forms of antediluvian giants, who, shrouded in the habiliments of the dead, come to revisit, by the pale light, the earth which they had plagued with their oppression, and polluted by their sins, till they brought down upon it the vengeance of the long-suffering heaven." On another occasion he introduces them as "glimmering, a grayish white, in the rising sun, and projecting far to the westward their long, gigantic shadows." And Malcolm, in the exercise of a similar faculty with that of Burns and of Scott, surrounds them, in his description, with a somewhat similar atmosphere of partial dimness and obscurity:---

"The hoary rocks, of giant size,
That o'er the land in circles rise,
Of which tradition may not tell.
Fit circles for the wizard's spell,
Seen far amidst the scowling storm,
Seem each a tall and phantom form,
As hurrying vapours o'er them flee,
Frowning in grim obscurity,
While, like a dread voice from the past,
Around them moans the autumnal blast."

There exist curious analogies between the earlier stages of society and the more immature periods

of life—between the savage and the child; and the huge circle of Stennis seems suggestive of one of these. It is considerably more than four hundred feet in diameter; and the stones which compose it, varying from three to fourteen feet in height, must have been originally from thirty-five to forty in number, though only sixteen now remain erect. A mound and fosse, still distinctly traceable, run round the whole; and there are several mysterious-looking tumuli outside, bulky enough to remind one of the lesser moraines of the geologist. But the circle, notwithstanding its imposing magnitude, is but a huge child's house after all—one of those circles of stones which children lay down on their village green, and then, in the exercise of that imaginative faculty which distinguishes between the young of the human animal and those of every other creature, convert, by a sort of conventionalism, into a church or dwelling-house, within which they seat themselves and enact their imitations of the employments of their seniors, whether domestic or ecclesiastical. circle of Stennis was a circle, say the antiquaries, dedicated to the sun. The group of stones on the southern promontory of the lake formed but a halfcircle, and it was a half-circle dedicated to the moon. To the circular sun the great rude children of an immature age of the world had laid down a circle of stones on the one promontory; to the moon, in her half-orbed state, they had laid down a half-circle on the other; and in propitiating these material deities they employed in their respective enclosures, in the exercise of a wild, unregulated fancy, uncouth, irrational rites. HUGH MILLER ("Rambles of a Geologist.")

THE CATHEDRAL OF ST. MAGNUS.

OU would hardly expect to find an ancient cathedral up in those Orkney Islands that one usually sees huddled away in a spare corner of the map, and made to look even smaller than they are by the exigencies of space. It is

curious to think of: once, long ago, strange ships with monstrous figure-heads and painted sides, full of the northern actors of history, crawled with their lines of oars into the sounds and bays of these islands, till for centuries they became the stage for dramatic events and stirring personages. the players bore names that any history book tells of. Harald Hardrada, old King Haco, Bothwell, and Montrose have all played their parts. And there are others, earls and prelates, and northern kings, and old sea-rovers, who were really far better worth knowing than half the puppets with more familiar Then, gradually the lights went out and the audience turned away to look at other things, and the Orkneymen were left to observe the Sabbath and elect a County Council. One by one the old buildings toppled down, and the old names changed, and



1. Earl's Palace. 2. Bridge Street. 3. Albert Street. 4. Bishop's Palace.

the old customs faded, till the place of the islands in history became their place upon the map; but time and men have spared one thing—this old cathedral church of St. Magnus in Kirkwall.

On the ancient houses of the little borough and the winding slit of a street, the old red church still looks down benignly, and sometimes (of a Sunday, I think, especially) a little humorously. Over the gray roofs and the tree-tops in sheltered gardens, and the black mites of people passing on their business, its lustreless Gothic eyes see a wide expanse of land and a wider and brighter sweep of sea. The winding sounds and broadening bays join and divide and join again, through and through its island dominions. Backwards and forwards, twice a day, the flood tide pours from the open Atlantic, and each channel becomes an eastward flowing river; and then from the North Sea the ebb sets the races running to the west. Everywhere is the sight or the sound of the sea—rollers on the western cliffs, salt currents among the islands, quiet bays lapping the feet of heathery hills. Out of the two great oceans the wind blows like the blasts of an enormous bellows. and on the horizon the clouds are eternally gathering.

It is over this land of moor and water and vapour that the cathedral watches the people; and though from the difficulty of passing through so narrow a street it has never moved from the spot where it first arose, and has never seen, one would suppose, the greater part of its territories, yet it knows—none better—the stories and the spirit of all the islands. Crows and gulls cruise round the tower familiarly, and perhaps bring gossip; but eyes so long and narrow, and of

so inhuman an anatomy, may very likely see through a hill or a heart for themselves.

The country is like a fleet at sea, and the old spirit of the people came from the deep. At first that spirit was only restless and fierce and free; in time it began to think, and at odd moments to be troubled, and they called it pious. Then it looked for a fitting house where it might live when it could no longer find a home in the people. So it built the red cathedral, and there it silently dwells to-day.

There is something in their church that none of the respectable townsfolk have the slightest suspicion of—something alive that vibrates to the cry of the wind and the breaking of the sea, and the little human events that happen in the crow-stepped houses.

On the wild autumn afternoons when the hard north-east wind is driving rain and sleet through the town, the old church begins to remember. The wind and the sleet coming over the sea stir the quick spirit so sharply that every angle is full of sighing noises. As the shortened day draws to an end, and lights begin to twinkle in the town, and the showers become less frequent, and the clouds are rolled up and gathered off the sky, then the people come out into the streets and see the early stars above the gable-ends and high cathedral tower. They think it cold, and walk quickly, but a personage of sand-stone takes little note of the temperature. The cathedral merely feels refreshed.

When the clear, windy night draws in, the people go to rest, and one by one the lights are put out till only the stars and the lighthouses are left. Looking over a darkened town and an empty night, with the

air moving fresh from Norway, the memories come thick upon the old church which shelters so many bones. It is like digging up the soil of those lands from which the sea has for centuries receded, and where the ribs of ships and the skeletons of sailors lie deep beneath the furrows of the plough.

Kirkwall must have been a strange little town before the cathedral's memory begins, when there was no red tower above the narrow street and the little houses, in the days when Rognvald, the son of Kol, had vowed to dedicate a splendid minster to his uncle, St. Magnus, should he come by his own and call himself Earl of Orkney; and when the islanders waited to see what aid the blessed saint would furnish to this enterprise.

It is one of the island tragedies—the saga of how the evil Earl Hakon slew his cousin, Earl Magnus, outside the old church of Egilsay with that high round tower that you can see over Kirkwall Bay from the cathedral parapet, and how the grass grew greener where he fell, and miracles multiplied, and they made him a saint in time.

Though all these events happened before a stone of the cathedral was laid, they may help to give the meaning of its story, and on that account they are worth, perhaps, a rough telling here. Earl Hakon had died, and his son Paul ruled in his stead. He was a silent, brave, unlucky man, upright and honourable in his dealings, but the shadow of his father's crime lay over the land. It brought old age and prosperity and repentance to the doer of the deed; and on his son the punishment fell.

Rognvald claimed the half of the earldom. Paul answered that there was no need for long words, "For

St. Magnus Cathedral, interior.

1. South aisle. 2. North aisle. 3. Nave.

I will guard the Orkneys while God grants me life so to do." And then the contest began. Rognvald attacked from north and south. Paul vanquished the southern fleet, and hurrying north drove his rival back to Norway; and so the winter came on, and the peace that in those days men kept in winter.

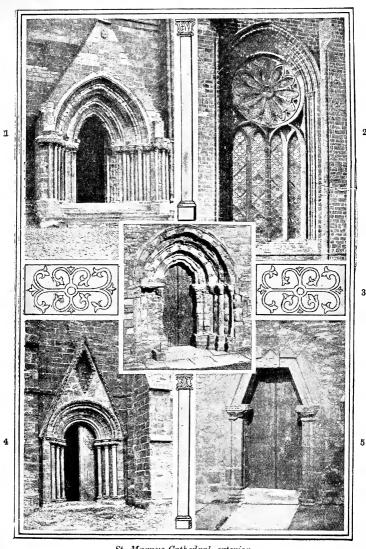
All had gone well with Paul, but his luck was to change with a little thing. He was keeping Yule with his friends and kinsmen, when upon a winter's evening, a man, wet with the spray of the Pentland Firth, came out of the dusk and knocked upon the He was hardly the instrument, one would think, a departed saint would choose to build a cathedral with—a Viking with his sword ever loose in its sheath, and his lucky star obscured, coming here for refuge, from the ashes of his father and his home. He was known as Sweyn Asleifson (a name to be famous in the islands), and was welcomed for his family's sake; they brought him in to the feast, and the drinking went on. In a little while there arose a quarrel over the cups; Sweyn killed his man, and fled into the night again. He was a landless outlaw this time, for the dead man had been high in favour, and the earl was stern. Meanwhile men went on drinking over the hall fires; but Paul's luck had departed, and St. Magnus had a weapon in his hand. In the spring the war began again, and suddenly in the midst of it Earl Paul disappeared—his bodyguard cut down upon the beach, himself spirited clean away. Sweyn Asleifson had come for him, and carried him to a fate that was never more than rumoured. So Rognvald won the earldom, and the first stones of his church were laid. The saint had certainly struck for him.

That is the true story of the vow and the building of the cathedral, a tale too old for even the venerable church to remember. But all the long history of the seven centuries since it knows; and indeed it has played such a part in scene after scene and act after act, that a memory would have to be of some poorer stuff than hewed sandstone to forget a past so stirring. And who can be so far behind every scene as the house which during men's lives listens to their prayers, and at last upon a day takes them in for ever?

When it first began to look down from its windows upon those men going about their business in the sunshine or the rain, it saw among the little creatures some that were well worth remembering, though there be few but the cathedral to remember them now. There was Rognvald himself, that cheerful, gallant earl who made poetry and war, and sailed to Jerusalem with all his chiefs and friends, fighting and rhyming all the way, and riding home across the length of Europe, and who, when he fell by an assassin's hand, was laid at last beneath the pavement of this cathedral he had founded. And then, most memorable of all the great odallers who followed him in war and sat at his Yule feasts, there was the Viking, Sweyn Asleifson, he who kidnapped Paul, and afterwards became the lifelong and, on the whole, faithful friend of Rognvald, and the faithless enemy of almost every one else; the most daring, unscrupulous, famous, and -judging by the way he always obtained forgiveness when he needed it—the most fascinating man in all the northern countries. He was the luckiest, too, till the day he fell in an ambush in the streets of Dublin, exclaiming with his last breath, in most remarkable contrast to the tenor of his life: "Know this, all men, that I am one of the Saint Earl Rognvald's bodyguard, and I now mean to put my trust in being where he is, with God." May he rest in peace wherever his bones lie, even though his reformation came something late, the turbulent, terrible old Viking, whom the Saga writers called the last of that profession.

The generation who built it had passed away, when on a summer's day, after it had weathered nearly a century of storm and shine, the cathedral saw the greatest sight it had yet beheld. Haco of Norway had come with his fleet to conquer the Western Isles of Scotland, the Norse kings' old inheritance. The pointed windows watched ship after ship sail by with coloured sails and shining shields, bearing the Norsemen to their last battle in southern lands; and then the islands waited for the news that in those days was brought by the men who had made the story.

Month upon month went by; men wondered and rumours flew; the days grew shorter, and the gales came out upon all the seas. At last, when winter was well upon the islands, what were left of the battered ships began to struggle home. They brought back stories that the cathedral remembers, though six centuries have rolled them out of the memories of the people—tales of lee-shores and westerly gales, of anchors dragging under the Cumbraes, and Scottish knights charging down upon the beach where the Norwegian spears were ranked on the edge of the tide; then of more gales and whirlpools in the Pentland, until at length they carried their old sick king ashore, to die in the bishop's palace at Kirkwall.



St. Magnus Cathedral, exterior.

1. West doorway, nave. 2. East window. 3. Doorway, south transept.
4. Doorway, north aisle. 5. Doorway, south aisle.

He lay for two months in that ancient building now a roofless shell, standing just beyond the churchvard wall—his most faithful friends beside him, the restless Orkney wind without, and the voice of the Saga reader by the bed. First they read to him in Latin, till he grew too sick to follow the foreign words; and then in Norse, through the Sagas of the saints, and after of the kings. They had come down to his own father, Sverrir, and then, in the words of the old historian, "Near midnight Sverrir's Saga was read through, and just as midnight was past Almighty God called King Hakon from this world's life." They buried him in the great red church that had stood sentinel over the sick-chamber; and as the race of Vikings died with Sweyn, so the roving, conquering kings of Norway passed away with Haco, and never again came south to trouble the seaboards.

The Orkneys, however, were not yet out of the current of affairs. They cut, indeed, but a small figure compared with the Orkney of the great Earl Thorfinn in the century before Rognvald founded his cathedral—he who owned nine earldoms in Scotland and all the Southern Isles, besides a great realm in Ireland. But there was still a bishop in the palace and an earl with powers of life and death in his dominion, and an armed following that counted for something in war; and the cathedral was still the church of a small country rather than of a little county. The sun cast the shadows of dignitaries in the winding street, and the bones they were framed of were laid in time beneath the flags of St. Magnus's church. When one comes to think of it, the old cathedral must hold a varied collection of these, for here lie the high and the low of two races, and no man knows how many chance sojourners and travellers.

At last, upon a dark day for the islands, their era of semi-independence and Vikingism and Norse romance came to a most undignified end. A needy king of the north pledged them to Scotland for his daughter's dowry, as a common man might pledge his watch. East to Norway was no longer the way to the motherland, and the open horizon meeting the clouds, the old highroad, led now to a foreign shore. Henceforth they belonged to the long coast with its pale mountain peaks far away over the cliffs, which had once, so far as the eye could see, belonged to them. It was a transaction intended for a season, but the season has never run to its limit yet. Now, it is to be hoped, it never will; but for centuries it would have been better for the Orkneys if they had gone the way of some volcanic islet and sunk quietly below the gray North Sea.

One might think that, when they had ceased to be a half-way house between their sovereign and his neighbours of Europe, and were become instead a geographical term applied to the least accessible portion of their new lord's dominions, their history and their troubles would soon have ceased, and the islanders been left to fish and reap late crops and try to keep out the winter weather. But there was no such good luck for many a day to come. Alas for themselves, they were too valuable an asset in the Scotch king's treasury. Orkney too valuable! That collection of windy, treeless islands, where great ponds of rain-water stand through the fields for

months together, and a strawberry that ripens is shown to one's friends! The plain truth is that, measured by a Scotch standard of value in those days, it would have been hard to find a pocket not worth the picking. The rental of Orkney was more than twice that of the kingdom of Fife, and Fife, I suppose, was an El Dorado compared with most provinces of its impecunious country. So north they came, Scotch earls and bishops and younger sons, to make what they could before the pledge was redeemed. And to the old cathedral was flung the shame of standing as the symbol of oppression. It was not its fault, and every stone must have silently cried to Heaven for forgiveness. But a cathedral meant a bishop, and an Orkney bishop meant the refinement of roguery and exaction. When these prelates in their turns came to inhabit permanently their minster, and they could at last hear the voice of its spirit that loves the land it watches, demanding an account of their stewardship, what could they say? The old excuse—"We must live"? I can hardly think the church perceived the necessity.

That monument which the old sailors and fighters of the north had built, that they might link a better world with the rough and warring earth, had to stand immovable for century upon century, watching the trouble of their sons. It saw them make their stand at Summerdale in the old fashion, with sword and halbert and a battle-cry on their lips, and march back again to the town in a glimpse of triumph. But that quickly faded, and the weight of new laws and evil rulers gradually broke the high spirit entirely. It saw the proud odallers reduced to long-suffering

"peerie lairds," and all their power and romance and circumstance of state pass over to the foreigner, until after a time it was hard to believe that, some pages further back, there was a closed chapter of history which read quite differently from this.

Down below the parapet of the tower the narrow streets were full of the most splendid-looking people, all in steel and the Stewart arms. Earls Robert and Patrick of that royal name, each, through his scandalous life, made the island the home of a prince's court; and out among the moors and the islands the old race wondered whose turn it should be for persecution next, and how long Heaven would let these things be.

The downfall of the Stewarts' rule came at last, violently as was fit, but to the end they used the old church on behalf of the wrong. The tower was wrapped in the smoke of the rebels' musketry when old Earl Patrick lay by the heels in Edinburgh awaiting his doom as a traitor, and his son held Kirkwall against what might, by comparison, be termed the law, and it was only at the point of the pike that they turned the last Stewart out of the sepulchre of St. Magnus.

Then the long windows watched the shadows of all manner of persons, who are well forgotten now, darken the prospect for a while, and pass away to let other clouds gather; and in all that time there cannot have been many whom a critical edifice can recall with pride.

The bishops were sent about their business, and the Solemn League and Covenant was solemnly sworn. The troopers of Cromwell stalked through the old pillars with their wide hats the firmer set on. The

Covenant was unsworn, and the bishops came back and acquired emoluments for a little while longer, till at last they went altogether, and in good, sober Presbyterian fashion the awakened people set about purifying their temple. Poor old church! they did it thoroughly. Away went carving and stained glass, and ancient tombs and bones, and everything that the austere taste of Heaven is supposed by man to dislike. They made it clean with a kind of yellowish whitewash, and divided it by a sanitary deal screen impervious to draught. In this shameful guise the cathedral has watched the advent of quiet days and the slow healing of time. To-day the greatest clamour it hears is made by the rooks. No earl's men or bishop's men quarrel in the streets; no one either fears or harries the islanders; the history of Orkney is written and closed and laid upon the shelf. The hands of the clock move evenly round, and the seasons change by the almanac.

But there stands the old red church, silently remembering and arranging in their due perspective all these things remarkable and true. The worst of it is that it makes no comment that a mortal can understand, so that no one can say what a seasoned, well-mortared observer of seven centuries of affairs thinks of changing dynasties and creeds, and whether it is disposed to take them more seriously than so many moultings of feathers, and if one can retain any optimism through a course of whitewash and draught-proof screens.

It is pleasant to think, for the old minster's sake, that it heeds the rubs of fortune very little, and regards material changes just as so many shifts of plumage. Its people are still flesh and blood, and its islands rock and turf and heather, and it will take more than pails and paint-brushes, and pledges and covenants to make them otherwise. The winter days are as bleak as ever, and the summer evenings as long and light, and the sun rises out of the North Sea among the flat green islands, and sinks in the Atlantic behind the western heather hills; and it is likely enough that from the height of the cathedral tower many other most serious events look surprisingly unimportant.

J. STORER CLOUSTON.
!("Macmillan's Magazine." By permission.)



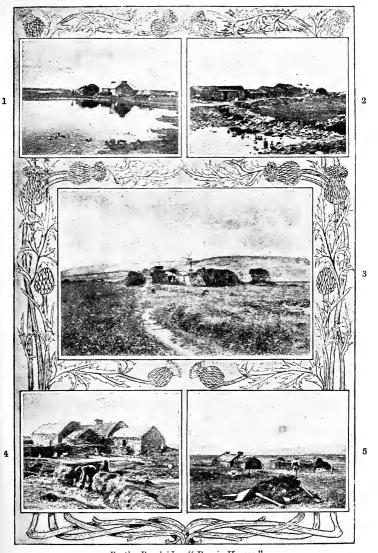
Kirkwall in winter.

A ROAD IN ORCADY.

N southern lands—and most lands are southern to us—the road runs between fragrant hedgerows or under shady trees; but in Orcady trees and hedges are practically unknown. Yet the road lacks not its charm, for this is a world of compensations. If we never breathe the fragrance

of the may or hear the whisper of the wind-stirred branches, we have, on the other hand, nothing to shut out from our eyes the wide expanse of land and sea or to hide the blue sky over us, no fallen timber after a gale to block our way and make of our progress an involuntary obstacle race, and no thorns to puncture our cycle tyres. The lover of the highway may miss here much of the bird-life that enlivens the roads of the south; but our road has a life and traffic of its own quite apart from the trickling stream of men and horses which flows fitfully along its white channel. Flowers and flies, birds and beasts, the road has something for each and all of them. Even by day they use it, but from dusk to dawn they claim it as their very own.

I do not remember that Stevenson, who so loved the road, has written anywhere of its little life—of the birds and beasts, the shy living things, that haunt



By the Roadside—"Peerie Hooses."

1. Holm. 2. Harray. 3. Birsay. 4. Tankerness. 5. Orphir.

it. In the treeless isles of Orcady, at least, the furred and feathered creatures seem to think that man makes the road for their especial delectation. For all creatures of beach and bog, hill and meadow, it has its charms; and hence it is ever beat upon by soft, soundless feet and shadowed by swiftly moving wings, and many a little comedy or tragedy is played out upon its stage. We walk upon it in spring and summer through an air fragrant with the perfume of innumerable small, sweet flowers, with the music of birds and bees about us, and ever, under and behind all song, the voice of the great sea, full of indefinable mystery as of a half-remembered dream.

The engineer who makes the road unwittingly plans it in such fashion as to be of service to the folk of moor and marsh, of shore and furrow. In Orcady every road, sooner or later, leads to the sea. In former days the sea itself was the great highway, and therefore close to its shores are found the old kirks and kirkyards. For by sea men came to worship God, and by sea they were carried to their long home. The kirks and kirkyards being beside the sea, the road comes thither to them. It comes down also to the piers, the slips, and jetties, which play so important a part in the lives of the islanders. Thus the road passes within a few yards of the haunts of all the divers, swimmers, and waders that frequent our shores.

Also in making a road the aim of the man who plans it is to avoid, so far as possible, all ascents and descents. In carrying out this aim he raises the road on embankments where it passes through low and marshy grounds, and makes cuttings through the higher lands. Where it runs through such a cutting

the roadside ditches catch and keep a little store of water in a dry season, and thither plover, snipe, redshanks, and dotterel bring their velvet-clad birdlings to drink. If the season be wet, the road raises above the marsh a comparatively dry platform, on which the birds may rest when not feeding, and the roadside dykes offer a shelter from wind and sun.

But our road draws feet and wings to it in many other ways. It passes now through cultivated fields, with dry stone dykes fencing it on either side; now it runs unfenced through the open moorland, and again along the very margin of the sea. Here it is bordered by marshes and there by a long reach of black peat-bog, and everywhere it woos with varied wiles the living things of earth and air. Before the dykes have seen many seasons they begin to deck themselves with velvet mosses, and to the miniature forests of moss come insects of the lesser sorts, flying and creeping things, red and brown and blue. In pursuit of these small deer come the spiders, which lurk in crevices of the walls and spread their cunning snares across the mouths of culverts where farm roads branch off from the highway. Long-legged waterskaters dart to and fro among the floating weeds on the surface of the stagnant ditches; and over these ditches the midges weave their fantastic dances on summer evenings. The litter of passing traffic brings hurrying, busy, burnished beetles, which find harbourage in the loosely piled banks of ditch scrapings that form the boundary between highway and moorland. Where the road, with its generous grassy margin, runs like a white ribbon with green borders through the brown moors, wild flowers that are choked

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or hidden in the heather spread themselves to the sunshine—primroses and daisies, clover red and white, milkwort and tormentil, hawkweed and violets, thyme and crowfoot: their very names read like a poem. The number of small wild flowers that grow in our roadside ditches and within reach of the road is amazing when one begins to reckon them. steep grassy bank is gorgeous with rose-campion and with the purple and gold of the vetches, and all the air is sweet with the perfume of wild mustard, which with the pale yellow of its blossoms almost hides the green in that field of springing barley. This wet meadow, on either hand all aglow with the pink blossoms of the ragged robin, a little earlier in the year had its wide and shallow ditches glorified by the broad green leaves and exquisite feathery blooms of the bog-bean, while its drier grounds were starred with the pale cups of grass of Parnassus. In spring the vernal squills shone on yonder hillocks with a blue glory as of the sea in summer.

On this long flat stretch of peat-bog these are not untimely snowdrifts but nodding patches of cotton-grass. In autumn, when a strong wind blows from that quarter, all the road will be strewn with the silvery, silken down that makes so brave a show among the purple heather of the bog. Later still in the year the same bog will glow ruddy as with a perpetual sunset, when the long, coarse grass reddens. Passing this way on some gray afternoon the way-farer will find it hard to believe that the "charmed sunset" has not suddenly shone out through the clouds "low adown in the red west." And the peatmoss on which the road is built has other glories—

green moss and moss as red as blood, fairy cups of silver lichen with scarlet rims, and long reaches of bog-asphodel, shining like cloth-of-gold and sweetening the winds with their faint, delicate perfume. Here, where our road runs on a firmer foundation, grow the wild willows, all low-growing and all adding a beauty to the year in their catkins. When the daisies have hardly ventured to thrust their heads into a cold world the catkins gleam in silky silver, changing as the days lengthen to yellow gold. Later on some of them are covered with an exquisite white down which floats their seeds about the land. The little burns which our road bridges ripple and chatter through miniature forests of ferns and meadow-sweet, the foxglove shakes its bells above the splendour of the gorse, and the yellow iris hides the young wildduck that are making their way by ditch and brooklet to the sea. These are but a few of the flowers with which the road garlands and bedecks herself to welcome the little peoples who love her.

To the flowers come all day long in summer the humble-bees. These little reddish-yellow fellows, hot and angry-looking, have their byke or nest in some mossy bank or old turf dyke, to which they carry wax and honey for the fashioning of a round, irregular, dirty-looking comb. The chances are that they will be despoiled of their treasure by some errant herd-boy before July is half over. Their great cousins in black velvet striped with gold prefer to live solitary in some deserted mouse-hole; but they cannot, for all their swagger and fierce looks, save their honey from Boy the Devourer. Though there are no wasps in Orcady, the roadside blossoms have visitors other

than the bees. Here come the white and brown butterflies, and those dainty little blue creatures whose wings are painted and eyed like a peacock's tail. And at night moths, white, yellow, and gray, flit like ghosts above the sleeping flowers, or dance mysteriously in the dusk on silent wings.

Where the insects come, there follow the insecteaters. On a June evening there are parts of the road where one may see kittiwakes and black-headed gulls hawking for moths. Wheatears and starlings, larks and pipits, and, more rarely, thrushes, blackbirds, and wrens, with an occasional stonechat, all come to prey on the insect life of the road. Swallows there are none in Orcady, but the ubiquitous sparrow is there. To his contented mind the road offers a continual feast. When the birds set up housekeeping in spring, many of them choose their nesting-places in the near neighbourhood of the road. It seems almost as if they argued that here, under the very eye of man, they run less risk of discovery than further afield, where he may expect to find their treasures. From crannies of the loosely-built walls that bound the road you may hear the hungry broods of starlings, sparrows, and wheatears chirping on every side as you pass in May. I have seen a nestful of young larks gape up with their foolish yellow throats from a tuft of grass on the very edge of a roadside ditch, and have found a grouse's nest in the heather not fifty yards from the most man-frequented part of the road. Yellow-hammers, too, and other buntings often nest in the long grass by the ditch-side. Here, in a hedge of whin or gorse which crosses the road at right angles, are the nests of the thrush, the blackbird, and the wren. If you drive along our road in spring you shall see the male pewit, in all the glory of his wedding garments, scraping, a few yards from the roadside, the shallow, circular hollow in which his young are to be hatched; and a little later you shall see his patient spouse look up at you fearlessly from her eggs, or even, if your passing be at noonday, you may watch her slip off the nest as her mate comes up behind to relieve her in her domestic duties. For these birds have learned that man on wheels is not to be feared, though man on foot is one of their most dreaded enemies.

In Orcady there are not many four-footed wild things, but those that dwell among us are drawn to the road as surely as the birds are. In the gloaming rabbits come down to the roadside clover where the bees have gathered honey all day. Great brown hares, too, come loping leisurely along the roadmoving shadows that melt into the dusk at the least alarm. Hares always like to make their forms near a road of some sort, for it affords them a swift and ready means of flight when they are pursued. They must be hard pressed indeed before they will dive like rabbits into roadside drains or culverts, but these refuges are not to be despised when greyhound or lurcher is close upon their heels. Mice, voles, and rats find shelter in the banks of road-scrapings or in the walls and drain-mouths; and the sea-otter does not despise the road when he makes a nocturnal expedition inland. It is not long since a man who was early afoot on a summer morning met a pair of otters almost on the street of our sleeping island capital. Seals, of course, cannot use the road, but where it runs by the sea-marge their shining heads

rise up from the water to watch the passers-by, and he who is abroad before dawn may find them on the beaches within a few yards of the roadway.

The deer, roe, foxes, badgers, stoats, weasels, wild-cats, and moles of Orcady are even as the snakes of Iceland. Tame cats run wild, however, we do not lack, and they take their tithe from the road as surely as do the hawks and falcons. Neither snakes, lizards, nor frogs are found in the isles, but on a damp autumn evening the road is dotted with toads of all sizes, which sit gazing into infinity or hop clumsily from before the passing wheel.

In pursuit of beetles, mice, and small birds, hawks and owls come to the road. The kestrel of all hawks loves it the most. He sits upon the humming telegraph wires or hangs poised, like Mahomet's coffin, in mid-air, ever watchful and ready to swoop down upon his prey. The same wires which give him a restingplace often furnish him with food, ready killed or disabled. When man first set up his posts along the road and threaded them with an endless wire, sad havoc was wrought among the birds. Plover—green and golden-snipe, redshanks, and grouse dashing across the road in the dusk, struck the fatal wires and fell dead or maimed by the wayside. I have seen a blackbird fly shrieking from a prowling cat, and strike the wire with such force that his head, cut clean off, dropped at my very feet. The older birds appear to have learned a lesson from the misfortunes of their fellows, but every autumn young birds, new to their wings, pay their tribute of victims to the wires. More especially is this the case with the plovers, and though the kestrel rarely touches so big a bird when it is whole and sound, he feasts upon their wounded.

The hen-harrier skims to and fro along the roadside ditches, but he is a wary and cautious fowl, and is never within gunshot of the road when a man comes down that way. The merlin, that beautiful miniature falcon, glides swift and low across the moors and meadows, flashes suddenly over the roadside dyke, and before the small birds have time to realize that their enemy is upon them, he is gone again—only a little puff of feathers floating slowly down the air showing where he struck his prey. The peregrine wheels high overhead, but is too proud and shy a bird to hunt upon man's roads. Nor has the road any charm for the raven, who goes croaking hoarsely over it on his way from shore to hill. The little short-eared owls hide all day among the heather near our road, and come flapping up in the gloaming on noiseless wings to take their share of its good things. In the treeless islands the kestrel is not the only bird that sits upon the wires. There the starling sings his weird love song, mingling with his own harsh notes the calls of every other bird that the islands know; and the buntings chant their lugubrious and monotonous ditties there.

The telegraph wires are not the only mysterious works of man which have disturbed and interfered with the feathered life so near to and yet so far apart from his. What a mystery must he be to those fellow-creatures who watch him, with his continual scratching and patching of the breast of kindly Mother Earth! Not wholly does he yield the road to them between sunset and sunrise; but when he goes abroad in the dark it is often in the guise of a rumbling dragon with great eyes of flame. Once, to the writer's

knowledge, a gannet swooped down in valiant ignorance on such a horrid creature of the night. He flashed suddenly, white out of the darkness, into the circle of light of a doctor's gig lamps. That bold bird his fellows saw no more; and one may fancy that with his disappearance a new terror was added to the fiery-eyed creatures that roam the roads by night. He died, though not without a fierce fight for his life; and his skin, cunningly filled out with wire and straw, stands under a glass case in his slayer's home even unto this day.

It is in spring and summer that the road sets forth its choicest lures for its lovers, yet even in "winter and rough weather" it has its beauties for the seeing eye. The puddles and cart-ruts shine like dull silver when the clouds are heavy and gray overhead. When the rain cloud blows over and the sky clears, these same shallow pools and channels gleam with a cold, clear blue, more exquisite than that of the heavens they reflect; and at night the stars besprinkle them with diamonds. Again,—

"Autumnal frosts enchant the pool, And make the cart-ruts beautiful."

"When daisies go"—and of all roadside blossoms they linger latest and reappear earliest (I have seen them lifting their modest crimson-tipped heads in December and opening their yellow eyes before the coltsfoot stars begin to shine)—but even when they are gone the gray stone dykes have still a glory of green moss, of gray and golden lichens.

When all the land is soaked and sodden with

When all the land is soaked and sodden with heavy rains, the road, where it climbs that low brown

hill, will suddenly shine out across the intervening miles like a sword flung down among the heather.

When the winter rains have given place to the first snowfall of the year, go out early in the morning, before hoofs and wheels have blotted out the traces of the night, and you shall learn, as nothing else save long and close observation can teach you, how great is the nocturnal traffic of birds and beasts upon the road. Like fine lacework you shall find their footprints, to and fro, round and across, up the middle and down again. Hares and rabbits, rats and mice, gulls and plovers, thrushes and larks, water-hens and water-rails—these and many more have been busy here while you slept. And even now bright eyes are watching you, themselves unseen—those unsuspected eyes which are ever upon us as we follow the road on our daily round of duty or pleasure. Do they look on us with fear or wonder, with contempt or admiration, or with a mingling of all these feelings? That we can never know while the great barrier of silence stands between us and them. We blunder across their lives. doing them good and evil indiscriminately, but we understand them no more than they can understand us.

Now in winter, new birds come to our road. Great flocks of snow-buntings, circling and wheeling with marvellous precision, at one moment almost invisible—a dim, brown, moving mist—and the next flashing a thousand points of silver to the level rays of the wintry sun. Scores of greenfinches, which we never see in summer, rise from the road edges to circle a little way and settle again. The "spink spink" of the chaffinch, also unknown to us in summer, may now be heard; fieldfares spring chuckling through the air

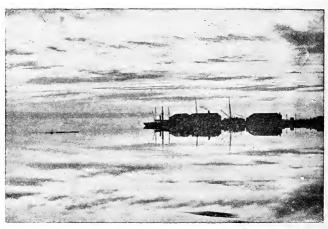
far overhead, and red-winged thrushes hop among the stubbles. Down this shallow pass between the low hills come in the gloaming the lines of the wild swans, flying from the upland lochs to the sea. Their trumpet call rings far through the frosty air, and as we hear them there stir within us vague thoughts and dreams of the white north whence they came. As if answering the thought, the wet road shines with a new, faint, unearthly light, as flickering up the northern sky come the pale shifting streamers of the aurora borealis.

Of the human life that pulses intermittently along our road there is not space now to write. Boy and girl, youth and maiden, man and woman, day by day, year in, year out, they follow the winding line, till for each in turn the day comes when it leads them to the kirkyard or to the sea, and the roads of Orcady know them no more.

Duncan J. ROBERTSON.

DUNCAN J. ROBERTSON.

("Longman's Magazine." By permission.)



Kirkwall Pier—a midnight photograph.

A LOCH IN ORCADY.

T

T is one among many, in an island where the locks lie scattered like fragments of the sky fallen among the hills—one among many, and one of the least known of them all. On it the fisherman casts no fly, or casts it in vain, for fish have never prospered in its waters.

It can never be an ideal trout loch, for it is not fed, like its sister lochs, by the innumerable small burns that channel our low hills. One surface-fed streamlet indeed flows into it, a streamlet hardly worthy of the courtesy-title it bears; but for the most part its waters are drawn from the secret sources of the springs.

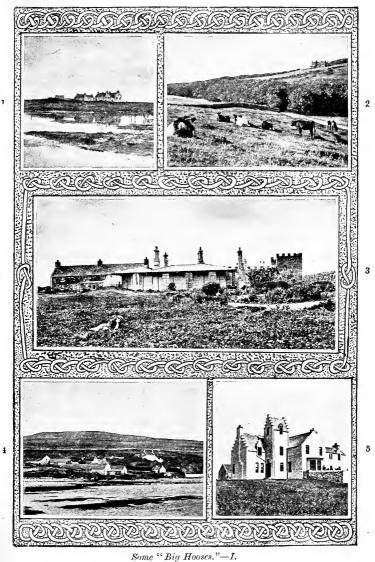
Its placid surface mirrors no hillsides purple with heather and green with waving fern, but from its margin the land rolls back in low billows, squared with fields that year by year darken under the plough and smile again in due season with the homely crops of the isles. Yet the little loch has charms of its own for those who know it—charms that its wilder and more romantic sisters cannot boast. Not a quarter of a mile from its western shore the Atlantic billows boom and thunder upon the cliffs, or roll in, great and green, to burst and

spread in a whirling smother of foam upon the sands; and the quiet of the inland water is thrice welcome to eye and ear when these are dazzled and wearied by the ceaseless turmoil and tumult of the sea.

The valley in which lies the loch runs down to a deeply curved bay, swept and scoured out by the sea, where there is a breach in the great cliff rampart that guards our island's western coast. Up this valley the wind has, through the ages, heaped a huge sandhill which rolls and ripples under its greensward down to the lip of the bay. Between the sand and the clay lies the loch, narrowed by the rising slope of sand that forms its northern bank.

At its eastern end is the germ of a village. A little shop, a post office, the long, low building which was a school before these days of school boards—these and a few cottages stand between the loch and the sunrise. Close to the water's edge runs the high-road leading from a steep little seaport town, away through the quiet country, luring men to the sea and the great world of adventure beyond it. For with us isles-folk the tune that sings itself in the dreams of youth is not "Over the hills," but "Over the seas and far away."

Along the northern shore, as close as may be to the water, runs another road—a road that leads to the kirk and the kirkyaird, and, incidentally, to the laird's house. Yet because men, who made the road, must preserve an apparent sobriety and straightness of purpose, while Nature, who laid the line between land and water, need care nothing for her reputation, there runs between the road and the water a grassy



Skaill, Sandwick.
 Binscarth.
 Hall of Tankerness.
 Westness, Rousay.
 Holodyke, Harray.

margin. Here it is of the narrowest, and there it spreads out into miniature capes and peninsulas, where teal love to rest in the early morning, and rabbits come down to nibble the juicy water-plants long before man is afoot.

On the other side of the road the sandbank rises, steep and green, a cliff of sandy sward sometimes attaining a height of full twenty feet. There the rabbits have their outposts. The green turf is splotched with the scattered sand from their burrows, and their white tails bob and flutter among the mounds they have made.

This is but the flank of the sandhill. Farther to the west, where man has never ploughed the sand, the loch is bounded by low, green links which swarm with rabbits. Bunkers and hazards there are to delight the soul of the golfer; yet hither that lover of links comes but seldom. The rabbits and the birds have it all to themselves, save where some little fields are set amid the links, and one or two houses of men.

Out of the turf of the bank projects a great stone, gray with lichen, and looking like the broken and petrified shaft of a mighty spear flung by one of the giants who of old waged a titanic warfare from isle to isle. Yet if a vague legend be true, the great stone is rather some bewitched living creature waiting the breaking of spells; for, so they say, there is a certain night in each year when it leaves its sandy bed and goes down to quench its thirst in the waters of the loch.

Yet the birds do not fear it. The wheatear jerks and bobs upon its topmost edge as we gaze and

wonder how and when he came hither. Then with a flirt of his tail he is off to repeat his cheerful, tuneless call upon the nearest mound.

At its western end the loch widens and is divided into two little bays, a bay of sand and a bay of mud. In the more northerly of these bays there is being fought a long skirmish in the great, slow, endless war between land and water; and now victory leans towards the land, for the sand, blowing up day by day from the sea, settles here in the shallow water and drives it back.

Twenty years ago, between the loch's edge and the links lay a field of shining yellow sand, to which the golden plover were wont to come down in great flocks of an autumn evening. Once the sand had established itself, the advance of grass and flowers began. Pushing forward a vanguard of reeds and rushes, they pursued their steady march down to the water's edge; and now, where the sands were, is a grassy meadow, starred in its season with the pale blooms of the grass of Parnassus, its landward side meshed by rabbit tracks, the tiny rivulets winding through it beset with scented beds of wild peppermint and haunted by snipe, and its outer margin giving cover to duck and coots, to water-hens and dabchicks.

There are little islets beyond the meadow, some grass-grown, some still of bare sand, and a little sandy beach at one place, where redshanks and ringed plover run in the shallows. Thither too come the dunlin and the sandpiper, and rarer birds—knots and ruffs, greenshanks with their triple call, and whimbrels, the "summer whaups" of the isles-folk. Here you may wade, knee-deep in clear water, to the

very outer edge of the reeds and find all the way a footing on hard sand. And the reeds will yield their secrets. On this heaped pyramid the little grebe is hatching her eggs, and that reedy platform is a coot's nest. Or at a later season you may chance, if the Fates be kind, to catch a glimpse of scurrying dusky ducklings vanishing among the green stems, while their mother flutters off, making-believe to have a broken wing.

A wide, shallow ditch divides the marsh from the fields on the south, and where the ditch ends an old stone wall begins, marches a little way towards the water, and then breaks off to run round the bay of mud, and so up along the south shore of the loch. Where it turns off, this wall seems at one time to have meditated an advance into the water, and in its retreat has left a tumbled straggle of stones which runs out along a little cape. Here at twilight come great gray herons, shouting hoarsely, to sit gazing into the waters. Here, too, curlews are wont to gather, keeping well out of gunshot from wall or ditch.

The southern bay—the bay of mud—holds a great reed-bed, where shelter many water-fowl. The swans breed there, with coot and water-hen and grebe. There, too, come the wild duck after their kind, mallard and teal, pochard and scaup, golden-eye and merganser. But the bottom there is muddy and treacherous, and it is a very doubtful pleasure to follow the wild-fowl through their haunts in the reeds. About the inner margin of the reed-bed, among the grassy tussocks and muddy pools, is a favourite feeding-ground for snipe. There, too, the

pewits gather, and gulls of many kinds, while redshanks rise screaming from the water's edge.

Out in the middle of the loch is a small islet or holm. This islet is nested on every summer by a colony of black-headed gulls. There, too, the terms breed, and there the great white-breasted cormorants, which come up after the eels of the loch, sit with black wings widespread in the sunlight. The circling, screaming cloud of gulls which hovers over the islet is a sight never to be forgotten, and the very thought of the sound of their calling brings back those wonderful summer days when all the world was young, and a brighter sun shone in a bluer sky.

There are men scattered here and there about the world who look back to the loch and its environs as to an earthly paradise; and ever in their dreams the loch, the links, the shore are but a beloved and beautiful background to one central figure—a boy with a gun. The seasons may change and mingle, as seasons do in dreams, but the boy treads again the familiar places, and renews his old disappointments and triumphs. Each man sees different pictures and a different boy, but a boy with a gun is always there.

It is strange to think that there may be other boys to-day who hold the loch and all its pleasant places in fee as we hold it by the tenure of our memories. Stranger still to think of all the vanished boys, back through the years, the generations, the centuries, who have loved our little loch, hunted by its margins, and dreamed strange dreams among the sunny hollows of the links. Could they return to-day, islesman born, Norseman, Pict, or Scot, they would find many changes; for man is ever busy

improving and altering the face of his kindly Mother Earth: yet the loch they would see but little changed.

The waters shine as of old under the same sunlight, or ruffle into miniature white-capped billows with the autumn winds, and by night they mirror the unchanging stars. The splendour of the sandhills in summer, when they robe themselves like kings with the purple and gold of crowfoot and thyme; the hot scent of wild peppermint crushed under foot; the trumpet call of the wild swans ringing through the frosty air on winter nights; the pipings and flutings of the water-fowl among the summer reeds; the screaming of falcons and croaking of ravens from the cliffs; and overhead, from dawn to dusk, in the long days of the northern summer, the myriad music of the larks; -all these things they would find unchanged. And though the little fences and fields, the roads, the byres and barns of men have changed the nearer scene, yet man has not altered the "beloved outline of familiar hills," nor silenced the deep music of the eternal sea. DUNCAN J. ROBERTSON.

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AMONG THE KELPERS.

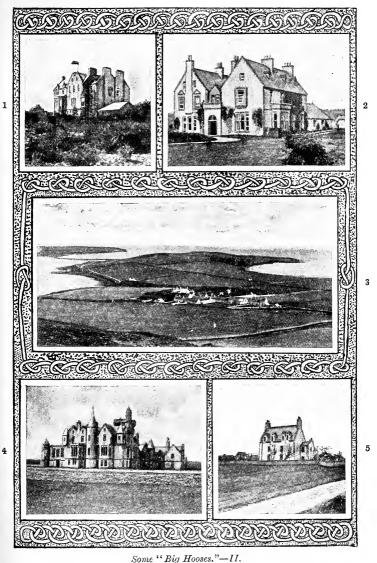
N the end of March and the beginning of April, when the isles rise brown from a steel-gray, wind-ruffled sea, their bare unloveliness is veiled by pale blue smokedrifts, which east over the low, sloping shores a certain charm of remoteness and of mystery. Later in the year, when the

summer seas are only less blue than the skies above them, and every island shines like an emerald, white jets and spirals as from many altars rise round all the shores. For spring and summer are the kelper's seasons, and long, dry days, which scorch and wither the young crops, are welcome to the crofter who has secured a good stock of "tangles" in winter and a big share in a "brook of ware," now that "burning weather" has come.

Until recently no kelp was burned after Lammas—that is, August 2—but of late years, when the season has been dry, the fires have been burned even so late as October.

The kelper's year may be reckoned from mid-November. Then he is paid for his work in the year that is ended. Then the gales sweep up from north or west, tearing from its deep sea-bed the red-ware, of which the long supple stems are known to the islesmen as "tangles." Should the wind freshen to a gale during the night, the diligent kelper is up and out before the first glimmer of dawn. Buffeted by the wind and lashed by the stinging spray, he peers through the darkness, watching for those shadows against the white surf of the breaking waves which he knows to be rolling masses of seaweed and wrack. He is armed with a "pick," an implement resembling a very strong hayfork, but with the prongs set, like those of a rake, at right angles to the handle. With this pick, struggling often mid-thigh deep in the rushing waters, he grapples the tumbling seaweed and drags it up the beach, out of reach of the waves. For the wind may change, and the "brook," as he calls a drift of weed, if not secured at once, may be carried out to sea again, or even worse, to some other strand where it will be lost to him. Of course, the winds and waves often do this work alone, and pile the tangles in huge, glittering rolls along the beaches.

When the brook is fairly on the strand, the work of the kelper is only begun. He has to carry the tangles from the beach to the seabanks above, in carts where that is possible, and where no carts can pass, then laboriously on hand-barrows. I know of one strand on which the great gale of November 1893 landed a brook of tangles which kept the kelpers busy for three months. Once on the banks, the tangles are stacked in great heaps on "steiths," or foundations built of sea-rounded stones arranged in such fashion as to give free ingress to the air. There they lie till spring, when by the action of wind and sun they have become hard, dry, and wrinkled—brands ready for the burning.



Trumbland, Rousay.
 Graemeshall, Holm.
 Melsetter.
 Balfour Castie.
 Smoogro, Orphir

Only the tangles can be dried in winter; but the softer parts—the foliage, one may call it—of the redware is not lost, but goes to manure the fields, and until a sufficient quantity has been obtained for that purpose none is made into kelp.

Each proprietor in the islands has right, generally under a charter from the Crown, to the weed cast up on his shores. Each ware-strand, or beach where drift-weed comes to land, is set apart for a certain number of tenants on the estate to which it belongs. and each brook of ware as it comes ashore is divided among these tenants, usually in proportion to their rents. The general custom is, that it is decided by lot from which portion of the brook each man shall The middle is generally considered draw his share. the best part, as there the weed is in its greatest bulk, and less rolled and beaten by the sea than at the ends; but it may happen that one end is near the only part of the beach where the ware can be carried up, and then the man who draws his lot there is saved much labour.

The sharing of the ware is a fertile seed of dispute and an inexhaustible source of quarrel. The "kelp grieve," or overseer who acts for the proprietor, generally settles all disputes; and each kelper, with the aid of his family, carries up his share of the brook, and spreads it on the drying-greens. These are most frequently links that know not cleek or driver, and upon them in the early morning the ware is spread, as thinly as may be, to be dried on the short, crisp grass by sun and wind.

To the man whose daily life is built about with stone and lime, the summer work of the kelpers shines tempting as the waters to Tantalus. He thinks not of that kelper in winter, plunging and struggling with the slippery tangles amid the turmoil of the surf, but dreams only of quiet summer days and the gray glimmer of sunlit waters seen through a veil of drifting smoke.

The links roll down in long, green billows from



Kelp-burning.

the ruins of an old feudal castle, where the brown rabbit is the door-ward, and in whose towers the starling nests unscared—roll down to a little bay, where the long waves of the Atlantic come up unceasingly, curving in great, green arches, before they break in thunder of white foam on the brown rocks and yellow sand. Where the grass is thin and scant the sand shines through, and this makes a bad dry-

ing-green, as kelp is of less value when mixed with sand. But here is a short, close turf, nibbled upon by rabbits, a racing-ground for lambs, where the thrift or sea-pink meets the meadow-clover, and thyme and crowfoot break in ripples of purple and gold to sweeten all the summer air.

Than this a better drying-green cannot be found. On one side of the bay a long stretch of flat rocks runs down from the grass to the sea, and they too are utilized, when tides allow, to dry the seaweed. Here, in May and June, the whole air tingles with the song of larks innumerable. Long before sunrise, before the last stars have faded in the west, they are up, weaving a magical garment of song over all the green land. All day and far into the dim twilight that is our northern night they sing without ceasing. Larks are everywhere. In that tuft of grass at our feet is a nest with four of the dusky-brown eggs which hold next year's music. There, in the ditch by the roadside, is another nest, from which the featherless young raise feeble necks to gape for food, showing their yellow tongues with the three black spots, which children here are told will appear on the tongue of that child who takes the laverock's nest. Again, a fledgeling, speckled like a toad, rises suddenly from the clover and flies a few yards, while its anxious parents circle close overhead with little tremulous bursts of song, or flutter with trailing wing along the grass.

That pretence of a broken wing, which now seems to be an instinct, must surely at first have been arrived at by a process of reasoning. There must have been long since a broken wing, and a boy, or a dog, or a snake to chase the fluttering sufferer, and some wise observer among the mother-birds of that forgotten day to see and make a note of the chase, and with the heart-leap of a happy inspiration to find in it a new method of protecting her eggs and tender young, and to hand down the lesson she learned to our blithesome bird of the wilderness.

But this summer world, so thrilled with lark music, is not held by the lark alone in fee. From every drystone wall young starlings are calling, "Chirr! chirr! chirr!" and the old birds hurry to and fro between their nests and the brown fields, soon to wave with oats and bere, where they gather the insects and grubs their younglings love. Their bronze feathers gleam in the sunshine as they pass, and at their harsh note of warning as they see strangers near their homes the tumult of the young birds among the stones is instantly hushed. The farmer owes these cheerful and busy birds a heavy debt of gratitude, as the number of his insect enemies which they destroy is incalculable. On the smooth turf the dried ware is piled in

On the smooth turf the dried ware is piled in conical heaps, like giant molehills, to preserve it from the heavy night dews and from possible rain, and among the brown hillocks the wheatear bobs up and down, flirting his tail and repeating his cheerful "Tchk! tchk! chek-o! chek-o!" At times the rapture of summer and of his love inspire him with a vain desire of song. Up he goes, as if he were in very deed the skylark he takes as his model, uttering harsh and unmelodious notes—a feeble travesty of the golden rain of song that falls from the blue above him. But his flight extends upwards only a yard or two, and he sinks down again, chuckling to himself, as pleased with his song as any minor poet.

As the day wears down to afternoon the corncrakes begin to call from the young grass, and all night long they answer each other from field to field. Speak of them to the kelpers, and everywhere one hears the same story of their hibernation in old walls. That landrails migrate has been proved beyond question, but equally beyond question does it seem that some few sleep out the winter here. Any kelper will tell how he, or if not he himself then some one of his neighbours, once in winter found a corncrake in some old dyke, to all appearance dead. He carried it home, and, laying it before the fire, watched the death-like trance slowly melt into life and motion.

As to the winter sleep I can only speak at secondhand; but I have seen the birds in summer run like rats into the dry-stone dykes with which our crofters so love to encumber and adorn their land. That these dykes can be meant only for ornament is evident to the most casual observer in this land where ponies, cows, sheep, ay, and the very geese, are ofttimes tethered by the leg.

Yet if the dykes serve no other purpose, they provide nesting-places for the starling and the wheatear, for the rock-pipit and the sparrow, which save the crops of the crofter from destruction by grub and fly. Mice also shelter in them, and rats in those islands where rats are found. In the happy isle of which I write no rat can live. They come ashore time and again from vessels touching at the little pier near the village, but where they go or what fate awaits them none can tell—only this, that they are seen no more on the green lap of the world.

But we have left the ware too long in the sun.

Should rain come, the kelper sees much of his profit melt away, for the salt which it causes to crystallize on the dried weed wastes, and what is left makes inferior kelp. All along the edges of the drying-greens are the burning pits or kilns—hollows for all the world like huge plovers' nests in shape, lined with flat blue stones from the beach. They are about two feet deep and some five feet in diameter.

When the ware is ready to be burned a smouldering peat or a handful of lighted straw is laid in the bottom of the pit. Over this dry ware is piled, slowly at first till the fire catches, and ever more rapidly as the red core of smouldering flame waxes.

Sometimes ware and tangles are burned separately, but more frequently the kelper burns them together. The tangles make the stronger and better kelp. The pit is filled, and the ware or tangles are piled on till the mass rises two feet or more above the level of the earth. Then for six or eight hours it must be carefully watched and tended, and ever new fuel piled on to prevent a burst of flame. When tangles are being burnt alone, the kelper finishes off his pit with dried ware, as otherwise the tougher knots and lumps of the latest burned tangles would not be thoroughly consumed.

Each pit holds about half a ton, and takes the best part of a summer day to burn, the actual time depending on the state of the wind and the condition of the weed. When at last it smoulders low, it is "raked" before being left to cool. One man takes a spade with a very small blade and a handle fully seven feet long, the lower half being of iron; two other workers, as often women as men, have "rakes,"

implements not unlike a rough caricature of a golfer's iron, but with handles as long as that of the spade. With these rakes the kelp is mixed and smoothed, while the spadesman turns it up from the bottom of the pit. Hard work it is and hot, great jets of flame shooting out under the spade from what looks like gray crumbling earth mingled with black ashes and white quartz; for the kelp assumes so many colours and forms that to describe it accurately were impossible. As the kelper turns and tosses the glowing mass on a warm June evening, he knows he has come near the end of that labour which began in the gray winter dawn, when the rolls of red-weed lashed about him amid the roaring backwash of the waves.

When the kelp has been sufficiently mixed, the pit is levelled and smoothed over, all the outlying ashes are swept in with a handful of dry ware, and it is left to cool and harden. Then, as the kelpers turn homewards, the white sea fog creeps up by the rocks where all day long the kelp smoke drifted.

Such is the work of the kelper, and such the places of his toil. An easy and a pleasant life it is compared to that of the men who labour in the bowels of the earth or in the great manufactories of smoke-darkened cities. He has the green turf under his foot and the clear sky over him, the sea makes music for him unceasingly, and the salt winds bring him health and strength. The furred and feathered folks share his land with him, and gather their harvest on the same shores. As he goes to his work in the morning, through the silver mists of dawn, a flock of blue rockdoves with great clatter of wings flash off through the

clear air. The redshank pipes shrilly at him from the copestone of the nearest wall, and over the ploughed fields where their precious eggs are lying the pewits wheel and scream. "Pewit-weet! pee-weet!"—their note has in it for the isles folk, to whom the cuckoo is but a name, the very voice of spring and hope and love. The ringed plover stands motionless on his three-toed yellow feet, calling with his sweet, low note, and invisible save to the keenest eye until he makes a little run and betrays himself. Linnets swing and sing on the swaying thistles and among the heather. On the blue waters of the bay a little fleet of eider ducks is afloat, and their curious, hoarse, barking chuckle rolls up over the waters. Perhaps a seal raises his round head, shining like a bottle, and gazes with mild eyes at the men upon the beaches; while overhead gulls and terms swing past, cleaving the strong air with careless wing. Far out to sea the white gannets hawk to and fro. Suddenly one poises in mid-air for a moment, then drops like a stone into the water, a fountain of white spray flashing up in the sunlight as he disappears. Your kelper will tell you how in his younger days he caught the solan geese by means of a herring fastened to a board and sunk a few inches below the surface of the water. The bird sees the fish, poises, and swoops down only to drive his mighty bill through the board and break his neck.

Nearer shore than the gannets the kittiwakes are fishing, when suddenly there glides among them a dusky skua, who forces the luckiest fisher to drop his spoil, which the ravager catches in mid-air and bears off. A true pirate of the air is the skua, and reminds

me always of those low, dark feluccas so dreadful and so dear to the sailor on the high seas of romance. Far up in the blue ether a peregrine falcon sweeps round, circling wide on motionless, outspread wings, or a raven goes croaking from the cliffs to seek a prey, as he may have done for years unnumbered. If the tradition of his longevity may be believed, that dark corbie who flies croaking over the kelpers toiling in the morning sunlight, and sees the white smoke rise from their harmless kilns—what fires may he not have seen upon these beaches, and what strange smoke of sacrifice go up from forgotten altars to the unchanging heavens? Give him even a shorter lease of life than that which tradition assigns him, and still he may remember the blazing beacons leap up to carry from isle to isle a warning of the coming of Norse invaders. Allow him only two short centuries, and yet he must have watched the smoke of many a burning homestead in the days when the followers of the "Wee, wee German Lairdie" avenged their private wrongs in the name of their king. The older men among the kelpers still tell tales of the Jacobite lairds who lay hid like conies in the clefts of the rocks till these calamities were overpast.

The old stories—the folk-tales of the isles—linger fragmentary among the kelping people. One may hear from them how all the fairies were seen to leave some island riding on tangles, and how they all went down in the windy firth, never to be seen again of mortals. Here is a man, bowed and crippled by rheumatism, who will tell how he was shot in the back by a "hill-ane" when ploughing. He saw not his assailant, but only the shadow of him on the

earth. Another old man remembers having his side hurt as a boy, and going to a "wise woman" to be cured. She told him he had been "forespoken"—that is, bewitched—by a woman then dead, and made him drink water mixed with earth from the "forespeaker's" grave. She then put a hoop covered with a sheep's skin on his head, a basin of water on that, and poured melted lead through the head of a key into the water, giving the patient a piece of the lead in the form of a heart as a charm. The cure wrought by this modern Norna was not, however, effectual.

There are many quaint and even beautiful turns of speech among these hard-working crofters. Their faces shine on my memory red like setting suns through the white reek of the kelp pits. Here is one whose fathers fled from Perthshire after "the '45," and who thinks that some day he would like to go back to see the old place again—the "old place" which none of his have looked upon for one hundred and forty years! He toils night and day in summer cultivating his croft, fishing for lobsters, and making kelp. His rent is perhaps seven or eight pounds. Books, you would think, must be unknown to him; yet he will tell you he has "always been a great reader of Sir Walter Scott's works," and under the spell of that mighty wizard his hard life has budded and wreathed itself with romance.

At the next pit is a man of a very different type. Quiet and slow, this man has led an honest life, with an eye ever to the main chance. Pressed once for an answer to some question important to the settling of a kelp dispute, after vain attempts at evasion, he burst out, "Gie me time, Mr. Blank, to wind up me mind."

Across the bay the pits are watched by an old bachelor—a rara avis among the kelpers—a little, clean-shaven, mouse-like man, who has "money in the bank." He holds a croft where his ancestors have dwelt longer than the memory of man extends. The peat fire smouldering on his hearth has, to his certain knowledge, burned unquenched for two hundred years. How much longer ago it was kindled tradition recordeth not. Every night his last work is to "rest" that precious fire, and every morning it claims his earliest care. All his life he has toiled, gathering a harvest both from land and sea, and a harvest of content and happiness as well, such as few crofters know how to reap. "When I come oot on a fine simmer morning at four o'clock wi' never anither reek but me ain, I'm laird o' a' the land as far as I can see." He has the secret of the lordship of the eye, which can give to a penniless man more profit of the pleasant earth than to the greatest lord of land among them all.

Look at this fellow, gaunt, black, and shaggy; he might be one of Punch's Scotch elders. Asked if he remembered some event of thirty years ago-"No, sir," he said. "Ye see, I wasna at hame then; I was divin' in the face o' the sea for a livin'." He had been a fisherman, and quite naturally chose to say so in this poetic phrase.

These are only a few from among the many typical kelpers whose friendship I am proud to own. But if the types among them are many and various, in one thing they are all alike—their capacity for hard work. That work does not cease with the smoothing over of the smouldering pits. When the kelp has cooled it is

broken up and lifted out of the pit in great lumps which look like gray slag, with streaks of white, blue, and brown running through it. Should it be exposed to rain its quality is much deteriorated, and to avoid this danger storehouses are built by the lairds, to which the kelp is carted. The kelp grieve weighs each man's quantity as it is brought in, and he is paid a fixed sum per ton. When a sufficient quantity is gathered in the store a vessel is chartered, and where there is a pier the kelp is carted alongside. In islands where there is no pier it must be taken off in small boats. The kelpers themselves provide the carriage. Then the sails are spread, and the produce of the year's work is carried off to chemical works far over sea, where, by processes unknown to me, iodine is extracted from it. The kelper receives about two pounds ten shillings for each ton of kelp he manufactures, and the importance and benefit of the industry to these crofters cannot be overestimated. known a man paying a rent of eight pounds receive thirty-four pounds for his kelp in one year. Nor is the actual price he receives the only benefit the crofter derives from kelp. Were it not for the share of the profit falling to the laird, he too often could not, in these days, afford to assist his tenants in improving either their houses or their land. On the whole, then, the kelper's lot is not an unhappy one. His work lies in pleasant places, and it is eminently healthy, and his days, as a rule, are long in the land and on the sea.

Duncan J. Robertson.
("Longman's Magazine." By permission.)

A WHALE-HUNT IN ORKNEY.



'HALES in the bay so soon in the season!" exclaimed the clergyman, starting to his feet. "Come away," he continued, "you have yet another day before you; we imitate the great of old,

who entertained their guests with tournaments."

The manse garden commanded a fine view of Mill Bay, and on rushing out into the open air we saw a long dark line of boats, some with sails and some with oars, stretching across the blue waters of the broad voe, upwards of a mile from the shore. practised eye of my host caught the gleam of dorsal fins in front of the boats, and we immediately hurried down to the beach, scarcely drawing breath till we stood on the bank above the sands of Mill Bay. inmates of the neighbouring cottages had already assembled in eager groups on the grassy downs, and other islanders still came flocking from remoter farms and cabins to the shore. Several of the men were armed with harpoons, while farm lads flourished over their shoulders formidable three-pronged "graips" and long-hafted hayforks.

Many of the matrons had their heads encased in

woollen "buities," and this peculiar headdress imparted a singular picturesqueness to the excited groups on the sea-bank. Other boats with skilled hands on board put off from various points along the shore, and the fleet of small craft in the bay was rapidly increased by the arrival of fresh yawls. The crowd of urchins on the beach, who "thee'd" and "thou'd" each other like little Quakers in the Orcadian vernacular, cheered lustily as boat after boat hove in view round the headlands, swelling the fleet of whalers.

The line of boats was now little more than a quarter of a mile from the beach. The bottle-nosed or caing whales, showing their snouts and dorsal fins at intervals, seemed to advance slowly, throwing out skirmishers and cautiously feeling their way. As the beach was smooth and sandy, with a gentle slope, the boatmen in pursuit were endeavouring to drive the "school" into the shallows, where harpoons, hayforks, and other weapons could be used to advantage.

The excitement of the spectators on land increased as the long line of the sea-monsters drew closer inshore. From the boats there came wafted across the water the sound of beating pitchers and rattling rowlocks, and the hoarse chorus of shouting voices. This babel of noises, which the water mellowed into a wild warchant with cymbal accompaniment, was meant to scare the "school" and hasten the stranding of the whales. But an incident occurred that changed the promising aspect of affairs, turned the tide of battle, and gave new animation to the scene.

Eager to participate in the expected slaughter, two or three farm lads, whose movements had escaped notice, suddenly shot off from the shore in a skiff rowing right in front of the advancing line. The glitter and splash of oars alarmed the leaders, and the entire "school," seized with a sudden panic, wheeled round and dashed at headlong speed into the line of pursuing boats.

A shout rose from the shore as the flash of tailfins, the heaving of the boats, and the rapid strokes of the boatmen showed all too plainly the escape of the whales, and the success of their victorious charge. Away beyond the broken line of the fleet they plunged in wild stampede, striking the blue waters into spangles of silver foam. Arches of spray, blown into the air at wide distances apart, served to indicate the size of the "school" and the speed of the fugitives.

"Whew!" exclaimed my reverend friend, "that was a gallant charge, and deserved to succeed; but I hope our brave lads will yet put salt upon their tails. The boatmen have toiled hard for their share of the fish, and great would be the pity if the whales made right off to the open sea. It is not every day that a 'drave' a hundred strong visits our shores, and there they go round the head of Odness in full career."

A commotion among the crowd at a short distance along the beach here arrested our attention. The exciting spectacle of the grand charge and wild flight of the whales had so absorbed our gaze that we failed to notice a mishap which was fortunately more ludicrous than alarming. The three youths who foolishly rowed off from the shore and caused the stampede had suffered for their rashness by getting their skiff capsized when the sea-monsters wheeled round to the charge. On gaining the outskirts of the crowd, we found the three luckless whale-hunters already beached.

Bonnetless, dripping, and disconsolate, they were the objects of mirth to some, of commiseration to others.

At last they made off, and we immediately set out in the direction of Odness to catch a sight of the whales, which had quite disappeared from the bay. The boats had turned in pursuit when the "school" escaped, and they were now making all haste to double the headland. On gaining the top of the cliffs, we were glad to observe that the whales, recovered from their fright, drifted leisurely along the coast, giving way at times to eccentric gambols.

"All right!" cried my friend, handing me back my

binocular; "they are coasting away famously round Lamb Head, and they are almost certain to take a snooze in Rousholm Bay, which is the best whale-trap I know in Orkney. Let us sit down here on the top of the cliffs till the boats come abreast, and then we shall take a nearer way to Rousholm than following the coast."

The summit of the rocks, softly carpeted with grass, moss, and wild flowers, afforded a pleasant resting-place, and commanded a picturesque prospect. To eastward there was a wide expanse of sea, stretching away without a break to the Norwegian fiords. The whale-hunting fleet, composed of all varieties of small craft, was soon well abreast of our resting-place. A fine and favourable breeze had sprung up, and fishing-yawls, with their brown sails outspread, coasted briskly along. The rearguard of the fleet consisted of row-boats manned by patient and determined boatmen, who pulled hard at the oars in the prospect of winning some share of the spoil. We remained a short time on the moss-crowned cliffs gazing on the

animated scene, and listening to the voices of the boatmen, the plash of the waves below, and the plaint of restless sea-birds. On leaving our lair we dropped down upon a neighbouring farmhouse, where a couple of "shelties" were placed at our disposal, and away we trotted along field-paths and rough tracks to the head of Rousholm Bay, on the south side of the island. From all the cottages and farms in the district the islanders were flocking to the shore of the bay, and we thus had good hope that a portion of the school at least had run blindfold into the whale-trap of Rousholm. On nearing the shore we were delighted to find that our hope was fulfilled. A large detachment of the whales, supposed to number one hundred and fifty, had entered the bay, while the rest of the school had disappeared amid the reaches of the Stronsay Firth.

Rounding the point of Torness, and stretching across the mouth of the bay, the fleet of small craft again hove into view, and pressed upon the rear of the slowly advancing and imprisoned whales. Among the onlookers there was now intense excitement, the greatest anxiety being manifested lest the detached wing should follow the main army, and again break the line of boats in a victorious charge. The shoutings and noise of the boatmen recommenced, and echoed from shore to shore of the beautiful and secluded bay. A fresh alarm seized the monsters, but instead of wheeling about and rushing off to the open sea as before, they dashed rapidly forwards a few yards, pursued by the boats, and were soon floundering helplessly in the shallows.

The scene that ensued was of the most exciting

description. Fast and furious the boatmen struck and stabbed to right and left; while the people on the shore, forming an auxiliary force, dashed down to assist in the massacre, wielding all sorts of weapons. The wounded monsters lashed about with their tails, imperilling life and limb, and the ruddy hue of the water along the stretch of shore soon indicated the extent of the carnage. Some of the larger whales displayed great tenacity of life; but the unequal conflict closed at last, and no fewer than a hundred and seventy carcasses were dragged up on the beach.

One or two slight accidents occurred, but to me it seemed marvellous that the boatmen did not injure each other as much as the whales amid the confusion and excitement of the scene. The carcasses, as I was informed, would realize between £300 and £400; and grateful were the people that Providence had remembered the island of Stronsay, by sending them a wonderful windfall of bottle-noses fresh from the confines of the Arctic Circle.

Daniel Gorrie ("Summers and Winters in the Orkneys").



Wreck at Burgh Head, Stronsay.

ARTICLES MADE OF STRAW.

HE Orkney peasantry of two centuries ago lived in a poor country — a country ground down by the tyranny of greedy and unscrupulous rulers; a country whose inhabitants had neither the raw materials

from which to construct many necessary utensils nor the money to purchase them. It is interesting to note some of the ways in which our forefathers overcame the circumstances in which they were placed. One of the most notable is the ingenious use of straw for the construction of many domestic utensils.

The materials from which articles of straw were made were principally bent and the straw of black oats. The bent, after being cut, was loosely bound into rough sheaves and left to dry and wither. It was then bound into neat sheaves called beats, the legal size of which used to be two spans in circumference. Each beat was carefully pleated at the upper end, gradually tapering upwards into a cord which served to bind two beats together. The pair of beats so fastened was called a "band of bent," twelve of which formed a "thrave." From this bent were made the cords, always called bands, which

were used in the manufacture of straw. During the long winter evenings each ploughman was required to wind into bands one beat of bent. The cord was spun or twisted by the fingers, the two strands being each twisted singly, and at the same time laid into each other in such a way that the tendency of the strands to untwist was the means of keeping the two firmly twisted together.

The straw used was that of the common Orkney black oats, which was at once tougher and more flexible than that of other cultivated kinds. The straw to be used was not threshed with the flail, which would have spoiled it, but was selected from the sheaves, held in a bunch between the hands, and beaten on some hard edge to remove the grain. Such straw was called gloy. From those two materials, bent bands and gloy, a very wide variety of indispensable articles were manufactured by the Orkney farmer.

These articles may be divided into three classes—flexible, semi-flexible, and inflexible. Of the flexible type, the most simple and primitive article was the sookan, or, to give it a still older name, the wislin. This was simply straw twisted loosely into a thick cord of one strand, for temporary use. If not at once used to tie round something, it had to be wound into a clew to preserve its twist.

A very common use of sookans in the winter-time was to form what were known as "straw boots." A loop of the sookan was passed round the instep, over the shoe or *rivlin*, the thick straw cord being then wound round the ankles and the lower part of the leg. When the snow was deep, such straw boots

formed a very comfortable part of the peasant's attire. Less than a century ago, on a Sunday when the snow lay deep on the ground, more than forty men wearing straw boots were seen in one Orkney church. It must be added that on the way home some of them were severely reproved by a neighbour for having performed this unnecessary labour on the Sabbath day!

Next in order comes simmans. This was a strong straw rope made of two strands, also twisted by hand, and rolled into great balls or clews, the size of which was the width of the barn door. The main use of simmans was to thatch the corn stacks, and also the roofs of the cottages. A newly-thatched cottage, with the bright warm colour of the new straw ropes, was a pleasing object in an Orkney landscape. The sombre colour given when the simmans were twisted of brown heather was less cheerful, but Nature did her best even here by her decoration of the low walls with bright yellow and green lichens.

Most of the ropes and cordage required by the Orkney farmer were made either of hair or of bent. The bent bands already noticed were made into ropes on a rude machine called a *tethergarth*, and were used for tethering cattle and sheep, and for "boat tethers" for small fishing-boats. Finer bent ropes were applied to a great many uses, such as flail "hoods," sheep shackles, and all parts of horse harness. A very important part of this, the collar or *wazzie*, was formed by twisting four thick folds of straw together; and, when properly made, I suspect the wazzie was much cooler for the horse than the

modern collar with its absurd cape. Even the ploughtraces were made of bent ropes, which, if quickly worn, were easily replaced. For bringing in the crop, a large net made of bent cord, and called a *mazie*, was put round a bundle of sheaves, and suspended, one on each side of the horse, from the horns of the *clibber*, a rough kind of wooden pack-saddle.

Flackies, or mats made of straw bound together with bent cord, were used for many purposes. Small ones were used as door-mats, and large ones were hung up as an apology for an inner door. Horse flackies were laid over the back of the horse to protect it from the friction of the clibber, and his sides from the load which it supported. Flackies were also fixed on the rafters, under the straw, when thatching house roofs.

We next come to what I have called the semi-flexible class of straw articles. The first to be noticed is the *kaesie*, which, in various shapes and sizes, was put to a great number of uses. It was made of straw, bound by bent cord, like the flackie, but was of a closer texture, and it was usually in the shape of a basket. The *meils-kaesie* was so called because it was made to hold a "meil" of corn—that is, a little over a hundredweight.

It was in these meils-kaesies that the corn was carried to the mill, and the meal brought back from it; for carts were unknown, and roads were but paths or tracks. Each horse carried a full kaesie on either side. The horses travelled in single file, the head of each being tied to the tail of the one in front. A man was in charge of each pair of horses, to attend to the proper balancing of their loads. A

train of twenty or thirty horses marching in this way was a picturesque sight. On arriving at the mill, the burdens were removed, and the head of the foremost horse was tied to the tail of the hindmost, which prevented their moving away until their drivers were ready to return home.

Next may be mentioned the corn-kaesie, which was used to hold dressed grain. These were shaped somewhat like a barrel, and were made in various sizes. Then comes the common kaesie, used for carrying burdens on the back. These also were of different sizes. In form they were narrow and rounded at the bottom, and widened gradually towards the top, which was finished by a stiff circular rim called the fesgar, to give firmness to the basket. To the fesgar were fastened the ends of a bent rope of suitable length, called the fettle, by which the kaesie was suspended from the shoulders of the bearer.

To the same class as the kaesies belong the cubbies, the names and uses of which are legion. These were smaller than the former, and firmer in texture, while the shapes showed more variety, as might be needed for their special uses. We need only mention a few. The windo' or winnowing cubbie was used to pour out the corn gently on the barn floor, while the wind blowing in at one door and out at the other carried away the chaff. The sawin' or sowing cubbie carried the seed corn in spring. The horse cubbie was used as a muzzle for a horse when necessary. The hen cubbie was suspended as a nest for the domestic fowls. The use of the spoon cubbie, which hung by the side of the fire, needs no explanation. The bait cubbie and

the sea cubbie must close our list, the former used for carrying bait, and the latter for the catch of fish. A cubbie was always carried by the beggars who swarmed before the introduction of the poor law, and to "tak' the cubbie and the staff" was a phrase meaning to be forced to beg one's bread.

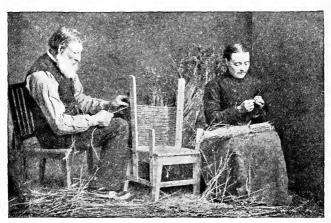
We now come to what I have called inflexible articles. Here we may mention first the *luppie*, once in universal use for holding all sorts of dry materials, such as meal, burstin, eggs, and the like. Luppies were round and barrel-shaped, close in texture, and as firm as a board. They varied much in size, being made from about ten inches to three feet in height. They had a rim round the lower end to protect the bottom, and two "lugs" at the top. Those of the smallest size were used by housewives as work-baskets.

The work on these luppies, and on the straw stools to be mentioned next, was considered the finest and most durable. Small coils or gangs of straw were firmly and closely laced over one another. The lacing cord was of the strongest bent, and the projecting ends of the bent were carefully clipped off. These bands were known as stool bands.

We now come to the straw stools or chairs, which were mainly of three kinds. The first was a sort of low, round stool without any back. Such a stool could be easily lifted to or from the fireside, and on an emergency could be instantly converted into a luppie by simply being turned upside down. The next was called the low-backed stool, having a semicircular back reaching to the shoulders of the sitter. Last comes the high-backed or hooded stool, which

was the easy-chair of the Orkney cottage. In later times the seat was always made of wood, in the form of a square box, with a slightly projecting top. Strips of wood were used to support the front edges of the back, and to form elbow rests in front of these. The seat box usually contained a drawer, in which the goodman kept his supply of snuff, and perhaps the few books which made up the cottage library. This form of chair, which is now regarded as the orthodox one, was invented in the middle of the eighteenth century by a native of North Ronaldsay, as the construction of the seat of wood took far less time than working it all in straw; but the older form, with its circular straw seat, and the side slips and elbow rests entirely covered with straw and bent cords, was much more elegant in the lines of its form.

Walter Trail Dennison. (Adapted from "Orcadian Papers.")



Making a straw-backed chair.

THE WEATHER OF ORKNEY.

FOREIGN writer has said that Englishmen grumble more at their

weather than at anything else, while it is really the only thing about their country of which they might be proud. His meaning is that, compared with other

regions of the world, the climate of Great Britain is singularly free from disagreeable extremes of heat or cold, and of drought or flood. And if this is true of Great Britain as a whole, it is especially true of Orkney. In summer we rarely suffer from heat, and in winter we are equally free from extreme cold. The mean temperature of the whole year in Orkney (45.4°) is little below that of Aberdeen (46.3°), of Alnwick in Northumberland (46.3°), or of Kew near London (49.4°).

The equability of our temperature, or its freedom from all extremes of heat and cold, is due to the influence of the sea. The temperature of the ocean varies only about 13° during the year; it is lowest in February, being 41.6°, while that of the air is 38.6°, and is highest in August, being 54.5°, while that of the air is 54°.

The smallness of the difference between the annual mean temperature of Orkney and that of Kew is really due to the mildness of our winters. Taking the mean of the three winter months, we find that of Orkney to be almost the same as that of Kew, and slightly higher than that of Alnwick. For the three summer months, however, Orkney is three degrees colder than Alnwick and eight degrees colder than Kew. The hottest day in Orkney during the last thirty years only reached 76°, while at Kew 92° was recorded.

The extent to which the sea influences our climate can best be seen by comparing it with that of an inland or continental station of similar latitude. Winnipeg, in the province of Manitoba, formerly well known to Orkneymen as Fort Garry in the Red River Settlement, lies in nearly the same latitude as London. Its mean temperature, however, during the three winter months is only 0.9°, or thirty-one degrees below freezing-point, and thirty-eight degrees lower than that of Orkney; in summer it is 66°, or thirteen degrees above that of Orkney.

Not only is our climate ruled by the sea; it is ruled by a sea whose waters are themselves somewhat warmer than their latitude might lead us to expect. The temperature of the ocean is often affected by currents, bringing water either from warmer or from colder regions. In the case of the ocean waters round our coasts, the movement is from the south-west. This movement is due at first to the Gulf Stream, which carries a great mass of warm water from the Gulf of Mexico into the North Atlantic, and afterwards to a surface drift caused by the prevailing south-westerly winds.

Our coast waters are therefore somewhat warmer than they would be if there were no such movement, and much warmer than if there were a current in the opposite direction, sweeping along the shores of Norway from the northern ocean. If we compare our climate with that of Nain, in Labrador, which lies in nearly the same latitude, and is also on the Atlantic coast, we shall see how much depends upon the ocean currents. The cold Arctic current which washes the Labrador coast, bringing with it melting icebergs, snow, and fog, reduces the mean annual temperature of Nain to less than 26°, more than nineteen degrees below that of Orkney.

While the climate of oceanic islands is benefited by the equable temperature of the ocean, it is often marked by excessive moisture and rainfall. Yet even in this matter we shall see that Orkney has little to complain of, while, of course, serious droughts are practically unknown.

Scotland, though small in area, shows great inequality in the distribution of its rainfall, due to the diversity of its surface and to the fact that most of its rain is brought by westerly winds. Districts near the west coast, especially if mountainous, have a much greater rainfall than those towards the east, which are also on the whole less elevated. Thus considerable portions of the West Highlands have an annual rainfall of over 80 inches, Ben Nevis recording over 150. Many parts of the eastern Lowlands, on the other hand, have only 30 inches or less; and Cromarty, which is the driest station in Scotland, has only 23 inches.

Compared with the mainland of Scotland, then, it does not seem that the climate of our islands gives us

much cause for grumbling, for our annual rainfall varies from 37.7 inches at Sandwick to 30.7 at Start Point in Sanday. Our wettest months are October, November, and December, during which we receive from one-third to one-half of our yearly rainfall; our driest months are April, May, and June, which to-

gether give us only one-eighth of the total.

One fact about rain is sometimes overlooked: in cool climates rain brings heat. This may not be noticeable at the time, but its general effect can be observed. Just as it requires heat to turn water into vapour, and as evaporation always produces cold, so the change back again from vapour into water sets free some of this heat, raising the temperature of the air, of the rain itself, and of the land on which it falls. Much of the warming effect of our westerly winds is due not to the direct warmth of the Gulf Stream, as used to be supposed, but simply to the fact that these winds are rain-carrying winds. They thus bring to us the benefit of that solar heat which far away to the south-west caused the vapour to rise from the surface of the ocean.

The chief difference between our weather and that of Scotland is, perhaps, the greater prevalence of high winds in Orkney. The land being low, our islands are swept by the full force of the gales so common in the North Atlantic. When speaking of winds, it may be useful to remember the classification which is recognized by the Meteorological Office. A wind moving at the rate of thirteen miles an hour is called a light breeze; forty miles represents the velocity of a moderate gale, and fifty-six miles a strong gale; seventy-five miles an hour is the speed of a storm, and ninety

miles that of a hurricane. We have the record of only one hurricane, on November 17, 1893, with a velocity of ninety-six miles. Several gales of over eighty miles have been experienced, and one summer gale of seventy-five miles in the year 1890. During the fifteen years 1890 to 1904 three hundred gales were recorded in Orkney, while Alnwick experienced only one hundred and fifty-seven, and Valencia, on the west coast of Ireland, one hundred and thirty for the same period. Fleetwood, on the coast of Lancashire, however, had a record of three hundred and six gales during those years.

Every Orcadian must have noticed a type of weather which is common all the year round, but especially so in winter. On a blue sky wisps of cirrus or "mare's-tail" cloud appear in patches. Gradually these increase till they form a continuous haze, in which a lunar halo or "broch," and occasionally solar halos or "sun-dogs," may be seen. Then the wind, which was light and probably westerly, backs to the southward and eastward, and the sky becomes threatening. The wind increases, perhaps to a moderate gale, and rain falls heavily. The wind then shifts towards the south and south-west, increasing in force, sometimes quite suddenly, or it may change still further round towards the north. Meantime the barometer, which has been low and falling, begins to rise briskly, and the weather clears.

To understand how this common series of weather changes comes about, a little knowledge of cyclones is necessary. A cyclone is a movement in the air resembling a whirlwind; the cyclones of the Indian Ocean and the China seas, indeed, are real whirlwinds of the most violent and destructive type. In the

North Atlantic they exist for the most part as enormous eddies in the great air-ocean, often several hundreds of miles in diameter, probably rotating with the force of a gale near the centre, and at the same time moving forward as a whole at a moderate speed. A cyclone has been known to keep company with one of our Atlantic liners during its whole voyage, but the rate of progress is often less than this.

A cyclone owes its origin to some local excess of heat, such as might arise from a heavy rainfall, the heat causing an upward movement in the air. The inrush of cool air which then follows begins a circular or whirling motion. The moist air in front of the cyclone gives up its moisture with the fall in temperature, causing the rains that are invariably found in front of such a movement. The air after the rainfall is dry and warmer, and its ascent keeps up a partial vacuum or area of low pressure, which is the centre or vent of the cyclone. It is really the rainfall in front of the cyclonic system that causes its forward movement, assisted by the rotation of the earth. Each space relieved of its moisture forms in its turn the new centre. A coast-line, or an anticyclonic movement of the air in front of a cyclone, will alter its course. When one reaches the shores of Europe, it soon spends itself for want of the moisture-laden winds in front to keep up the system.

In the northern hemisphere the direction of rotation of a cyclone is opposite to the movement of the hands of a watch; in the southern hemisphere it is in the same direction as the movement of the hands of a watch. This is the effect of the rotation of the earth, as will be clear after a little thought on the

matter. In the North Atlantic the forward motion of a cyclone is always from the westward to the eastward; hence the "storm warnings" which reach us from the United States.

Our islands lie in the most common track of those Atlantic cyclones, and the centre of the whirl often passes over or near the Orkneys. Now if you will look at the chart or diagram of a typical cyclone as given here, and suppose it to be moving slowly from

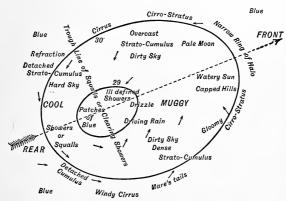


Diagram of a typical Atlantic cyclone.

south-east to north-west, or suppose yourself to be moving through it in the opposite direction while it remains still, you will see how the changes of wind and weather which we have described must result from this movement.

During the greater part of the year our weather is mainly due to a constant procession of those Atlantic cyclones, great and small, and hence arises the changeableness of our winds and our weather. But in the spring we often have weather of a different type. Our winds are then often cold, sometimes dry, and frequently easterly or northerly in direction for several days together. Such weather is due to anti-cyclones—that is, areas of high pressure, from which the air flows downwards and spreads outwards in every direction. An anti-cyclone is the opposite of a cyclone in almost every respect. Its supply of dry air often comes from the ascending air in the centre of a cyclone, which has deposited its moisture. At the meteorological station on Ben Nevis it was sometimes noticed that when an anti-cyclone was stationed over the south of England, and a cyclone was crossing the north of Scotland, there was an upper air-current travelling from the latter to the former, and no doubt supplying the dry air of the anti-cyclone. This is a type of movement which is usually found over land rather than sea, and it has not the regular forward movement of the cyclone.

The last point which we may notice about our weather is the amount of sunshine which we receive. At every well-equipped observatory, such as that of Deerness, there is an instrument which records the duration of sunshine, hour by hour and day by day, all the year round. In the matter of sunshine, Orkney is not so badly treated as we may sometimes think. The average number of hours of sunshine each year recorded at Deerness is 1,177, while Edinburgh enjoys only 1,166. London is a little better, with 1,260, while Hastings, on the more favoured south coast of England, has an average record of 1,780 hours. Our brightest month is May, with an average of 178 hours of sunshine, and our gloomiest month is naturally December, with only 20.6 hours.

THE PLACE-NAMES OF ORKNEY.

RKNEY place-names form an attractive subject of study. There is always some reason why a certain place received its own particular name, though that reason may often be difficult to discover. The use of a name is, of course, to

distinguish one place from other places of a similar class, and the most obvious way of doing so is to refer to some special feature or peculiarity of the place. In this way arise such names as the Red Head, the North Sea, the Muckle Water, and Green Holm. Houses and farms and islands are often named after the owner.

When people of a different race and language settle in a country, or when the language changes, as happened in Orkney after its annexation to Scotland, the old names may still be used, although when their meaning is unknown or has been forgotten they are apt to be changed in various ways. People rarely take the trouble of inventing a new name for a place if they can find out the name already given to it. Thus if there had been any Celtic or Pictish inhabitants left in Orkney when the Norsemen settled there, the Celtic

names of the islands and hills and bays would have been handed down from them to us. But all the old place-names in Orkney are Norse, and the only Celtic elements found in them refer to the settlements and churches of the Culdees, as we have already mentioned.

The Norse place-names are usually descriptive, based either on the appearance or the situation of the place, or on the name of its occupier. Such names have an interest which is entirely wanting in the modern names given to farms or houses, names which are often selected for absurd or trivial reasons. There is little need for inventing any new names in a land which has been so fully supplied with them already. For it is not only the various islands and their most prominent physical features that bear descriptive Norse names; hillock and meadow, field and spring, rock, geo, and skerry—all have been named by our forefathers with names of which the form as well as the meaning is now in many cases forgotten. names should be regarded as relics entrusted to our care, and we ought to learn them from the old people by whom they are still remembered, and preserve them from alteration or oblivion, as the material relics of our romantic history are now being preserved from destruction and decay.

Orkney, the general name of the island group, is partly Celtic and partly Norse. Pliny, the Roman geographer, mentions Cape Orcas, probably Duncansby Head in Caithness, and calls the islands Orcades. The Celtic Scots called them the Orc Islands, and southern writers use the form Orcanig. The root of the name is supposed to be orc, which meant

the bottle-nose whale. The Norse visitors added the termination -ey, meaning "island."

When the Norsemen settled in these islands, they gave to each a name in their own language, and these names have been preserved with little alteration, though their meaning has generally been forgotten. Some were named from their configuration or appearance, as Hoy (Ha-ey), the high island; Flotta (Flatey), the flat island; Sanday, the sand island; Eday, the island of the eith or isthmus; Burray (Borgar-ey), the islands of the "brochs." Some were named from their position, as Westray, the west island; Auskerry, the east skerry. Some were named after persons as Rousay, Rolf's island; Gairsay (Gareksey), Garek's island; Graemsay (*Grimsey*), Grim's island; Copinsay, Kolbein's island. The name *Rinansey*, the island of St. Ninian, often called Ringan, was afterwards changed to Ronaldsay, with "North" prefixed to distinguish it from the original Rognvald's island, now South Ronaldsay. A few were named from their uses, as Faray, the sheep island; and Hrossey, the horse island, an old name for the Mainland (Meginland), or principal island of the group.

It is very odd to find in books and on maps the Latin name *Pomona* applied to this last island—Pomona, the Roman goddess of harvest-plenty, whose name was also used to indicate the fruits of the earth. The explanation seems to be that a mistake was made by George Buchanan, the greatest Latin scholar whom Scotland ever produced, in quoting a passage from Solinus, an old Latin writer. Solinus, speaking of some island which he calls Thylé or Thulé, says that it is five days' sail from the Orcades, and that it

is large and rich in the constant yield of its harvests (pomona). Buchanan, who knew much of Latin but little of either Thulé or the Orcades, takes this to mean that "Thulé is large and Pomona is rich and fertile," and he concludes from this that Pomona must be the chief island of the Orcades. Thus by a mere blunder the name "Pomona" was given to the Mainland; but there is no good reason why we should perpetuate this blunder. "Mainland" is the name which every intelligent Orcadian should use. It is believed by some that the use of the word pomona itself is due to another blunder, the mistake of a copyist, and that what Solinus really wrote was a contracted form of a word which simply meant fruit.

Our place-names have suffered much from the blunders of surveyors and map-makers who knew nothing of the Norse language. Whenever they found a name which bore some resemblance to an English word, they immediately changed it into what they supposed to be its correct English form. good example of a name thus "corrected" for us is that of the place now called "Walls." The proper name of the district is Waas, and this is the name which it should bear on the map. But the intelligent surveyors no doubt knew that there is an English word "walls" which is pronounced "wa's" in Scotland, and so they assumed that the Norse place-name "Waas" ought to be written and pronounced "Walls." This is of course an absurd error. "Waas" is a form of "Voes," a name which is admirably suited to the district, the land of the voes or bays.

The name of our county town, Kirkwall, has been similarly disguised by the well-meaning reforms of

ignorant persons. Old people in the islands still call it "Kirkwaa," and this is the correct form of the name. The Peerie Sea was called the "Kirk-voe" long before St. Magnus Cathedral was built, the name being derived from the old church of St. Olaf, whose doorway still exists, and this name, applied to the town, naturally changed into "Kirkwaa." It would probably be impossible now to restore the old name; we can only be grateful that our map-makers did not also turn "kirk" into the English form "church." We may suspect that the parish name Holm has been similarly tampered with. The local pronunciation, which is "Ham," indicates that the name may be derived from hafn, a harbour, as in "Hamnavoe" (Hafnarvagr) and other cases, but has no connection with holm, which means a small island. When the meaning of hafn had been forgotten, and the local pronunciation was ignored, the name was naturally supposed to be connected with the holms which lie off the shore.

A similar intrusion of the letter l is found in Pierowall, and also in Noltland, in Westray. The latter is sometimes, and more correctly, written as "Notland." The Norse name was Nautaland, the pasture for "nowt" or cattle. The word Pentland must be our last example of such blunders. To the Norsemen the Scottish mainland was Pettland, the land of the Picts; and even at the present day Orcadians, who have not been misled by books and maps, still speak of the "Pettland Firth."

The names of farms or small districts are often very interesting. A common termination in these is *-bister*, which represents the Norse *bolstadr*, a farmsteading, the first part of the name usually being

derived from the name of the original owner, as in "Grimbister" and "Swanbister," the farm of Grim and of Sweyn. The word is connected with bol, a dwelling, which still exists in our local dialect in the form "beul," meaning a stall in a byre or stable. Two Norse words, bu and bær, meaning a home or a household, give rise respectively to the common farm name Bu, and to several names ending in -by, as Houseby and Dounby.

The termination -ster or -setter, which is also very common, represents the Norse word setr; the name sæter is still used in Norway for a summer pasture among the hills at some distance from the farm. Several of our farms bear the name of Seatter, and the number of compounds of this word is too large to need illustration.

Garth, which meant an enclosure, is akin to the English words yard and garden, and is found in numerous farm names, sometimes alone, but more frequently in compounds, where it appears as the termination -ger, the g being sounded hard. Other names for enclosed land were quoy (kvi) and town (tun), and in almost every district we find farm names in which these words appear. The Norse skali, a hall, appears as skaill, either alone or as an element in compound names. There are other common terminations which might be mentioned, all of them significant and worthy of study, but these may suffice to illustrate how full of meaning and interest our common place-names really are.

We have said that the Norse word for "island" now appears as the termination -ay or -a. This termination, however, has in some cases a different

origin, especially where the name does not refer to an island. Thus in the names Scapa and Hoxa the -a is a contraction of eith, meaning an isthmus. Scapa was Skalpeith, the ship-isthmus, and Hoxa was Haugseith, the isthmus of the haug or howe. In the name of the island of Sanday, the termination means "island;" in the name Sanday applied to several places round Deer Sound, the reference is to the "Sand aith" or isthmus already mentioned. In names of places such as Birsay and Swannay, where a large burn is found, we may conclude that the -ay represents the Norse -a, meaning a river, as the o does in Thurso.

As we should expect from a seafaring race, the Norsemen have left us a very liberal heritage of names for the various natural features of our shores. Projecting points of land are called "ness" or "moul" or "taing," according to their configuration, and even the less prominent rocks are still known as "clett" or "skerry," or bear other names which were originally simple descriptions of their peculiar forms. In the same way descriptive names were applied to the water features, and every "voe" and "sound," every "hope" and "geo" have names which offer us a fine field for study.

In dealing with this last class of names, there are two Norse words which may cause us some trouble—hella, a flat rock, and hellir, a cave, both of which appear in place-names as hellya, while a third word helgr, holy, sometimes assumes the same form. It is impossible to determine what the original form and meaning of a name have been unless we examine the place as well as its name.

In studying our place-names, we ought to remember that the correct names are those that are used by the old people who live in the district, not those that are found on the map, or are used by people who adopt the pronunciation suggested by the spelling. By means of the knowledge of a few dozen common Norse roots, and a careful examination of the places to which the names belong, most of our old-fashioned place-names may be made to yield up their ancient meanings, and to throw some light upon the past condition of the islands. When studied in this way, our place-names are seen to be fragments of fossil history, organic remains of an early stratum of society, as eloquent of the past as are the geological fossils of the early ages of plant and animal life.



At the quern.

Part III.—Nature Lore.

THE STORY OF THE ROCKS.

"Sermons in Stones."

STONE quarry is a common enough object in Orkney—so common, indeed, that we may never have taken any interest in it. Yet this common quarry is a place where we may learn some strange facts about the making

of our islands, if we visit it in the spirit of one who

"Finds tongues in trees, books in the running brooks, Sermons in stones, and good in everything."

The quarrymen begin their work by clearing away the "redd" from the rock beneath. First they remove the soil. This is dark in colour, not very rich or deep, perhaps, and not so black as the more fertile soils of other lands. Yet it contains the plant-food which nourishes our crops, and thus nourishes our selves. The particles are fine and loose, and the soil is traversed everywhere by the small rootlets of plants. The dark colour is due to the decayed substance of past crops of plants, which largely consists

of carbon. We must try to find out how this soil, which is so precious to the farmer, has been formed.

Every one knows the difference between the appearance of a new house and that of an old one: in the former the stones of the walls are clean and sharp, in the latter they have a weathered, time-worn look. In graveyards the headstones recently put up have their inscriptions sharp and clear; the older stones have their surfaces pitted, and the letters carved on them are indistinct. Compare the old carvings and tracery on the outer walls of our cathedral, made hundreds of years ago, with the clean-cut masonry of new buildings which stand near it, and you will see that stones decay with time and moulder away; they crumble into dust under the winter's frost and rains and the heat of the summer sun.

So it is with all the rocks of which the surface of our islands is made up. Year by year they moulder away. The dust or earth into which they break down forms a soil in which plants take root and grow. The plants push their root fibres downwards, helping to open up the cracks in the rock; and when these roots die and decay their substance mingles with the soil, giving it that black colour which marks old fertile soils that have long been cultivated.

Under the soil lies the subsoil—that is, rock which is half decayed and partly broken up. In course of time it will become as fine as the soil itself; for the subsoil gradually changes into soil. In wet weather the rain, and in dry weather the wind, carry away the fine particles of earth from the surface of the fields, and would sooner or later take away all the fertile soil; but the continual action of the weather on the

subsoil supplies fresh material. Hence, while the old soil is constantly being removed, new soil is forming to take its place.

As we see in the quarry, under the soil and the subsoil there is rock. This is true of all parts of our country; there is a rocky skeleton beneath the thin layer of fertile soil which supports the plants and animals. In the rocky skerries which are common along the shores we see the nature of the rock-built framework of the islands. If the soil and subsoil were swept away, as the waves have swept it from the skerries, it would be plainly seen that the islands built up of rocks.

All the rocks of our islands, almost without exception, were laid down under water. They consist of three different substances. One is sand, in small rounded white or yellow grains. Another is clay, dark gray in colour, very close grained and soft. The third is lime.

A rock which consists mostly of sand is called sandstone. The Eday freestone, which is much used for putting round the doors and windows of shops and large buildings, is a sandstone. The common blue flagstone contains clay mixed with more or less sand. The sandy beds are coarse, gritty, and hard; the finegrained flags contain more clay, and are darker in colour, softer, and smoother on the surface. Nearly all the fine flags contain lime; often it is seen in white shining crystals on the joint-faces of the stones used in building. The presence of lime in a soil improves it considerably.

In different parts of Orkney the rocks differ much in appearance. In one place we find yellow and red
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sandstone, in another blue and gray flags, in another pudding-stone and granite. What is the meaning of this? It shows that while the whole area of our islands was covered with water, gravel was being laid down at one place, sand or muddy silt at another, and so on. We can even make out the order in which the different layers or strata were laid down.

It is done in this way:—Usually the beds of rock are not now flat but tilted, and show their edges turned up in a more or less sharp slope. If we walk along any bare rocky shore we shall find that bed succeeds bed, each resting on the top of all those which underlie it. No place could be found to show this better than the shore of Hoy Sound from Stromness to Breckness. We go on and on, crossing over bed after bed of rock, till we have passed over the edges of a pile of flagstone which must be several thousand feet thick. The same thing can be seen to the east of Kirkwall, or, in fact, almost anywhere in the islands.

Sometimes the beds dip or slant in different directions at different parts of the shore. Then again they may be broken by cracks or faults which bring different kinds of rock up against one another. If one could visit the whole of Orkney and examine all the rocks, making out in what order they follow one another, how often they are interrupted or repeated by faults, and what is their inclination or dip, one could tell exactly the order in which the rocks of each district were laid down on the bottom of the old lake where they were formed. This is one of the tasks which the geologist undertakes; and though it looks very difficult, yet in Orkney it is quite possible to do so with pretty fair accuracy.

What is the result? At the bottom of the whole we place the granite of Stromness and Graemsay. This represents part of the floor of the old lake on which the gravel and sand and mud were laid down—the part which stood up above the water as an island. Next to this we find a thin layer of pudding-stone. This is formed of the old gravel which gathered on the beaches and shores around the granite island as it



Cliff showing horizontal strata.

was slowly covered over. Above that were laid down the flagstones of the West Mainland; then those of Kirkwall, the East Mainland, and the North Isles; then the yellow and red sandstones of Eday, Shapinsay, the Head of Holland, Deerness, and South Ronaldsay.

The whole series of these rocks must be thousands of feet thick, and how long they took to form we cannot conceive. Then there is a gap in the series. This means that for a time the lake was dry land, and instead of mud and sand being laid down, the rocks which had been formed were partly washed away by rain and streams. After a long time had passed, another lake was formed, and in it were laid down the yellow sandstones of Hoy, which are quite different from the other yellow sandstones of Orkney.

When you think that each thin flagstone or layer of sandstone in our quarry was once a sheet of mud and sand, and that it took months, no doubt, or even years, to gather on the lake bottom, you can understand how vast a space of time is represented by the old red sandstone of Orkney.

"Books in the Running Brooks."

Let us now take a stroll along one of the little burns which flow between their green or heathery banks in any of the valleys of our native islands. These little burns are very small in comparison with the mighty rivers of the world, yet they are quietly performing a great task, and in the long past ages the amount of work which they have done is far greater than you have ever imagined.

It is summer, and the burn runs shallow and slow; the pebbles and sand show clearly in the pools. The burn enters a little bay, and as it flows across the shore it breaks up into several streamlets, each working its way through the gravel. Brackish water plants grow here; the shore is muddy, and the seaweed is often soiled with fine sediment. The burn has brought this down, and has dropped it where it enters the sea.

We follow the channel upwards, through flat, rich meadows, which may be tilled, and covered with corn and other crops. In the meadow the burn winds to and fro, and in each loop the outer side is steep, often overhanging: under the grassy bank the trout lie hid. The inner side of the bend is shallow, slopes gradually down to the water, and is covered with small broken stones and gravelly pebbles. We can see that the current is eating away the steep outer bank by undermining it, while on the inner side the small stones are gathering.

The meadow through which we are passing is flat, and covered with wiry grasses which love wet situations. The stuff of which it is made can be seen on the banks of the burn. It is a soft, darkbrown earth, almost without stones, or with here and there a layer of pebbles. How has this meadow been formed? The stream has done it.

To find out how the stream made the meadow we must visit it in winter after several days of heavy rain. Then a sheet of water covers the meadow, making it a shallow lake. The water is very still except near the channel of the burn; it is brown and full of mud. For some days the lake remains, then the water begins to fall. The stream is clearer now, though still dark with mud; good water this for the trout-fisher. A few days more and the lake has vanished; the stream keeps within its banks, though it is still full.

Now look at the meadow. It is covered with a very thin film of grayish-brown mud. In spring the grasses will grow quickly, and will be greener than ever. The meadow is a little—ever so little—

higher for the new sheet of mud it has acquired. Winter after winter this goes on. The brown earth which forms the meadow is flood mud. Its flat configuration is due to its being laid down in a little temporary lake.

Let us follow the stream still farther, and leave the meadow behind. The channel gets steeper, and the water flows along quite merrily, faster than in the level meadow below. The bends in the burn disappear. It is in a hurry here and flows straight; in the flat meadow below it loiters and swings lazily to and fro. The channel is shallow, and there are few pools. The banks are often bare rock, or the stony clay which is produced by the weathering of rock. The stream is washing away the clay; it even attacks the hard rocks.

To see how this is done you must come when the burn is swollen with heavy rains. Then you will hear it rolling the stones along. They grind on one another, and thus they get their rounded shape, or are broken up into small fragments. As they are rolled along they wear away the rocks and deepen the bed of the stream. Loose pieces are swept away, soft layers are planed down. Many of the cracks and joints are opened and loosened, ready for fresh attacks during the floods of next winter.

This is where the gravel comes from. In the lower part of its course the stream cannot move large stones, but in floodtime the smaller pebbles are carried downwards. The big stones lie in the upper stream; they must be broken smaller before they can be carried away. After rainy weather you will often find that a rapid branch stream has shot a big heap of pebbles into the main stream. When the

floods rise above the surface of the meadow they may strew sheets of little stones here and there over the grass.

After a big flood, if you know the stream well, you will find many changes. Here a bank of gravel has been carried away; there a new one has gathered. At every bend the bank shows undermining, and pieces have been swept away. The fine stuff makes mud: part of this is laid down on the meadow, but much of it is carried right out to sea.

That running water will wash away sand, gravel, and mud is not new to you. You have often seen it on the roads and in the roadside ditches, in the little runnels around the farmhouses, or in the ploughed fields. The burn is always doing the same thing, according to its powers. In dry weather it does little, for its current is weak; in floods it works rapidly. For perhaps two dozen days in a year every burn is in great strength, and is a powerful agent in changing the form of the land. This leads you to grasp the fact that the stream has dug out its own channel, and that it carries rock material to lower levels, and at last to the sea. If you know some of our burns well, and study and watch them closely, you will find a world of interest in them. Every feature of their channels is due to the work the flowing water is doing, and shows the manner in which it is done

But what of the wide valley in which the burn flows? Other agencies have been at work here besides the water: ice has left its mark on every part of our valleys. But the burn has done most. On either side it is joined by branches. Each of these is cutting its own channel, and thus gradually deepening the valley. Each branch has its lesser branches; together they cover the whole valley with an intricate system of water channels.

Between these channels, heather and grass are growing in the stony soil. The soil, as you have learned already, is due to the decay of the rocks. Frost and rain begin the work, and the growth of plants hastens and helps it. Over the whole of the sloping valley sides the rocks are being broken up into finer and finer particles. When heavy rain comes it washes away the smaller particles, and little runnels appear which carry away the surface water.

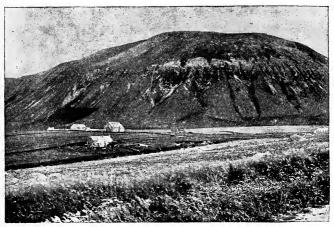
Every year a portion of the soil is swept away to the meadows, or to the mud sheets which floor the shallow sea below. None of this ever comes back; it is sheer loss—a little at a time, but if the time be long enough it amounts to a very great quantity. Every day since that burn began to flow it has carried downwards a greater or smaller burden of soil.

It took a long time for people to grasp the fact that running water is a great earth-shaping agent. Every valley you have ever seen was made in this way. Other things helped, but the stream was the main cause. A valley is only a great groove eaten out of the rock. It is not due to any earthquake or rending apart of the rocks; it is not an original feature of the country. There was a time when there was no valley there; but from the day the stream first began to trickle over the rocks it has gone on deepening its channel and excavating the valley, and it is still doing so.

The stream not only made the valley; it shaped

the hills also. We sometimes speak of "the everlasting hills." No doubt the hills are very old, and will last a long time. Yet the little stream is older and mightier than they. It shaped them and brought them into being; in time it will remove them and level them with the plain.

Let us climb the side of a hill, and see what we can learn about it by patient observation and inference.



The Ward Hill, Hoy.

Any one of our flat-topped, round-shouldered Orkney hills will do. They were all formed in the same way, and teach the same lessons.

The ascent is gentle at first as we leave the plain or the bottom of the valley. Then it gets steeper and steeper. Often it is like a series of great steps—a sharp rise for a little, then a flat ledge; another sharp rise, followed by a gentle slope, and so on. These terraces are formed of beds of hard stone,

which weather down very slowly. The softer rocks crumble fast, and form the steep slope. All our flagstone hills show these steps or terraces. They prove that the slope of the hillside is determined largely by the rate at which the different rock beds wear away.

After our stiff climb we get near the top. Many of our hills are broad-backed. When we get above the steep part we find a flat top, and it is often difficult to say where the actual summit is. In many places there are great groups of hills, all of about the same height, but separated by valleys. The Orphir, Firth, and Harray hills, the Rousay, Evie, and Birsay hills, and the hills of Walls are all of this kind. Even the Hoy hills show the same feature, though less clearly. In all these cases the hilltops look like the remains of one continuous stretch of high ground, which has been cut up into pieces by the digging out of the valleys. The hills are the remnants of a plateau.

This is not a mere supposition, but can be proved quite clearly. In many Orkney hills there are beds of rock which can be identified by the geologist by certain marks. They may contain peculiar fossils, or they may be of a special colour or structure. In Firth and Orphir, for example, there is a band of flagstone which yields roofing slabs. You can follow this band from hill to hill for several miles, often by the quarries in which it was extensively worked in former years. It occurs at much the same level in all the different hills, though sinking somewhat to the north according to the dip or slope of the rock bed. It is found on both sides of the valleys, as, for example, at Finstown, at much the same height.



The Hills of Orkney. Photographed from a Relief Model based on the Ordnance Survey.

The Orkney hills, then, consist of a great pile of beds of flagstone which once spread unbroken over the whole country. Out of this great mass of flagstones and sandstones the running water of the burns has carved the valley systems. The hills are the remnants which the streams have not yet removed. As time goes on the valleys deepen and broaden, and the hills get less and less.

"The hills are shadows, and they flow From form to form, and nothing stands."

It has taken vast ages to do this work, and the work is still going on. It is very slow. The oldest man hardly notices any visible change in the configuration of the country. But wind, rain, frost, and running water are ever at work. Every day sees some loss, some material swept away never to return. What becomes of it? It reaches the sea, and there forms mud and sand. Time will change these into solid rock again, and may ultimately use them in building new continents. The hills crumble into dust, but it is "the dust of continents to be."

Cliffs and Beaches.

On looking at a map of Orkney or Shetland we are struck with the irregularity in the shape of the islands and the winding nature of the coast line. There must be some reason for this, and a little reflection will bring it to light. If you look at the larger valleys you will notice that most of them end in salt-water bays, while the hills or ridges between the valleys run out into points or "nesses." This is especially the case in Shetland; but in Orkney, too,

there are many instances of it. The shape of the land extends beneath the water—the deep bay continues the land valley, the point and the skerry mark the position of the watersheds.

We have seen that the valleys were eaten out by running streams. At one time the land stood higher, and the burns flowed where now the salt water covers the bottom of the bay. Thus the land was shaped. Then the ground sank a little, and the sea flooded the lower grounds. The hilltops remained above water as islands; the valleys and flat grounds were changed into bays and sounds and firths. Think what would happen if the land sank another hundred feet. Many of the present islands would become shoals, and new islands would be made where the sea flowed round the higher ground, winding out and in among them in narrow sounds and straits, just as it does among the islands of the present day.

Long ago Orkney and Shetland were much larger than they are at present. Most of the North Sea was dry land, covered with trees. In several parts of Orkney we can see trunks and roots of trees uncovered after heavy storms have shifted the sand on the beach. These trees did not grow beneath the sea, of course; but the land sank, and the salt water covered the site of the old forest.

Our wild animals, such as hares and rabbits, mice, voles, and shrews, were not imported in boats. They were here probably before man arrived, and they walked in on their own feet when the sea bottom was still part of the dry land of Europe. Those who have studied this question think the land is still sinking, or at any rate has not yet begun to rise. If it were

rising, we should find gravels and shells and seabeaches above the level of the present shores. Such raised beaches are found in many parts of Scotland, but not in Orkney or Shetland.

The shores are always changing, and every part of them bears evidence of constant alterations. Where there are high banks or cliffs, you will often find that pieces have fallen down; this is especially the case where the bank consists of clay. Our Orkney rocks are very hard and our cliffs very lasting, but in some parts of England there are villages and churches now standing on the very edge of the cliffs which a few centuries ago were at a considerable distance from the sea.

It is the sea that wears away the cliffs by hammering at the rocks; during storms the big stones on exposed beaches are rounded and worn by the billows tossing them about and driving them against the rocks. On the west coasts of our islands the great winter waves have enormous power; no breakwater could resist them, and a ship which is driven ashore soon goes to pieces. The cliffs are undermined at their base by the formation of caves; the soft parts are eaten out into geos. Frost and rain open the seams of the rocks and great masses tumble down; these are then tossed to and fro until they are converted into heaps of boulders. The boulders get less and less, and become pebbles; last of all they are ground down to fine shingle and sand.

Every kind of rock has its own characteristic type of cliff scenery. When pieces are detached they separate along natural cracks which are called "joints," and these joints have a different arrangement in

sandstone, in granite, in serpentine, and in schist. Weathering then acts on the exposed surface, and, if the rock is bedded, some beds are eaten away more rapidly than others. There is much to interest us in our cliffs; there is not a detail in their form which has not a meaning.

On wild shores where storm-waves are high we find large boulders; the smaller ones are washed away



A sandstone cliff.

and swept out to sea. Sometimes there is no beach, but the cliff plunges down into deep water, for there the waves are so powerful that they clear away all the broken rock. On sheltered beaches we find small rounded pebbles. If we look at the stones on the shore of a small fresh-water loch we find them scarcely rounded at all, for the little waves cannot toss them about and rub them against one another.

The tear and wear of pebbles produces sand, and the sand is driven to and fro by currents and by storms. It rests for a time in some of the bays, but is not a fixture. A high wind drives some of it ashore to cover the grass of the sandy links. A heavy storm may drag a great deal of it out to sea. Unless it is held fast by bent or other plants, sand is always moving.

Even the stones travel along the shore, driven by the beat of the waves in bad weather. There are stone beaches common in Orkney and Shetland which are often called ayres, and which have behind them a salt lagoon or oyce. The oyce opens to the sea at one end of the ayre, and a strong tidal current flows out and in through the opening. An ayre is really an army of stones on the march, constantly moving forward. In every bay there is one direction from which the biggest waves come, and the stones of the ayre have come from that direction. The opening of the oyce is at the other end of the ayre.

At first there was a bay with a shallow inner end. When the big waves reach shallow water they turn over and have their speed checked. Stones carried along the shore are dropped at the edge of the shallow water, forming a bar. The bar goes on stretching across the bay as the storms fetch more stones, and in time the oyce is nearly walled in. But as the opening gets narrower and narrower the tidal flow gets stronger and stronger. There is a combat between the tidal currents and the storm currents, and in time things are adjusted so that the speed of the outflow is just enough to keep the opening from being closed up.

The Age of Ice.

Along the burns and the seashores, and in stone quarries, we often see banks of clay. Usually this clay is full of stones. In some places the clay is merely the softened, crumbling top of the rock, and the stones in it are of the same kind as the solid rock below. In other places the clay contains stones which are quite unlike any rocks in the neighbourhood. Sometimes these stones are very large, and they must have been carried from some distant place, for they are of a kind of rock which is not found in the islands. What is the history of this clay with travelled stones, or "boulder clay," as it is called?

Boulder clay may be recognized by several marks. It is tough and sticky; it shows no bedding or layers; and it may be only a few inches thick, or it may form cliffs thirty or forty feet high. Pick a few stones out of it: you will notice that they are not all of the same kind. Wash them carefully in the sea or the burn. Their ends are blunt and worn, but they are not rounded like sea-pebbles. Their surfaces are smooth, and are covered with fine scratches, as if some one had drawn a needle or the point of a knife along them. Nowhere except in this clay will you see stones with these curious scratches.

If you find the place where the bottom of the clay rests on the hard rock, you should carefully remove a little of the clay and lay bare the rock surface beneath. Wash it with a little water, and you will see that it is covered with fine scratches exactly like those on the stones. Now this smoothing and scratching of the stones and of the rock

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might be explained by imagining that the clay at one time was in motion, pushed forward by some immense force, and that the stones rubbing on one another and on the rocky floor produced these scratches.

Among the Alps, in Norway, in Greenland, and in other places where there are high snow-clad mountains or a very cold climate, the snow gathers in the valleys till it forms thick masses, and is compressed by its own weight into ice: these masses are known as glaciers. Glaciers are really slow-moving rivers of ice; they slip very slowly down the valley slopes, travelling usually only a few inches in a day. When they reach the warmer region at the base of the mountains, they melt away, leaving behind them heaps of clay which they have swept down from the hills. The stones in this clay are worn and smoothed and scratched exactly like those in the boulder clays of Orkney and Shetland, and the rocks over which the glaciers have moved are smoothed and scratched likewise.

The boulder clay, then, is clearly a glacial deposit, formed at a time when our islands were covered with moving sheets of ice. These ice sheets were travelling from the North Sea towards the Atlantic, in a west or north-west direction, for the scratches on the rock surface always have that trend. We can often prove also that the boulders found in the clay have travelled from the south-east. Thus at the Mont, near Kirkwall, the boulder clay is full of red sandstone from the Head of Holland and Inganess Bay. In Shetland stones have been carried from the east side of the mainland right over the hills to the west shores.

When we piece together all the evidence about this Ice Age or Glacial Period, not only in Orkney and Shetland but in all the north-west of Europe, we learn that it lasted a very long time, and that the North Sea was filled with a great sheet of ice which must have been several thousand feet thick. This ice was pushed out of the basin of the North Sea westwards into the Atlantic by the pressure of the deep snow-cap which covered the mountains of central Europe, and on its way it passed over Orkney and Shetland. The broken stones and rubbish which gathered below it formed the boulder clay. This may seem a very strange tale, but every kind of evidence that is needed to prove its truth has been found by those who have studied the boulder clay and the scratched rocks beneath it.

After the great ice sheet melted, the climate was still cold, and there were times when snow and ice gathered on our hilltops and little glaciers flowed down the valleys. These also have left traces behind by which you can know where they were. In every one of the higher glens in the Orkney hills you will find mounds of clay and stones, often forming a crescent or bow running from side to side of the valley. They are very well seen in Harray, Birsay, Orphir, and Hoy; but even in the East Mainland the hills, though low, gave rise to little glaciers. In Shetland they are almost as common as in Orkney. In many parishes there are clusters of large and small mounds, some of them grassy and others covered with heather, lying near the mouths of the main valleys. When these mounds have been cut into by streams or by

roads, we see that they are not rocky hillocks but consist only of clay and stones, and that the stones are often scratched like those in the stiff boulder clay. These mounds are the "dumps" or moraines where the glaciers which filled the valleys melted and dropped their rubbish. At that time our islands must have resembled Spitzbergen, where to-day most of the hills have an ice-cap and nearly all the valleys are filled with glaciers, some of which reach the sea and give birth to icebergs, while others melt away and deposit lumpy moraines over the valley bottoms.

Orkney Fossils.

You cannot examine many of our Orkney flagstones carefully without finding fossils. The most common are scales and bones of fishes. In the rock these often appear as coal-black specks. When a fossil has weathered for a long time, as in a stone dyke or on the seashore, it often becomes bright blue, like a splash of blue paint. Sometimes whole fishes are found in the gray flagstones, with every fin and every scale perfect. Of course you will not find these every day or every year, but there are many quarries in Orkney where you may get them occasionally. When the quarryman uncovers a bed of rock, he often finds it sprinkled over with great numbers of fossil fishes.

We can picture to ourselves that, at some time long gone by, when these flagstones were being laid down in the old Orcadian lake as sheets of sandy and muddy silt, the fishes were suddenly killed by a volcanic eruption, or by a period of drought, and their dead bodies covered the muddy bottom for

miles. Fresh mud then came down and buried them, and preserved their remains. In process of time their bones and scales were changed into the pitch-black substance which we now find in the rocks. But we can still see that these specks and scales are really parts of fishes. If we examine them under the microscope, we find that they have all the marks of structure that the same parts of certain fishes have at the present day.

In almost every parish in Orkney there is at least one quarry which contains good fossils, and there must be many others which we do not yet know of. But no person who knows what a bit of fossil fish is like need search very long among the flagstones of the shore without finding a scale, a jaw bone, a tooth, or other relic of the fishes which lived in Orkney at the time the flagstone muds were gathering. A heap of stones thrown down by the roadside, for building a dyke or for mending the roads, often contains fragments of dozens of fishes.

It is not difficult for us to picture what these fishes were like when alive. Some of them were about the size of sillocks or herrings, others were as large as a big cod. They had scales all over their bodies, and fins, supported by bony rays, just like living fishes. But though many of them were of the same shape and general outline as a trout or a herring, they differed from these in many ways.

Their scales were often hard and bony, with a smooth, shining outer layer of enamel like that which covers a tooth. Those fishes are called *ganoids*. On their heads they had bony plates with the same hard covering, often showing ridges and furrows, knobs,

and other markings. You may see these beautifully preserved in many of the fossil bones which occur in the gray and blue flagstones. Those fishes belong to species which are no longer living on the earth's surface, but closely allied kinds of fish are still found in a few rivers in Africa, America, and Europe. The royal sturgeon is one of these.

None of the fishes which are common in our seas at the present day are ever found as fossils in rocks as old as the Orcadian flagstones. The water of the Orcadian lake was fresh water. We know this because we find no marine shells, and no crabs or cuttle-fishes in the flagstones, though these kinds of animals peopled the sea at that time, and would have been preserved as fossils if they had inhabited the lake.

Some of the fishes in the lake were very grotesque and oddly-shaped creatures. One of them had two curious bony arms or wings which stuck out from its sides. It is not very common in Orkney, but is sometimes found in quarries near Stromness, and a smaller fish of much the same shape may be got in Deerness occasionally. They are called "winged fishes," and are quite unlike any fishes now living. So strange is this fossil that when first found it was thought to be a curious beetle.

Another strange fish was of great size; its head bones are a foot or more in length. Pieces of the head of this fish may be seen in many parts of Orkney, but the bones of the body were soft and rotted away after the fish died. The back of its head was somewhat like a shovel in shape, and the bones are often half an inch in thickness. There were two great holes for the eyes near the corners of this

shield. The back of the neck was protected by another large plate. A specimen of this fossil can be seen in the Stromness museum; it was called by Hugh Miller the *Asterolepis*, or "star-scale fish," of Stromness.

Besides the fishes, other fossils occur in the flagstones, but not of many kinds. At Pickaquoy, near Kirkwall, and in several other places, very small shells, like tiny mussel shells, often cover the surface of the beds of rock. Pieces of wood may also be seen in the flagstones; they are flattened out and form black strips of a coaly substance, but as they must have drifted a long distance from land, and sunk to the bottom only when they became water-logged, they do not tell us much about the nature of the plants which clothed the islands and the shores of the lake. Yet we know that there were no flowers then, no grasses, or sedges, or trees like those that now live, but only great reeds and tree-like plants belonging to the same groups as the horse-tail that grows in watery places and along roadsides, and the little green scaly club moss that creeps through the heather, sending up its fruitbearing spikes. There were also many kinds of ferns. In the forests and swamps there were land-snails and insects, but no frogs or lizards, still less any birds or other warm-blooded creatures. The fishes are the highest types that then existed; they were the "lords of creation" in that day.



"Winged fish" (Pterichthys).

A PEAT-MOSS.

ARL EINAR it was, as the story goes, who first taught the Orkneyman to make the turf into peats—Torf Einar, as he was called in memory of this fact. If the story is true, he did a great work for the islands,—not quite treeless in his day, perhaps,

but yet in a bad way for fuel in the long winter evenings,—and he deserves a monument almost as

splendid as that of Earl Magnus.

The wood fires went out long ago, and the peat fires will, no doubt, follow in due time. True, the peat-mosses are not yet exhausted, but year by year they recede, and the road to "the hill" grows longer. There is less time to spare now for peat-cutting than there used to be, for our modern methods of farming require more constant labour. But through our trade with other lands money is circulating more freely, and coal can be bought to take the place of peat. The change means more money and less time, and that is just the great difference between this century and those which have gone by.

But the peat-moss is not yet deserted, and in the early summer it is still a busy scene in many places.

Harvest has ever been a time of joy, and peat-cutting is the harvest of the moss. The flaying-spade and the tuskar are not mere toys, nor is "taking out" the newly-cut peats a holiday task; but there are few scenes where more cheerfulness and wholesome mirth can be seen than at many an Orkney peat-cutting.

Let us approach one of these familiar "peat-banks," not necessarily to share in the fun, and certainly not to take part in the labour, but to find out what we can about the substance which we call peat. Here is a bank where the moss is deep enough to give three lengths of peat, one above the other, besides the surface layer, which is cut off and thrown down on the old peat ground.

This top layer, we see, is, like ordinary turf, full of the roots of growing plants—heather, rushes, sedges, and grasses of various kinds. Filling up the spaces between them is a tangled mass of spongy mosses. These mosses are the most important plants of all in the formation of peat.

The most common of the bog-mosses is the Sphagnum, a small branching plant with thin, scaly leaves. Where there is plenty of light it is of a vivid green, and the tops of the sprays look like tiny emerald stars. Lower, where less light comes, the plant looks yellow and sickly, while still lower it is black and decaying. The black substance which we call peat is really a mass of decayed sphagnum moss.

The upper part of our peat-bank, just below the turf which has been cut away, is more loose and fibrous than the under part. The roots of the larger

plants may still be seen in it. The second and especially the third peat are much closer in texture and of a deeper black colour. The vegetable matter is more completely decayed, and if we were to compress it sufficiently it would look very like coal.

At one part of the face of the bank we notice a layer of a different kind. We find the roots and parts of the stems and branches of small trees embedded in the moss. There has been a wood here at one time—how long ago, we cannot tell. That layer of moss which now lies above the remains of the trees may have taken centuries to form.

In many places we find more than one such layer of wood, separated as well as covered by thick layers of moss. Some of the trees have been of considerable size, too; the trunk of one found in the parish of Stenness measured about five feet in circumference, while the moss near it was thickly studded with the nuts which had fallen from it year after year.

The trees whose remains have been found in our mosses include the poplar, pine, mountain ash, birch, hazel, alder, and willow. One very interesting fact is that the silver fir is also found, a tree which does not now grow in Scotland, and is not found in Scottish peat-mosses, but which is common in Norway.

What curious tales those peat-mosses tell of the changes of climate which have passed over our islands! At the present day it is only in our deepest glens, as in Hoy, that we can find even small trees and bushes growing wild. Yet at one time our islands must have been well wooded, though it is only in the mosses that the remains have been preserved for us to see.

The sphagnum, again, has another story to tell. It requires abundant moisture for its growth, and at present it can find this only in flat and boggy ground. It is therefore only in such places that peat is now being formed. Yet we find peat on most of our hillsides and even hilltops. This tells of a time when our climate was much wetter than it now is, and when sphagnum flourished everywhere.

One more story of a different kind can be read from the peat-moss. Here and there, as at Deersound and Widewall Bay, when the tide is out, we may find peat-moss, and the remains of large trees among it, far down on the beach, many feet below the level of high water, and most of it covered to a considerable depth with the sand and gravel which form the upper beach and the land near it. This tells clearly of a gradual sinking of the land in the neighbourhood. When that moss was being formed, and when those trees were growing, the shallow bay must have been dry land.

The plants and flowers which grow on our mosses are worth more than a passing glance. Let us look at some of them. The sphagnum we have already mentioned; it belongs to the class of flowerless plants. The others we shall mention are flowering plants.

Best known of all, perhaps, is what we call heather. This name is used for at least four different plants in Orkney. Two of these bear that common but beautiful flower the heather-bell. One bears bells of a pale, rose-coloured, waxy appearance; the other, which is more common, has bells of a darker and often purplish red. The former is the cross-leaved heath, with its little green leaves arranged in whorls of

four; the latter has its leaves in whorls of three, and is known as the fine-leaved heath.

The most common kind of heather is the ling, which flowers somewhat later than the heaths. It is this plant whose spikes of tiny rose-coloured flowers make our hillsides a purple glory in the early autumn, and whose leaves and stems give them their familiar brown tint during the rest of the year. A white variety is also found, the "white heather" which is supposed to bring good luck to the finder.

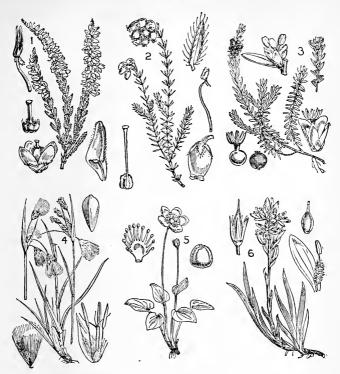
Another kind of heather is that which bears the small black berries so well known to every young Orcadian. This plant is not a heath at all; it is really the black crowberry. The berry is preceded by a tiny purplish flower, which probably few of

the berry-gatherers have ever seen.

The "rashes" or rushes are a common feature of our moors. Two kinds may be noticed, one with its flower-tuft more closely packed together than the other. These rushes were of some use in former days. The white pith was extracted and dried for winter use as wicks in the old oil-burning "crusies," before the introduction of paraffin.

There are many smaller plants of a similar type, one of which, the bog asphodel, ought to be well known; its pretty, yellow, star-like flowers, grouped on a stalk some eight inches high, often make patches of our moorlands glow with the shimmer of gold.

The cotton-grass is probably more familiar. There are two kinds found in Orkney, one bearing a single tuft of white down on each stem when seeding, the other a group or cluster of tufts. This plant is not



Plants of the peat-moss.

1. Common ling (Calluna vulgaris). 2. Cross-leaved heath (Erica tetralix). 3. Black crowberry (Empetrum nigrum). 4. Cotton grass (Eriophorum polystachion). 5. Grass of Parnassus (Parnassia palustris). 6. Bog asphodel (Narthecium ossifragum).

a grass, and has no connection with the cotton plant; but the name is a good one for all that, and no one can mistake the plant to which it applies.

One of our most beautiful moorland plants is that which bears the attractive name, "grass of Parnassus." This also is not a grass, and does not in the least resemble one. It is well worth looking for and

looking at when found. From a group of darkgreen, glossy, heart-shaped leaves rises a slender stem four or five inches high, with one leaf growing on it midway up its height. This stem bears a single cup-shaped flower as large as a common buttercup, with five white petals marked with darker veins. The central parts of the flower are yellowish-green. Round the stigma stand the five stamens, and between these and opposite the petals are five curiously shaped nectaries or honey vessels. They are fringed with a row of white hairs, each ending in a yellow knob, and look like a tiny golden crown placed in the centre of the flower-cup. The name of the flower is said to be taken from Mount Parnassus in Greece, the home of the Muses. Certainly the flower itself is dainty enough to be a favourite with the poets.

Some plants have developed the curious habit of eating, or, at any rate, digesting and absorbing the juices of insects. Two of those insectivorous plants may be found in our peat-moss. In certain places we may notice that the thick carpet of moss is dotted with little rosettes of bright yellowish green, which look like vegetable star-fishes scattered over a beach of moss. That is one of our "plants of prey." It is called the butterwort.

From the centre of the rosette rises a slender stalk of two or three inches, bearing a small dusky purple flower somewhat like a dog-violet. The green leaves which form the rosette are stiff, and lie close to the ground, as if to keep a clear space among the other plants. They curl up at the edges, and look as if they did not want to mingle with their kindred

round about; and indeed they do not, for they have other game in view.

Attracted by this bright green star, a small insect comes in search, perhaps, of honey. He finds the leaf covered with a sticky fluid, and his touch causes more of the fluid to come out of little pores in the The insect is held fast, and the gum clogs up the pores of his body so that he cannot breathe. He soon dies. Then the plant pours out an acid

liquid, which dissolves all the soft parts of the captured insect, and leaves only the skeleton. At the same time this dissolved or digested food is sucked in by

the pores of the leaf.

The acid juice of the butterwort is so like the juice of the animal stomach, that in Lapland the people used to pour warm milk over butterwort leaves, and thus changed it into a curd, just as we do by adding to the milk some rennet, made from the stomach of a calf.



Butterwort.

On this same patch of moor we may find another flesh-eating plant. This is smaller than the last, and less easily found. It has a slender flower-stalk with a spike of small whitish flowers rising from the centre of a curious group of leaves. The leaves lie flat on the ground; they are small and round, no larger than split peas, and covered with bright red hairs that look like tiny red pins stuck in a tiny green pin cushion.

Each of these hairs carries at its tip a bead of clear fluid, which glitters in the sun; hence the plant is called the sundew. Let any thirsty insect come to drink this dew, and a strange thing happens. He finds his feet held fast by the sticky dewdrops, and the more he struggles the more of these does he rub



Sundew.

against. He is held fast until he is suffocated, and then he is digested and absorbed by the leaf.

When the fly alights on the plant, the hairs begin to bend in towards the centre of the leaf. Even those hairs which have not been touched bend over until all of them are helping to hold fast the prey and dissolve it with their liquid. If the insect alights near the edge of the leaf, he is thus carried towards the centre and held fast, while the leaf itself bends so as to form a cup for the acid that pours from the hairs. If two insects alight on the same leaf, the hairs form into two groups, those near

each animal curving towards him, so that the leaf acts as if it had two hands. In this way all the insects that come are attended to.

There are many other curious plants to be found in the peat-moss, but those we have mentioned will suffice to show how much of interest there is in our bleak mosses and moors.

SOME COMMON WEEDS.

HAT is a weed? We may best describe it, perhaps, as a plant growing in the wrong place. A weed is not necessarily ugly, or harmful, or even useless. Many common weeds are very beautiful, and

some of them are very useful; but if they are growing where we wish something else to grow, we call them "weeds," and root them out, or try to do so. Grass in our hayfields and meadows is a valuable plant; grass in our flower-borders or turnip-fields is a weed. So when we speak of weeds, we do not mean any special class of plants, but only those which force themselves upon our notice by springing up where we wish something else to grow.

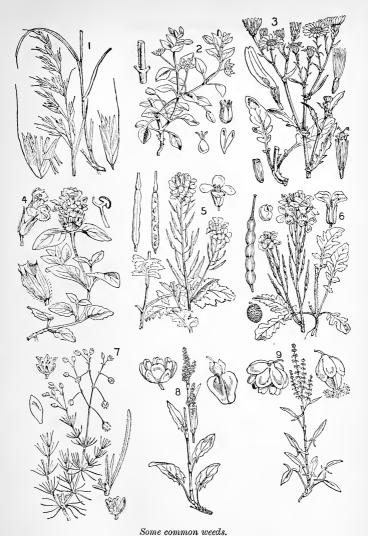
Many of our common weeds are very interesting plants to the botanist. They have to fight for their lives; and the way in which they scatter their seeds, and the power of those seeds to lie dormant for years waiting a chance to grow, are well worth study. It is a war between the farmer and wild nature, and when we look over our fields and pastures in spring and summer we see clearly enough that the farmer is not always the victor. In many a cornfield the oat

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crop seems to be merely incidental, while the hardier children of nature flourish in spite of its intrusion.

This is not as it ought to be. Even if they are otherwise harmless, the weeds use up a large part of the plant food in the soil, and they rob the young oats of the necessary light and air. In this way weeds prove an expensive crop to the farmer. It pays him to study their life-history so as to learn how they may be eradicated, and to spend some labour in the task of doing so.

A common pest in the Orkney cornfields is the "runcho" or "runchic," known elsewhere by the name of charlock or wild mustard. Its pale-yellow flowers overtop the growing oats, and their unwelcome gleam makes some fields conspicuous for miles around. The form of the flower shows that the charlock belongs to the same family as the turnip and the cabbage and the fragrant wallflower of our gardens. The flower has four petals, and the crosslike arrangement of its six stamens, four long and two short, has given them their name of Crucifera, or cross-bearers. The seed-vessels, like those of the turnip, are in the form of a long, narrow pod with a partition running down the middle. The seeds are small and hard, and they grow only in a freshlystirred soil with plenty of light and air. When a field is laid down in grass they make no sign of life, but when it is ploughed for the next crop of oats they spring up once more, and make it as gay as a flower-bed. Two kinds of this plant are found —the one, charlock, of a light yellow colour, common in peaty and clayey ground; and the other, wild mustard, of a deeper yellow, found in sandy soil.



False oat grass.
 Chickweed.
 Ragwort.
 Prunella.
 Wild mustard (Brassica Sinapis).
 Charlock (Raphanus Raphanistrum).
 Corn spurrey.
 Sheep's sorrel.
 Common sorrel.

Another showy weed is the yellow corn-marigold. This handsome flower seems more dainty in its choice of soil, and in some districts it is not common. A glance at the open flower shows its kinship to the "wee, modest, crimson-tipped" daisy. The so-called flower is not one, but a host of tiny flowers or florets growing upon a broad green disc called the receptacle. This compound or composite type of flower is found in a large number of common plants, named on this account *Composite*. Many of them are found in Orkney, and they are a very interesting as well as a numerous family.

One of the best known is the dandelion, a more beautiful flower than many which we grow in our gardens, and only its abundance prevents our admiring it. If we examine the florets of the dandelion, we see that each of them has a corolla forming a long yellow ribbon on the side farthest from the centre of the flower. In the corn-marigold only the outer florets have this ribbon, which forms a halo of rays round the central portion. In the daisy these rays are white, with the tips pink, especially underneath.

A well-known feature of the dandelion is the white down which it produces when in seed—a wonderfully beautiful arrangement for spreading its seeds far and wide to find room to grow. This is a common method of broadcast sowing among the Compositæ family. The thistles, which form a well-known section of that family, depend largely on their floating seeds in their struggle against the farmer. Some farmers seem to forget this fact, for, crowded in some corner of an old pasture, or in serried ranks by roadside and ditchside, we may see those armed

foes allowed to blossom and send forth thousands of winged seeds to overrun the neighbouring fields, and even the neighbouring farms. A few hours' work with a scythe would prevent the mischief. There might well be laws to prevent the careless spreading of weeds as there are to prevent the spreading of infectious disease among animals.

One of the Composite family is a common weed in Orkney pasture fields—the "tirsac" or ragwort. This is a coarse, vigorous plant, with a tough stalk about two feet in height, crowned with a spreading tuft of yellow daisy-shaped flowers. In fields where this weed is allowed to grow and multiply, it soon comes to occupy a large proportion of the whole area, and this means a considerable loss in the grazing value of the pasture.

The large family of the grasses includes some of the plants most useful to the farmer. All the grain crops, such as wheat, barley, and oats, are cultivated grasses, as are also the plants which are used for pasture and for hay. There are some wild grasses, however, which are very persistent and troublesome weeds. Some of these, like couch grass, spread more by creeping underground stems than by seeds. A common grass in Orkney is that known as "swine-beads," from the knotted form of its underground stems. Its common name is false oat grass. It resembles small black oats, but is much taller. Cartloads of its beaded stems may be gathered from some fields when being prepared for turnips, and by so doing much trouble may be saved.

When a field is laid down in turnips or potatoes, the weeds have a hard struggle for life. Those of slow growth are checked by the ploughing and grubbing and harrowing, and later by the hoe and the scuffler. Yet there are a few which in a moist season spring up quickly and soon cover the drills. The common spurrey, with its narrow, sticky leaves growing in whorls, and its tiny white flowers which open only in the sun, is perhaps the best known. The chickweed is another common weed in such fields. These, however, if kept down at first by the hoe, are of too feeble growth to injure the crop among which they strive to find a living.

Sheep's sorrel and common sorrel, both commonly known as "sooricks," were more harmful half a century ago than they are at present. Cultivation and the rotation of crops have reduced their quantity, but their enormous power of spreading can be witnessed in a poor, thin, or peaty soil, where the crops, especially grass, are meagre. There they spread, and sometimes with such vigour that they push every other plant aside. Both kinds of sorrel are common. The one with arrow-shaped leaves is called common sorrel; that with spear-shaped leaves, sheep's sorrel. Their leaves, which have a very acid taste, often turn reddish.

Another common and pretty little flower is prunella or self-heal. Whorls of green bracts and violet flowers form a dense, short spike. It grows from four to six inches high, and is to be met with on dry soils, and although fairly common in oats, flourishes best in second year's grass. It is one of the large order of *Labiates*, a group which includes the dead-nettle and the hemp-nettle, and when abundant it is a clear indication of the exhaustion of some ingredients

of the soil—often lime. When fields are brought to a high state of cultivation, or are near enough the seashore to get an abundant supply of sand, it almost disappears; but when they are impoverished, it soon returns.

These are only a few of the weeds which every farmer knows well. They are worth study, for it is only when we know how they grow and spread that we are able to prevent their increase. The cultivation and manuring of the soil and the sowing of seeds are only one side of the farmer's work; he has to remove the wild growth as well as to promote the growth of what he sows. Otherwise his fields will bear two crops at a time, one of nature's sowing and one of his own, and of these two the natural crop is likely to be the more flourishing.



HOME LIFE ON THE ROCKS.

Guillemots.



OTHING is more interesting than to look down from the summit of some precipice on to a ledge at no great distance below, which is quite crowded with guillemots. Roughly speaking, the birds form two long rows, but these rows are

very irregular in depth and formation, and swell here and there into little knots and clusters, besides often merging into or becoming mixed with each other, so that the idea of symmetry conveyed is of a very modified kind, and may be sometimes broken down In the first row a certain number of the altogether. birds sit close against and directly fronting the wall of the precipice, into the angle of which with the ledge they often squeeze themselves. Several will be closely pressed together, so that the head of one is often resting against the neck or shoulder of another, which other will also be making a pillow of a third, and so on. Others stand here and there behind the seated ones, each being, as a rule, close to his or her partner. There is another irregular row about the centre of the ledge, and equally here it is to be remarked that the sitting birds have

their beaks pointed towards the cliff, whilst the standing ones are turned indifferently. There are generally several birds on the edge of the parapet, and at intervals one will come pressing to it through the crowd in order to fly down to the sea, whilst from time to time others also fly up and alight on it, often with sand-eels in their beaks. On a ledge of perhaps a dozen paces in length there may be from sixty to eighty guillemots, and as often as they are counted the number will be found to be approximately the same.

Most of the sitting birds are either incubating or have young ones under them, which, as long as they are little, they seem to treat very much as though they were eggs. Much affection is shown between the paired birds. One that is sitting either on her egg or her



Guille mot.

young one—for no difference in the attitude can be observed—will often be very much cosseted by the partner who stands close behind or beside her. With the tip of his long, pointed beak he, as it were, nibbles the feathers (or, perhaps, scratches and tickles the skin between them) of her head, neck, and throat; whilst she, with her eyes half closed, and an expression as of submitting to an enjoyment—a "Well, I suppose I must" look—bends her head backwards, or screws it round sideways towards him, occasionally nibbling with her bill also amidst the feathers of his throat, or the thick white plumage of

his breast. Presently she stands up, revealing the small, hairy-looking chick, whose head has from time to time been visible just peeping out from under its mother's wing. Upon this the other bird bends its head down and cossets in the same way—but very gently, and with the extreme tip of the bill—the little tender young one. The mother does so too, and then both birds, standing side by side over the chick, pay it divided attentions, seeming as though they could not make enough either of their child or of each other. It is a pretty picture, and here is another one.

A bird—we will think her the female, as she performs the most mother-like part—has just flown in with a fish—a sand-eel—in her bill. She makes her way with it to the partner, who rises and shifts the chick that he has been brooding over from himself to her. This is done quite invisibly, as far as the chick is concerned, but you can see that it is being done.

The bird with the fish, to whom the chick has been shifted, now takes it in hand. Stooping forward her body, and drooping down her wings, so as to make a kind of little tent or awning of them, she sinks her bill with the fish in it towards the rock and then raises it again, and does this several times before either letting the fish drop or placing it in the chick's bill—for which it is I cannot quite see. It is only now that the chick becomes visible, its back turned to the bird standing over it, and its bill and throat moving as though swallowing something down. Then the bird that has fed it shifts it again to the other, who receives it with equal care, and bending down over it, appears—for it is now invisible—to help or

assist it in some way. It would be no wonder if the chick had wanted assistance, for the fish was a very big one for so small a thing, and it would seem as if he swallowed it bodily. After this the chick is again treated as an egg by the bird that has before had charge of him—that is to say, he is sat upon, apparently, just as though he were to be incubated.

On account of the closeness with which the chick is guarded by the parent birds, and the way in which they both stand over it, it is difficult to make out exactly how it is fed; but I think the fish is either dropped at once on the rock, or dangled a little for it to seize hold of. It is in the bringing up and looking after of the chick that one begins to see the meaning of the sitting guillemots being always turned towards the cliff, for from the moment that the egg is hatched one or other of the parent birds interposes between the chick and the edge of the parapet. Of course I cannot say that the rule is universal, but I never saw a guillemot incubating with its face turned towards the sea, nor did I ever see a chick on the seaward side of the parent bird who was with it.

I observed that the chick—even when, as I judged by its tininess, it had only been quite recently hatched —was as alert and as well able to move about as a young chicken or partridge; but whilst possessing all the power, it appeared to have little will to do so. Its lethargy—as shown by the way in which, even when a good deal older, it would sit for hours without moving from under the mother—struck me as excessive; and it would certainly seem that on a bare, narrow ledge, to fall from which would be certain death, chicks of a lethargic disposition would

have an advantage over others who were fonder of running about.

The young guillemot is fed with fish which are brought from the sea in the parent's bill, and not—as in the case of gulls—disgorged for them after having been first swallowed. It is, however, a curious fact that the fish when thus brought in are, sometimes at any rate, headless. The reason of this I do not know, but with the aid of glasses I have made quite certain of it, and each time it appeared as though the head had been cleanly cut off. Moreover, on alighting on the ledge the bird always has the fish (a sand-eel, whenever I saw it) held lengthways in the beak, with the tail drooping out to one side of it, and the head part more or less within the throat—a position which seems to suggest that it may have been swallowed or partially swallowed—whereas puffins and razor-bills carry the fish they catch crosswise, with head and tail depending on either side.

I have once or twice thought that I saw a bird which just before had no fish in its bill all at once carrying one. But I may well have been mistaken; and it does not seem at all likely that the birds should usually carry their fish, and thus subject themselves to persecution, if they could disgorge it without inconvenience. With regard to the occasional absence of the head, perhaps this is sometimes cut off in catching the fish.

Seals.

Quite near to where I watch the guillemots there is a little iron-bound creek or cove, walled by precipice, guarded by mighty "stacks," and divided for some way into two by a long rocky peninsula running out

from the shore. On the rocks in one of these alcoves were lying eight seals, which were afterwards joined by another, making nine, whilst in the adjoining one were four—also, as it happened, joined by another, as I



Common seal.

watched—making fourteen in all: such a sight as I had never seen before.

I watched these seals of mine on this, my first meeting with them, for a considerable time from the top of the cliffs—the glasses giving me a splendid view—and soon knew more about them than I had done before, and got rid of some popular errors. For instance, I had always imagined that seals had one set attitude for lying on the rocks—namely, flat on their bellies—a delusion which every picture of them in this connection had helped to foster. Imagine my surprise and delight when it burst upon me that only some three or four were in this attitude, and that even these did not retain it for long. No; instead of being in this state of uninteresting ortho-

doxy, they lay in the most delightful free-thinking poses, on their sides, showing their fine, portly, columnar bellies in varying degrees and proportions; whilst one utter infidel was right and full upon his broad back, yet looked like the carved image of some old Crusader on the lid of his stone sarcophagus. Every now and then they would give themselves a hitch, and bring their heads up, showing their fine round foreheads and large mild eyes; a very human—mildly human—and extremely intelligent appearance they had, looking down upon them from above. Again, they had the oddest or oddest-appearing actions, especially that of pressing their two hind feet or flippers together, with all their five-webbed toes spread out in a fan, with an energy and in a manner which suggested the fervent clasping of hands. Then they would scratch themselves with their fore feet lazily and sedately, raising their heads the while, looking extremely happy, having some-times even a beatific expression. And then again they would curl themselves a little and roll more over, seeming to expatiate and almost lose themselves in large, luxurious ease—more variety and expression about them lying thus dozing than one will see in many animals awake and active.

Even in this little time I learnt that they were animals of a finely touched spirit, extremely playful, with a grand sense of humour, and filled "from the crown to the toe, top-full" of happiness. Thus one that came swimming up the little quiet bay, in quest of a rock to lie upon, seemed to delight in pretending to find first one and then another too steep and difficult to get up on (for obviously they were not),

and would fling himself from off them in a sort of little sham disappointment, gambolling and rolling about, twisting himself up with seaweed, and generally having a most lively, solitary romp. A piece of bleached spar, some four or five feet long, happened —and I am glad that it happened—to be floating in the water at quite the other side of the creek and, espying it, this delightful animal swam over to it, and began to play with it as a kitten might with a reel of cotton or a ball of worsted. More frolicsome, kitten-hearted, and withal intelligent play I never saw. He passed just underneath it, and, coming up on the opposite side, rolled over upon it, cuffed it with one fore foot, again with the other, flipped it then with his footy tail as he dived away, and returning, in a fresh burst of rompiness, waltzed round and round with it, embracing it, one might almost say. At last, going off, he swam to a much steeper rock than any he had made-believe to find so difficult, and, scrambling up it with uncouth ease, went quietly to sleep in the best possible humour.

What intelligence all this shows! Much more, I

What intelligence all this shows! Much more, I think, than the sporting of two animals together. This seal was alone, saw the floating spar at a distance, and swam to it with the evident intention of amusing himself in this manner. Later, another seal played with this same spar in much the same way; yet both of them seemed to be quite full-grown animals.

Then I saw something which looked like a spirit of real humour, as well as fun. Three seals were lying on a slab of rock together, and one of them, raising himself half up, began to scratch the one next him with his fore foot. The scratched seal

—a lady, I believe—took it in the most funny manner, a sort of serio-comic remonstrance, shown in action and expression: "Now do leave off, really. Come now, do leave me alone"—and when this had reached a climax the funny fellow left off and lay still again; but as soon as all was quiet, he heaved up and began to scratch her again. This he did—and she did the other—three times, at the least, and if not to have a little fun with her I can hardly see why.

Shags.

Now I have found a nest with the bird on it, to see and watch. It was on a ledge, and just within the mouth of one of those long, narrowing, throat-



like caverns into and out of which the sea, with all sorts of strange, sullen noises, licks like a tongue. The bird, who had seen me, continued for a long time afterwards to crane about its long neck from side to side or up and down over the nest, in doing which it had a very demoniac ap-

pearance, suggesting some evil being in its dark abode.

As it was impossible for me to watch it without my head being visible over the edge of the rock I was on, I collected a number of loose flat stones that lay on the turf above, and, at the cost of a good deal of time and labour, made a kind of wall or

sconce with loopholes in it, through which I could look and yet be invisible. Presently the bird's mate came flying into the cavern, and wheeling up as it entered, alighted on a sloping slab of the rock just opposite to the nest. For a little both birds uttered low, deep, croaking notes in weird unison with the surroundings and the sad sea-dirges, after which they were silent for a considerable time, the one standing and the other sitting on the nest vis-à-vis to each other. At length the former, which I have no doubt was the male, hopped across the slight space dividing them on to the nest, which was a huge mass of seaweed. There were now some more deep sounds, and then, bending over the female bird, the male caressed her by passing the hooked tip of his bill through the feathers of her head and neck, which she held low down the better to permit of this. The whole scene was a striking picture of affection between those dark, wild birds in their lonely wave-made home.

The male bird now flies out to sea again, and after a time returns carrying a long piece of brown seaweed in his bill. This he delivers to the female, who takes it from him and deposits it on the heap, as she sits. Meanwhile the male flies off again, and again returns with more seaweed, which he delivers as before; and this he does eight times in the space of one hour and forty minutes, diving each time for the seaweed with the true cormorant leap. Sometimes the sitting bird, when she takes the seaweed from her mate, merely lets it drop on the heap, but at others she places and manipulates it with some care. All takes place in silence for the most part, but on some of the visits the heads are thrown up,

and there are sounds—hoarse and deeply guttural as of gratulation between the two.

The nest of the shag is continually added to by the male, not only while the eggs are in process of incubation, but after they are hatched, and when the young are being brought up. In a sense, therefore, it may be said to be never finished, though for all practical purposes it is so before the female bird begins to sit. That up to this period the female as well as the male bird takes part in the building of the nest I cannot but think, but from the time of my arrival on the island I never saw the two either diving for or carrying seaweed together. Once I saw a pair of birds together high up on the cliffs, where some tufts of grass grew in the niches. One of these birds only pulled out some of the grass, and flew away with it, accompanied by the other.

It is not only seaweed that is used by these birds in the construction of the nest. In many that I saw grass alone was visible, though I have no doubt seaweed was underneath it; and one in particular had quite an ornamental appearance, from being covered all over with some land plant having a number of small blue flowers; and this I have observed in other nests, though not to the same extent. I think it was on this same nest that I noticed the picked and partially bleached skeleton-with the head and wings still feathered—of a puffin. It had, to be sure, a sorry appearance to the human—at least to the civilized human-eye, but if it had not been brought there for the sake of ornament, I can think of no other reason; and brought there or at least placed upon the nest by the bird it must

almost certainly have been. The brilliant beak and saliently-marked head of the puffin must be here remembered. Again, fair-sized pieces of wood or spar, cast up by the sea and whitened by it, are often to be seen stuck amongst the seaweed, and on one occasion I saw a bird fly with one of these to its nest and place it upon it. In all this, as it seems to me, the beginnings of a tendency to ornament the nest are clearly exhibited.

Both the sexes share in the duty and pleasure of incubation, and (as in some other species) to see them relieve each other on the nest is to see one of the prettiest things in bird life. The bird that you have been watching has sat patiently the whole morning, and once or twice, as it rose in the nest and shifted itself round into another position on the eggs, you have seen the gleam of them as they lay there "as white as ocean foam in the moon." At last, when it is well on in the afternoon, the partner bird flies up and stands for some minutes preening itself; while the one on the nest, who is turned away, throws back the head towards it, and opens and shuts the bill somewhat widely, as in greeting, several times. The new-comer then jumps and waddles to the farther side of the nest, so as to front the sitting bird, and sinking down against it with a manner and action full both of affection and a sense of duty, this one is half pushed, half persuaded to leave, finally doing so with the accustomed grotesque hop. It has all been done nearly in silence, only a few low, guttural notes having passed between the birds whilst they were close together. Just in the same way the birds relieve each other after the eggs have

been hatched, and when the young are being fed and attended to.

A shag is sitting on her nest with the young ones, whilst the male stands on a higher ledge of the rock a yard or so away. He now jumps down and stands for a moment with head somewhat erected and beak slightly open. Then he makes the great pompous hop which I have described before, coming down right in front of the female, who raises her head towards him, and opens and closes the mandibles several times in the approved manner. The two birds then nibble, as it were, the feathers of each other's necks with the ends of their bills, and the male takes up a little of the grass of the nest, seeming to toy with it. He then very softly and persuadingly pushes himself against the sitting bird, seeming to say, "It's my turn now," and thus gets her to rise, when both stand together on the nest over the little ones. The male then again takes up a little of the grass of the nest, which he passes towards the female, who also takes it, and they toy with it a little together before allowing it to drop. The insinuating process now continues, the male in the softest and gentlest manner pushing the female away, and then sinking down into her place, where he now sits, whilst she stands beside him on the ledge. As soon as the relieving bird has settled itself amidst the young, and whilst the other one is still there—not yet having flown off to sea—it begins to feed them. Their heads-very small, and with beaks not seeming to be much longer in proportion to their size than those of young ducks—are seen moving feebly about, pointing upwards, but with

very little precision. Very gently, and seeming to seize the right opportunity, the parent bird takes first one head and then another in the basal part, or gape, of his mandibles, turning his own head on one side in order to do so, so that the rest of the long bill projects sideways beyond the chick's head without touching it. In this connection, and while the chick's head is quite visible, little, if any, more than the beak being within the gape of the parent bird, the latter bends the head down and makes that particular action as of straining so as to bring something up which one is familiar with in pigeons. This process is gone through several times before the bird standing on the ledge flies away, to return again in a quarter of an hour with a piece of seaweed, which is laid on the nest.

As the chicks become older they thrust the head and bill farther and farther down the throat of the parent bird, and at last to an astonishing extent. Always, however, it appeared to me that the parent bird brought up the food into the chicks' bills in some state of preparation, and was not a mere passive bag from which the latter pulled fish in a whole state. There were several nests all in unobstructed view, and so excellent were my glasses that, practically, I saw the whole process as though it had been taking place on a table in front of me. The chicks, on withdrawing their heads from the parental throat, would often slightly open and close the mandibles as though still tasting something, in a manner which one may describe as smacking the bill; but on no occasion did I observe anything projecting from the bill when this was withdrawn, as one would expect

sometimes to be the case if unmodified fish were pulled up. Always, too, the actions of the parent bird suggested that particular process which is known as regurgitation, and which may be observed with pigeons, and also with the night-jar.

Young shags are at first naked and black, also blind, as I was able to detect through the glasses. Afterwards the body becomes covered with a dusky gray down, and then every day they struggle more and more into the likeness of their parents. They soon begin to imitate the grown-up postures, and it is a pretty thing to see mother and young one sitting together with their heads held stately upright, or the little woolly chick standing up in the nest and hanging out its thin little featherless wings, just as mother is doing, or just as it has seen her do. At other times the chicks lie sprawling together either flat or on their sides. They are good tempered and playful, seize hold playfully of each other's bills, and will often bite or play with the feathers of their parent's tail. In fact, they are a good deal like puppies, and the heart goes out both to them and to their loving, careful, assiduous mother and father.

When both birds are at home, the one that stands on the rock, by or near the nest, is ready to guard it from all intrusion. Should another bird fly on to the rock and alight, in his opinion, too near it, he immediately advances towards him, shaking his wings, and uttering a low grunting note which is full of intention. Finding itself in a false position, the intruding bird flies off; but it sometimes happens that when two nests are not far apart, the sentinels belonging to each are in too close a proximity, and

begin to cast jealous glances upon one another. In such a case neither bird can retreat without some loss of dignity, and, as a result, there is a fight.

I have witnessed a drama of this nature. The two locked their beaks together, and the one which seemed to be the stronger endeavoured with all his might to pull the other towards him, which the weaker bird, on his part, resisted as desperately, using his wings both as opposing props and to push back with. This lasted for some while, but the pulling bird was unable to drag the other up the steeplysloping rock, and finally lost his hold. Instead of trying to regain it, he turned and shuffled excitedly to the nest; and when he reached it, the bird sitting there stretched out her neck towards him, and opened and shut her beak several times in quick succession. It was as if he had said to her, "I hope you observed my prowess. Was it well done?" and she had replied, "I should think I did observe it. It was indeed well done." On the worsted bird's ascending the rock to get to his nest, the victorious one ran, or rather waddled, at him, putting him to a short flight up it. This bird was also cordially received by his own partner, who threw up her head and opened her bill at him in the same way, as though sympathizing, and saying, "Don't mind him; he's rude." In such affairs, either bird is safe as soon as he gets within close distance of his own nest; for it would be against all precedent, and something monstrous, that he should be followed beyond a charmed line drawn around it.

EDMUND SELOUS. (From "Bird Watching" and "The Bird-Watcher in the Shetlands." J. M. Dent and Co. By permission.)

THE BIRDS OF SULE SKERRY.

ULE SKERRY is a tiny, barren, surfbleached islet, lying far out in the open ocean, thirty-two miles west from Hoy Head, about the same distance from Cape Wrath, and thirty miles from the nearest land, Farrid Head, in Sutherlandshire. The Skerry, roughly rhom-

boidal in outline, is about half a mile in length and a quarter of a mile in its greatest width, and attains a height of only forty-five feet in its central part. All round the shore is a belt of bare, jagged rock, where the wash of the great Atlantic waves prevents any vegetation from finding a foothold, and of the thirty-five acres or so which form the entire area of the island only some twelve are covered with a mossy, vegetable soil.

Lying, as it does, right in the track of trading vessels, this low islet, together with the Stack, which rises to a height of more than a hundred feet some four and a half miles to the south-westward, formed a death-trap to many a ship, which was, no doubt, afterwards merely reported as "missing," and its shores when visited were rarely found without some stranded wreckage to tell of the unrecorded tragedies

of the winter seas. It was not till the year 1892 that steps were taken to mark this dangerous rock, but three years later saw the completion of Sule Skerry Lighthouse, a massive tower of a hundred feet in height, with a powerful light visible for a distance of eighteen miles.

Sule Skerry is no longer either a dangerous or a

lonely islet when compared with its former state. The three lightkeepers who are always on duty, together with their goats, poultry, and rabbits, give quite an inhabited air to the placeprobably too much so for the comfort of the original occupants, the flocks of birds which find on it either a permanent home or a temporary dwellingplace. Sule Skerry is an ideal place for observation of the birds which frequent our islands, both from the



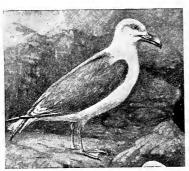
Sule Skerry Lighthouse.

immense numbers of them which nest there, and from the absence of high cliffs or inaccessible rocks. Luckily for us, one of the lightkeepers formerly on this station, Mr. Tomison, a native of Orkney, was a man unusually well qualified for such observation, and he has recorded much that is of interest regarding the bird life of the Skerry. From one of his papers on this subject we quote the following interesting pages.

The Residenters.

The birds of Sule Skerry may be divided into three classes—the residenters, the regular visitors, and the occasional visitors. The class of residenters is represented by the great black-backed gull, the herring gull, the shag or green cormorant, and the meadow pipit.

The great black-backed gull is one of the handsomest birds of the gull family, but owing to its



Great black-backed gull.

destructive propensities amongst small birds, rabbits, and occasionally young lambs, a continual warfare has been waged against it for years by farmers and gamekeepers, until now it is almost entirely banished to the outlying parts of the

country. Before the lighthouse was erected on Sule Skerry, large numbers of this species frequented the island; but the lightkeepers found them such arrant thieves that they reduced their numbers considerably. There are still about twenty pairs resident on the island all the year round, and they seem to find plenty of food either on land or at sea. Their breeding-time is in May, and sometimes as late as June. When the young are hatched the parents are continually on the lookout for food, and I have often seen them swoop down and seize young rabbits. Frequently they make desperate

efforts to capture the old rabbits, but never successfully. They lay three eggs in a nest composed of withered grass, and the process of incubation lasts about four weeks.

A small colony of herring gulls stays on the island all the year round, but in summer vast flocks of them are in evidence when the herrings are on the coast.



Herring gull.

Only the residents remain to breed, and about a dozen pairs annually rear their young and spend their whole time in the vicinity. Some of the young must emigrate to a more genial climate, for although rarely disturbed their numbers are not increasing. They lay three eggs early in May, and sit about four weeks. When hatched, the young immediately leave the nest, and are so like the surrounding rocks in colour that when they lie close it is almost impossible to discover them. When hunting for food for their offspring, these gulls are almost as great a pest as their cousins, the great black-backed, and are more audacious thieves.

The most numerous of the residenters are the scarfs. In summer and winter they are always on the island, and apparently there is an abundant supply of suitable food in the vicinity, for they never go far away. During winter they congregate on the rocks in large flocks or colonies, and they have become so accustomed to man's presence that they fly only when one approaches within a few yards of them. In very stormy weather they seek refuge in some sheltered spot, far enough away from the coast-line

to be safe from the encroaching waves, and only when frightened by any one approaching too near do they choose what is, in their opinion, the lesser of two evils, and seek safety in flight. With the advent of spring they, like all other birds, turn their thoughts to love. Their comparatively homely winter dress gradually changes to one more appropriate to this sentiment and more in harmony with the imposing surroundings. Early in the year their plumage assumes a greener tint, and the graceful tuft or crest on the top of the head becomes more and more prominent. This crest practically disappears about the end of June, and seems to be a decoration in both sexes only during the nuptial season. Usually they manage to get through with their love-making and selecting of partners by the middle of March, after which the operations of nest-building are undertaken.

In Orkney we associate a scarf's nest with some almost inaccessible cliff, but such is not the case on Sule Skerry, for the simple reason that there are no cliffs. The nests are built all over the island, but principally near the coast-line; and the sociableness of the bird's disposition shows itself in this fact, that they tend to crowd their nests together in certain selected spots, to which they return year after year. One place in particular, a patch of rough, rocky ground from forty to fifty yards square, I have named the scarf colony on account of its numerous population during the breeding season. Here in 1898 I counted fifty-six nests.

As to the materials used for nest-building, these are principally seaweed and grass, but the scarf is not very particular as to details, and uses anything that will suit the purpose. I have found pieces of ordinary rope, even wire rope, and small pieces of wood used, and a very common foundation is the skeleton of a rabbit which has died during the winter. During building operations I have observed that one bird builds and the other brings the materials. After all has been completed, three, four, and sometimes five eggs are laid. Three is the most common number; five is rare. During incubation the one bird relieves the other periodically. It is a common sight to see one come in from the sea, sit down at the edge of the nest, and hold a long palaver with its mate. The sitting bird then gets up and flies out to sea, the other taking its place.

When the young come out of the egg they are entirely naked, of a dark sooty colour, and particularly ugly. Towards the end of the first week of their existence a coating of down begins to grow, followed by feathers in about three weeks. As near as I can judge from observation, the bird is fully fledged in five weeks from the time of hatching.

The only other residenter is the meadow-pipit, tit-

lark, or moss-cheeper. It is the only small bird that remains on the island all the year round. It nests generally in May, and lays five or six eggs. It is said that two broods are raised in the season, but I have never noticed that here. Towards



Meadow-pipit.

the end of summer they are to be seen in considerable numbers, but in September and October the island is visited by kestrels, who soon thin them down.

The Regular Visitors.

The regular visitors are puffin, razor-bill, common guillemot, black guillemot, oyster-catcher, tern, eider duck, kittiwake, stormy petrel, curlew, snipe, turnstone, and sand-piper. In this list I have advisedly placed first the puffin, or tammynorie, or bottlenose, or coulterneb, or pope, or sea-parrot, for it is a well-known and well-named bird. In point of interest it undoubtedly takes the first place among all our feathered friends. Its re-



activity, its assertive disposition, and the regularity of its habits, compel the attention of the most careless observer. At one time puffins were

markable appearance,

At one time puffins were much in demand for food. An old history of the Scilly Islands tells us that in 1345 the rent of these islands was three hundred puffins. In 1848, on account of the bird having got scarcer, and con-

sequently more valuable, the rent was fifty puffins. We are also led to understand that the young birds, being plump and tender, were more highly esteemed than their more elderly and tougher relatives.

The most remarkable feature of this curious bird is its beak, the peculiarities of which are its enormous size compared with the size of the body, and its brilliant colours—blue, yellow, and red. For a long time it was a puzzle that occasional dead specimens

found washed ashore in winter had a beak very much smaller and destitute of bright colours. It has now been ascertained that the outer sheath is moulted annually, being shed on the approach of winter and replaced at the return of the breeding season.

To give any idea of their numbers on Sule Skerry is an almost impossible task, for when they are on the island they are hardly ever at rest. The air is black with them, the ground is covered with them, every hole is tenanted by them, the sea is covered with them. They are here, there, and everywhere.

They first make their appearance early in April, and spend from eight to twelve days at sea before landing, coming close in round the island in the forenoon and disappearing at night. Before landing they fly in clouds round the place, and after having made a survey to see that all is right, they begin to drop in hundreds, till in half an hour every stone and rock is covered. They do not waste time, but start at once to clear out old holes and make new ones, and for burrowing they can easily put a rabbit in the shade. Those who are not engaged in digging improve the shining hour by fighting, and for pluck and determination they are hard to beat. They are so intent on their work that I have often seized the combatants, and even then they were unwilling to let go their hold of each other; but when they do, it is advisable for the person interfering to let go also, if he would avoid a rather unpleasant handshake.

After spending a few hours on the island they all disappear, and do not usually land again for two days; but when they do come back the second time there is no ceremony about their landing. They come in

straggling flocks from all points of the compass, and resume their digging and fighting. They continue in this manner, never remaining ashore all night till the first week of May. They spend very little time on the construction of their nests, which consist merely of a few straws. The greater number burrow in the dry, peaty soil, and their holes will average at least three feet underground; but there are also an immense number that lay amongst loose rocks and stones on the north side of the island. The eggs laid there are always clean and white until the young bird is hatched; but those laid underground in a day or two become as brown as the soil, and seem more like a lump of peat than an egg. During the time of incubation, which lasts a month, those not engaged in hatching spend their time in fishing and resting on the rocks, and as a pastime indulge in friendly sparring matches.

One easily knows when the young are hatched by seeing the old birds coming in from sea with herring fry or small sand-eels, which are carried transversely in their bills, from six to ten at a time. The sole work of the parent birds for the next three or four weeks is fishing and carrying home their takes to the young. Very little time is given to nursing. They remain in the hole just long enough to get rid of their burden, and then go to sea again. As the young ones grow, the size of the fish brought home increases. At first it is small sand-eels from one and a half to two inches long, but at the end of a fortnight small herrings and moderate-sized sand-eels are the usual feeding. I noticed an old bird fly into a hole one day with a bigger fish than usual, and, to see

what it was, I put in my hand and pulled out both birds. The tail of the fish was just disappearing down the young one's throat, but I made him disgorge his prey, and found it to be a sand-eel eight inches long. How that small bird could find room for such a dinner was really wonderful.

At first the young are covered with a thick coating of down, and probably their appearance at this stage has given rise to the name "puffin," meaning a "little puff." In a fortnight the white feathers on the breast begin to show, and the birds are fully fledged in four weeks, when they at once take to the water. As soon as they go afloat, young and old leave the place, and about the middle of July one can easily see that their numbers are decreasing, the end of August usually seeing the last of them.

There is a considerable colony of razor-bills on the island. Their time of arrival is about the same as

that of the puffin, but they make no commotion when they come. They seem to slip ashore, and always keep near the coast-line, ready to fly to sea when any one approaches. They begin laying towards the end of May, and lay one egg on the bare rock, usually under a stone, but in some cases on an exposed ledge.



Razor-bill.

During incubation one bird relieves the other, for if the egg were left exposed and unprotected the black-backed gull would very soon appropriate it. Some authorities say that the male bird brings food to its mate; but I have never observed this, though I have watched carefully to see if such were the case.

The young remain in the nest, or, to speak more correctly, on the rock, for about two weeks if not disturbed, and I have seen a young one remain ashore until covered with feathers, which would mean about four weeks from the time of hatching. They all, young and old, leave early in August. I am sorry to say they are becoming scarcer every year, chiefly on account of their shyness and fear of man.

The common guillemots are scarce. Their great haunt in this vicinity is the Stack. There they are to be seen in myriads on the perpendicular side of the rock facing the west. Only two or three pairs take up their abode on the island; in fact their numbers scarcely entitle them to be called Sule Skerry birds. The few young ones I have seen are carried to the water as soon as they are hatched at least they disappear the same day.

Black guillemots or tysties are plentiful. Their time of arrival is about the middle of March, but they are rarely seen ashore before the end of April. Their nests are to be found in out-of-the-way crevices or under stones, and are not easily discovered on account of the extraordinary watchfulness of the birds and their care not to be caught on or near their nests. They lay two eggs, and the young are fully feathered before going afloat. They remain about the island till the end of September.

The first of all the visitors to arrive are the oystercatchers. They first put in an appearance about the end of February, when their well-known cry denotes that the long, dreary winter is over. They spend their time till the end of March chiefly feeding along the coast-line; but after that time they pair, and are

seen all over the island. About the end of May they lay three eggs in a nest composed of a few small stones; and when the young are hatched the noise of

the old birds is perfectly deafening on the approach of an intruder, and even when no one is annoying them the clamour they make almost amounts to a nuisance. On calm, quiet nights it is hardly possible to sleep



Oyster-catcher.

for them, and one feels inclined to get out of bed and shoot them down wholesale. The young leave the nest as soon as hatched, and are rarely seen, for on hearing the warning cry of the parent bird they at once hide among the long grass or under stones, and on one occasion I found a pair some distance underground in a rabbit's hole. They all leave the island during the first half of September.

Next to the puffins in numbers are the terns—the Arctic terns. They are also like the puffins in the regularity of their arrival at the island. When first seen they are flying high up, and they continue doing so for a day or two, only resting at night. There are several varieties of terns scattered all over the British Isles, but in the north the most numerous are the Arctic and the common tern. The latter rarely visits the island.

There are certain localities where the terns take up their abode, and they stick closely to the same ground year after year, never by any chance making a nest twenty yards outside their usual breeding ground. They begin to lay in the first week of June, but 1 have found eggs on the last day of May. They lay two eggs, and sometimes three. When the young are hatched the parents are kept busy supplying them



with food, which consists chiefly of sand-eels and herring fry. Their method of fishing is to hover over the water, not unlike the way a hawk hovers when watching its prey, and when they see a fish to make a

dart on it, rarely if ever failing to make a haul. They also prey on worms when it is too stormy for fishing at sea. On a wet evening, when the worms are having an outing, the terns are to be seen in hundreds all over the island, hovering about six feet above the ground, every now and again making a dart down, and, when successful, flying home with their catch to the young. No time is lost, for the old bird seldom alights when handing over the worm. It swoops down to where the young ones are standing with outstretched necks and bills gaping, screaming out to let their whereabouts be known, and then flies off again for more. When the young are able to fly they accompany their parents over the island, and occasionally do a little hunting on their own account.

About the first of August the young are fully fledged. Young and old then assemble from all parts of the island to a piece of bare, rocky ground on the north-east corner, which they make their headquarters for about ten days, flying out to sea for food, but always returning at night. About the fifteenth of August they all disappear, and are seen no more till the following May.

The island is the headquarters of a large colony of stormy petrels. It is not an easy matter to fix the exact date of their arrival, for they are never seen during the day, and only come out of their holes at

night. They are first seen in the latter end of June, when on a fine clear night one can see them flitting about close to the ground, very like swallows in their movements. They begin to lay in July, and their nests are to be found under stones and in rabbits' holes.



Stormy petrel.

Almost the only way to find them is to listen for their peculiar cry, which they keep up at intervals the whole night through. If captured during the day, they seem quite dazed when released, and at once fly into some dark place. The date of their departure, like that of their arrival, is not easily fixed, but I



Eider duck (male).

think it is during September. Young birds have been got on the lantern at night as late as the end of September, but never in October.

The eider duck is a regular visitor, and a considerable flock make Sule Skerry their headquarters for about

eight months in the year. They are first seen in March fishing off the island, but they very rarely land before the end of April. In May they may be seen ashore every day, but always near the water.

ready to pop in if alarmed. They are very shy and difficult to approach. In June the duck and the drake both come ashore and select a place for their nest, and that is the only occasion on which the drake takes a part in the hatching process. So far as my observation goes, I have never seen him approach his mate during the month of incubation.

The nest is built sometimes on a bare rock, but more commonly among grass, and consists of coarse grass for a foundation, the famous down being added only as the eggs are laid. Five or six is the common



Eider duck on nest.

number found in one nest. From the time it begins to sit until incubation is completed, the duck never leaves the nest unless disturbed, and will only fly to sea if driven off. If approached quietly, it will allow one to

stroke it, and does not seem afraid. There are always one or two nests close to the house, and though I have watched them closely at all hours, night and day, I have never seen the birds go away for food, nor have I seen their undutiful spouses bring any to them. I will not venture to say that the duck lives a month without sustenance, but I am strongly inclined to that belief. When frightened away, it goes only a short distance, and returns immediately as soon as the cause of its fright has been removed.

The whole inside of the nest is lined with down, which seems to be intended only for the purpose of

keeping the eggs warm. It is certainly not intended to form a cosy nursery for the young, as they leave for the sea a few hours after birth and do not return. Unless the down is removed before the young are hatched it is useless, for it gets mixed up with the

egg-shells, which are always broken into very small pieces. After leaving the nest the young birds rarely come ashore again, but remain afloat, feeding along the edge of the rocks on mussels and crustaceans. The old birds disappear in October,



but some young ones remain till the end of November.

Few kittiwake gulls visit the island, but these come regularly, and take up their abode on the same ground year after year. They arrive in April, and about the first of May begin nest-building, a work which keeps them employed for about three weeks.



Curlew or whaup.

They begin laying about the end of May, and lay three eggs. The young are fully grown before leaving the nest, and are fed by both the parent birds. They all leave the island about

the end of August, and not even a straggler is seen till the following spring.

I have now gone over all the birds that breed on Sule Skerry, and come next to the regular winter visitors, consisting of the curlew, the snipe, the turnstone, and the common sandpiper.

About a dozen curlews or whaups make the island their home for about nine months of the year. They leave about the end of May and return in August, remaining on the island all winter. Their number always keeps about the same — twelve or fifteen. They have the same characteristics as those found elsewhere—their extraordinary alertness and their peculiar cry—but they are distinctly less shy than is usually the case in other parts of the country. They are never disturbed in any way, and the result is that, if any one wished, it would be an easy matter to get within gunshot of them. Their chief food is worms and insects, of which there is a plentiful supply on the island.

When the curlews leave the island, a few whimbrels take their place, and remain about six weeks. They breed in Orkney and Shetland, but though they remain on the island most of the breeding season I have never yet found a nest. I have spent many an hour watching them from the light-room with the glass to see if they were sitting, and have gone over the ground where they are most frequently seen, but



could never find an egg or any attempt at nest building. They are very much like the curlew in general appearance, only much smaller.

The snipe leaves the island in May, and is absent about four months, usually

returning in October. None, so far, have ever nested on Sule Skerry, and they all go elsewhere for that purpose. There is a considerable number of them resident during the winter, larger in some years than in others. They sometimes get killed by dashing against the lantern at night, but it is not often they fly so high.

The turnstone always spends the winter on the

island, arriving about the end of August or the first of September, and from then on till April it spends its time feeding on insects. On Sule Skerry it is in no way afraid of man, but rather the opposite, for it depends a good deal on the lightkeepers for its livelihood in stormy weather. Whenever the lightkeepers go to feed their hens, the turnstones gather



from all parts of the island and sit round at a respectful distance—about a dozen yards—waiting for their share, which they receive regularly every day, and they seem to enjoy it very much. The lightkeepers



Sandpiper.

often turn over big stones to enable the hens to feed on the insects which are there in immense quantities. The turnstones have learned the meaning of this operation, and whether the hens are present or not, they soon gather round for a feast when one retires

a short distance. A few specimens of the common sandpiper always accompany them, but they feed more amongst the seaweed along the coast-line, and are more afraid of the approach of man.

Occasional Visitors.

We now come to the third class, the occasional visitors. These are the wild goose, the mallard or stock duck, the teal, the widgeon, the Iceland gull, the Sclavonian grebe, the heron, the kestrel, the hooded crow, the rook, the lapwing, the golden plover, the redshank, the corncrake, the water rail, the fieldfare, the redwing, the snow-bunting, the starling, the song thrush or mavis, the blackbird, the water-wagtail, the stonechat, the woodcock, the skylark, the twite or mountain linnet, the robin, the swallow, the blackheaded gull, and the little auk.

Wild geese pass the island on their way south in October, but very rarely rest. Occasionally a flock will hover round for some time, but the sight of a human habitation scares them away, and they continue on their way in the direction of Cape Wrath. October half a dozen were seen resting on the island one morning about eight o'clock. They seemed to be feeding in one of the fresh-water pools, but all they would find there would not fatten them. Sule Skerry is a very likely place for them to call at, as it is right



Mallard.

in their track when on the way to and from Iceland and Faroe, but perhaps the island being inhabited causes them to give it a wide berth. At any rate very few of them ever honour it with a visit

The mallard pays the island frequent visits during the winter, two and three at a time. They never stay long, for there is very little

feeding for them. They are particularly shy, resting only on the most outlying parts, and seeming continually on the watch. Teal and widgeon are not common. Of the former one sees a specimen or two every winter, while of the latter only two have visited the island, and that was in March 1897, when they stayed a few days.

In November 1895 an Iceland gull arrived on the island, and remained to the end of February following. It became fairly tame, sitting the greater part of the day near the house on the watch for any scraps of

meat that were thrown out. Hopes were entertained that it intended remaining permanently on the island, but on the approach of the breeding season it departed. In 1898 one stayed for a week in November; in the following year another was seen on the 23rd of November. This one was fishing in company with some common gulls, and occasionally flew over the island quite close to the tower; but I did not see it alight, nor



Heron.

was it seen again on any of the following days.

The common heron every year spends a day or two on the island, generally in October or November, but it never seems at home. They wander about in search of food, but apparently do not find very much. When leaving the island they always, without exception, fly in the direction of Cape Wrath, but where they come from I cannot say, never having noticed them arriving.

The hooded crow is an annual visitor, generally in

November, and it sometimes comes for a short visit in April. Two or three is the common number at one time. There is, however, not much food for them, and on that account their visit is soon over. A few rooks call about the same time.

Every year in April the lapwings make the island a resting-place, staying from a week to a fortnight. The place does not seem to suit them for nesting purposes, for I have never seen them make any attempt at nest-building. After resting and renewing their strength, they seek out some more hospitable part of the country. Small flocks of the golden plover also rest on the island on their passage north in March and April, and again on their way south in October and November, staying from eight to twelve days. There are also a few straggling visitors during the winter.

The common redshank is a frequent visitor, staying perhaps a week at a time, but it never nests on the island. In 1896 a corncrake's well-known song was heard during the greater part of June. It was heard again the following season, but never since. The bird, however, is occasionally seen in summer. The only way I can account for its silence is that the goats and rabbits never allow the grass to grow to any length, and thus there is no cover for it. I think most ornithologists are now satisfied that this bird migrates to a warmer climate every year on the approach of winter. Whether such is the case or not I do not feel prepared to say, but from my experience of Sule Skerry I am quite satisfied it is only a summer visitor there, and does not remain on the island all winter. The water-rail pays the island a visit every winter,

but I do not think there is any danger of its being mistaken for the corncrake. They are a little like one an-

other in shape, but they are two distinct species, and easily recognized.

In October and November the island is visited annually by considerable numbers of fieldfares, redwings, blackbirds, rock-thrushes, starlings, and woodcocks. They



Water-rail.

generally stay from a week to a fortnight, and are more numerous some years than others. Waterwagtails are rare visitors, seen at various times of the year. Stonechats are also rare visitors, only staying a few days in May. The skylark, so common everywhere else, is a very rare visitor, and is only seen or heard once or twice during the summer months. Robin redbreast is always seen in the autumn, and generally stays a few weeks if the weather is moderate. The twite or mountain linnet pays an occasional visit in summer, and stays for some time; but I have never yet found a nest, and cannot say if it breeds on the island. In June every year a few sparrows spend a fortnight on Sule Skerry. Snow-buntings almost deserve the name of regular winter visitors, for from October to March they are seldom long absent.

Last September I got a bird which I knew to belong to the grebe family, but I could not be sure of its proper name, and I sent it to Mr. Harvie Brown for identification. He informed me it was a Sclavonian grebe, a bird not very common in this part of the country. In November 1897 I found a dead specimen of the little auk.

Though not a Sule Skerry bird, the solan goose

deserves notice in this paper. The Stack, distant four and a half miles, has been their chief breeding place in Orkney for ages, and every year it is tenanted by immense numbers. The rock is 140 feet high, rising perpendicularly on the west, but sloping gradually from the water to the summit on the east side. It is on this slope that the solans congregate, and no other bird is allowed to trespass on their preserves. In May, June, July, and August their numbers are so vast that any one seeing the rock at a distance would imagine it was painted white or



Solan goose.

composed of chalk. Sule Skerry, however, is too far distant to allow of one forming any idea of their numbers, but looking at them with the glass one sees the rock simply covered, and apparently as many flying about as resting. Lewis men visit the place annu-

ally in August, and carry away a boatload of young birds. Last year they came up to the rock, but there was too much surf for a landing, and as the weather was threatening they headed for the Sutherlandshire coast. That night the wind blew half a gale, and fears were entertained that it would prove too much for them, for their boat was small and hardly powerful enough to be so far from home; but a few days later they again approached the rock. They again failed to negotiate it, and after waiting for about an hour they made sail for home, and did not return. The weather certainly favoured the solans on these occasions.

I have never seen a solan resting on Sule Skerry; they even carefully avoid flying across the island, though they fish in immense numbers all round, and sometimes within forty or fifty yards of the shore. They usually begin to arrive in the vicinity about the end of January, and their numbers continue to increase until the end of April, when they take possession of the rock, and from then until the end of August their name is legion. When the young are fledged, they gradually disappear, and from the first of December till the last days of January they are not to be seen.

Thus they go on year after year, a fraction of that greatfeathered multitude which has come and gone since the earliest ages, and will probably continue to come and go as long as the world lasts, some arriving and departing in silence, others heralding their coming and going with the wildest clamour. On this subject, and speaking of the northern isles, Thomson the poetsays:—

"Where the Northern Ocean, in vast whirls,
Boils round the naked melancholy isles
Of farthest Thule, and the Atlantic's surge
Pours in amongst the stormy Hebrides;
Who can recount what transmigrations there
Are annual made? what nations come and go?
And how the living clouds on clouds arise,
Infinite wings! till all the plume-dark air
And rude resounding shore are one wild cry?"

J. Tomison ("Orcadian Papers").



COMMON SEAWEEDS.

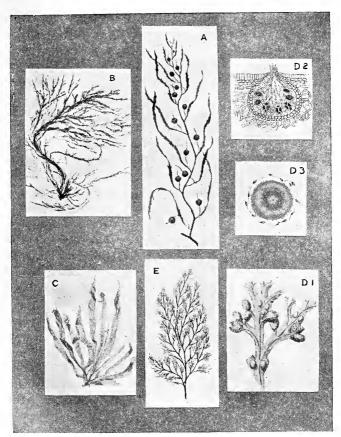


SEVERE storm has been raging for several days on our shores, and no ship has dared to cross the Pentland. To-day a great calm has fallen upon the face of the waters, and the sun shines clear in the sky. A walk by the seashore on such a morning will afford an excellent opportunity for collecting speci-

mens of our seaweeds, and for studying their life-history.

Here they lie in all their varied colours, strewn on the beach like autumn leaves in a forest. Now is our chance to secure some of those rare and beautiful weeds that grow in the deeper water, and have been torn off and driven ashore by the waves. If pressed and dried with care, they will remain things of beauty for long. For this purpose we use squares of stiff paper or card, on which we spread them out carefully under water. When pressed, they will adhere to the paper by means of the mucilage which they contain.

The delicate fern-like or feathery fronds of those red seaweeds will compare in beauty with the best of our flowering plants. This is all the more wonder-



Common seaweeds .- I.

A, Sargassum (Gulf-weed). B, Cladophora. c, Enteromorpha. D 1, Fucus vesiculosus. D 2, Receptacle of same, with eggs and sperms. D 3, Egg, with sperms. E, Polysiphonia.

ful when we consider their lowly origin. For the family of the *Alga*, to which the seaweeds belong, is the oldest and most primitive of all the families

of plants. To the Algæ most likely belonged the first forms of life which appeared on the earth.

If we are fortunate to-day we may find a specimen of the famous Gulf-weed (Sargassum), which gives its name to the Sargasso Sea, and which is said to have cheered Columbus on his celebrated voyage of discovery. In the tropical Atlantic it covers immense areas of the ocean, and it is occasionally cast ashore on the Orkney coasts, drifted hither by the Gulf Stream and the westerly winds. It is easily recognized by its numerous little round air-bladders, each on a separate branch.

Now let us turn our attention to the seaweeds which we find growing on the beach around us. In many a rock pool in the "ebb" we may see a miniature forest of tiny weeds of beautiful colours and forms, a veritable ocean garden. Near highwater mark we find here and there in the pools pretty green algae, some with broad, flat fronds, such as the sea-lettuce (Ulva), and others with slender branching feathery filaments (Cladophora). Many of the green algae, however, prefer to live in fresh water. If you make an aquarium, you will find the sea-lettuce and the sea-grass (Enteromorpha) of great value in keeping the water pure, owing to the amount of oxygen which they give out.

Farther down on the beach the rocks are covered thickly with alge of an olive-brown colour. The rocks, indeed, would fare much worse in a storm if the seaweeds were not there to protect them, as the grass protects the soil of the fields.

Look more closely at those big brown sea-wracks and you will notice that the most common kind

(Fucus vesiculosus) has little globular air-bladders arranged in pairs along its flat, smooth-edged fronds. Each blade has a distinct midrib, and where it divides, like all the Fucus group, it splits into two equal branches. On some of the little end branches you may see a yellowish swelling dotted over with minute knobs and pores. These swellings are receptacles for holding the eggs and sperms, which are contained in tiny cavities under each projecting knob. Many seaweeds produce their fruit in winter, when the land plants are sleeping and the fields are bare.

The microscopic sperms correspond to the pollen and the eggs to the ovules of the flowering plants. But there is one wonderful difference. The sperms of the Fucus can move about freely by means of two little projecting threads or cilia. When the tide is out, both eggs and sperms come to the door of their little houses by the help of the mucilage in which they float; and when the sea comes back swarms of these sperms swim away and wriggle about, till one of them comes in contact with an egg. It adheres to and fuses with the egg, which thus becomes fertilized, and is then able to give rise to a young plant. A similar process goes on in all the plants of the Fucus group.

Here is one with notched or serrated edges (Fucus serratus), and without air-bladders; there another well known to every schoolboy as the "bell tang" (Fucus nodosus), with large air-bladders in the centre line of the frond, and yellow fruit-bodies each on a branch of its own, without any trace of midrib.

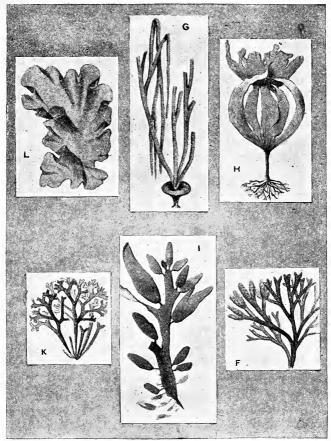
The air-bladders of the seaweeds are natural buoys,

by means of which the plants are kept erect in the water. The mucilage which makes them so slippery to walk over is of the utmost importance, as it protects them from drought when they are left uncovered by the tide. Seaweeds are very simple in their structure, and have no true roots, stems, or leaves. They do not need such organs, for every part of their body is in contact with the water which contains their food-supply.

What are those tufts of reddish-brown threads growing all over the fronds of this Fucus? That is a red seaweed (*Polysiphonia*), which often makes its home under the shelter of a more hardy plant. In the red algae the sperms have no cilia, and cannot move about of themselves, but the eggs have each a long thread, corresponding to the stigma of the higher plants, and against this thread the sperms are driven by currents of water.

The little Fucus known as "teeting tang" (Fucus canaliculatus) ought not to be passed unheeded. It is often much relished by sheep and cattle. You may know it by its greenish-brown colour and by the distinct groove on one side all along its length. It is found only in the upper part of the "ebb." Another interesting plant of this group may be found on the large rocks nearer low-water mark. It is called the "sea-thong" (Himanthalia lorea), because its fructification grows out from a button-shaped base into long, forked, thong-like branches.

If the tide is far out, we shall be able to see the tops of the "red-ware" standing out of the water, and some of the tangles will be quite dry. These tangles belong to the *Laminaria* group, the giants



Common seaweeds .- II.

F, Fucus canaliculatus. G, Himanthalia lorea. H, Laminaria digitata. I, Rhodymenia. K, Chondrus crispus. L, Porphyra.

among the seaweeds. They contain a large amount of iodine in their composition, and that is why they are used for the manufacture of kelp. Notice how

firmly they cling to the sea-bottom by their strong holdfasts, which have weathered many a storm.

An interesting feature in this group is their manner of growth. The growing region lies at the junction of the stalk with the blade. You will often find a specimen in which the old blade is being pushed away on the end of the young one, ready to be broken off and cast adrift by the waves. The stalk itself is perennial, but in some kinds of Laminaria (Laminaria digitata, for example) the blade is usually torn into shreds before it is thrown off.

A well-known ally of the tangles is the "merkal," also called "honey-ware." You can tell it by the prominent midrib and the broad, thin wing on each side, running all its length. This is one of the edible seaweeds. Do you see this bright red palmate plant growing under the shelter of the tangles? It is the common dulse (Rhodymenia palmata), which may often be seen for sale on the streets of our cities. Examine it well and taste it, and you will be able to recognize it in future, however much it may vary in form or colour. But do not eat too much of it, for it is said to be somewhat indigestible.

Another edible seaweed which has been widely used as an invalid food may be found in the lower part of the "ebb," often under the shelter of larger plants. This is the Irish moss or carrageen (*Chondrus crispus*). It is fleshy and pink in colour. A jelly is made from it which is considered a great delicacy.

The purple laver (*Porphyra*) is perhaps the most valuable of the seaweeds as a food, and is said to sell at a high price in Yokohama. In form it

resembles the sea-lettuce. Many other marine algae have been used as food, and none of them are poisonous. In North Ronaldsay the sheep seem to esteem them highly as food.

The most important use of seaweed is to serve as food for various kinds of molluses, crustaceans, and fishes. The "plankton" of the sea-surface—minute one-celled algæ—are very important in this way. What grass is to the land animals, the marine algæ are to the living creatures of the sea. When driven ashore by the waves, or when cut down by the once familiar "hook," the larger seaweeds are much used as manure for field crops. They thus repay the debt they owe for any portion of their food that may have come originally from the dry land.

Before returning from our walk let us haul down this small boat from its "noust" and take a bird's-eye view of the seaweeds in their natural habitat. Through the clear water beneath us we can see the strange shapes of the submerged vegetation, dense and tangled, with here and there a lazy sea-urchin on the broad red-ware, and the sillocks actively swimming around. But our oars are entangled in the "drew" (Chorda filum), so full of annoyance and even of danger to the swimmer. Look at one of those long threads. It is covered with hairs; it tapers towards both ends, and its fructification extends along its whole surface. In structure it is a hollow tube divided into many chambers.

What a variety of colours and shades we see as we look down on this wonderful submarine scenery! We notice that near high-water mark green is the predominant colour, and that the lower belt is mostly brown, while here at low-water mark and beyond it, as well as under the shelter of the seawracks and tangles, shades of red prevail. Beyond the depth of thirty or forty fathoms seaweeds are extremely rare, owing to the want of light at the sea-bottom: seaweeds, like other plants, cannot take in their food in darkness.

Notwithstanding their varied tints, the fundamental colour of all seaweeds is green, as you can prove for yourselves by boiling a few brown specimens, or soaking them for some time in fresh water. You will find that the other colouring matters are dissolved out, and only the green is left. The red or brown pigments are probably of use in aiding or in protecting the green colouring matter, chlorophyll, in its important work of assimilating the food material.



CRABS.



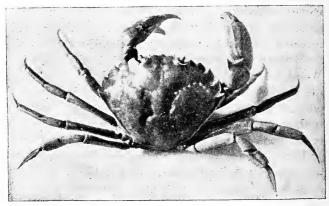
HEN I was a boy at school we frequently amused ourselves by catching crabs. The scene of our operations was the Peerie Sea, where a wall had been built along the shore. Here we used to

gather, armed with a piece of string and bait of some kind, and we often spent a whole long evening perched on the wall, fishing for crabs. The Peerie Sea was a receptacle for all kinds of refuse, and formed a happy hunting-ground for swarms of crabs.

When one thinks of catching crabs, one may naturally imagine an excursion to the shore during ebb-tide, and much turning over of stones and seaweed. Our method was quite different. We made the crabs come to us. Our bait was a piece of fish or anything of an animal nature, provided it was fairly tough. No hook was necessary; we simply tied the end of the string round the bait.

The baited line was let down into the water, preferably in the vicinity of a crab, and drawn slowly along the bottom. If the animal was timid, and not very hungry, he often scuttled off in a fright.

Usually, however, he was both hungry and fearless, and seized the bait at once, trying to drag it in among seaweed or into a hole. Now came the exciting part of the business. Our object was to haul him up before he quitted his hold. The wall was high, and he required careful management. Sometimes when he was drawn up out of the water he would let go, and fall back with a flop into the sea again; sometimes he would hold on till he was drawn up over



Common shore crab.

the wall, and then we shook him off on the pavement behind.

Occasionally when we had no bait we would manage to land a crab with a small stone or a cinder. So long as the stone lies motionless on the bottom he pays no attention to it. As soon as it begins to move, drawn along by the string, the crab rushes at it and seizes it with his claws, and it is some time before he finds out his mistake. Not infrequently he will allow him-

self to be drawn quite out of the water, clinging to his find. It is very amusing to see the crab worrying a hard stone, then dropping it when he has discovered it is not eatable, and then seizing it again as it begins to move away from him, just like a kitten with a ball of wool. Apparently he cannot resist the idea that movement means life.

The commonest kind of crab in Orkney is the green shore-crab. He is on the whole a bold animal, but when frightened he runs away with great speed. He moves sideways, and thus meets with less resistance from the water than if he were to move directly forward. Usually, however, he does not walk fast, but creeps over the bottom in a leisurely fashion. When seizing his food he comes up to it "head on," his nipping claws held wide apart; when he is near enough, he suddenly brings them together, and begins to tear up the food in little bits and pack it into his mouth.

His eyes are placed on the tip of movable projections, so that they command a wide view. He cannot see behind him, however, or under his body, and he usually keeps his eyes fixed in the direction in which he is going. When he is resting, his eyes are ever on the watch. Every little movement on the beach near him he notices at once.

The crab has a peculiar method of feeding. His mouth is just under his head, and the opening is guarded by two flat jointed plates, one on each side of his mouth. If you pull these two plates apart—after having arranged with a friend to hold his pincers—you can see where his mouth is, and you may notice two strong things which look like teeth. These are

really his jaws; they move from side to side, and not up and down like our jaws. To see how he feeds, you must put him into a glass jar, and look up from below while he is eating a bit of fish. He tears it up with his pincers, and puts little bits into his mouth, the parts of which move from side to side as he eats.

He is not very particular as to what he eats. He is, indeed, a cannibal, and will eat the crushed leg of another crab as readily as anything else. He is one of the most useful animals on the beach, however, and has been called the scavenger of the shore. In fact, if one wishes to get the flesh cleaned off the skeleton of any large animal, there is no easier method than to lay it on the beach, well below high-water mark, and build stones around it, leaving spaces between them to admit crabs.

As we have already said, the crab is bold and fearless. He is safe in his coat of armour, and his pincers are powerful weapons of offence and defence. When fighting he rears himself up and throws his nipping legs far apart with the pincers wide open. He then looks a formidable animal; and he really is formidable, for with these legs he can protect almost any part of his body, and the strength of his grip is considerable.

Take up a dead crab and examine his biting leg. The different parts are joined by hinges. Each hinge allows of motion only in one plane, but the various planes are so adjusted that the limb can be moved in almost any direction. Only one part of his body cannot be touched by his pincers, and that is his back. If you wish to grasp a live crab with impunity, seize him across the back just where his

walking legs join the body. He may struggle as he pleases, but he cannot nip you.

It is quite a common thing to find a shore crab with one or more legs wanting, or with one large pincer and one small one. What is the reason of this? It means that at one time or other the crab has had a limb torn off in a fight, for the males are continually fighting with one another. When a limb is lost it is not a very serious matter, for a new limb soon begins to grow on again, and after a time becomes as large as the lost one.

There are times, however, when the crab is by no means pugnacious. One sometimes finds under a stone a crab which has hardly enough spirit to lift his pincers in self-defence. On touching him one finds that he is quite soft. What has happened to him? He has recently been casting his coat; for, as the animal goes on growing within his shell, he becomes too big for it, and the only thing he can do is to burst the shell and come out of it, and then wait for a bigger one to grow. When he is thus moulting, he is glad to crawl away and hide till he is able to face the world again. Many of the empty crab shells that one picks up on the beach are the old cast-off clothes of crabs still alive and vigorous. By examining one of these we can see how thorough the process of moulting is; not only are the shells of his back and his legs thrown off, but the covering of his eyes, his feelers, his mouth parts, and even the inside lining of his stomach,—for, strange to say, the wall of his stomach is lined with the same kind of shell as the outside of his body.

The crab is formed for living in water, but he

can stand long exposure to the air. If you cover him with damp garden soil or peat mould he will survive for days. The reason is that so long as his gills are kept damp he can breathe and live quite well. The lobster breathes in exactly the same way, and when lobsters are being shipped for the southern markets they are put in boxes with layers of wet seaweed to keep them alive.

Have you ever seen the beautiful set of gills which the crab has? If you find a dead crab that has been lying on the beach for some little time, you can easily remove the upper shell, leaving the soft parts of the body with the legs attached. Just above the attachment of the legs there is a series of brown feathery-looking things which seem to cover the whole side of the body. These are the gills. They lie in a special chamber, occupying about half of the whole space inside the shell. While the crab is alive, the gills are continually bathed in a current of water, which is pumped in through a small hole at the side of his mouth and drawn out at another hole near it. If the gills become dry the animal soon dies.

There is a curious pointed flap folded tightly across the crab's body underneath, which is commonly called its "purse." It used to be a schoolboy belief that the crab carries its money here. The fact simply is that the purse is kept closed for the sake of protection, as the skin underneath it is soft and might easily be injured in a fight.

You have all seen the long tail of the lobster, with its broad flaps at the end. By suddenly bending its tail underneath its body the lobster is able to propel itself backwards through the water at a great rate.

The crab and the lobster are, as you may know, closely related, and the purse of the former corresponds to the tail of the latter. The purse or tail of the crab, however, is always tucked up under the body, and is never used for swimming.

Both animals carry their eggs on this part of their body, and you may occasionally find a crab with its purse so full of eggs that it cannot be closed. These eggs have a curious history. When they are hatched, it is not a small crab that comes out, but a funny little creature not in the least like its parent. It has a rounded body and a long thin tail, and swims actively about. At this stage it is called a zœa.

By-and-by the creature settles down to the seabottom and casts its shell. Its back is now broader and its tail shorter, and it is provided with claws; but it is still quite unlike a crab, and swims freely about. It is now known as a megalopa. Swarms of these may be found clustered round seaweed and other floating substances, both near the shore and in deep water. As it grows it again casts its shell, but it now tucks in its tail and settles down in life as a real crab, though of course a very small one as yet: you may find scores of them on the beach not much bigger than a split pea.

Besides the green crab there are others which are common on the sea-beach. One of these is the edible crab or "partan." This crab lives in somewhat deeper water than the other, and is of a dark reddish or purplish hue on the back, while its under parts are white. It is not nearly so quick and active in its movements as the green crab, but when it does get hold of anything it has a stronger bite. In deep

water it grows to a giant size, and it is regularly caught in creels and sold for food, as its flesh is firm and good to eat. The flesh of the green crab, on the other hand, is much softer and less abundant, and it is not used for eating. Strangely enough, all crabs turn red when boiled, whatever their colour when alive.

Another curious crab is sometimes found in weedy pools on the beach. This animal is of a spidery form, and is much more difficult to see than an ordinary crab, for he is elaborately disguised. His back and legs are grown over with hairy brown seaweed, and as he always lies among a mass of similar weed it is impossible to detect him so long as he remains at rest. When he does move, his movements are extremely slow. If you take him out of the water, he looks a most uncouth creature as he feebly sprawls about. Place him back in the bunch of seaweed from which he was taken, and he immediately adjusts himself so as to become invisible. This is his mode of escaping observation, for he is too slow and weak to be able to defend himself.

Still another odd-looking crab may be found in deep water. This animal has rather thin legs, while its back is somewhat pear-shaped, the pointed end being directed forwards. It is, however, a much more active animal than the last mentioned, and we may often see it from a boat as it climbs about on the broad blades of the tangles. It is rarely found on the beach, but the cast off shell of the animal may be found on almost any part of our shores.

One of the most interesting of our crabs is known as the hermit-crab. He belongs to the family of

soft-tailed crabs, and in shape is more like the lobster than the other crabs we have mentioned. The hinder part of his body being without armour, he is forced to seek an artificial defence, and this he finds in the empty shell of a whelk or "buckie," into the spiral coils of which he inserts his unprotected tail. These creatures are generally called hermit-crabs, because each lives in his own separate habitation, like a hermit in his cell or like Diogenes in his tub; but,

unlike these in their habits, they are so pugnacious that they are also known as soldiercrabs.

Hermit - crabs

may be found plentifully on the shores, of various sizes, and inhabiting any kind of

ing any kind of shell that they find to suit their size. If we look



Hermit-crab (with anemone on shell).

into a shallow sand-bottomed rock-pool, we may see some of these shells moving about at a rate to which they were quite unaccustomed during the life of their builder and original occupier: we know at once that each of these shells has now as a tenant one of those interesting crabs.

By means of an apparatus at the extremity of his tail the hermit holds firmly to his temporary abode, and he flattens himself closely against the shell,

(1,384)

370 · Crabs.

leaving exposed only the one large pincer which is specially fitted to bar the door against intruders. It is difficult to seize the creature at all; and even when a grasp of any portion can be secured, the hold of the tail is so firm that the animal runs some risk of being torn apart rather than leave his shell.

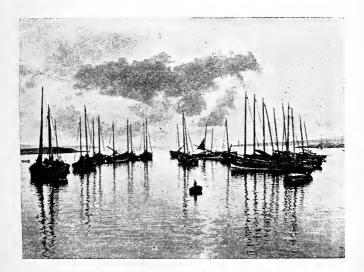
A well-known writer on Natural History, the Rev. J. G. Wood, has given an interesting account of the hermit-crab, from which we quote the following

paragraphs:-

"The combative propensities of these creatures are If two hermits of fairly equal size are placed in an aquarium, they are not content with appropriating different portions of the vessel to themselves, but must needs travel over it and fight whenever they meet. This struggle is constantly renewed, until one of them discovers his inferiority and makes way whenever the victor comes near. When they fight they do so in earnest, tumbling over each other, and flinging about their legs and claws with great energy. They are not at all particular about diet so long as it is of an animal substance, and will eat molluses, raw meat, or even their own species. More than once when a hermit has died I have dropped the body into the water so as to bring it within view of another hermit. The little cannibal caught the descending body in one of his claws very dexterously, and holding it firmly with one claw he picked it to pieces with the other, and put each morsel into his mouth in a rapid and systematic manner that was highly amusing.

"When a hermit desires to change his habitation, he goes through a curious series of performances. A

shell lies on the ground, and the hermit seizes it with his claws and his feet and twists it about with wonderful dexterity, as if testing its weight; and after having examined every portion of its exterior, he proceeds to satisfy himself about its interior. For this purpose he pushes his fore legs as far into the shell as they will reach, and probes every spot that can be touched. If this examination satisfies him, he whisks himself into the new shell with such rapidity that he seems to have been acted upon by a spring. Such a scene as this will not be witnessed in the sea unless the hermit is forcibly deprived of his shell, but when hermits are placed in a tank or vase they seem to be rather fond of 'flitting.'"



HOPPERS AND SHOLTIES.

F t

F the great multitude of different animals which live on the seashore possibly the most numerous are the little creatures known as "sholties" or "Shetland sholties." They are to be found on almost every beach. Their peculiar shape,

flattened on the sides, their habit of hiding in crowds under stones or seaweed, their intense alarm when they are suddenly exposed, and their vigour in escaping into a new hiding-place, are known to every schoolboy. They look very different from their pugnacious relatives, the crabs; they are feeble creatures, more ready to escape from danger than to offer fight. Yet they are most interesting little animals, and the more one watches their ways the more one comes to understand their wonderful adaptation to their surroundings.

Though their general appearance is quite familiar, it is not so commonly known that there are many different varieties of these creatures. As a matter of fact, there are scores of different kinds, some living on the beach, some just below extreme low-water mark, and others in the deep sea. We shall concern ourselves here only with those that live on the beach.

There are three common kinds which every one ought to know. Two of these, curiously enough, though beach animals are not really sea animals. They are hardly ever in the water; they live on

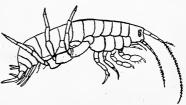
the fringe of beach which lies just above high - water mark. The sea reaches them but rarely, and they never voluntarily seek the water. These two kinds are known as the shore - hopper (Orchestia) and the sand-hopper (Talitrus), the latter being found mostly on sandy beaches, where they make little burrows in which to hide, and the former living under stones among the decaying seaweed on stony beaches. They both get their name of "hopper" from their



Shore-hopper (Orchestia).



Sand-hopper (Talitrus).



Sholtie (Gammarus).
(All magnified about three times.)

habit of leaping or springing into the air, by means of which they often avoid capture by enemies. French people call them "sea-fleas."

The third variety, which is probably best known of

all, and to which the name of "sholtie" is here more especially applied, is that which occurs farther down on the beach in places which are constantly wet with sea-water. This animal (Gammarus) is much narrower in the body than the other two, and some of its legs are bent backwards along its side, so that by means of them it can run or crawl on its side. Indeed. when out of the water this creature in quite unable to walk back uppermost; whenever by any chance it does succeed in raising itself into what is for most animals the normal attitude, it immediately topples over on its side again. It can be readily distinguished from the other two forms by having two pairs of long, delicate feelers or antennæ in front of its head; the hoppers have only one long pair of antennæ and one short pair.

All these animals, in spite of their small size, are near allies of the crabs and lobsters. A naturalist would tell you that they belong to the group of the Crustacea, this name being applied to all animals of the crab tribe on account of the firm, crackly skin or shell which surrounds them. The Crustacea are marked by other features in addition to the possession of this hard exterior. They are all jointed animals, their body being built up of a series of segments, each of which carries a pair of legs or appendages of some kind, these appendages also being jointed. In the crab and the lobster a number of segments have become fused or welded together to form the front part or body of the animal. In the group of animals to which the sholties belong the segments are all distinct.

To understand something of the structure and the general habits of the sholtie, all that we require to do is to collect a few specimens from the beach and put them in a saucer with a little sea-water. They will swim about in a very active fashion, the swimming being performed by means of little fanlike appendages attached to the under part of the animal just where the swimmerets are in the lobster. By the vigorous strokes of these appendages the animal forces its way through the water.

These appendages are, however, of use in another way; the gills of the animal are attached to them. Even when it is lying almost dry, or in water too shallow for swimming, these appendages can be seen to work regularly and rhythmically with a gentle flapping movement. Sometimes they stop working for a little and then begin again, but they are never long at rest. In this way currents of water are made to bathe the gills continually, and the flapping of the appendages is really a breathing movement.

The walking legs are attached to the fore part of the body. Some of them point backwards, as has already been mentioned, and the animal prefers to crawl or run on its side. As a rule, too, it propels itself over the ground by jerking movements of its body, its tail being alternately curled up and then suddenly straightened out again. It is in this way that it wriggles over the stones and escapes into a place of safety when exposed.

One of the most characteristic points about the sholtie is its habit of clinging to objects, especially if they afford a cover from the light. Drop a bit of seaweed into the dish where they are swimming, and in two or three minutes the sholties will all be found clinging to the under surface of the weed. We

might indeed imagine that they had escaped from the saucer. They cluster like swarming bees round the smallest blade of seaweed, and it is only by turning over the weed that we can make sure that they are there. When exposed to full daylight they seem uncomfortable, and keep swimming about trying to find a hiding-place. It is only when they find something to cling to and to hide under that they really rest and feel at ease.

But we have not yet examined the hoppers. Though externally so like the sholties, they are very different in constitution and habits. To understand the difference between the two classes of animals. the best plan is to put either a shore-hopper or a sand-hopper into some water along with a sholtie. The latter is an active little animal in the water, capable of moving about like a fish. The hopper, on the other hand, is obviously out of his element; he sinks to the bottom of the dish and there works his way along in lumbering fashion. breathing organs can be seen waving backwards and forwards in rhythmical fashion, but they are too feeble to be used for swimming. The shorehopper can breathe quite well in water, and may live in it for days. It is said that sand-hoppers do not stand long-continued immersion, and die of drowning.

On land, however, the hopper is at home, provided he gets just sufficient moisture to keep his gills damp. Not only can he crawl about back uppermost—a feat which the *Gammarus* would attempt in vain—but as he crawls he keeps his tail curled up under his body, and by suddenly straightening this out he can throw himself into the air with considerable

vigour. In this way he often not merely escapes from an enemy, but even drives terror into the heart of the pursuer. It takes some little time to realize that hoppers can be handled with impunity, and are harmless for all their sudden jerky movements.

Why do these animals live on the upper fringe of beach, and what do they find there to eat? The answer is simple. They live on the cast up refuse of the sea; they are the scavengers of the jetsam. Naturalists who are collecting the skeletons of small animals often put the carcases which they wish to have cleaned under some decaying weed on the beach. After a week or a fortnight the bones are found to be picked absolutely clean.

In order to tell the sand-hopper from the shorehopper we have only to look at his front feet. If they are all thin and slender, the animal is a sandhopper; if one pair of the front feet are clubbed at the end and armed with a claw, we know that he is a shore-hopper.



SEA-ANEMONES.



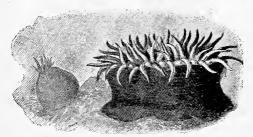
HEN the tide ebbs and leaves the rocks exposed we may find here and there a few soft, rounded objects attached to the bare rock, often bright red in colour, and looking like strawberries or ripe cherries.

They are found especially on the sheltered sides of high rocks and in the angles formed by slight ridges and clefts. We do not seem to have any local name for these objects, although they are so common and conspicuous; one wonders why our name-inventing forefathers did not bestow on them some descriptive title. Their English name is "sea-anemone," a term derived from their resemblance to the anemone flower.

It is only when they are covered by the water, however, that they deserve the name of anemone, for then they open out like a bud and spread out circles of leaf-like projections, much as an opening daisy or dandelion does. They usually remain open during the whole time that the tide is up; when the water goes back again these leaves all curl in towards the middle of the anemone and are folded up inside, leaving only a little dimple on the top to indicate where they have disappeared.

Sea-anemones, however, are by no means flowers. Their jelly-like consistency and their habits would lead us to classify them as animals, and this they undoubtedly are. Though they seem to be rooted to one spot, and to open and close like a plant, their real habits are those of an animal. As a matter of fact, they are carnivorous animals; they first kill their victims by poisoning them, and afterwards devour them. If they had the power of moving rapidly in pursuit of prey, they would be as deadly to the general population of the beach as are the most venom-

ous snakes to the creatures on land. As it is, they account for a very considerable number of



Sea-anemones.

the beach inhabitants by simply lying in wait and grasping the little animals that happen to stray within their reach.

The beautiful circles of leaflets which we see so regularly arranged are really active grasping tentacles, armed with whole batteries of little poisonous stings. With these tentacles they seize hold of any little creature, such as a "sholtie" or a young crab, that happens to move over them. The poor animal is held fast in spite of all its struggles, tentacle after tentacle is brought up by the anemone to grasp it, while hundreds of fine stinging darts discharge into

it their poison, and the victim, its struggles gradually becoming more and more feeble, is ultimately drawn into the centre of the animal, where lie its mouth and its stomach. Then the tentacles are all closed in over the prey, and remain thus closed for a time—a day or several days, according to the size of the animal caught. During this time the process of digestion is going on, and when it is completed the skeleton and useless parts of the animal are discharged by the same opening as that by which it was taken in, and the anemone once more spreads its tentacles to wait for its next victim.

It is not only living animals that the anemone will devour. Anything of animal nature, dead or alive, is grist to its mill; and though it has no eyes, it can quite well distinguish what is good for food. A waving branch of seaweed borne towards it by currents in the water is quite ignored, while a bit of flesh is never allowed to come in contact with the tentacles without an effort being made to secure it. By some natural power, whether by the sense of smell or of taste or by some other sense unknown to us, the creature distinguishes unfailingly what it needs. It is great fun to feed it with small portions of limpet or of whelk, and by doing so one can see exactly how the process of feeding is carried on.

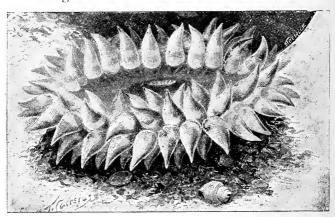
One might imagine that the anemone would easily fall a prey to larger and stronger animals. It has no hard skin or shell to protect it, and its beautiful jelly-like appearance would suggest to any hungry fish or crab that it is not only easy to demolish but would form a juicy morsel. Yet it does not seem to be in any danger from such enemies. I was once amusing

myself by throwing little pieces of bait into the sea among a crowd of sillocks. Along with the bait, which consisted of limpet and fish, I threw in a morsel of one of these red anemones. A bold young sillock immediately snapped it up. Then something seemed to go wrong, for the poor young fish suddenly shot the anemone out of its mouth and swam off without so much as looking at the other bait which I threw all round about it. The piece of anemone was less palatable than it looked.

Strangely enough an anemone is not much inconvenienced by being cut into bits. The individual pieces if put into the sea again close up and grow into new animals. No doubt the piece which the sillock swallowed was fully alive, and stung the mouth and throat of its captor so severely that the fish was only too glad to be rid of it.

All anemones are not red in colour like those of which we have been speaking. There is a great number of different kinds of these creatures round our shores, but most of them are only to be found by careful searching. Some are found in rock-pools; these are generally coloured more or less like the seaweeds in the pools. Others are found only in dark places; under large stones or boulders near low-water mark they grow in all attitudes—upright, sideways, and upside down—attached by their base to the surface of the stone. The greatest variety of them I ever saw was found among the stones of a little jetty or pier, which was being taken down to make room for a larger pier. The under surface and the sides of the stones on this pier were simply covered with anemones of all sizes, shapes, and colours.

The various kinds of anemone differ not only in colour but also in size and shape. Some are minute things, with a thin body or stalk crowned at the top with long, fine tentacles, which they wave about actively through the water in search for small prey. Others again are large, and one kind, known as the dahlia, which is common in Orkney, attains to gigantic proportions; when its tentacles are expanded it is as wide across the top as the mouth of a large breakfast cup. The dahlia is variously coloured, sometimes dark crimson, the tentacles being marked with broad rings of crimson and white, sometimes green with red markings. The outside of its body is usually covered with bits of gravel and broken shells, so that when the animal closes up there is nothing to be seen but a rounded heap of gravel. When open it is a magnificent creature, and its broad, tapering tentacles shine with an iridescent light.



Dahlia anemone.

Part IV.—Legend and Lay.

THE OLD GODS.

N the north of Europe there lived long ago that race of people whom we know as the Norsemen—tall, fair-haired men, strong and warlike, and as much at home on sea as on land. They came to Britain in great numbers at different times, and many of them settled there. We read of

them sometimes as Vikings, sometimes as Danes, and sometimes as Normans. The Saxon settlers of a still earlier time were of the same kindred. We have already told the story of their settlement in Orkney, and of the earldom which they established there. Everything that we can find out about this wonderful race of sea-rovers and warriors is of interest to us; for while most of the lowland dwellers of Scotland and England have some Norse blood in their veins, we who live in these northern islands regard ourselves as the lineal descendants of those Vikings.

Before the Norsemen became Christians, they believed in many gods and goddesses. They had gods of the sky and of the sea, of spring and of summer, of thunder and lightning, of frost and of storm.

Many a strange tale they told of the doings of their gods, and most of those tales are really pictures of the processes that take place in nature—of the wars between wind and sea, between light and darkness, and between sun and frost.

In the beginning, they believed, there was the great Spirit, the Creator. Of him they have no tales to tell. Then the world was made—or rather the worlds, for the Norsemen thought that besides this world of men there were a world of the gods, a world of the giants, and other worlds. Between Asgard, the home of the gods, and Midgard, the world of men, a beautiful bridge was built, which we call the rainbow.

Odin was the highest of the gods. He was the god of wisdom and of victory, and the friend of heroes. Men spoke of him as tall and strong, with long, flowing hair and beard, and wearing a wide blue mantle flecked with white, as the blue sky is flecked with fleecy clouds. On his shoulders sat two ravens, Thought and Memory. They roamed over the world every day, and came back at night to whisper in his ear all they had seen and heard. At his feet crouched two wolves, which he fed with his own hand.

Odin had three palaces in Asgard. One of these was Valhalla, the home of heroes; and hither came at their death all the brave men Odin loved so well. He sent forth beautiful maidens to hover over every field of battle, and to carry home to Valhalla those who fell in the fight. In Valhalla the brave lived for ever. They spent their days in fighting, as they had loved to do on earth; but every evening the warriors returned to the hall of feasting, unhurt, and the best of friends. Such was the Norsemen's idea of a heaven for heroes.

Odin gave men wisdom as well as courage. Only through suffering, however, did he become the god of wisdom. It happened on this wise. Far below the world of the giants was a crystal spring which watered the roots of the tree of life—a great tree reaching up to heaven. This well was the fountain of wisdom, and whoever drank of it became wise. It was guarded by a giant called Mimir, or Memory. Mimir was older than the gods, and wiser than they, for he remembered all things. Odin went down below the world of the giants one day, and he said to Mimir, "Give me a drink of the clear water of your well."

"Ah," said Mimir, "this water is never given to any except at a great price. You must be willing to give up the most precious thing you possess before you can drink at Mimir's fountain."

"Be it so," replied Odin; "I will give whatever you ask."

Mimir looked at him, admiring his courage, and at length replied, "If you would drink, you must leave with me one of your eyes."

This was a great price to pay, but Odin did not flinch. He drank of the fountain, and came back to Asgard with only one eye, but he had won the wisdom he desired.

Thor was the god of thunder; he was the champion of the gods, and defended Asgard against the giants. His was the largest palace in Asgard; it had five hundred and forty halls and many great doors, and was called by a name which means Lightning. Thor wore a crown of stars upon his head, and rode in a chariot drawn by two goats, from whose hoofs and teeth flashed sparks of fire. To Thor belonged three

very precious things. The first was his mighty hammer, with which he fought the frost giants. The second was his belt of strength: when he girded himself with this his strength was doubled. The third was his iron gauntlet: with this he grasped his famous hammer, which he made red-hot when he fought the giants.

Loki was the spirit of evil and mischief. Having been banished from Asgard for his wickedness, he lived many years in giant-land, rejoicing in his evil deeds. He had three children, each as full of evil as himself. So much mischief did they work that Odin looked down from Asgard with a grave countenance. must not be," he said; "Loki's children will fill the world with evil." So Odin fared forth to giant-land. One of the evil brood he sent to the under world of darkness, and one he threw into the sea. The third. Fenris the wolf, was so strong that Odin spared him. "If he were to live with the gods," he said, "his strength might be turned to good instead of ill." So he took Fenris the wolf up to Asgard, to see whether he would learn goodness with his strength.

Who among the gods would care for the wolf-spirit? Brave Tyr was ready with the answer. "Father Odin," he cried, "I delight in strength. Let me have the charge of this fierce fellow; I care not if the task be hard and dull." So Fenris became his charge. He fed him with sheep and oxen, and took him with him upon his journeys. But Fenris did not learn the ways of the gods. His muscles were like iron, and his teeth stronger than steel, but his heart remained savage and cruel.

One night Odin called the gods together. "Sons,"

he said, "I have looked upon Fenris, and seen his cruel strength. There is no love in his eyes, and no thought of good in his heart. Day by day he becomes stronger for evil. We must bind him, or he will destroy us." They listened, and saw that the counsel of Odin was good. "Come with me," said Thor the mighty; "I will forge a chain that will hold him fast." All night long the gods watched Thor toiling at his anvil, dealing great blows upon the glowing iron, and sending sparks like shooting-stars through the darkness. When morning came the massive chain was finished.

"Come, Fenris," called Thor, "you are strong; let us see you break this chain which I have made." Fenris allowed them to bind him with the heavy links: when they had done so, he stretched his huge limbs, and the thick iron snapped like a thread of silk. The gods kept silence as Fenris walked away.

silk. The gods kept silence as Fenris walked away.

Again Thor led them to his forge; again he toiled all night, hammering and shaping great bars of steel.

When morning came, another chain was ready, ten times stronger than the first. But this chain also snapped like a spider's thread before the might of Fenris.

The gods once more sat in council, and Odin's face was grave. "Great indeed is the power of evil," said the All-wise, "but the power of good must be greater still. Sons, let us call to our aid the skill of the dwarfs. Tyr shall tell them of our need, and they will help us to bind the enemy." Like an arrow from the bow, Tyr sped from Asgard to the cave of the dwarfs, the skilful workers in gold and gems, and gladly they lent their aid to Father Odin. Three nights they

toiled in the darkness, and then they brought to Tyr a delicate chain which might have been spun from a cobweb. "Here is thy chain, O Tyr," they said. "Fierce Fenris cannot escape from its bands."

When Tyr came back to Asgard, Fenris was called once more to test his strength. He looked on the delicate thread, and he trembled; yet he would not seem to be afraid. "If one of you will place his hand in my mouth, so that there may be fair play, I will let you bind me," he replied. The gods looked in one another's faces. Who would dare the power of the wolf?

Brave Tyr stepped forward and put his arm between the wolf's jaws. The tiny chain was wound round Fenris. He rose to stretch himself and shake it off, but it held him fast. With a wild howl he gnashed his teeth together, and Tyr stood before the gods without his strong right arm. Then a great shout arose in Asgard, "Hail to Tyr! he has given his right hand to save the world from evil." It was echoed from the hills, and rang through the caves of the dwarfs. "The chain of the dwarfs is mighty," they said, "but stronger is the brave heart of Tyr." So wisdom and goodness together were more than a match for strength and evil.

Baldur was the god of light. He was the fairest of all that dwelt in Asgard, the best beloved of gods and men. Wherever he went he carried with him that kindness and love which is to the heart of man what light is to the sky. Every one loved him but Loki; the spirit of evil hated the goodness that was in Baldur. Baldur's palace was the home of all that was bright and pure. It was built of the blue of the sky and the clear crystal of running water. Here he

lived in peace, for no evil thing could enter. But Baldur became sad and troubled, for he dreamed that his life was in danger.

Then his mother went abroad over the whole world, and made everything promise not to hurt Baldur. Who would harm the beautiful god? Earth, air, and water, beasts and birds, and plants and flowers—all things promised never to hurt him. So his mother returned to Asgard with joy, but still Baldur was sad. Then the gods invented a kind of game to cheer his heart. They made him stand in the midst while they threw at him weapons and all hurtful things, to show that nothing could do him harm; and thus they amused themselves many days.

In the meantime Loki disguised himself as an old woman, and went to Baldur's mother. He said he marvelled that Baldur was not hurt, and then the mother told him of the promise which all things had made never to harm her son.

"What! have all things promised this?" asked Loki.

"Yes," was the reply; "all things have promised except one weak little plant, the mistletoe, which grows far away, and which I did not think it worth while to ask."

Loki rejoiced in his evil heart when he heard this. He hurried to the place where the mistletoe grew, and plucked a twig of it, which by his magic he made into a spear. Then he came back to Asgard, where the gods were playing their game of throwing spears at Baldur.

"Why do you not join in the game?" he asked one of the gods.

"Because I am blind," he replied.

"For the honour of Baldur you should throw a spear at him," Loki went on.

"I have no spear to throw," answered the blind

god.

Then Loki put into his hand the mistletoe spear, and helped him to aim it. The spear pierced Baldur through the heart, and he fell dead. Then there were grief and anger in Asgard; weeping and mourning were heard for the first time among the gods.

Odin sent a message to the daughter of Loki, who ruled over the world of the dead, and asked her to set Baldur free. She replied that he would be set free if every living thing would weep for him; but if a single creature refused to weep, he could not return.

Then the gods went through all the earth, and prayed all things living to weep for Baldur. One old woman alone refused, and so Baldur could not be set free. The old woman was no other than Loki, who had taken this form in order to hide himself.

After the death of Baldur came a gloomy time in Asgard. The gods had fierce wars with the frost-giants, and were defeated. This time is called "the twilight of the gods." But even then they looked forward to a better time which was to come, when Baldur should return, and all should be light and joyand peace.

Thus the old Norsemen gave us the beautiful tale of Baldur, the sun-god. When the days are short in winter, the time of the mistletoe, Baldur is dead; but when spring returns, the war with the frost-giants is over, and Baldur returns with light and joy to the northern lands.

A VANISHING ISLAND.

YNHALLOW—the "holy island"—lies in the middle of the fierce tideway that separates the Orcadian mainland from Rousay, the Hrolfsey of the Sagas.

"Eynhallow frank, Eynhallow free,
Eynhallow stands in the middle of the

With a roaring roost on every side, Eynhallow stands in the middle of the tide."

So runs an old island rhyme, and surely never was there an island so beaten upon and shouted round by the angry tides. It sets a black front of jagged rocks to the Atlantic on the west, and the great billows, rushing on the rocks, send spouts of spray high in the air, to whirl eastward over the gradual slope of the isle. All day long the tide sweeps past on either side, boiling and eddying like a swift and deep river. When the wind is in the north-west and a strong ebbtide is running, then is the time to see the roosts in all their glory; for the inrolling ocean swell meets the outrushing tide in the narrow channels, and the white waves leap and roar as if some

"wallowing monster spouted His foam fountains in the sea." To see this mad turmoil of the roost on a wild winter day is strange and terrible; but when the white breakers shout and toss themselves in the sunlight of a still June morning there is a paradoxical charm in the sudden outburst of leaping, sparkling foam amid the blue waters, unruffled of any wind, that the wildest storm of winter can never claim.

There is an even stronger fascination in the swift, dark, silent rush of the tides, ceaseless along the shores, sweeping in with the flood and whirling out again with the ebb, and with the little green isle in their midst setting its steep front to the angry ocean, but sheltering with its two long eastward points a quiet sandy bay where no current ever comes.

All along the coast, on either side of Eynhallow Sound, are low green mounds, marking the places where once were the homes of the prehistoric Orcadians, that Celtic or Pictish race which the conquering Norsemen destroyed so completely that there is not in all the place-names of the isless any trace of their forgotten tongue. Amidst such surroundings, one has only to look at Eynhallow to know that it must have gathered legend and tradition in the long years.

In Rousay there still lingers a tale of the breaking of the spell that held Eynhallow sea-bound; for "once upon a time" the isle was enchanted, and visible to human eyes only at rare intervals. It would rise suddenly out of the sea, and vanish as suddenly before any mortal could reach it. And if any one should feel inclined to doubt this tale, can we not point him to the isle of Heather-Bleather, which is still held by the spell of the sea-folk, and appears and disappears even unto this day?

When Eynhallow was still a vanishing island, it became known in Rousay that if any man, seeing the isle, should hold steel in his hand and, taking boat, go out through the tides, never looking at aught but the island, nor ever letting go the steel till he leaped on to its virgin shore, that man should break the spell and win the isle from the sea-folk for his own people. After many failures—and who can tell how many a brave heart went down the tide to the seatrows in that perilous venture?—there came at last the hour and the man; the vanishing isle was won from the waters, and left standing "in the middle of the tide."

If there be yet any man brave enough to try the adventure of the vanishing island, Heather-Bleather awaits his coming. I have never met any person who would confess to having seen that mysterious isle, but many of the dwellers by the roosts have spoken to those who saw it rise green out of the waters. This island is the home of the Fin-men or Sea-men (not to be too rashly identified with the seatrows), a race of beings who play a prominent part in Orcadian folk-lore.

In Rousay they tell of a maiden mysteriously rapt from the hillside over the sea, and sought in vain by her kindred. Long years after, "when grief was calm and hope was dead," the lost girl's father and brothers were at sea in their fishing-boat, when there rolled down upon them one of those dense banks of sea-fog so common in the North in summer. The fishermen knew not where they were, but sailed on until their boat grounded on an island which at first they took to be Eynhallow. They soon found, however, that they

were on an island they had never seen before, and on going up to a "white house" they found in the "guidwife" who admitted them their long lost daughter and sister. She welcomed them, and in a little time her husband and his brother came in from the sea in "wisps" (the local name for great rolls of heather "simmons," or ropes, used in thatching houses). Others say that they came in the guise of seals, and cast off their skins. Be that as it may, they treated their human connections well and hospitably. When the time came for the men to leave for home, the woman refused to accompany them, but she gave her father a knife, and told him that so long as he kept it he could come to the isle of the waters whenever he pleased. Just as the boat put to sea the knife slipped from the old man's hand into the water; in a moment the fog swallowed the island, and no man has set foot on it since.

In summer and autumn evenings, when the sea-fog comes rolling up in great banks from the Atlantic, and the westering sun fills the hollows between with fantastic lights and shadows—when the islands seem all to shift and change, appearing and disappearing among the huge masses of white vapour, it requires no very strong imagination to see once more the green isle of Heather-Bleather riding the waters, real and solid as its sister of Eynhallow, won so long since from the sea-folk.

Of its old enchantment the isles-folk say that Eynhallow still retains some small part. No steel or iron stake, such as are used for tethering cattle, will remain in its soil after sunset. Of their own motion they leap from the ground at the moment when

the sea swallows the sun. Then, again, no rat or mouse can live upon the island, and it is not long since it was usual to bring boatloads of earth from Eynhallow to lay under the foundations of new houses, and under the corn-stacks in the farmyard. It was firmly believed that through the charmed earth no mouse or rat could pass.

Duncan J. Robertson (The Scots Magazine).

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[Since the preceding article first appeared, a very interesting discovery has been made on Eynhallow, which may help to explain both the name of the island—the "Holy Isle"—and the existence of so many supernatural legends regarding it. References are made in the Sagas to a monastery in Orkney in Norse times, and it is recorded that an abbot from this monastery was appointed to that of Melrose in 1175. Many probable sites were suggested as having been occupied by this monastery, but no remains could be found, and some doubt was felt as to whether it ever really existed in Orkney at all. In the year 1900, however, Professor Dietrichson, a Norwegian, examined the ruins on Eynhallow, and was able to show that they are the long-sought remains of the lost monastery—small in size, but complete in all the details of a Cistercian monastery of the period referred to in the Sagas.]

HELEN WATERS: A LEGEND OF SULE SKERRY.



HE mountains of Hoy, the highest of the Orkney Islands, rise abruptly out of the ocean to an elevation of fifteen hundred feet, and terminate on one side in a cliff, sheer and stupendous as if the mountain had been cut down

through the middle and the severed portion of it buried in the sea. Immediately on the landward side of this precipice lies a soft green valley, embosomed among huge black cliffs, where the sound of the human voice or the report of a gun is reverberated among the rocks till it gradually dies away into soft and softer echoes.

The hills are intersected by deep and dreary glens, where the hum of the world is never heard, and the only voices of life are the bleat of the lamb and the shriek of the eagle. The breeze wafts not on its wings the whisper of the woodland, for there are no trees on the island; the roar of the torrent stream and the sea's eternal moan for ever sadden those solitudes of the world.

The ascent of the mountain is in some parts almost perpendicular, and in all exceedingly steep; but the admirer of Nature in her grandest and most striking aspects will be amply compensated for his toil, upon reaching their summits, by the magnificent prospect which they afford. Towards the north and east, the vast expanse of the ocean, and the islands, with their dark heath-clad hills, their green vales, and gigantic cliffs, expand below as far as the eye can reach. view towards the south is bounded by the lofty mountains of Scaraben and Morven, and by the wild hills of Strathnaver and Cape Wrath, stretching towards the west. In the direction of the latter, and far away in mid-ocean, may be seen, during clear weather, a barren rock called Sule Skerry, which superstition in former days had peopled with mermaids and monsters of the deep. This solitary spot had long been known to the Orcadians as the haunt of sea-fowl and seals, and was the scene of frequent shooting excursions, though such perilous adventures have been long since abandoned. It is associated in my mind with a wild tale, which I have heard in my youth, though I am uncertain whether or not the circumstances which it narrates are yet in the memory of living men.

On the opposite side of the mountainous island of which I speak, and divided from it by a frith of several miles in breadth, lie the flat serpentine shores of the principal island or Mainland, where, upon a gentle slope, at a short distance from the sea-beach, may still be traced the site of a cottage, once the dwelling of a humble couple of the name of Waters, belonging to the class of small proprietors.

Their only child Helen, at the time to which my narration refers, was just budding into womanhood; and though uninitiated into what would now be con-

sidered the indispensable requisites of female education, was yet not altogether unaccomplished for the simple times in which she lived, and, though a child of nature, had a grace beyond the reach of art.

Henry Graham, the accepted lover of Helen Waters, was the son of a small proprietor in the neighbourhood; and being of the same humble rank with herself, and, though not rich, removed from poverty, their views were undisturbed by the dotage of avarice or the fears of want, and the smiles of approving friends seemed to await their approaching union.

In the Orkneys it was customary for the bridegroom to invite the wedding guests in person; for which purpose, a few days previous to the marriage, young Graham, accompanied by a friend, took a boat and proceeded to the island of Hoy in order to request the attendance of a family residing there; which done, on the following day they joined a party of young men upon a shooting excursion to Rackwick, a village romantically situated on the opposite side of the They left the house of their friends on a bright, calm autumnal morning, and began to traverse the wild and savage glens which intersect the hills, where their progress might be guessed at by the reports of their guns, which gradually became fainter and fainter among the mountains, and at last died away altogether in the distance.

That night and the following day passed, and they did not return to the house of their friends; but the weather being extremely fine, it was supposed they had extended their excursion to the opposite coast of Caithness, or to some of the neighbouring islands, so that their absence created no alarm whatever.

The same conjectures also quieted the anxieties of the bride, until the morning previous to that of the marriage, when her alarm could no longer be suppressed. A boat was manned in all haste, and dispatched to Hoy in quest of them, but did not return that day nor the succeeding night.

The morning of the wedding day dawned at last bright and beautiful, but still no intelligence arrived of the bridegroom and his party; and the hope which lingered to the last, that they would still make their appearance in time, had prevented the invitations from being postponed, so that the marriage party began to assemble about midday.

While the friends were all in amazement, and the bride in a most pitiable state, a boat was seen crossing from Hoy, and hope once more began to revive; but, when her passengers landed, they turned out to be the members of the family invited from that island, whose surprise at finding how matters stood was equal to that of the other friends.

Meantime all parties united in their endeavours to cheer the poor bride, for which purpose it was agreed that the company should remain, and that the festivities should go on—an arrangement to which the guests the more willingly consented, from a lingering hope that the absentees would still make their appearance, and partly with a view to divert in some measure the painful suspense of the bride; while she, on the other hand, from feelings of hospitality, exerted herself, though with a heavy heart, to make her guests as comfortable as possible, and by the very endeavour to put on an appearance of tranquillity acquired so much of the reality as to prevent her

from sinking altogether under the weight of her fears.

Meantime the day advanced, the festivities went on, and the glass began to circulate freely. The absence of the principal actor of the scene was so far forgotten that at length the music struck up, and dancing commenced with all the animation which that exercise inspires.

Things were going on in this way when, towards night, and during one of the pauses of the dance, a loud rap was heard at the door, and a gleam of hope was seen to lighten every face, when there entered, not the bridegroom and his party, but a wandering lunatic named Annie Fae, well known and not a little feared in all that countryside. Her garments were little else than a collection of fantastic and parti-coloured rags, bound close around her waist with a girdle of straw, and her head had no other covering than the dark tangled locks that hung, snake-like, over her wild and weather-beaten face, from which peered forth her small, deep, sunk eyes, gleaming with the light of insanity.

Before the surprise and dismay excited by her sudden and unwelcome appearance had subsided, she addressed the company in the following wild and

incoherent manner,—

"Hech, sirs, but here's a merry meeting indeed. Plenty o' gude meat and drink here, and nae expense spared! Aweel, it's no a' lost neither; this blithe bridal will mak' a braw burial, and the same feast will do for baith. But I'll no detain you langer, but jog on upon my journey; only I wad juist hint that, for decency sake, ye suld stop that fine fiddling and dancing."

Having thus spoken, she made a low curtsy, and hurried out of the house, leaving the company in that state of painful excitement which, in such circumstances, even the ravings of a poor deranged wanderer could not fail to produce.

In this state we too may leave them for the present, and proceed with the party who had set off on the preceding day in search of the bridegroom and his friends. The latter were traced to Rackwick; but there no intelligence could be gained, except that some days previous a boat, having on board several sportsmen, had been seen putting off from the shore, and sailing away in the direction of Sule Skerry.

The weather continuing fine, the searching party hired a large boat, and proceeded to that remote and solitary rock, upon which, as they neared it, they could discover nothing, except swarms of seals, which immediately began to flounder towards the water's edge. A large flock of sea-fowl arose from the centre of the rock with a deafening scream; and upon approaching the spot, they beheld, with dumb amazement and horror, the dead bodies of the party of whom they had come in search, but so mangled and disfigured by the sea-fowl that they could barely be recognized.

It appeared that these unfortunates upon landing had forgotten their guns in the boat, which had slipped from her fastenings, and left them upon the rock, where they had at last perished of cold and hunger.

Fancy can but feebly conceive, and still less can words describe, the feelings with which the lost men must have beheld their bark drifting away over the face of the waters, and found themselves abandoned in the vast solitude of the ocean.

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With what agony must they have gazed upon the distant sails, gliding over the deep, but keeping far aloof from the rock of desolation. How must their horrors have been aggravated by the far-off view of their native hills, lifting their lonely peaks above the wave, and awakening the dreadful consciousness that they were still within the grasp of humanity, and yet no arm was stretched forth to save them; while the sun was riding high in the heavens, and the sea basking in his beams below, and Nature looking with reckless smiles upon their dying agonies!

As soon as the stupor of horror and amazement had subsided, the party placed the dead bodies in their boat, and, crowding all sail, stood for the Orkneys. They landed at night upon the beach, immediately below the house where the wedding guests were assembled; and there, while debating in what manner to proceed, they were overheard by the insane wanderer, the result of whose visit has already been recorded.

She had scarcely left the house, when a low sound of voices was heard approaching. An exclamation of joy broke from the bride. She rushed out of the house with outstretched arms to embrace her lover, and the next moment, with a fearful shriek, fell upon his corpse! With that shriek reason and memory passed away for ever. She was carried back delirious, and died towards morning. The bridal was changed into a burial, and Helen Waters and her lover slept in the same grave!

John Malcolm. (Adapted.) (Native of Firth, Orkney; 1795-1845.)

A LEGEND OF BORAY ISLAND.*

In the far-off Northern Islands,
Where the wild waves ever flow,
I have heard a wondrous legend
Of the days of long ago.

There, amid the circling waters,
Boray Isle lies all alone,
Silent ever, save at nightfall
On the eve of good St. John.†

Those who in the faith of Odin
'Neath the waves have sunk for aye,
Are as sea-beasts doomed to wander
Till the dawn of Judgment Day.

Once a year on Boray Island
They revisit scenes of earth,
And, their ancient forms resuming,
Hold their wild unhallowed mirth.

On the shore their sealskins leaving, They in revels pass the time, Till the midnight hour resoundeth From St. Magnus' distant chime.

^{*} Boray Island, or Holm of Boray, off Millburn Bay in Gairsay.

† Midsummer Eve.

At the solemn knell the dancers
In wild haste their guise regain,
And as seals once more appearing
Plunge below the waves again.

Long ago a Northern fisher
In a storm was left alone,
And to Boray Isle was driven
On the eve of good St. John.

There he saw the ghostly revels—
Music wild fell on his ear;
And he snatched a cast-off sealskin,
And he hid in mortal fear.

All the evening long he watched them,
Till he heard St. Magnus' chime—
Twelve deep tones proclaimed the hour
When was o'er the fated time.

At the solemn knell the dancers
In wild haste their guise regain—
All save one; a fair sea-maiden,
Seeking for her robe in vain.

All the others plunged and left her,
And no more could Eric bide,
But his friendly shelter leaving,
Hurried to the maiden's side.

Flung his fisher mantle round her; With the Cross he signed her o'er; And with loving words addressed her, Bidding her to fear no more.

- "Fairest one! no longer fated
 As a wild sea-beast to roam,
 Come and be my bride, my treasure,
 Mistress of my hearth and home.
- "Thou shalt be a christened woman By the help of good St. John, And at blessed Magnus' altar Holy Church shall make us one."

So he spake, and so he won her,
And he took her to his home;
'Margaret' was the name they gave her,
'Pearl' cast up from Ocean's foam.

Three bright years they dwelt together,
Love and joy around her grew;
Every day he blessed the tempest
That his bark on Boray threw.

But when spring three times had circled, Margaret's cheek was thin and white; Day by day her strength departed, And she faded in his sight.

Then she spoke, and thus she bade him:
"Death's cold touch is on my heart,
But in peace from this dear homestead
Soul and body cannot part

"Till I know my fate for certain—
If the holy water shed
On my christened brow will save me
From the doom of Odin's dead.

"Row me in your skiff, my husband, On the eve of good St. John; Take me back to Boray Island, Lay me on the sands adown.

"Clasping fast the Cross of Jesus, I must meet the dead alone; If they still have power o'er me, Ere day breaks I shall be gone.

"All alone you needs must leave me;
Pass in fast and prayer the time;
And return when o'er the waters
Peals St. Magnus' midnight chime.

"And if Cross and Chrism guard me From the sway of spirits foul, Then, my husband, know for certain Christ will save my ransomed soul."

All her bidding he accomplished,

Though his heart was sad and sore:
On the fated eve he took her,

Laid her down on Boray shore;

Went where he no more could see her,
To the islet's farthest bound.
Soon he heard the ghostly dancers
With wild cries his wife surround.

All the evening long they tried her,
Tempting her to turn again,
With weird strains of love or threatening,
To her life below the main.

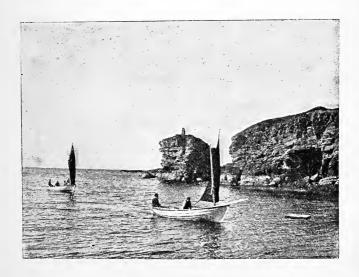
A Legend of Boray Island.

Sadly Eric watched and waited,
Passed in fast and prayer the time,
Till at last, o'er rippling water,
Pealed St. Magnus' midnight chime.

Then he rose, and hastened to her; Found her on the lonely sands, Lying with the Cross of Jesus Claspèd in her folded hands.

To the Islands of the Blessed
Margaret's ransomed soul had fled,
And a smile of victory lingered
On her lips, though cold and dead.

ALICE L. DUNDAS (The Honourable Mrs. John Dundas).



SONGS OF THE GODS.

The Challenge of Thor.

I am the God Thor, I am the War God, I am the Thunderer! Here in my Northland, My fastness and fortress, Reign I for ever!

Here amid icebergs Rule I the nations. This is my hammer, Miölner the mighty; Giants and sorcerers Cannot withstand it!

These are the gauntlets Wherewith I wield it And hurl it afar off. This is my girdle; Whenever I brace it Strength is redoubled!

The light thou beholdest Stream through the heavens In flashes of crimson Is but my red beard Blown by the night-wind, Affrighting the nations!

Jove is my brother; Mine eyes are the lightning; The wheels of my chariot Roll in the thunder, The blows of my hammer Ring in the earthquake!

Force rules the world still, Has ruled it, shall rule it; Meekness is weakness, Strength is triumphant, Over the whole earth Still is it Thor's Day!

Thou art a God too.
O Galilean!
And thus single-handed
Unto the combat,
Gauntlet or Gospel,
Here I defy Thee!

LONGFELLOW.

Tegner's Drapa.*

I HEARD a voice that cried,
'Balder the Beautiful
Is dead, is dead!"
And through the misty air
Passed like the mournful cry
Of sunward sailing cranes.

I saw the pallid corpse
Of the dead sun
Borne through the Northern sky.
Blasts from Niffelheim
Lifted the sheeted mists
Around him as he passed.

* The Song of Tegner, a Swedish poet.

And the voice for ever cried, "Balder the Beautiful Is dead, is dead!" And died away Through the dreary night, In accents of despair.

Balder the Beautiful, God of the summer sun, Fairest of all the Gods! Light from his forehead beamed, Runes were upon his tongue, As on the warrior's sword.

All things in earth and air Bound were by magic spell Never to do him harm; Even the plants and stones— All save the mistletoe, The sacred mistletoe!

Hæder, the blind old God, Whose feet are shod with silence, Pierced through that gentle breast With his sharp spear, by fraud Made of the mistletoe, The accursed mistletoe!

They laid him in his ship, With horse and harness, As on a funeral pyre. Odin placed A ring upon his finger, And whispered in his ear.

They launched the burning ship!
It floated far away
Over the misty sea,
Till like the sun it seemed,
Sinking beneath the waves.
Balder returned no more!

So perish the old Gods!
But out of the sea of Time
Rises a new land of song,
Fairer than the old.
Over its meadows green
Walk the young bards and sing.

Build it again,
O ye bards,
Fairer than before!
Ye fathers of the new race,
Feed upon morning dew,
Sing the new Song of Love!

The law of force is dead! The law of love prevails! Thor, the Thunderer, Shall rule the earth no more, No more, with threats, Challenge the meek Christ.

Sing no more,
O ye bards of the North,
Of Vikings and of Jarls!
Of the days of Eld
Preserve the freedom only,
Not the deeds of blood.

Longfellow.

THE SONG OF HAROLD HARFAGER.

THE sun is rising dimly red, The wind is wailing low and dread; From his cliff the eagle sallies, Leaves the wolf his darksome valleys: In the mist the ravens hover, Peep the wild-dogs from the cover— Screaming, croaking, baying, yelling, Each in his wild accents telling. "Soon we feast on dead and dying,

Fair-haired Harold's flag is flying."

Many a crest in air is streaming, Many a helmet darkly gleaming, Many an arm the axe uprears, Doomed to hew the wood of spears. All along the crowded ranks, Horses neigh and armour clanks, Chiefs are shouting, clarions ringing, Louder still the bard is singing,

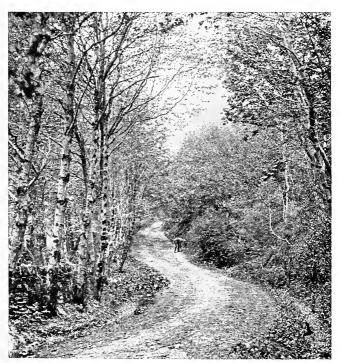
"Gather, footmen-gather, horsemen, To the field, ye valiant Norsemen!

"Halt ye not for food or slumber, View not vantage, count not number; Jolly reapers, forward still; Grow the crop on vale or hill, Thick or scattered, stiff or lithe, It shall down before the scythe. Forward with your sickles bright, Reap the harvest of the fight— Onward, footmen—onward, horsemen, To the charge, ye gallant Norsemen!

The Song of Harold Harfager.

"Fatal choosers of the slaughter,
O'er you hovers Odin's daughter;
Hear the choice she spreads before ye—
Victory, and wealth, and glory;
Or old Valhalla's roaring Hail,
Her ever-circling mead and ale,
Where for eternity unite
The joys of wassail and of fight.
Headlong forward, foot and horsemen,
Charge and fight, and die like Norsemen!"

SIR WALTER SCOTT.



A woodland path, Binscarth.

KING HACON'S LAST BATTLE.

ALL was over; day was ending
As the foemen turned and fled.
Gloomy red

Glowed the angry sun descending; While round Hacon's dying bed

Tears and songs of triumph blending Told how fast the conqueror bled.

"Raise me," said the king. We raised him— Not to ease his desperate pain; That were vain!

"Strong our foe was—but we faced him: Show me that red field again."

Then with reverent hands we placed him High above the battle plain.

Sudden on our startled hearing
Came the low-breathed, stern command,—
"Lo! ye stand?

Linger not—the night is nearing;
Bear me downwards to the strand,

Where my ships are idly steering Off and on, in sight of land."

Every whispered word obeying, Swift we bore him down the steep, O'er the deep,

Up the tall ship's side, low swaying

To the storm-wind's powerful sweep,

And his dead companions laying Round him—we had time to weep.

But the king said, "Peace! bring hither Spoils and weapons, battle-strown— Make no moan; Leave me and my dead together;
Light my torch, and then—begone."
But we murmured, each to other,
"Can we leave him thus alone?"

Angrily the king replieth;

Flashed the awful eye again
With disdain:

"Call him not alone who lieth
Low among such noble slain;
Call him not alone who dieth
Side by side with gallant men.

Slowly, sadly we departed;
Reached again that desolate shore,
Never more

Trod by him, the brave, true-hearted, Dying in that dark ship's core! Sadder keel from land ne'er parted, Nobler freight none ever bore!

There we lingered, seaward gazing, Watching o'er that living tomb, Through the gloom—

Gloom which awful light is chasing— Blood-red flames the surge illume!

Lo! King Hacon's ship is blazing; 'Tis the hero's self-sought doom.

Right before the wild wind driving, Madly plunging—stung by fire— No help nigh her—

Lo! the ship has ceased her striving!

Mount the red flames higher, higher,

Till, on ocean's verge arriving,
Sudden sinks the Viking's pyre—
Hacon's gone!

LORD DUFFERIN.

THE DEATH OF HACO.

The summer is gone, Haco, Haco;
The yellow year is fled;
And the winter is come, Haco,
That numbers thee with the dead!

When the year was young, Haco, Haco, And the skies were blue and bright, Thou didst sweep the seas, Haco,
Like a bird with wings of might.

With thine oaken galley, proudly, And thy gilded dragon-prow, O'er the bounding billows, Haco, Like a sea-god thou didst go.

With thy barons gaily, gaily,
All in proof of burnished mail,
In the voes of Orkney, Haco,
Thou didst spread thy prideful sail;

And the sturdy men of Caithness,
And the land of the Mackay,
And the men of Stony Parf, Haco,
Knew that Norway's king was nigh.

And the men of utmost Lewis, Haco,
And Skye, with winding kyles,
And Macdougall's country, Haco,
Knew the monarch of the isles.

And the granite peaks of Arran,
And the rocks that fence the Clyde,
Saw thy daring Norsemen, Haco,
Ramping o'er the Scottish tide.

But scaith befell thee, Haco, Haco!

Thou wert faithful, thou wert brave;
But not truth might shield thee, Haco,
From a false and shuffling knave.

The crafty King of Scots, Haco, Who might not bar thy way, Beguiled thee, honest Haco, With lies that bred delay.

And hasty winter, Haco, Haco,
Came and tripped the summer's heels,
And rent the sails of Haco
And swamped his conquering keels.

Woe is me for Haco, Haco!
On Lorn and Mull and Skye
The hundred ships of Haco
In a thousand fragments lie!

And thine oaken galley, Haco,
That sailed with kingly pride,
Came shorn and shattered, Haco,
Through the foaming Pentland tide.

And thy heart sunk, Haco, Haco, And thou felt that thou must die, When the bay of Kirkwall, Haco, Thou beheld with drooping eye.

And they led thee, Haco, Haco,
To the bishop's lordly hall,
Where thy woe-struck barons, Haco,
Stood to see the mighty fall.

And the purple churchmen, Haco, Stood to hold thy royal head, And good words of hope to Haco From the Holy Book they read.

Then out spake the dying Haco,
"Dear are God's dear words to me;
But read the book to Haco
Of the kings that ruled the sea."

Then they read to dying Haco
From the ancient saga hoar,
Of Holden and of Harold,
When his fathers worshipped Thor.

And they shrove the dying Haco,
And they prayed his bed beside;
And with holy unction Haco
Drooped his kingly head and died.

And in parade of death, Haco,
They stretched thee on thy bed,
With a purple vest for Haco,
And a garland on his head.

And around thee, Haco, Haco,
Were tapers burning bright,
And masses were sung for Haco
By day and eke by night.

And they bore thee, Haco, Haco,
To holy Magnus' shrine,
And beside his sainted bones, Haco,
They chastely coffined thine.

And above thee, Haco, Haco,
To deck thy dreamless bed,
All crisp with gold for Haco,
A purple pall they spread.

And around thee, Haco, Haco, Where the iron sleep thou slept,
Through the long, dark winter, Haco,
A solemn watch they kept.

And at early burst of springtime,
When the birds sang out with glee,
They took the body of Haco
In a ship across the sea—

Across the sea to Norway,

Where thy sires make moan for thee,
That the last of his race was Haco,
Who ruled the Western Sea.

And they laid thee, Haco, Haco,
With thy sires on the Norway shore,
And far from the isles of the sea, Haco,
That know thy name no more.

JOHN STUART BLACKIE.
(From "Lays of the Highlands and Islands.")
(By permission of the Walter Scott Publishing Company.)



A modern war-fleet in Kirkwall Bay.

THE OLD MAN OF HOY.

THE Old Man of Hoy Looks out on the sea,

Where the tide runs strong and the wave rides free;

He looks on the broad Atlantic sea,

And the Old Man of Hoy

Hath this great joy,

To hear the deep roar of the wide blue ocean,

And to stand unmoved 'mid the sleepless motion,

And to feel o'er his head

The white foam spread

From the wild wave proudly swelling;

And to care no whit

For the storm's rude fit,

Where he stands on his old rock-dwelling— This rare Old Man of Hoy.

> The Old Man of Hoy Looks out on the sea,

Where the tide runs strong and the wave rides free;

He looks on the broad Atlantic sea,

And the Old Man of Hoy

Hath this great joy,

To look on the flight of the wild seamew,

With their hoar nests hung o'er the waters blue;

To see them swing

On plunging wing,

And to hear their shrill notes swelling,

And with them to reply To the storm's war-cry,

As he stands on his old rock-dwelling— This rare Old Man of Hoy...... The Old Man of Hoy Looks out on the sea,

Where the tide runs strong and the wave rides free;

He looks on the broad Atlantic sea,

And the Old Man of Hoy

Hath this great joy,

To think on the pride of the sea-kings old—

Harolds and Ronalds and Sigurds bold—

Whose might was felt By the covering Celt

When he heard their war-cry yelling.

But the sea-kings are gone, And he stands alone,

Firm on his old rock-dwelling—
This stout Old Man of Hoy.

But listen to me, Old Man of the Sea,

List to the Skulda that speaketh by me: The Nornies are weaving a web for thee,

Thou Old Man of Hoy,

To ruin thy joy,
And to make thee shrink from the lash of the ocean,

And to make thee shrink from the lash of the ocean, And teach thee to quake with a strange commotion,

When over thy head And under thy bed

The rampant wave is swelling:

And thou shalt die

'Neath a pitiless sky,

And reel from thy old rock-dwelling— Thou stout Old Man of Hoy!

JOHN STUART BLACKIE.

(From "Lays of the Highlands and Islands.")

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ORKNEY.

The parting beam of autumn smiles
A farewell o'er these lonely isles;
Capped with its fire, the mountains soar
Like lighted beacons on the shore,
While far beneath, in depth profound,
The tides roll through each darksome sound—
Those passes where the troubled sea
Hurries with roar and revelry;
Where waves dash on in headlong haste,
By a wide world of waters prest.
Here ruined hall and nodding tower
Hint darkly at departed power,
Their domeless walls, time-worn and gray,
Give dimly back the evening ray,
Like gleams from days long past away.

Saint Magnus! pile of ages fled, Thou temple of the quick and dead! While they who raised thy form sublime Have faded from the things of time; While hands that reared, and heads that planned, Have passed into the silent land, Still hath thy mighty fabric stood 'Mid sweeping blast and sheeted flood. Above thy tower and turrets tall The thunder-cloud hath spread its pall,..... And muttered o'er thine airy height Its bursting accents to the night: Though oft the wild and wintry storm Hath reeled around thy towering form, The mighty pile still proudly rears Its head above the wreck of years.

As through thy pillared aisles I tread,
Where rest the gone forgotten dead,
Each step a mournful echo calls
To wander through the dreary walls;
The sullen sounds they backward throw,
Which falter into whispers low.
Each tombstone's frail and crumbling frame
Preserves not e'en an airy name;
The lines by Friendship's fingers traced,
Now touched by Time's, are half effaced;
The few faint letters lingering still
Are all the dead man's chronicle.

How often have the guests who ranged Thy sacred labyrinths been changed! Of crowds, who sang their anthems here, How still each tongue—how deaf each ear!.....

But thou like them must pass away Beneath the hand of pale decay; Even now thy towering turrets feel The weight of ages o'er them steal; Thy summit in its airy waste Rocks to the rude and rushing blast; When years that wander o'er thee call Thy time-struck fabric to its fall, Thy mouldering columns lone and gray Shall shelter then the bird of prey; Each worshipless recess shall be Place for their frightful revelry; The raven's hoarse and funeral note Shall o'er sepulchral ruins float......

Still doth the ruined palace stand, A crumbling relic in the landTenantless fabric, huge and high,
And proud in ruined majesty;
The verdant ivy robes thy wall,
Weeds are the dwellers in thy hall,
And in the wind the tufted grass
Waves o'er thy dim and mouldering mass,
And freshly each returning spring
Blooms o'er thy mortal withering.
On darkening piles, and waning wrecks,

A gay green garment oft is spread;
For ruin, as in mockery, decks
The faded victims she hath made.

With time and tempest thou art bent,
A drear, neglected monument,
Lorn as some frail and aged one
Who lives when all his friends are gone!—
Where is thy voice of music?—where
The strains that hushed the midnight air,
When Beauty woke her witching song,
And spellbound held the festive throng?—
A narrow and a nameless grave
Hath closed upon the fair and brave,
And all around is deadly still,
Save when, from some high pinnacle,
The raven's croak, or owlet's wail,
Blends with the sighing of the gale......

The hoary rocks, of giant size, That o'er the land in circles rise, Of which tradition may not tell, Fit circles for the wizard's spell, Seen far amidst the scowling storm, Seem each a tall and phantom form, As hurrying vapours o'er them flee,
Frowning in grim society,
While like a dread voice from the past
Around them mourns the autumnal blast......

Yet not the works of man alone,
Though hallowed by long ages gone,
Charm us away in musing mood;
Bear witness each grim solitude,
'Mid Hoy's high shadowy mountain walls
Where mournfully the twilight falls:
There bosomed in a deep recess
Sleeps a dim vale of loneliness,
The circling hills, all bleak and wild,
Are o'er its slumbers darkly piled,
Save on one side, where far below
The everlasting waters flow,
And round the precipices vast
Dance to the music of the blast......

There rocks of ages sternly throw
Their shadows o'er a world below,
And fierce and fast each dark-brown flood
Careering comes in maddening mood:
O'er the sheer cliffs the waters flash,
And down in whitest columns dash,
Till, far away, we scarce can hear
Their dying falls and murmurs drear,
As, bursting o'er the dizzy verge,
They melt into the boiling surge.

Here, when, perchance, the voice of men Is heard within the fairy glen, Deep muttering echoes start around, And rocks of gloom fling back the sound, While from their fragments, rent and riven, A thousand airy dwellers driven,
Send forth a wild and dreary scream,
Like such as breaks a fearful dream
When Conscience to the sleeper's gaze
Holds up the view of other days......

When, by Night's mantle hooded o'er,
The heaving hills are seen no more,
Oft blended with the torrent's dash
Are heard the thunder's startling crash,
And burst of billows on the shore,
Like cannon's deep and distant roar,
By echoes answered loud and fast,
That gallop on the midnight blast,
As if the Spirit of the vale
Heard in his cave the stormy wail,
And to the tempest rolling by
Shrieked loud his frightful mockery......

Where cairns of slumbering chiefs are piled, And frown above the waters wild, Rear their hoar heads, forlorn and dim, Upon the ocean's lonely brim, There the fierce storm and maddening surge Howl loud and long the warrior's dirge, And blended there together rave Through many a deep and dreary cave, And waken from their sullen lair Sea-monsters, darkly slumbering there.

Seen from those death-towers of the flood, The ocean's mighty solitude Widens through boundless space around, Vast, melancholy, lone, profound; So vast that thought with weary wing Droops o'er its distant wandering, And, left behind, again returns

To muse upon the mouldering urns......

As the rude brush of evening's wind Leaves not a lingering trace behind Of landscapes living in the stream, Like the dim scenery of a dream Called up by Fancy's wizard wand, When Sense is sealed by Slumber's hand; So Time's drear blast hath swept along Alike from record and from song Their very names, who now lie hid Beneath each dusky pyramid; And all that hint of them are graves Where the green flag of ruin waves, Or crumbling remnant of the past That ivy shelters from the blast, And clings to still when others flee, Like true love in adversity.

On Noltland's solitary pile
The last blush of the dying day
Plays like a melancholy smile
And hectic glow on pale decay......
The moss of years is on the wall,
And fitfully the night-winds start
Through Bothwell's roofless ruined hall,
Like sobs of sorrow from the heart;
Upon each floor of cold, damp sod
The clustering weeds like hearse-plumes nod;
Through chambers desolate and green
Hoots the gray owl at evening's close,

Meant for far other guests, I ween—
Where wave-worn Beauty might repose,
And find that bliss in Love's caress
Which hallows scenes of loneliness.

See Hov's Old Man, whose summit bare Pierces the dark-blue fields of air, Based in the sea, his fearful form Glooms like the spirit of the storm, An ocean Babel, rent and worn By time and tide-all wild and lorn-A giant that hath warred with heaven, Whose ruined scalp seems thunder-riven, Whose form the misty spray doth shroud, Whose head the dark and hovering cloud, Around his dread and lowering mass, In sailing swarms the sea-fowl pass, But when the night-cloud o'er the sea Hangs like a sable canopy, And when the flying storm doth scourge Around his base the rushing surge, Swift to his airy clefts they soar, And sleep amidst the tempest's roar, Or with its howling round his peak Mingle their drear and dreamy shriek.

The dying day has had its rest Upon the mountain's lofty crest; Now, o'er the ocean it has fled, And to the past is gathered; From stunted shrubs of foliage bared The farewell melodies are heard; The twilight spreads a duskier veil Upon the deep and lonely dale, And, moaning to the evening star, The mountain stream is heard afar. The twilight fades and night again
Claims from our time her portioned reign;
Earth sets, and leaves us to admire
Yon vaulted canopy of fire,
Those burning glories of the sky,
Those "sparks of immortality,"
Which shed from high their living light,
And blaze through the blue depths of night......

At such an hour, should music stray
Soft from some isle, far, far away,
It seems to charm to silent sleep
The murmurs of the mighty deep;
The torrent, as it speeds along,
Stills its dark waters to the song,
And the full bosom feels relief,
Soothed by the mystic "joy of grief;"
Upon the heart-chords stealing slow,
It hallows every cherished woe,
And wakes sensations in the mind,
Wild, beautiful, and undefined,
As tones that harp-strings give the wind.

Oh! at such soul-inspiring strain
The wondrous links of memory's chain,
Though scattered far, unite again,
And Time and Distance strive in vain.
Again Youth's fairy visions pass
In morning glow o'er Memory's glass,
At every magic melting fall
They come like echoes to their call,
And with the dreams of vanished years
Steal forth again our smiles and tears.

JOHN MALCOLM.

SCENES FROM "THE BUCCANEER." Night.

NIGHT walked in beauty o'er the peaceful sea, Whose gentle waters spake tranquillity; With dreamy lull the rolling billow broke In hollow murmurs on the distant rock; The sea-bird wailed along the airy steep; The creak of distant oar was on the deep. So still the scene, the boatman's voice was heard; The listening ear could almost catch each word; From isles remote the house-dog's fitful bay Came floating o'er the waters far away; And homeward wending o'er the silent hill, The lonely shepherd's song and whistle shrill; The lulling murmur of the mountain flood, That sung its night-hymn to the solitude; The curlew's wild and desolate farewell, As slow she sailed adown the darksome dell: The heathcock whirring o'er the heathy vale; The mateless plover's far-forsaken wail; The rush of tides that round the islands ran, And danced like maniacs in the moonlight wan,-All formed a scene so wild, and yet so fair, As might have wooed the heart from dreams of care, If aught had charms to soothe, or balm to heal, The pangs that guilt is ever doomed to feel......

Morning.

Day dawns, and from the main the mist is furled, The night-cloak of a solitary world; And slow emerging from the fleecy cloud The mountains soar like giants from the shroud. High o'er the rest, and towering to the storm, Glooms o'er the ocean Hoy's majestic form;

From his lone head, as roll the clouds away, Behold Creation bursting into day, As first it broke from night and nothingness, When the Great Spirit brooded o'er the abyss. How calm and clear the boundless waters seem, As if awakening from a heavenly dream; The little isles within their bosom lie, Like dwellers in a bright infinity; The crag terrific beetling o'er the west Beholds the heaven reflected in their breast. The dark-brown hills embrace each silent bay That loves amid their solitude to stray; And far beneath, with low sepulchral sound, Moans the dark torrent through the dell profound; And from the thunder-throne, the mountain cairn, Shrieks to the waste the solitary erne.....

Scenes of my song, of earliest smiles and tears, Ye wake the memories of departed years! The distant murmur of your mountain streams Steals o'er my spirit with departed dreams, With many a tale and recollected lay, Which, like the twilight of an autumn day, Faint on your shores, of wonderful and wild, Meet for the musing moods of Fancy's child. There have I roamed o'er many a soaring steep When the last day-gleam died along the deep, And o'er the still and solitary land, The distant music of the reaper band Came soft and mournful on the pensive soul, As mermaid's siren song o'er ocean's roll. There have I gazed upon the pathless seas, As on the gates of two eternities-Far east, where future days shall gild the wave, And west, where all the past hath found a grave.

JOHN MALCOLM.

TO ORKNEY.

Land of the whirlpool, torrent, foam,
Where oceans meet in maddening shock;
The beetling cliff, the shelving holm,
The dark, insidious rock;
Land of the bleak, the treeless moor,
The sterile mountain, seared and riven;
The shapeless cairn, the ruined tower,
Scathed by the bolts of heaven;
The yawning gulf, the treacherous sand;
I love thee still, my native land!

Land of the dark, the Runic rhyme,
The mystic ring, the cavern hoar,
The Scandinavian seer, sublime
In legendary lore;
Land of a thousand sea-kings' graves—
Those tameless spirits of the past,
Fierce as their subject Arctic waves,
Or hyperborean blast;
Though polar billows round thee foam,
I love thee!—thou wert once my home.

With glowing heart and island lyre,
Ah! would some native bard arise
To sing, with all a poet's fire,
Thy stern sublimities—
The roaring flood, the rushing stream,
The promontory wild and bare,
The pyramid where sea-birds scream
Aloft in middle air,
The Druid temple on the heath,
Old even beyond tradition's breath.

The Temple of Nature.

Though I have roamed through verdant glades,
In cloudless climes, 'neath azure skies;
Or plucked from beauteous Orient meads
Flowers of celestial dyes;
Though I have laved in limpid streams
That murmur over golden sands,
Or basked amid the fulgent beams
That flame o'er fairer lands;
Or stretched me in the sparry grot,—
My country! thou wert ne'er forgot.

DAVID VEDDER. (Native of Deerness; 1790-1854.)

THE TEMPLE OF NATURE.

TALK not of temples; there is one,
Built without hands, to mankind given.
Its lamps are the meridian sun
And all the stars of heaven;
Its walls are the cerulean sky;
Its floor the earth so green and fair;
The dome is vast immensity,—
All nature worships there!

The Alps, arrayed in stainless snow,
The Andean ranges yet untrod,
At sunrise and at sunset glow
Like altar-fires to God!
A thousand fierce volcanoes blaze,
As if with hallowed victims rare;
And thunder lifts its voice in praise,—
All nature worships there!

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The Temple of Nature.

The ocean heaves resistlessly,
And pours his glittering treasures forth;
His waves, the priesthood of the sea,
Kneel on the shell-gemmed earth,
And there emit a hollow sound,
As if they murmured praise and prayer;
On every side 'tis hallowed ground,—
All nature worships there!

The grateful earth her odours yield
In homage, Mighty One, to Thee,
From herbs and flowers in every field,
From fruit on every tree;
The balmy dew, at morn and even,
Seems like the penitential tear,
Shed only in the sight of Heaven,—
All nature worships there!

The cedar and the mountain pine,

The willow on the fountain's brim,

The tulip and the eglantine,

In reverence bend to Him;

The song-birds pour their sweetest lays

From tower, and tree, and middle air;

The rushing river murmurs praise,—

All nature worships there!

Then talk not of a fane, save one,

Built without hands, to mankind given.

Its lamps are the meridian sun

And all the stars of heaven;

Its walls are the cerulean sky;

Its floor the earth so green and fair;

The dome is vast immensity,—

All nature worships there!

DAVID VEDDER.

APPENDIX I.

CHRONGLOGY OF ORCADIAN HISTORY TO THE END OF THE EARLDOM,

WITH RELATED CONTEMPORARY EVENTS.

Certain historians assign earlier dates than those given below to the events before 933. The chronology adopted here is that which harmonizes best with the dates of events in other lands during that period. Approximate dates are marked "c"(circa); events not directly connected with the Earldom are in square brackets, and their dates in lighter type.

A.D.

78 (c.) Agricola's visit to Orkney.

563. [Columba in Scotland.]

580 (c.) Cormac's missionary journey to Orkney.

597. [Augustine in England.]

787. [First recorded appearance of Vikings in England.]

800(c.)[First period of Norse colonization begins.]

841. [Rouen taken by the Norsemen.]

852. [Norse kingdom established in Dublin.] 862. [Rurik founds the Norse line in Russia.]

871. [Alfred the Great King of England.]

885. [Siege of Paris by the Norsemen.]

900. Battle of Harfursfirth — Second period of Norse colonization begins.

- [Iceland colonized by Norsemen.]

901 (c.) Harald Fairhair in Orkney-Earldom established.

- Sigurd I. earl.

905 (c.) Battle with Maelbrigda of Ross—Sigurd's death.

Guttorm, Sigurd's son, earl.

907 (c.) Hallad, son of Rognvald, Earl of Moeri, earl.

910. Einar I. (Torf Einar), Rognvald's son, earl.

912. [Rolf or Rollo, Rognvald's son, Duke of Normandy.]

933. Arnkell, Erlend I., and Thorfinn I., Einar's sons, joint-earls.

950. [King Eric (Bloody axe) expelled from Norway.]

- 954. Eric and Earls Arnkell and Erlend fall at battle of Stainsmoor.
- 963. Arnfinn, Havard, Ljot, and Hlodve, Thorfinn's sons, joint-earls.
- 980. Sigurd II. (the Stout), Hlodve's son, earl. 980. [Discovery of Greenland by the Norsemen.]
- 986. [Discovery of America (Vinland) by the Norsemen.]
- 995. Conversion of Sigurd to Christianity by Olaf Tryggvason.
- 998. [Olaf Tryggvason, King of Norway.]
- 1014. Battle of Clontarf—Death of Earl Sigurd.
 - Sumarlid, Einar II., Brusi, and (later) Thorfinn II., Sigurd's sons, joint-earls.
- 1015. [Olaf the Saint King of Norway.]
- 1015. Death of Earl Sumarlid.
- 1017. [Knut (Canute) King of England.]
- 1020. Murder of Einar II.
- 1027. [Norse kingdom established in Southern Italy.]
- 1030. [Battle of Sticklestad—Death of St. Olaf.]
- 1031. Death of Earl Brusi-Thorfinn II. sole earl.
- Rognvald, Brusi's son, claims a share of the earldom.
- 1045. Battle in the Pentland Firth between Rognvald and Thorfinn.
- 1046. Murder of Rognvald in Papa Stronsay.
- 1056. [Malcolm Canmore King of Scotland.]
- 1057. Christ's Kirk in Birsay founded.
- 1064. Death of Thorfinn; his sons Paul I. and Erlend II. joint-earls.
- 1066. Harald Hardradi visits Orkney.
 - Harold, Godwin's son, King of England.
 - Battle of Stamford Bridge.
 - Invasion of Duke William of Normandy-Battle of Hastings.
- 1087. [Moorish Empire established in Spain.]
- 1096. [First Crusade.]
- 1098. Magnus (Barefoot), King of Norway, sends the Orkney earls to Norway, and makes his son Sigurd "King" of Orkney.
- 1103. [Death of Magnus-Sigurd King of Norway.]
- 1103. Hakon, Paul's son, and Magnus, Erlend's son, joint-earls.
- 1115. Murder of Earl Magnus (St. Magnus) in Egilsay.
- 1122. Death of Earl Hakon; his sons Harald I. and Paul II. joint-earls.
- 1127. Death of Harald—Paul sole earl.
- 1129. Rognvald II. (Kali) appointed joint-earl by King Sigurd.
- 1135. Rognvald's first expedition to claim the earldom.
- St. Magnus Church, Egilsay, founded.
 Rognvald's second expedition—Earl Paul kidnapped by Sweyn Asleifson.
- 1137. St. Magnus Cathedral founded.
- 1139. Harald II. (Maddadson) joint-earl.
- 1151. Crusaders winter in Orkney.
- 1152. Earl Rognvald's Crusade to Jerusalem.
- 1154. Erlend III. joint-earl.

- 1156. Death of Erlend III.
- 1158. Earl Rognvald killed.
- 1171. Sweyn Asleifson's last cruise and death at Dublin.
- 1171. [English invasion of Ireland.]
- 1175. Abbot Laurentius transferred from Orkney (Eynhallow) to Melrose.
- 1194. [Battle of Floravoe, near Bergen; defeat of the "Island-beardies."]
- 1196. Shetland separated from the Orkney earldom.
- 1197. Harald III. (the Young), grandson of Rognvald, joint-earl.
- 1198. Death of Harald the Young.
- 1206. Death of Earl Harald II. (Maddadson); his sons David and John joint-earls.
- 1214. Death of Earl David.
- 1214. [Alexander II. King of Scotland.]
- 1215. [Magna Charta granted in England.]
- 1222. Burning of Bishop Adam in Caithness.
- Death of Bjarne, the poet-bishop of Orkney.
- 1231. Death of John, the last earl of the Norse line.
- 1232. Magnus II., the first of the Angus line, earl.
 Loss of ship carrying the chief men of the Isles from Norway.
- 1239. Gilbride I. earl.
 - ? Gilbride II. earl.
- 1249. [Alexander III. King of Scotland.]
- 1256. Magnus III. earl.
- 1263. King Hakon's expedition—Battle of Largs—Death of Hakon at Kirkwall.
- 1266. Treaty of Perth-" Annual of Norway" established.
- 1276. Magnus IV. earl.
- 1284. John II. earl.
- 1286. [Death of Alexander III. of Scotland—Margaret of Norway heiress to the crown.]
- 1292. [Death of Margaret the "Maid of Norway."]
- 1306. [Robert Bruce King of Scotland. According to a tradition, the credibility of which is supported by various lines of evidence, Bruce passed the winter of 1306-7 in Orkney, not in the island of Rathlin.]
- 1310. Magnus V. earl.
- 1312. [Treaty of Perth confirmed at Inverness.]
- 1314. [Battle of Bannockburn.]
- 1325. Death of Earl Magnus V.; end of the Angus line.

 Malise of Stratherne earl.
- 1353. Erngisl earl.
- 1379. Death of Earl Erngisl; end of the Stratherne line.
 - Henry I. (St. Clair) earl—Shetland restored to the earldom.
 Union of Norway, Sweden, and Denmark (Union of Calmar).

- 1400. Henry II. (St. Clair) earl.
- 1406. [Prince James of Scotland captured by the English when on his way to France.]
- 1420. Bishop William Tulloch, commissioner in Orkney for the Crown of Norway.
- 1423. David Menzies of Wemyss commissioner.
- 1434. William St. Clair earl, the last earl under Norse rule.
- 1453. [Constantinople taken by the Turks.]
- 1468. Orkney and Shetland pledged to the Scottish Crown.
 - Marriage of James III. of Scotland to Margaret of Denmark.
- 1471. Lands and revenues of Earl William purchased by the Scottish Crown.
- 1472. Bishop William Tulloch appointed to collect Crown revenues.
- 1485. Henry St. Clair representative of the Crown.
- 1492. [First voyage of Columbus.]
- 1497. [Voyage of Cabot to Labrador.]
- 1513. Battle of Flodden-Death of Henry St. Clair.
- 1524. [Union of Calmar dissolved.]
- 1529. Battle of Summerdale.
- 1540. James V. of Scotland visits Orkney.
- 1542. [Mary Queen of Scots born.]
- 1565. Lord Robert Stewart obtains a feu charter of Orkney and Shetland.
- 1567. [Mary Queen of Scots deposed—James VI. proclaimed—Flight of Bothwell to Orkney and Shetland.]
- 1568. The Islands resumed by the Crown of Scotland.
- 1581. Lord Robert Stewart earl.
- 1588. [The Armada.]
- 1592. Earl Patrick Stewart obtains the Islands.
- 1603. [Union of the Crowns of Scotland and England.]
- 1614. Execution of Earl Patrick.

APPENDIX II.

NORSE WORDS IN ORKNEY PLACE-NAMES.

The following is a list of the Norse words most commonly found in place-names in Orkney, with their meaning. The forms in which they now appear, as names or parts of names, are given in italic, except where the old form is preserved with little change.

1. LAND FEATURES.

Ass, ridge : -house. Bjarg, rocky hill; -berry, -ber. Bratt, steep; brett-. Brekka, slope; -breck. Dal, valley; -dale, -dall. Fjall, hill; -fell, -fea, -fiold. Gil, narrow glen; -gill. Grjot, gravel; grut-. Hals, neck, col; hass. Hammar, crag. Haug, mound; howe, hox-. Hlith, slope ; -lee. Hvāll, höll, hill; hol-, hool-. Hvamm, small valley, grassy slope; quholm. Kamb, ridge or crest : kame. Knapp, hill-top, knob. Kuml, burial mound; cumla-. Leir. clay : ler-. Mel, sandbank, sandy downs. Mor, pl. mos, moor; mous-, -mo. Myri, wet meadow; -mire. Skal, soft rock, shale; skel-. Thufa, mound ; -too. Varthi, watch-tower; ward, wart. Voll, valley; vel-, -wall.

2. Fresh Water.

A, o, or, burn.
Brun, well; -burn.
Fors, waterfall; furs-.
Kelda, spring.
Oss, burn-mouth; oyce.
Tjörn, small lake; -shun.
Vatn, water; watten.

3. SHORE FEATURES. Bakki, banks; -back. Barth, projecting headland (edge of a hill, beak of a ship, etc.). Berg, mass of rock ; -ber, -berry. Bringa, breast: bring. Eith, isthmus; aith, -ay, -a. Ey, island; ey, -ay, -a. Eyrr, gravel beach; aure. Fles, flat skerry; flashes. Gnup, peak; noup. Hella, flat rock; -hellya. Hellir, cave; -hellya. Holm, small island. Klett, low rock ; -clett. Muli, muzzle, lip; moul. Nef, növ, nose; nevi. Nes. nose: -ness.

Oddi, sharp point : od. Sker, skerry. Stakk, pillar rock; stack. Tangi, tongue; -taing.

4. SEA FEATURES.

Brim, surf. Efja, backwater, eddy; evie. Fjörth, firth; firth, -ford. Gja, chasm, creek; geo. Glup, throat; gloup. Hafn, harbour; ham, hamn-. Höp, shallow bay. Straum, tide-stream; strom-. Vag, narrow bay; voe, -wall. Vath, wading-place, ford; waith. Vik, bay: -wick.

5. FARMS AND HOUSES.

Bolstadr, dwelling; -buster, -bister, -bist. Brū, bridge; bro-. Bu, bær, farm ; bu, -by. Bygging, building, from byggja, to settle, to build : -biggin. Garth, enclosure, dyke; -garth, -ger. Grind, gate. Hagi, enclosed pasture; hack-. Hus, house. Krō, sheepfold; -croo.

KvI, cattle pen; -quoy. Rett, sheepfold; -ret. Sel, "saeter" hut; selli-. Setr, saetr, out-pasture; seatter, -setter, -ster. 3kali, hall, house; -skaill. Skipti, dividing, boundary; skippi-. Stadr. homestead : -ster, -sta. Stofa, room, house; stove. Thopt, plot, site of a house; -toft, Tun, enclosure, hedge; -ton, -town.

6. Miscellaneous.

Djup, deep; deep-, jub-. Faer, sheep; far-. Flat, flat; flot-. Gra, gray. Graenn, green. Ha, high; ho-. Helgr, holy; hellya. Hest, horse. Hrafn, raven; ram-, ramn-. Hross, horse: russ-. Hund, dog. Hvit, white : wheetha -. Ling, heather. Mykill, great; muckle. Raud, red; ro-. Skalp, ship; scap-. Skip, shir. svart, black ; swart-.

APPENDIX III.

LIST OF BIRDS FOUND IN ORKNEY.

Local names are given in brackets. An asterisk (*) indicates that the bird is not known to breed in the islands. When any bird not in this list is found, it will usually be worth while to put the fact on record.

*Auk, Little (Rotchie).

Blackbird (Blackie).
Bunting, Corn (Chirlie Buntling).
*Bunting, Snow (Snowflake).

Chaffinch—rare.
Coot (Snaith).
Cormorant (Palmer, Scarf).
Crow, Hooded (Craa, Hoodie Craa,
Grayback).
Cuckoo—rare.
Curlew (Whaup).

*Curlew (Whaup).

*Diver, Black-throated—rare.

*Diver, Great Northern (Immer Goose).

Diver, Red-throated.

*Dotterel—rare.

Dove, Ring (Wood-pigeon)—rare.

Dove, Rock.

Dove, Stock.

Duck, Eider (Dunter).

*Duck, Golden-eye—rare.

Duck, Long-tailed (Calloo)—rare

*Duck, Scaup—rare.

Duck, Sheld (Sly-goose).

Duck, Teal.

Duck, Tufted.
Duck, Wild (Stock Duck).
Dunlin (Plover-page, Plover-pagick).

Falcon, Peregrine.

*Fieldfare.

Gannet or Solan Goose.

Gannet or Solan Goose.

*Goose, Bernacle—rare.

*Goose, Brent.

*Goose, Graylag—rare.
Grebe, Little.
Greenfinch (Green Lintie).
Grouse, Red (Muirhen).
Guillemot, Black (Tyste).
Guillemot, Common (Aak).
Gull, Black-headed.
Gull, Common (White-maa).
Gull, Greater Black-backed (Baakie).
Gull, Herring (White-maa).
Gull, Lesser Black-backed.

Hen Harrier (Goose-haak).

Jackdaw (Jackie, Kae).

Heron, Common.

*Scoter, Common.

Kestrel (Moosie Haak). Kittiwake (Kittie, Kittick, Kittiwaako).

Lapwing (Teeack, Teewhup). Linnet (Lintie, Lintick).

Merganser, Red-breasted (Sawbill, Harl, Rantick). Merlin. Moorhen (Waterhen).

Owl, Long-eared—rare. Owl, Short-eared (Cattie-face). Oyster Catcher (Skeldro).

Petrel, Fulmar.
Petrel, Stormy (Sea-swallow).
Phalarope, Red-necked.
Pipit, Meadow (Teeting).
Pipit, Rock (Tang Sparrow, Tang Teeting).
Plover, Golden.
Plover, Ringed (Sandlark, Sinlack).
Pochard.
Puffin (Tammie-norrie).

Quail-rare.

Rail, Land (Corncrake).
Rail, Water—rare.
Raven (Corbie).
Razorbill (Cooter-neb).
Redbreast (Robin Redbreast).
Redshank.
*Redwing.
Rook.

*Sanderling—rare. Sandpiper, Common. *Scoter, Surf-rare. *Scoter. Velvet. Shag (Scarf). Shearwater, Manx (Lyrie). Shoveller-rare. Skua, Richardson's (Scootieallan). Skylark (Laverock, Lavro). *Smew-rare. Snipe (Snippick, Horse-gowk). Sparrow, Hedge. Sparrow, House (Sprug). Starling (Stirling, Strill). *Stint, Little—rare. Stonechat-rare. *Swan, Hooper-rare.

Tern, Arctic (Pickie-terno, Rittick).

Tern, Common (Pickie-terno, Rittick).

Tern, Sandwich—rare.

Thrush (Mavis).

*Turnstone—rare.

Twite (Heather Lintie).

Wagtail, Pied (Willie-wagtail).
Warbler, Sedge-rare.
Wheatear (Chackie, Stone-chat).
Whimbrel (Little Whaup, Summer Whaup)-rare.
Whinchat-rare.
Widgeon.
Woodcock-rare.
Wren (Wirenn, Jenny Wren).
Wren, Gold-crested-rare.

Yellowhammer (Yallow Yarling).

APPENDIX IV.

BOOKS FOR FURTHER STUDY.

The subjoined list of books is given as a guide to further study by those who may wish to extend their knowledge of Orkney in any of the aspects suggested in this book. It is not in any sense a complete list of works relating to the Islands, nor does it, on the other hand, confine itself to such works in subjects where general study is the best foundation for local research. The books marked * are now out of print, and can only be obtained from libraries, or bought, when occasion offers, from dealers in second-hand books. As regards books still current, the list may be helpful to those who are building up school or parish libraries in the Islands. The most complete bibliography of Orkney and Shetland is the List of Books and Pamphlets relating to Orkney and Shetland, by James W. Cursiter, F.S.A.Scot. (Wm. Peace and Son, Kirkwall, 1894.)

Archæology and Early History.

*Orkneyinga Saga. Translated by Hjaltalin and Goudie. Edited, with Notes, by Anderson. (Edinburgh, 1873.) The historical introduction by Dr. Joseph Anderson is of special value.

The Orkneyingers' Saga. Translated by Sir G. W. Dasent. (London, 1894; Rolls Edition.) A very fine spirited rendering into English, as may be seen from the extracts given in the first part of this book.

The Saga of Hacon, and a fragment of the Saga of Magnus. Translated by Sir G. W. Dasent. (London, 1894; Rolls Edition.) This gives the Norse account of the battle of Largs, and events leading up to it.

The Icelandic text of the two preceding books is published in separate volumes in the same series.

The Story of Burnt Njal. By Sir G. W. Dasent. (Edinburgh, 1861; also a later and cheaper edition.) This is the finest of the Icelandic sagas. It deals mainly with life in Iceland, but contains several references to Orkney under Earl Sigurd the Stout, and the fine description of the battle of Clontarf quoted in this book.

The War of the Gaedhil with the Gaill; or, The Invasion of Ireland by the Danes and other Norsemen. Irish text, with translation and introduction by Jas. H. Todd. (London, 1867; Rolls Edition.) This

gives an account from the Irish point of view of the Norse invasions of Ireland up to and including the battle of Clontarf.

The Heimskringla; or, Chronicles of the Kings of Norway. Translated by Samuel Laing. (3 vols., London, 1844; new edition, edited by

Dr. R. B. Anderson, 4 vols., London, 1889.)

Heimskringla Saga. The Saga Library Edition. Translated by Wm. Morris and Eirikr Magnusson. (4 vols., London, 1893-1905.) The sagas included in the Heimskringla form a history of the early kings of Norway, and contain frequent references to Orkney. Snorri Sturlason,

the author, ranks among the greatest of historians.

Corpus Poeticum Boreale. By Gudbrand Vigfusson and F. York Powell. (2 vols., Oxford, 1883.) This is an almost complete collection of old Norse Eddic and Court poetry, including poems by Torf Einar, Arnor the Earl's poet, Earl Rognvald, and Bishop Bjarni. In a valuable introduction Vigfusson shows that many of the Eddic lays were written in the western Norse colonies in the British Isles, and some of them presumably in the Orkney earldom.

Icelandic Primer. By Henry Sweet. (Oxford, 1886.)

Icelandic Prose Reader. By G. Vigfusson and F. York Powell. (Oxford, 1879.)

Icelandic-English Dictionary. By R. Cleasby. Edited by G. Vig fusson, with appendix by W. W. Skeat, (London, 1874.)

The preceding three books form the best equipment for studying the language of the Norse period.

The Dialect and Place-Names of Shetland. By J. Jakobsen. (Lerwick, 1897.) Many of the place-names explained occur in Orknev.

The Vikings in Western Christendom, by C. F. Keary (London, 1891), gives an interesting account of the early Viking age, from 789 to 888 A.D. Saga Time, by J. Fulford Vicary (London, 1887), gives a popular

description of society from the ninth to the eleventh century.

Orcades, seu Rerum Orcadensium Historia. By Thormodus Torfaeus, Icelandic historian (1697). Translated by Alexander Pope, minister of Reay. (Wick, 1866.) Only a partial translation.

*Account of the Danes and Norwegians in England, Scotland, and Ireland. By J. J. A. Worsaae; translation. (London, 1852.) A standard

work.

Monumenta Orcadica: the Norsemen in the Orkneys and the Monuments they have left, with a Survey of the Celtic Pre-Norwegian and Scottish Post-Norwegian Monuments in the Islands. By L. Dietrichson. (Christiania, 1906.) The most recent and most scientific account of the Norse remains in Orkney, written in Norwegian, but with a very full summary-almost equivalent to a translation-in English. Of special interest is the account of the newly-discovered monastery in Eynhallow.

The Viking Age. By Paul du Chaillu. (2 vols., London, 1889.) Au account of the manners and customs, as well as the history, of the Viking

period; well illustrated, but not accurate or authoritative.

The Early Kings of Norway. By Thomas Carlyle. (London, 1875.) A short account of the period from 860 to 1397; of no great historical value.

Norse Mythology.

*Northern Mythology. By Benjamin Thorpe. (3 vols., London, 1851.) The best and most complete work on the subject.

Northern Antiquities. By P. Mallet; translation. (London, 1770;

edition in Bohn's Series.)

The Mythology of the Eddas. By C. F. Keary. (London, 1882.)

Norse Mythology: the Religion of our Forefathers. By R. B. Anderson. (Chicago, 1875.)

Asgard and the Gods: a Manual of Norse Mythology. By Dr. W. Wägner. (London, 1880.) The best popular book on the subject.

The Tragedy of the Norse Gods. By R. J. Pitt.

Heroes and Hero-Worship. By Thomas Carlyle. (London, 1841.)

The Earthly Paradise. By William Morris. (London, 1868-70.)

Sigurd the Volsung. By William Morris. (London, 1877.)

Epic and Romance. Essays on Mediæval Literature by W. P. Ker. (London, 1908.) An authoritative and very readable account of the old Icelandic literary art.

Later History.

*History of the Orkney Islands. By the Rev. George Barry. (Edinburgh, 1805: reprinted, with prefatory account of the Islands, Kirkwall, 1867.) One of the standard works dealing with the history of the Islands.

*Odal Rights and Feudal Wrongs. By David Balfour of Balfour.

(Edinburgh, 1860).

*Oppressions of the Sixteenth Century in the Islands of Orkney and Zetland. (Edinburgh, 1859: Abbotsford and Maitland Clubs publications.)

The above two books give an account of Orkney under Scottish rule.

*Monteith's Description of the Islands of Orkney and Zetland.

(Edinburgh, 1711; reprinted 1845.)

*General View of the Agriculture of the Orkney Islands. By John Shirreff. (Edinburgh, 1814.) An exceedingly interesting account of the state of the Islands in the early nineteenth century.

Description of the Isles of Orkney. By the Rev. James Wallace (minister of Kirkwall). Published by his son. (Edinburgh, 1693; re-

printed, with notes by John Small, M.A., Edinburgh, 1883.)

The Present State of the Orkney Islands Considered. By James Fea

(Surgeon). (Edinburgh, 1775; reprinted, Edinburgh, 1884.)

Orkney and Shetland Old-Lore Series. A miscellany issued quarterly by the Viking Club, London; contains numerous articles of historical interest.

Descriptive.

*The Orkneys and Shetland. By John R. Tudor. (London, 1883.) The best descriptive work on the county; at once popular and systematic.

Kirkwall in the Orkneys. By B. H. Hossack. (Kirkwall, 1900.) An extremely full and detailed descriptive and historical account of the town of Kirkwall.

*History of the Orkney Islands, by the Rev. George Barry (Kirkwall edition. 1867). contains a well-written description of the Islands.

*Summers and Winters in the Orkneys. By Daniel Gorrie. (Kirkwall, N.D.) A valuable series of sketches of Orcadian scenery and the conditions of life about the middle of last century.

Rambles in the Far North. By R. M. Fergusson. (Paisley, 1884.)

Our Trip North. By R. M. Fergusson. (London, 1892.)

Handbook to the Orkney Islands. (W. Peace and Son, Kirkwall.) Full of interest.

Orkney and Shetland. By M. J. B. Baddeley, B.A. Thorough Guide Series. (Thomas Nelson and Sons, London.) The best tourist guide to the Islands.

Orkney and Shetland Almanac and County Directory (W. Peace and Son, Kirkwall; issued annually) contains statistical and other material of value.

The North Sea Pilot. Part I. (London, 1894.) A Government publication for the use of mariners. Of much value to Orcadians interested in boating or in navigation.

Tour through the Islands of Orkney and Shetland. By the Rev. George Low, with introduction by Dr. Joseph Anderson. (Kirkwall, 1879.) An interesting account of the appearance of the Islands at the end of the eighteenth century.

Geology.

There is no book dealing specifically with the geology of Orkney. Recourse must be had either to books dealing with the science generally, or to those dealing with the Islands in which their geology is included.

The Orkneys and Shetland (Tudor) contains an account of the geology of the islands, written by Drs. Peach and Horne, with a useful geological map.

The most recent and complete geological survey of Orkney is that by Dr. J. S. Flett, an account of which is contained in two papers in the Transactions of the Royal Society of Edinburgh.

Some of Hugh Miller's works, such as The Testimony of the Rocks, The Old Red Sandstone, Rambles of a Geologist, and Footprints of the Creator, contain numerous references to the geology of Orkney.

Robert Dick, by Dr. Samuel Smiles, is an interesting account of a

Thurso baker who devoted his life to the study of geology in Caithness, where the rock formation is the same as that of Orkney.

Among general works in geology suitable for beginners may be mentioned Huxley's Physiography and Sir Archibald Geikie's Outlines of Field Geology, his Class-book of Geology, and his Scenery of Scotland.

Botany.

The Orkneys and Shetland (Tudor) contains a list of the rarer British

plants found in Orkney, compiled by W. I. Fortescue.

Volume xviii. of the Transactions of the Botanical Society of Edinburgh contains a complete list of Orkney plants by Prof. J. W. H. Traill. Another list is in preparation by Mr. Magnus Spence.

The Marine Algæ of the Orkney Islands, by G. W. Traill (Edinburgh,

1890), contains a list of the seaweeds of Orkney.

The following are some general works on botany which may be of service to the beginner:—Open-air Studies in Botany, by R. L. Praeger (London, 1897), a study of wild flowers in their homes, with illustrations; Flowering Plants, their Structure and Habitat, by C. L. Laurie, illustrated (London, 1903); Nature Studies, by G. F. Scott-Elliot (London, 1903); A Plant Book for Schools, by O. V. Darbyshire, illustrated (London, 1908); Flowers of the Field, by C. A. Johns (London, 1894).

Common Objects of the Seashore, by the Rev. J. G. Wood (London, 1866), contains good descriptions and illustrations of the seaweeds.

For identification of plants perhaps the best books are the British Flora, by Bentham and Hooker (London, 1904), and Illustrations to Bentham and Hooker's British Flora, by Fitch and Smith (London, 1905).

For mosses, the best book is Dixon and Jameson's Student's Handbook of British Mosses.

Zoology.

For a general introduction to natural history the best books are—Life and her Children (London, 1880), and Winners in Life's Race (London, 1882), by Miss A. B. Buckley (Mrs. Fisher), and Professor Arthur J. Thomson's fascinating Study of Animal Life, which gives a list of other books on zoology.

The animals of the seashore are dealt with in Rev. J. G. Wood's Common Objects of the Seashore and Fresh and Salt Water Aquarium; Seaside Studies, by G. H. Lewes; The Aquarium, by P. H. Gosse; and The Aquarium, its Inhabitants, Structure, and Management, by J. E. Taylor.

Gosse's Manual of Marine Zoology for the British Isles (2 vols., London, 1856) still remains the best book for the identification of marine animals.

For the study of birds the best works are the following:—The Birds of Shetland, by H. L. Saxby (Edinburgh, 1884); The Birds of the West of Scotland, by Robert Gray; Bird-Watching and The Bird-Watcher in the Shetlands, by Edmund Selous.

Saunders's Manual of British Birds (London, 1889) is the best single book for the identification of birds, each species being illustrated.

The Vertebrate Fauna of the Orkney Islands, by J. A. Harvie Brown and T. E. Buckley (Edinburgh, 1891), is in greater part a list of the birds of Orkney, with a short account of each.

Orcadian Papers: being Selections from the Proceedings of the Orkney Natural History Society from 1887 to 1904. Edited by M. M. Charleson, F.S.A.Scot. (Stromness, 1905.) The selections are not confined to natural history, but include historical and other contributions.

Fiction, Poetry, etc.

The Pirate. By Sir Walter Scott.

Poems, etc. By David Vedder. Edited by the Rev. G. Gilfillan. (Kirkwall, N.D.)

Poems, Tales, and Sketches. By Lieutenant John Malcolm, with introduction by the Rev. G. Gilfillan. (Kirkwall, N.D.)

*The Orcadian Sketch-Book. By Walter Traill Dennison. (Kirkwall, 1880.) A unique collection of stories and poems written in the "North Isles" dialect of the Orkney vernacular.

Orcadian Sketches. By W. T. Dennison. With introduction by J. Storer Clouston. (Kirkwall, 1904.) A selection from the preceding. The Pilots of Pomona. By Robert Leighton. (London, 1892.)

Sons of the Vikings. By Dr. J. Gunn, M.A. (Edinburgh, 1893. Cheaper edition, 1909.)

The Boys of Hamnavoe. By Dr. J. Gunn, M.A. (Edinburgh, 1894.) Vandrad the Viking. By J. Storer Clouston. (Edinburgh, 1897.) Garmiscath. By J. Storer Clouston. (Cheaper edition, London, 1904.)

In addition to the material available in book form, much excellent literature in prose and in verse, with more or less direct relation to Orkney, has appeared in various magazines above the names of Duncan J. Robertson, J. Storer Clouston, and others, specimens of which are included in the pages of this volume.

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