

# Lundy Field Society Newsletter No. 26



## 50th Anniversary Issue - January 1996

#### Editorial

This year is the 50th Anniversary of the LFS, and you will already have "signed on" for the AGM jollifications, and the June week on Lundy. We should raise our glasses to Martin Coles Harman for founding us; to Jack Hayward, our President, for enabling the National Trust to own the Island; to the Landmark Tust for administering it, and to all the people on Lundy itself, whose day-to-day efforts make it possible for LFS members to visit and research. Here's to them! All the Very Best.

In order to allow for a 50th Birthday reproduction of Gosse's "Sea and Land" (now virtually unobtainable), complete with a selection (by kind permission) of John Dyke's illustrations from the "Illustrated Lundy News" (also virtually unobtainable), Yr. Ed. has not trawled the Newspapers this year - in any case, but little material has reached the press. (Perhaps a double helping next year.) The new agent, Tony Blackler, broadcasts weekly on Bideford's Lantern Radio. I know LFS members will welcome (belatedly, because they arrived in August '95) Tony and his wife Cherry, and wish them both well.

For everyone that knew him, Tony Langham's death in May last year was a sad loss of a friend. To lose him and Pete Cole so close together is a blow to the LFS, to which they both gave so much. One trusts that they are pacing out old railway tracks together in Celestial Quarries, and measuring golf-courses. We send our sympathies to Jennifer Langham and all Tony's family: also to Douglas and all the Penny family on the recent death of Peg. One remembers with deep affection her elegance and sense of humour, and how she was always unfazed - an example to us all.

On a happier note, Anita? (who was Island Staff for three years '85 - 87) married Dr. John Argyle (an American citizen) in August '95. Liza Cole says it was a lovely white wedding, and Anita and John are now back in the States, where Anita has been part of the Brain Drain for 5 or 6 years, doing post-doctorate research into "something biochemical". Suzy (Betts)

Tucker(?) has provided another glorious grand-daughter for Ann and Christopher Betts. And now BTW Yr. Ed. is including, for dilatory (not to say idle) LFS correspondents, a form for family and professional news - PLEASE USE IT!

Ref. Research and Publications: Prof. Chas. Thomas' "And Shall These Mute Stones Speak" (University of Wales Press - £35.00) is a truly splendid piece of inferential/deductive scholarship on memorial stones in Wales, Devon and Cornwall, Ireland and Brittany, including those on Lundy, Yr. Ed. has not the room to review it as it deserves (perhaps in the next report?) but it is quite rivetting: not a fast read, and if you are like me, not acquainted with OGAM, some of the detail used to support general points made, is difficult to absorb, but the whole book is a fascinating use of monumental inscriptions to infer "tribal" movements in the Irish/ Welsh/Dumnonian land/sea area. It even allows Yr. Ed. (A devotee of speculation) to reckon King Arthur could have been a fellow Scot. The inferential method is marvellously used and you will specially enjoy the Lundy chapter. The book is expensive, but your local library will get it for you, then you can decide if you want to buy - I have.

In its much more modest way, "Lundy's War" by Mary Gade and Michael Harman is also a gem, and very affordable, a real contribution to the Lundy Archive.

Not about Lundy, but produced by LFS members, are three new books. Christopher Betts has translated (and written the Introduction to) J. J. Rousseau's "Social Contract" (Oxford World's Classics). Westwell Publishing (we are running Sketching Breaks on Lundy again this year) has published "A Book of Georgeham" by Lois Lamplugh, illustrated by Peter Rothwell, and "The Play's the Thing - A Critic's History of the Theatre in North Devon" by F. H. Kempe. We enclose the Subscription Form for our next publication in early summer '97 - an illustrated Chanter's "Lundy" - give it to yourself for a 50th anniversary present. ATVB, and don't forget to USE THE

FORM FOR PERSONAL NEWS.

Letters to the Editor.

American Bell-ringers on Lundy

Dear Editor

This was the fifth annual summer Butler Bell-ringing Tour for the North American Guild of Change Ringers. Each year we have visited different areas in the UK, to ring many different bells.

This year ten of us visited South Wales, North Somerset and North Devon. The highlight of the trip this year was our visit to Lundy Island to ring the recently restored Lundy bells. We were the first Americans, North American Guild of Change Ringers, to ring them. We come from the eastern part of the US, representing Philadelphia, Boston, Washington DC, Brewster - New York, Kent - Connecticut, and Rochester - New York. As there only 32 places in the entire continent of North America where we practice this ancient art of change-ringing, a holiday in the UK helps to satisfy our desires for more ringing. We also enjoy meeting and ringing with the "locals", driving through the countryside and eating pub meals.

## Stucley Family Connections with Lundy Dear Editor

As part of the recent AGM, and long weekend of events in Bideford, organised by the Devonshire Association, of which I am a member, we visited Hartland Abbey in North Devon. The Abbey is home to the Stucley family, who have been associated with the area for many hundreds of years. It is a beautiful place, dating to Tudor and pre-Tudor times. The Association members were shown around the Abbey by Sir Hugh Stucley, the sixth Baronet, who also gave us a lecture on his family history, and the history of the Abbey, before we toured round.

One of the items on display was a book, dating from 1618, written by Sir Lewis Stucley. The book is entitled "The true motives and inducements which occasioned His Majesty to proceed doing justice upon him (Sir Walter Raleigh)." This ancestor of Sir Hugh was High Sheriff of

Devonshire, and was ordered to arrest Sir Walter Raleigh, and bring him to London. En route, Sir Walter tried to escape to France, but he was recaptured and beheaded. The reason for his being attainted was that he had headed an expedition to Guiana to seek for a fabled gold mine. Not surprisingly, the expedition was a failure. Sir Lewis Stucley became hated throughout the land after this event, as Sir Walter Raleigh was a national hero. Sir Lewis retired to Lundy, and, shunned by the nation, he became insane, and died there in 1620. Sir Hugh Stucley believed that his ancestor was treated unfairly, and has had a very poor press ever since. He had no option but to obey the King, and, as High Sheriff of the county, he had to make the arrest personally, when so great a hero as Sir Walter Raleigh was involved.

In Alfred Noyes' book "Tales of the Mermaid Tavern", written about 1914, there is a section on the event described above, and Sir Lewis Stukely is painted as a very unpleasant and venal personality, who received £1000.00 for doing the dirty deed. In his insanity on Lundy, he writes a poem in which he denies that he drinks blood!! It is interesting to note that an even earlier ancestor of Sir Hugh held Lundy, or, at least, held an interest in the island in the 14th century. In the late Tony Langham's book "The Island of Lundy", published in 1994, only a few months before his death, we have a paragraph on page 25, concerning Sir John Luttrell, Knight, and his tenure of Lundy in 1387 -1338. There are pictures of the Luttrell family from the 18th century in Hartland Abbey. The Luttrells gained ownership of the Abbey by marriage in 1600.

Roger Allen.

## Lundy as an Astronomical Observatory. Dear Editor

Lundy - Cornerstone of Neolithic Science? Lundy has had an intriguing history since mediaeval times, but what do we know of its role five, or even six thousand years ago? Recently, Robin Heath, an author who lives in Wales, has uncovered some exciting evidence - now professionally published (Summer '95) by Bluestone.

Robin, an engineering graduate, was head of Technology at Cardigan College, and has a lifelong interest in megalithic sites. Whilst doing some research on Stonehenge - and pondering the question as to why it is where it is - his thoughts turned to the Preseli Hills, from where the Blustones were taken for Stonehenge Mark I. Other researches at Stonehenge had revealed that right-angled triangles play an

essential part in the alignment of the stones.

In an inspired moment (at Carnac in France), Robin used Spherical geometry right-angled triangle theory on the Stonehenge - Preseli line. His reward was a "5-12-13" fit - with the right-angle on Lundy.

Further analysis shewed that this "Pythagorean" triangle was even more interesting. The 'short' side (Lundy -Preseli) is divided into a two/three ratio by the island of Caldy, just off Tenby. This discovery is all the more remarkable as the 3:2 point in the 5:12:131 triangle is the pivotal point of a lunation triangle - giving the ratio of the sun and moon orbital movements (one year = 12.369 'months). Robin's book goes on to shew that this part of Britain was a vast astronomical observatory, and that Stonehenge was built to capture most of the basic principles in one place. He undertook some experiments at a primary school in Wales, and the children - using ropes and poles and a series of precisely positioned holes in the ground - were able quite easily to make astronomical observations (full moons, eclipses and the times of the tides). There is much in the book to intrigue the reader eager to explore our relationship with our surroundings.

Returning to Lundy, we can only speculate what role it held. From our own love of the place, we know that it has the capacity to inspire. Lundy and Caldy are the only fixed points on the triangle. Caldy is on a due north bearing from Lundy. The probability is that Preseli had a ritual significance predating Stonehenge. Who, one might ask had that original inspiration to look north and east from Lundy, and to envisage a great triangle spanning over 300 miles of southern Britain?

Perhaps someone reading this article has the vital clue which can lead to a fuller understanding of these questions. Lundy is a special place, and Robin's research presents us with tantalising possibilities in many areas - science, history and cosmology being a few. Maybe we can recover the knowledge that our forebears of 5,500 years ago, toiled so hard to set in the land-scape for the benefit of future generations. I commend this book, not just because of the Lundy connection, but because of its ability to enthuse our lateral thinking about the great questions of our heritage - and perhaps of our future?

"A Keyto Stonehenge" (ISBN 09526151-1-8) ia available from Bluestone Press of Maes yr Awl, Cwm Degwel, St. Dogmaels SA43 3JF. The price is £5.50 (plus p&p if ordered direct on 0123 961 3224.)

A Gentle Drug for the Exhausted Nerves (Translated from the German by the Rev. Wm. Benson of Barnstaple.)

The English Island of Lundy advertises a holiday "away from it all".

Dear Editor

The dose can be argued about: five days on Lundy, a week on Lundy, many think that three days on Lundy in the Autumn or the Spring are enough to bring sufficient recovery to the nerves. And then there are, too, these day visitors who depart again after a few hours on the island and take with them some souvenir and, above all, the impression that Lundy is boring.

What can one say to that? Perhaps it's good, that on Lundy the chaff and the wheat are separated. It is certainly not true, that the few who have been prescribed Lundy for three days or longer, remain behind on the beach in despair and great sadness, bewailing their fate, whenever the day visitors go away on the afternoon ferry, oh! they have gone. At last peace again and "away from it all".

After such a happy moment of departure, one sips on Lundy the afternoon "cup of tea" with even greater pleasure, and ruminates again on the evening walk: today perhaps again to the White Beach on the Rhododendron Coast; or northwards to the Gull Rock; or even - a challenging path - across the Threequarer Wall as far as the Gannet's Rock, and still further to the North-east point and Puffin Gully, where the puffins nest between the rocks.

Sipping the hot tea, the map in front of one, the idea grows, of going today, past the churchyard and the Old Lighthouse on the west coast, as far as the Punchbowl Valley, of looking for mussels there on the beach and then, in the evening light, looking out on to the sea. That's how it is.

At a late hour, an entry in the diary: another evening walk without meeting a human being - instead several sheep, two ducks and a rabbit. Yellow daffodils near Pondsbury Pond. Herring and black-headed gulls in the wind. Then in the dark: the roar of the surf, a clear star-lit sky and the lights of a lighthouse over in Wales. A last drink in the Marisco pub.

Boredom? Such is Lundy, this lump of granite, situated 18km from the coast of Devon in the Bristol Channel, almost 5km long and 1km wide. The inventory of the island: three lighthouses, a pub, a grocer's shop, a little hotel, some farm and holiday cottages, a Victorian church, a churchyard, the ruins of a 13th century castle, a helicopter landing ground, a camping site, a wind generator, a few tractors and some

small vehicles. The rest consists of fields, cliffs, marshland, slopes covered with scree or rocks, everywhere wild flowers and weeds, bracken and heather, fuchsias, oaks and rhododendrons on the east coast, a great quietness, wind, the roar of the surf and the cries of the seabirds, in short: just as "away from it all" as the slogan runs, with which Lundy presents itself in tourist brochures.

About 20 people live permanently on Lundy, joined by hundreds of sheep, some cattle, chickens and small animals. 400 types of birds are registered; about 40 kinds breed regularly on the island. In recent years the inhabitants have restored several farmhouses, enlarged them and equipped them with rooms for tourists. Up to 100 people can stay the night in the summer high season, in the various holiday houses. Throughout the whole year a ferry, the MS Oldenburg, runs between Bideford or Ilfracombe on the mainland to Lundy Island. The passengers have to change in a bay in the south-east of the island from the MS Oldenburg into a landing-craft, and are brought from this ashore. From there a winding path leads up to Millcombe House, the pub and the shop. Since 1969 the island belongs to the National Trust, which has now leased Lundy to the Landmark Trust. In 1987, the waters right round the island were declared a Sea Conservancy reserve; it is said to be the first of its kind in Great Britain.

Those who walk over Lundy today can vividly imagine that the island, centuries ago, was a nest for pirates. In the 12th century, the pirate, William de Marisco, terrorized from here, the inhabitants of the nearby coasts. Later the island fell to the British Crown, then, around 1610, to the self-appointed King of Lundy, Captain Salkeld. In 1625 the island is said to have been occupied by the Turks for two weeks. After that, the French, British smugglers, an obscure family called Heaven and various private owners have dominated the island. Between 1925 and 1954, Lundy belonged to a certain Martin Coles Harman, who increased the stock of game on the island, above all deer, geese goats and pheasants.

The name "Lundy" by the way, comes from the Norwegian expression for puffins, which, formerly in great numbers, and still today in smaller colonies, nest in the caves in the cliffs. On the tiny neighbouring island, Rat Island, there are said to live still some examples of the rare Black Rat; also a type of shrew is said to have survived there, and is now to be found exclusively there. The "Lundy Cabbage" is valued as a rarity, which cannot be found anywhere

in the world, except on this island. The same is claimed for two kinds of beetles. Let's now turn to the Marisco Tavern, the pub and church hall for permanent inhabitants and temporary holiday guests. They meet here for breakfast, for supper and for the last drink before the night's sleep. There is a telephone here, also a post office. Lundy's own stamp, decorated with a puffin, is obtainable; also - along with other brands - Lundy's own beer. On the walls, on shelves or in glass cases there are displayed, as in a museum, articles which have been found, dug or washed up in the island, or have been presented to the inhabitants: old whisky bottles, lifebelts, broken oars, ships' propellors, flags, mussels, lamps and china. 137 wrecked ships are said to lie on the seabed around the coast of Lundy. A map shows the places where the wrecks were found. Still today, so it is claimed in the Marisco Tavern, the remains from the freight and crew quarters of sunken ships are washed up.

Boredom? Not at all. So many paths which one has not yet trodden, so many bays, coastal areas and slopes which one has not reconnoitred, so many views which one has not yet enjoyed. Near the ruins of the Old Hospital, there is the hidden pool in which the goldfish play. Then there is the path to the lighthouse on the north-west point, the ruins of the John O'Groat's House, where today the rabbits hop over the ruins, and where the bracken grows profusely. Then there is this bay at St. James' Stone, where seals are occasionally to be seen. Here, the thought comes involuntarily to the visitor, that it would probably have been worthwhile to have brought with one to Lundy, this or that reference book on birds, butterflies, wild flowers and foliage, in order to look up in the evening, in peace, what had been seen during the day. One should also always have a pair of binoculars with one. I discovered brightly coloured feathers on the hillside near Tibbetts Point, well-formed mussels in Lametry Bay. The search for a message in a bottle, for an old brandy or whisky bottle remains, however, unsuccessful. On the other hand, I could tell you how many lighthouses can be seen on a clear star-lit night from Beacon Hill; in which ruined building the starlings gather in the evening to sleep; where, with a little bit of luck, deer can be seen in early morning; where the island ponies usually graze and how the Lundy Cabbage tastes. That is all in my diary to be read over.

I have not counted the sheep, but I did count, once, the day visitors, as they hurried after the berthing of the landing-craft, almost running as they climbed the winding path, taking photographs all the time. Meanwhile, I sat between wild flowers on a hill, bit with joy into my sandwich and already sensed how Lundy's holy peace was spreading over my nerves. The sheep bleated, the sun shone, and the seagulls sailed in the wind. "Away from it all", it's just that.

Thomas Droste, Hanover Strasse, 37077 Gottingen, Germany.



Sea and

Land

By Philip Henry Gesse F.R.S. (Published 1874)

Chapter I

There are many odd nooks and corners in England which are seldom visited by tourists,

and of which topographical writers know next to nothing, which are yet well stored with objects of interest amply sufficient to repay the toil and ingenuity expended in searching them out. Such a spot is Lundy, that little rocky island with precipitous sides, that stands in the midst of the waters of the Bristol Channel, like a sentinel to guard this great sea road into the heart of England. I had been prosecuting some researches among the microscopic zoophytes, and other objects of natural history, on the picturesque coast of North Devon, throughout early summer; and from the lofty downs and cliffs around Ilfracombe I had often gazed out upon Lundy, a long, low wall of purple in the horizon, and wished to explore it. It can only be seen in the clearest weather; many a day I have looked for it in vain, and thus its appearance became associated with lovely mornings and clear golden sunsets; and what I had heard of some peculiarities in its zoology, and what I imagined an insular rock so situated might afford to the naturalist, determined me to take the earliest opportunity of a visit to its cliffs. Such an occasion was found through the courtesy of Hudson Heaven Esq., the eldest son of the proprietor of the island, who kindly invited myself and two companions to accompany him in his boat, about to sail. Accordingly the break of day on the 1st of July saw us on the little quay at Ilfracombe, with portmanteaus and carpet-bags, collecting basket, bottles and jars for zoophytes, and some packets of sandwiches and other comforts for the interior

organisation. We had to wait at least an hour after the time appointed, before the tide served; it was rather a cold morning; the sky was leaden, and there was already a tough breeze from the westward, dead against our course, which seemed likely to freshen; the fishermen, moreover, that sauntered out from their hovels at that early hour, assured us, to keep up our already wavering courage, that there was a pretty heavy sea running outside. However, we were booked for the voyage, and were not going to retreat because it might have a dash of adventure; indeed the heroism of one of our party was so strung up by the exciting prospect, that he boldly intimated his purpose of joining the search for Franklin, after this expedition.

So at length we stowed ourselves in the sternsheets; the peak was hoisted, the jib was set, the mainsail trimmed; another pull on the peak-halyards, the jib and mainsheets tautened and here we were with the red sails as flat as a pancake, facing the westerly breeze, and pitching and rolling in the wash of the sea, which is always more than ordinarily uproarious off the harbour's mouth just at the turn of the tide.

The little boat ploughed and dug through the green and foaming waves, quivering now and then as one struck her broadside in a way that rather put a damper upon our mirth. Before she had made one short tack, and before we were well abreast of the flagstaff that crowns Capstone Hill, an envious sea curled up its green head right over the quarter, drenching us completely as if we had invaded its domain instead of its intruding into ours. A pretty picklethis to begin an eight hours' with! and very comforting to the stomachs, already receiving awful warnings of what was about to be. We all grew as quiet as mice in no time: the enthusiasm of science, no more than the pleasure of holiday-making can bear up with dignity against the manifold inflictions of cold and wet, cramped limbs, and the perpetual eversion of that internal organisation I spoke of just now, which no sandwiches could soothe. But let that pass. The approach to the island was interesting; especially as our kind cicerone, Mr. Heaven, pointed out the different objects of interest, and gave us legendary and statistical information. Its form somewhat resembles that of an oak-leaf, being considerably sinuated in outline, and the narrow peninsula of Lametry, constituting its southern extremity, with Rat Island as its termination, we may call the footstalk of the leaf. This end of the island curves round to the eastward, partially enclosing a little bay with good anchorage, pretty

well sheltered from all but easterly winds. About twenty vessels were lying here at anchor, of various nations and of all sizes, from the stately three-masted ship to the tiny fishing skiff. On our expressing surprise at seeing so many craft, Mr. Heaven assured us that often there were many more. "I have known," said he, "three hundred vessels in sight at once. On one occasion the wind had hung long from the westward, and had kept in the outwardbound craft: it at last changed and allowed them to sail, but suddenly shifting again, and coming on to blow from the old quarter, a hundred and seventy vessels put back and anchored in our little roadstead, all vessels of size, not counting boats."

The only landing place on the whole island is in this bay; and here the Trinity House have made a good carriage-road from the beach up the precipitous hill-side to the lighthouse, which occupies the highest point, and which I shall speak of more particularly presently. Up this zigzag road, which is substantially built of granite in the lower part, where it is exposed to the action of the sea in heavy gales, we climbed, eager to find the means of satisfying our quickened appetites, yet not indifferent to the charms with which nature had embellished this lonely place. The sides of the road were gay with flowers of many kinds, the common mallow, the milfoil, the weld or wild mignonette, looking like its pleasant namesake, but scentless; the flaring ox-eye daisy, the figwort, with its brown bead-like blossoms; the navew, loose and sprawling, but bright in hue; ragworts and sowthistles, and elder bushes with snow-balls of bloom, the nearest approach to a tree which the island can boast; these, with minor weeds and grasses and ferns of several kinds, fringed the footpath. The perpendicular side of the road, where the shale had been scarped away, and the crevice of stones, where it had been been faced with a crude wall, presented other and more attractive features. The kidney vetch, or lady's finger displayed its head of delicate flowers in profusion, pale yellow fading into cream colour; and the scarlet-tipped blossoms of the little bird's-foot lotus, that characteristic plant of our seaward downs and precipitous slopes, were not less abundant. From between the loose stones the navelwort shot out its singular spikes, each springing perpendicularly from a bed of succulent shield-like leaves, and fringed to its tall summit with little drooping bells of yellowish white. The situation seems particularly agreeable to this plant, for we found it in many parts of the island growing in great luxuriance, some of the spikes eighteen or twenty

inches in height, and thickly covered with flowers. The herb robert, the bitter vetch, and the purple sandwort displayed their unobtrusive but pretty blossoms among the herbage; and the crimson bells of the common heath, already opened, were fringing the edges of the slope above our heads. The sheep's bit scabious, a lovely flower, with globose heads of azure blue, was not wanting; and the surface of the rock was covered here and there with broad patches of the white stone-crop, whose white, or rather carnation coloured, starry blossoms were conspicuously beautiful. But more prominent than all was that noblest of British flowers, the tall foxglove, flourishing in special havuriance and beauty, while fragrance was diffused from scores of honeysuckles that climbed and sprawled on every side.

All these and other plants, some greeting us as old acquaintances, others possessing the charm of comparative novelty, were an agreeable contrast to the the desolation and barrenness we had pictured to ourselves as reigning here. And as we proceeded we saw pleasant traces of feminine taste, for gentle hands had been busy sowing seeds of stocks, and wallflowers and nasturtiums in the nook of the rock, which were beginning to spread the beauty of their foliage over the ruggedness, and gave promise of additional beauty by and by.

Chapter II The island is the property of William Heaven Esq., who has erected a handsome mansion above the landing place, in a sheltered hollow, which commands an extensive view of the opposite coast of Devon and of the broad Bristol Channel. Here he resides with his amiable family, exercising a patriarchal rule over his little dominion. Two thousand acres" form his realm; of which a considerable portion is under cultivation, and is let to a tenant farmer, John Lee by name, familiarly known as Captain Jack, an excellent, worthy man. In his earlier days he was bred to the sea, but now he ploughs the land. At his house, "The Farm", visitors are entertained; we found accommodation decent (for the circumstances), a well-supplied table, attendance prompt and kindly, and charges moderate. With the exception of the lighthouse keeper, who with his family and subordinates occupies a substantial stone house at the foot of the lighthouse, on the western edge of the island, rather remote from the farm, the rest of the inhabitants are labourers, and their families employed in husbandry, or in the mechanical occupations that minister to it.

The whole population amounts to about fifty souls, not one of whom is a native of

the isle; a child has not been born here within the memory of the present generation; the women invariably going over to the mainland when their confinement approaches. No medical man resides on the island; but a fire lighted on a particular summit summons a boat in cases of emergency, from the little village of Clovelly, just opposite. This place, itself a spot of romantic beauty, one of the gems of the North Devon coast, is situated in Barnstaple Bay, just within Hartland Point (the Herculis Promontorium of Ptolemy), and is distant about five leagues from the end of Lundy. A boat comes across every Friday, bringing the week's accumulations of the post-office, and returns with any letters that are ready. Other communication with the shore is only casual, as when the Pill boats come down as far as this from their little pilot village at the Avon's mouth to look out for ships, and anchor in the bay; or when a skiff-load of lobsters is run up to Ilfracombe to be shipped, per steamer, for Bristol.

A mutton-chop, improvised by Captain Jack's larder, revived our vigour, and we sallied out towards the south end to reconnoitre, a walk between stone fences, enlivened by many interesting plants in flower, some of which I shall mention presently, led us to the ruins of the castle, bearing the name of the De Mariscos, the earliest possessors of the island on record, who held it as long ago as Henry the Second's reign.

The walls of the castle and the ancient keep remain in integrity, and have been turned, by the addition of new walls, into labourers' cottages, the chimneys of which peep out from the ruins, so as greatly to mar their picturesque effect.

A woman was standing at one of the doors, and children were playing around; we shuddered to see the little things run and jump on the edges of the precipice, and babies carry babies a little younger than themselves into places where a single false step would have plunged them fathoms down; and we spoke to the woman about the danger. Such, however, is the power of habit to create indifference, that she actually appeared not to understand what was meant. Great mixens outside the doors, strewn with the shells of enormous limpets, and with those of the green conical eggs of guillemots, afforded amusing evidence of the favourite food of the poorer inhabitants of the island.

A few rods below the castle, where the greensward slopes steeply down to the south-east, a sort of doorway attracted our notice, and we looked in. It was the entrance to a large chamber excavated out

of the solid rock, and bore indubitable proofs of its being a work of art. The grey shale of which this end of the island is composed is friable, and easily removed; and time and labour alone would be needed to form such a cavern as this. A long slab, resting on two upright ones for joints, made the doorway. The cave is now used as an occasional stable, but tradition assigns a very different purpose for its construction. It is called Benson's Cave, and its history is as follows:-

"Exactly a century ago, the member of Parliament for Barnstaple was one Thomas Benson, a man of more talent than character. He was the owner of a ship called the *Nightingale*, which having been lost on her outward voyage to Maryland, he claimed the insurance. Before it was paid, however, one of the crew of the sunken ship gave information which led to the exposure of an artfully-plaimed piece of villany. It was proved that Benson, having shipped a valuable cargo of linen and pewter, with a ballast of salt, gave secret orders to the master to remain off Lundy, whither he repaired. The crew were here tampered with, and, by bribes and threats, were induced to comply with the proposed scheme. The linen and pewter were landed and concealed in this new-made cavern, excavated by Benson for the express purpose. The ship then sailed; but meeting in the mouth of the channel a homewardbound vessel, the master thought it a good opportunity to execute his purpose. He went below, bored a hole through the bottom, and knocked down the bulkheads, that the water might get at the the salt. But the sea pouring in with great rapidity, and the strange vessel being yet a good way off, it was thought they might possibly not reach her. The mate then fired the oakum stores with a candle, having first stopped the leak with a marlin spike. The smoke and flame were soon seen on board the approaching ship, which presently bore down, and taking the crew on board, carried them into Clovelly. Protests were sworn at Bideford; but meanwhile the boatswain, conscience-stricken, gave information of the roguery. The arch-villain Benson escaped to Portugal: his subordinate, the master, Lancey, was hanged; and the cavern remains to this day to perpetuate the remembrance of their crimes."

The steep sunny slopes of this part of the island were gay with the purple bloom of the cinerous heath, and with the brilliant masses of blossom of the yellow broom. A bush of this latter kind was springing out of the very lintel of the cavern doorway, and its long spikes of flowers were elegantly pendent over the entrance, the



darkness of the interior throwing out into fine relief the rich golden mass of bloom. The thorny, or Burnet-leaved rose, was trailing its lengthened and tortuous branches over the ground, nowhere rising to more than a few inches in height; we were charmed with the beauty and delicacy of its spotless cream-coloured blossoms, and still more with their exquisite fragrance. We afterwards found this plant quite characteristic of the botany of the island.

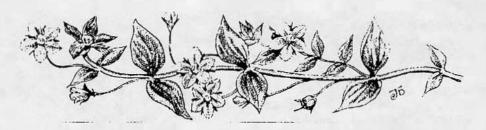
From these slopes we looked down upon, but did not explore, the peninsula of Lametry, a mass of land precipitous on every side, and joined to the main of the island by a ridge of rock running up to a sharp knife-like edge. Beyond this is an insular rock called Rat Island, from the great number of rats that have made it their home. They are believed to feed largely on fish, as well as on limpets, and other littoral prey. Lundy is much infested with rats. For a while the old English, or black rat, succeeded in maintaining undisturbed possession of this little nook against its ruthless exterminator the Norway, or



brown rat. The latter, however, has at length found its way across, and is already the more numerous of the two. Mice are quite unknown.

Among the lovelier plants we noticed the little euphrasy, that tiny flower that derives its name of eyebright, not from its beauty, though few lovers of flowers behold it without brightening eyes, but from its old reputation for "making old eyes young again", a reputation which, if Milton may be believed, is as old as the days of Adam at least, for the Archangel, about to guide our first parents' gaze into distant ages -

"The film removed which that false fruit, which promised clearer sight,



Had bred; then purged with euphrasy and rue The visual nerve, for he had much to see."

The little shining geranium, the dwarf red rattle, the yellow tormentil and that universal favourite, the scarlet pimpernel, were scattered in the bordering herbage of the paths; and the walls of the uncemented stone were nearly covered with large patches of white stonecrop, and of wild thyme, both beautiful but minute plants, the pink blossoms and downy capsules of the latter particularly noticeable from their abundance. Here, also, as well as in other places, grew in great profusion, the wood germander, or bitter sage, whose wrinkled leaves during the scarcity of the last war were used as a substitute for tea.

Fortunately, however, we were not reduced to any such sorry alternative, for our worthy old landlady's tea caddy proved well stocked with the real China leaf; and when we got back from our afternoon's stroll, we did justice to its revivifying qualities.

The next morning we started, under the auspices of our courteous guide, to visit the north end, the resort of countless sea-birds, and in going to it we skirted alond the eastern side. Viewed from the road above the landing-place, this line of coast presents a curious appearance. The grey cliffs rise nearly perpendicularly form the sea, to a height varying from fifty feet to as many yards; then a broad green slope very even and regular, forming an angle of 45 degrees with the horizon (less or more) carries up the elevation to four or five hundred feet, and there is the flat summit. The regularity of these slopes is remarkable, and one is ready to fancy that some gigantic carpenter has been at work, bevelling off the edge with a plane. From the sea the deep rich verdure of this inclined surface has a very attractive appearance, and when looked at narrowly, has a roughened texture, like that of a closegrown forest. This is owing to the nature of the herbage, which consists almost exclusively of the common brake-fern. In winter, as we were informed, the brown hues, assumed by this plant in decay, give to this side of the island a russet tint particularly rich and mellow.

Chapter III One of the first things that attracted our attention, and that continued to excite interest, was the extraordinary abundance of the cocoons of a small species of hawkmoth, known to collectors as the Burnet-moth. In the open waste spaces, the stalks of grass and the slender stems of herbaceous

plants were studded with these little appendages by hundreds, or even thousands. The cocoon is a pretty object; it is of a spindle shape, that is, swollen in the middle, and pointed at each end. It is formed of silk compacted into a papery substance, bright yellow and glistening, and is attached to the grass perpendicularly all along one side. Some of them which I opened displayed the caterpillar as yet unmetamorphosed, an inert little creature of pale yellow, studded with rows of close-set black spots. Others contained the black shining chrysalis, in which I detected a curious habit. I had collected a dozen or two stalks with cocoons, and had brought them into my bedroom. At night, while sitting reading, I perceived some creaking sounds proceeding from them, and by bringing each in succession close to my ear, I was enabled to find out the individuals from which the noise issued. Then holding the cocoon between the eye and the light, its semitransparency permitted me to see the enclosed pupa busily engaged in revolving on its long axis, and the sound was caused by the grating of its rings against the papery wall of its prison. We found multitudes of the moths sitting on the herbage, or flitting hither and thither on feeble wing. Many were drying their half-expanding wings in the morning sun; some were pushing their way out of the upper extremity of the brittle cocoon, previously to bursting the chrysalis skin; and others were emerging from the projected pupa, so wet and shrivelled, that it seemed marvellous that those crumpled and distorted wings should in an hour become the elegant organs



which we afterwards see them, smooth and satiny, or rather burnished with that rich subdued gloss that we see in what is called frosted gold, dark sca-green, spangled with large spots of crimson.

Truly, in studying so insignificant a creature as this, sown broadcast as it were upon the wild moors of this island rock, we cannot help being struck with the lavish pains (to speak according to the manner of men) that have been bestowed upon it. How elegantly has it been fashioned and trimmed; how gorgeously painted and gilded; how carefully provided for! Surely he must be blinder than the mole who does not trace here:

"The unambiguous footsteps of that God Who gives the lustre to an insect's wing, And wheels His throne upon the rolling worlds."

We wended our way along a narrow path through the tall fern, occasionally entangled among the tortuous branches of the sweet honeysuckle, or catching our feet in the trailing shoots of the white rose. How different the odour of these two flowers! Both are sweet, but the fragrance of the rose is far superior as an aroma to the sugary scent of the honeysuckle. Tall foxgloves, everywhere springing up from the dense bed of brake, gave quite a character to the scene. I think I never saw this magnificent flower in so fine a condition; several spikes occurred fully six feet in height, straight as an arrow, and densely crowded with their large purple bells. Our friend assured us that he had counted, on a specimen of extraordinary dimensions, the remarkable number of three hundred and sixty-five flowers, exclusive of unexpanded buds. This must have been a giant. We could not have selected a more propitious time for seeing nature in her loveliness; it was what Vergil elegantly calls "formosissimus annus" - the year in the height of beauty. The opening of July is the season when more plants are in flower than at any other period; the joyous insects are gay upon the wing, and the birds that are so inseparably associated with lovely summer weather are all with us; the atmosphere is apt to be calm and clear, and the deep transparent azure of the sky is reflected with a deeper intensity from the sparkling sea, just as we saw it now, as from ourbowery walk we ever and anon gazed out upon the broad main, the white sails scattered over its surfaces, gleaming in the morning sun and answering to the fleecy clouds that flitted over the face of heaven.

"Land and sea

Give themselves up to jollity."

Several tiny streamlets ooze out from the upland moors, and trickling down the sloping sides find their way along the chines and gullies to the sea. The spongy nature

of the soil, and the matting of the vegetation impeding the flow of the water, cause the courses of these streams to form bogs, difficult to pass, but presenting some objects of interest. In the first that we came to we found two kinds of speedwell, the lovely germander, familiar to everyone as the blue-eyed gem of the hedge-bank, and the spiked speedwell, a smaller species and much more rare, and rather to be looked for in chalky pastures than on the swampy borders of a stream. That plant, sacred to friendship, the true forget-me-not, was also abundant here, together with a white variety of the same species that I have not seen noted.

In another similar brook that breaks out from its darkling bed beneath dwarf willows, the common buttercup of our meadows was growing in company with a much more uncommon species of the same genus, the great spearwort; the latter we found by no means rare in various parts of the island.

The dwarf-furze, a Chapter IV smaller kind than that of our commons and downs, overruns a considerable portion of the central part of the isle, mingling freely with the fine and cross-leaved heaths, and the ling or true heather; this last was not indeed yet in blossom, but the true heaths were in full flower. The white-blossomed variety of the cross-leaved heath we found not uncorninon, readily distinguished from the ordinary state of the plant, not more by the pure creamy-white of its bloom, contrasting with the rosy purple hue which is normal, than by a pale yellow-green, by which patches could be discriminated almost as far as they could be seen.

How delightful it is, when tired with exercise, to throw one's weary limbs upon the soft yet springy heather, which yields



Great Spearwort

and yet sustains, with the elasticity of a hair mattress! The warm sun pours down on you, it is true, but the cool breeze plays about your face and tempers the ray; and as you gaze upward into the unfathomable sky, and feel its pure cloudless azure pen-

etrate your soul, and inhale the aromatic odour of the opening buds and the mingled perfiame of a thousand flowers around, you fancy, for the time at least, that no couch in the world could yield you so refreshing or so delightful a repose.

Hereabouts we obtained a view of the beach far below, covered with huge boulders of granite, all invested with a coating of seaweed; for the tide was now at its lowest. The eye, roaming over the intermediary slope of fern, so feebly appreciated the distance, that it seemed an easy matter to run to its edge and then scramble down the face of the perpendicular cliff which appeared only a few yards high. The boulders upon the beach appeared not large or weighty to be turned over by hand, and I was actually meditating an attempt to explore the inviting locality, in hopes of finding many Annelides and Crustacea under these stones. But our more experienced friend assured us that those greenclad boulders were masses of many tons' weight; that the cliff's were fifty to a hundred feet high, and so inaccessible that it would be utterly impossible to ascend or descend them unassisted. "Not long ago", said he, "a vessel came on shore in that very spot: walking here one morning early I discovered her on the rocks; she was a Norwegian brig in ballast, outward bound; all hands were saved, but it was only by means of ropes passed down to them by our people, by which they were hauled up those cliffs that you think so easy to climb." We now came to the Half-way Wall, so called because it cuts the island transversely in the middle. Its eastern extremity, close to which we stood, terminates in a huge mass of granite, on which a cubical (or rather parallel-sided) block, about fifteen feet high by eight feet wide, stands. It was formerly a true logan-stone, being so poised by nature that it could be rocked by the hands of those who had nerve enough to stand on its narrow and lofty base, as our friend had often done. Now, however, it had slipped out of its equilibrium into a crevice, and is now immovable; the action of the weather, as is supposed, having worn away its base.

The paths through the heath, and the open spots in many places, showed the power of atmospheric action to change the condition of the solid rock. These were covered with a sort of gravel, composed of white fragments aboout the size of peas, very uniform in appearance, which, when examined, proved to be nodules of quartz, liberated by the natural disintegration of the granite. A large quantity might be collected with little expense of time or labour. An attempt was made to use the granules



as gravel for garden walks, for which their regular size and form, and their pure white colour, would have made them very suitable; but the absolute want of any adhesive principle caused them to be rejected on trial: in technical phrase "they would not bind".

A little beyond the Half-way Wall we were introduced to "The Templar", a colossal human face in profile, sculptured by nature out of the rock. It forms a projecting point, one of those corners which, from the southern end of the island, we could see standing out at the upper extremity of the bevelled slope; an enormous block of granite, rudely split and shivered by the elements, but accidentally fashioned, as you look at it in bold relief against the sky, into so perfect a resemblance to the features of a man, that one can scarcely believe that it has not been touched by an artist's chisel. The features are bold and masculine, the nose sharply aquiline, the mouth compressed with a determined expression, the forehead projecting, the chin muscular and swelling; the head is covered with a low round skull-cap, furnished with a projecting peak in front: it requires, indeed, no stretch of fancy to imagine we see in it the portrait of one of those warlike Knights of the Temple, to whom the island at one period belonged

We noticed here a curious phenomenon, with which our prolonged stay on the island made us sufficiently familiar afterwards. On looking back to the southward, we perceived everything distinct and palpable, except the lighthouse, the summit of which was enveloped in a semi-transparent haze, that streamed off some distance to leeward like a white veil. We were informed that it is a common thing for the fog to lie on the heights of the island, while the sides, the beach, and the sea, are perfectly free from cloud: hence the elevated parts are generally moist; and thus, doubtless, those springs are fed which issue from these lofty moors and tickle down on either side.

Farther on, still keeping along the inner or eastern side, a romantic glen opens, very boggy, and therefore difficult to be explored. By means of the tufts of a sort of grass that grows here, however, we man-

aged to make our way some distance down it. This plant grows in large stools or tussocks, formed of the densely matted leaf bases of successive seasons; some of which are eight or ten feet high, and two feet in diameter. An agile person might leap from one of these to another, and so traverse the valley without wetting his feet. Through the gully we had a view of Gannet Cove, as also Gannet Rock, an insular mass lying off one of its points; and here we saw the first outpost of the grand army of birds that we had come to visit We pushed on up the opposite side of the valley, through the tall fern, which was growing excessively rank, reaching about as high as our heads; sat down for a few moments to rest, and amused ourselves by seeing which could cut the fern-stalk so as to produce the most effective royal oak. Perhaps some of my readers may like to amuse themselves in the same manner; if you have never seen it done, select a stout leaf of the common brake-fern and pull it up from the roots, then with a sharp knife cut the stalk across slantwise, in the black part that is normally immersed in the soil, when the section of the vessels will display a very pretty resemblance of a well-grown oaktree, either tall or widely spreading according to the direction in which you make the



cut

In the vicinity we found some interesting plants. The beautiful blue skull-cap was growing in the streamlet that trickled into the gully: higher up the pretty little yellow pimpernel, or wood loosestrife, was abundant, and so was the bog pimpernel, as indeed, we found it widely spread over the north end and centre of the island. Mr. Heaven mentioned his having met with the much rarer blue pimpernel on some former occasions; but it did not occur to us. Among the brake the wild hyacinth yet lingered in flower, but was found more numerously in fruit. The dwarf red-rattle, a lowly denizen of waste places scarcely raising its rosy vaulted head above the level of the moss in which it grows, occurred here, together with its usual companion, the bird's-foot lotus. The small upright St. John's wort, an exquisite flower, the tiny eyebright, and the milkwort of the rich blue variety were also among the plants we gathered here.

Chapter V But now we were approaching the scene which had been the chief object of our curiosity. Near the northern extremity of the island stands a huge oblong block, like a square column, called the Constable: we pass this, and the wondrous spectacle suddenly bursts upon us. Much as our expectations may have been excited, they were in nowise disappointed; though my companions were not like myself naturalists proper, we were unanimous in declaring that the sight was more than worth the voyage, sea-sickness and all; it was a scene, the witnessing of which must always stand out prominently in memory, as one of the remarkable things, of which an ordinary life can reckon but few.

We turn the corner of a pile of rocks, and we stand in the midst of myriads of birds. We are on an inclined plane, extending, perhaps, half-a-mile down to the sea-cliffs, composed of numberless hillocks of red earth, on which lie, heaped irregularly, and partially imbedded in the soil, great boulders of granite rock. On these, on the hillocks, and in the hollows between, sit the birds, indifferent to our presence, until within two or three yards of them, when they turn the large liquid eye towards us, as if demanding the meaning of the unwonted intrusion. If we avoid sudden motion, we may approach still closer, but generally at about this degree of proximity the little group congregated on the particular stone or hillock leap up, spread their short, feeble wings and fly with a rapid laborious beating of the air, out to seaward. The flight is painfully feeble at first, but presently gathers strength and becomes more forcible, though always fluttering.

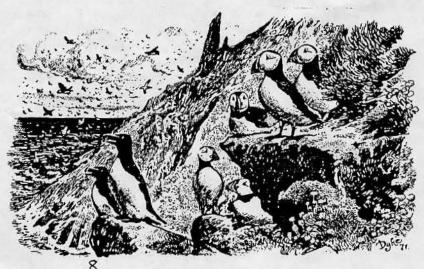
The great congregation of birds begins just hereabouts: the cover of fern to the southward, which we have been skirting, is not suitable to their habits; but it extends forward as far as the eye can reach, and then

is not bounded, but spreads on around the north extremity of the island, far down on the western side.

The air, too, is filled with them like a cloud. Thousands and ten thousands are flying around in a vast circle or orbit, the breadth of which reaches from about where we stand to half-a-mile seaward. They remind me strongly, with their little wings stretched at right angles to their bodies, painted in black against the sky, of the representations we see in old astronomical works of the fixed stars arranged in the Ptolemaic system in a crowded circle around the sun and planets. If you attend only to those near you, they seem to rush on in one direction in an unceasing stream; and you wonder what can be the purpose, and what the terminus, of the universal migration; but when your eye has followed them a little, you perceive the circular movement, that the same birds pass before you again and again, as they come round in their turn, like the movers in a theatrical procession, that cross the stage and pass round behind the scenes to swell the array again.

But the earth and the air are not the only spheres occupied by these birds: look down on the sea: its shining face is strewn, as far as you can discern anything, with minute black specks, associated in flocks or groups, some comprising few, others countless individuals. These, too, are the birds, busily employed in fishing for the supply of their mates and young, or resting calmly on the swelling undulation.

The fearlessness manifested by those that are sitting around us, permits us to observe them at leisure. They are principally of two kinds; the smaller has a large round head, with a beak monstrously deep and high, but thin and knife-like; and as if to make this organ more conspicuous, it is painted with red, blue and yellow. The legs and large webbed feet are orange-coloured; and these, too, are sufficiently remarkable in



flight, for the bird stretches them out behind, somewhat expanded at the same time, in such a manner that they appear to support the short tail, the broad feet sticking out behind. The whole of the upper plumage is black; the face, sides of the head, and underparts pure white, except that a black collar passes round the throat. These are known by the fishermen as sea parrots or coulternebs; but are more generally designated in books as puffins.

The other species is larger, being nearly as big in the body as a duck, but shorter in the neck. The beak is formed on the same model, but is more lengthened; and it, as well as the feet, is black. The general proportions are more those of ordinary birds; and though the distribution of the hues of the plumage, black and white, is nearly the same as in the former species, the black covering the whole head and neck, combines, with the other differences I have mentioned, to render the discrimination of one from the other easy, even at a great distance. This is the razor-billed auk.

These two species furnish the majority or the individual birds that are congregated just here. But when we get round yonder point we shall open the haunts of several other kinds, almost as innumerable as these. It must not, however, be supposed that they keep their localities so strictly as not to intermingle in any degree. From the point where we stand, we may with a little care be able to discern individuals of all the kinds, more or less numerous. The different species of gulls, in particular, amounting to four or five, are conspicuous for their long pointed wings and elegant sailing flight. They are wary and alert; we do not see them sitting still as we approach, as the puffins and razorbills do, for before we can get within gun range they are on the wing. Then, as conscious of their powers, they are bold; sweeping by over our heads, with a querulous scream; now and then swooping down and making as if they would dash at our faces, but taking care to swerve as they come close, and gliding away with the most graceful ease and freedom.

Let us examine for a moment the ground beneath our feet. We need caution in moving about, for the tussocks and mounds feel precariously hollow and spongy; now and then the foot breaks through and the whole leg is buried in a dusty cavity that gives forth an insufferable odour of guano; then as we jump on a hillock, it totters and breaks off from its base to roll down the hill, laying bare an interior riddled with holes like a honeycomb. These hillocks themselves are nothing but enormous tufts of the comon thrift or sea lavender,

so often used for edgings in cottage gardens; the plant in a succession of years assumes a dense hemispherical form, while the decay of the old leaves forms a reddish spongy earth, which constantly accumulates, and constitutes the soil on which the living plant grows.

Under the projecting shelter of one of these tussocks we found a nest of one of the gulls, the lesser black-backed species, as was supposed. It was a platform made of the red leaf-bases of the thrift, dry and brittle, on which lay one chick and one egg. The latter was larger than a hen's egg, of a dark greenish hue with black spots; it was on the point of hatching, for I distinctly heard the feeble piping of the impatient chick within, whose beak had already begun to chip the shell. The hatched young one, a tiny creature, covered with pale brown down, lay quite still with shut eyes, which it opened for a moment when touched, to close them again in stoical indifference.

Chapter VI Presently we came upon another nest, containing one young rather more advanced; its clothing of down prettily spotted with dark-brown. Then another with two eggs of dirty white, mottled and splashed with brown, which was conjectured to belong to the glaucous gull, a powerful and handsome bird seen hovering about, of snowy-white plumage, except the back and wings, which are of a delicately-pale bluish-gray.

The whole atmosphere was redolent with the strong pungent odour of guano, which, as everybody knows, is the excrement of fish-eating birds, collected from the rocks on which they breed, where it has accumulated for ages. The same substance was splashed upon the stones and earth wherever we looked; we saw it falling through the air; our clothes were spotted as if with whitewash; and we scarcely dared to gaze upwards on the circling flocks, lest our eyes should suffer the misfortune of Tobit. It is to the puffins that the burrows with which the soft vegetable earth is honeycombed are chiefly attributable. The whole island is indeed stocked with rabbits, and their warrens (or "buries" as the local phrase is) are very numerous. The puffin does not hesitate to appropriate these whenever he can; but as there are many more birds than beasts, the former are generally compelled to excavate for themselves: this is effected by means of the powerful beak, to the depth of two or three feet. At the bottom of the hole the egg is laid, never more than one. We saw several egg-shells, from which the young had been hatched; they were nearly as large as hen's eggs, of a dirty whited-brown tint, which is said to derive from the soil, as

they are purely white when first laid. We had no means of digging, and we did not choose to explore the burrows by thrusting our arms; for the puffin, if at home, would have given our intrusive fingers such a welcome with his strong and sharp beak, as we might not soon have forgotten.

Mr. Heaven informed us of a curious habit in the economy of these birds. Immense numbers come to the breeding-place in April, to reconnoitre the ground: they remain three or four days, then disappear so completely that not a single bird is to be seen. In about a fortnight they return for good, and set about the work of family rearing. Then mortal combats may be witnessed; the rabbit and the puffin fight for possession, the old buck stands up in front of his hole, and strikes manfully, while the knife-beak of the dishonest bird gives him a terribly unfair advantage. Sometimes two male puffins contend; each strives to catch his adversary by the neck; and when he can accomplish it, shakes and holds him with the tenacity of a bull-dog.

Auks and guillemots likewise bear a part un the exploratory April visit; but not in such numbers as the puffins.

One of our party knocked over a puffin with a clod of earth, just to examine it. We did not wish to destroy them, and therefore abstained from throwing. It was stunned, and lay in our hands while we admired the thickness and closeness of its plumage, beautifully clean and satiny, especially the white parts. Presently it began to open its large dreamy grey eyes, so singularly set in scarlet eyelids: we did not wish to prove the keenness of its beak, and therefore laid it on a rock in the sun, where no doubt it soon recovered.

It must not be supposed that this was any feat of skill in the marksman. It would have been perfectly easy to procure hundreds in the same way. Our friend assured us that he had himself knocked down six



with one stone; and that he had seen twenty-seven bagged from a single shot with an ordinary fowling-piece, not reckoning many more which were knocked over, partially wounded, but which managed to fly out to sca.

We walked on a few rods further. The character of the declivity continued pretty much the same; but we had opened a point of the distant cliff which was cut into a series of rocky ledges. like a wide flight of steps leading to some magnificent building. On these were seated a dozen or twenty gannets, beautifully snow-white birds, with black tips to their wings, larger than geese. We could easily have scrambled to their rock, but our friend was reluctant to have them disturbed. This fine bird used to be numerous here; and Gannet Cove and Gannet Rock received their appellations from the hosts of those birds that used to make that neighbourhood their resort; but having been much annoyed by idle gunners from the main, they had deserted the island, it was feared finally. Lately, however, a few pairs have returned, to the gratification of the proprietor, who is desirous of their increase. In truth, they are noble and beautiful birds; their long pointed pinions enable them to wheel and glide about in the air, to soar aloft, or swoop, or float on motionless wing at pleasure with the utmost grace; while the contrast of the black wing-tips with the general whiteness of the plumage, cannot fail to elicit admiration. As they sail near, we perceive that the neck and poll are tinged with buff; but this exception to the general purity of the vesture is not at all conspicuous or universal. Their cry is "crak, crak, crak" uttered on the wing. The snowy purity of the mature plumage is said to be reached through several alternations of opposite hues. The young, when newly hatched are black and quite naked: their first coat of down is white; this is succeeded by a plumage of black spotted with white; and this by the spotless white investiture in which we saw them.

Another reason why the gannets should not be disturbed, while so few as they yet are, is the bold piratical character of the larger gulls. These are ever on the watch to destroy the eggs of the gannet, the moment both the parents are flown. We had a proof of the ferocity of these predaceous birds before our eyes. As we were looking down the slope, we saw a glaucous gull emerge from a puffin's hole into which he had just crept, bringing out the little black puffin chick. We watched the marauder shake his victim and giving it repeated blows with his beak, the poor little thing crawling away just as a mouseling does

when half killed by a cat. We began to run towards the spot, the gull taking no notice till we got pretty near, when he turned up his eyes and gave us a look of impudent defiance, then deliberately seized his prey in his beak and bore it off triumphantly far out to sea. The larger gulls will sometimes swoop down upon a group of puffins sitting on the sea, and snatch up an adult from the flock in the powerful beak. Mr. Heaven has seen this done.

Our attention was here pointed to a new bird. On the lower ledges of the wide stairlike rock occupied by the gannets, sat, in little crowded rows, many birds about as large as pigeons, which in form and in the colours of their plumage they much resembled. They were the kittiwake, the smallest of the gulls that can properly be called indigenous to our shores. We afterwards made closer acquaintance with the species.

Chapter VII The Shearwater is said to breed in the rocks hereabouts; but we did not notice it; nor do I know of what species it is. Nearly at the edge of the slope we observed a stout iron rod erected, standing ten or fifteen feet high. On inquiry we found that this, with a corresponding one at some distance, is used for the support of a long but narrow net, which is stretched along like a wall at the edge of the precipice, to intercept the puffins. These birds, when they fly, shoot down in a straight line, just sufficiently above the ground to clear the rocks and hillocks; they thus strike the net, and are caught. They are also taken in numbers by dogs, which run upon them before they have time to fly; and in other modes, chiefly for the sake of their soft and abundant feathers.

From the spot where we now stood there extended a considerable space, almost covered with the wild hyacinth, as we could see from the fruit-bearing stalks. The contrast which this large belt presented when in flower, with the thrift which occupies as exclusively the range below it, was described to us as very curious and pretty; the whole forming two parallel zones the one of blue, the other of pink. Large beds of coarse sorrel were prominent in the vegetation here; and the crevices and bases of the rocks were fringed with the singularlycut leaves of the buck's-head plantain growing in the unusual luxuriance. The pungent peppery scurvy grass we also found very fine.

We now approached the north-west point, the very extremity of the island; no slope of earth, but a wilderness of huge castellated masses of granite, piled on one another in magnificent confusion. By scrambling between and over these, we contrived

to take a perch, like so many of the tenant-birds themselves, on the very verge of the stony point, whence we could look over each side, and gaze on the boiling sea at the foot of the perpendicular precipices. In truth this was a noble sight; the point was fringed with great insular rocks, bristling up amid the sea, of various sizes, and irregular angular shapes, partially or wholly covered by the tide at high water, although now largely exposed. There was a heavy swell from the westward, which, coming in on broadly heaving undulations, gave the idea of power indeed, but of power in repose; as when the lion couches in his lair with sheathed talons, and smoothed mane, and half-closed eyes. But no sooner does each broad swell, dark and polished, come into contact with these walls and towers of solid rock, than its aspect is instantly changed. It rears itself in fury, dashes with hoarse roar, and apparently with resistless might, against the opposition, breaks in a cloud of snowy foam, which hides the rocky eminences, and makes us for a moment think the sea has conquered. But the next - the baffled assailant is recoiling in a hundred cascades, or writhing and grovelling in swirls around the feet of those strong pillars, which still stand in their majesty, unmoved, unmovable, ready to receive and repel the successive assaults of wave after wave with ever the same result.

We watched the war of the elements, the conflict of the Land and Sea, a while, with somewhat of the interest that attaches to a doubtful combat, though we well knew the fortress could not be taken by assault; and at length we turned to other features of interest which our vantage-ground commanded.

Looking over the battlemented margin of the platform on which we stood, we could see the entrance of a fine cavern, sixty feet in height, about thirty in width, and perhaps eight hundred in length. It completely perforates a projecting promontory, the part of the coast, indeed, which we had been skirting, on which our principle observations on the birds had been made. A boat can go right through, but only at high water, because there is a rock in the midst of the course, which at any other state of the tide, leaves too narrow a channel on either side. But the most interesting fact connected with the cavern, is that a spring of fresh water is said to rise in its centre, bubbling up through the sea-water that overlays its mouth. Mr. Heaven could not vouch for this on personal observation; but the well-known occurrence of similar phenomena renders credence in this case no great difficulty. The breaking of the sea

into the mouth of the cave, narrowed as it is, and the reverberations of its hollow roar from the sides of the chasm, were particularly grand and striking.

When our first emotions of admiration at the grander features of the scene were a little exhausted, we had leisure to look at the living occupants of the rocks. The perpendicular cliffs of the naked rock, broken into vast angular masses, square columns, and buttresses, like the walls of some old irregular castle and cut into shelves and ledges, sometimes only a few inches wide, presented a very different scene from the sloping wilderness of thrifttussocks, interspersed by boulders, which we had seen tenanted by the puffins and razorbills. Both of these species, indeed, were found here also in considerable numbers; but the species more strictly appropriated to this locality was the foolish guillemot or "mer" as it is better known to the fishermen. All along the little ledges, around, above, and beneath us, we saw the guillemots sitting in rows, row upon row, almost as close as they could comfortably place themselves, every one bolt upright, the manner of sitting common to the puffins and razorbills also, but not to the gulls or gannets, which incline the body when resting, as most birds do. It is the position of the feet, set far behind, in the shortwinged plunging birds of the diver and ank families, that makes the upright posture that of the rest, this being the only manner in which the centre of gravity can be brought over the feet. The whole sole rests on the ground, and not the toes only, as in other birds.

Many of these birds were incubating, and others had a chick. Not the least vestige of a nest was there, not a fragment of seaweed, not a leaf of thrift; the single egg, never more, is dropped on the smooth shelf of stone, perhaps not wider than its own

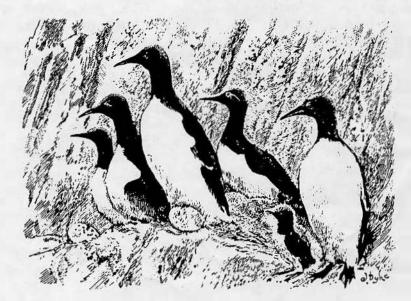
length, where one would suppose the first puff of wind would roll them over the edge, and involve them by scores in the irremediable fate of Umpti-dumpty in the nursery rhyme. Still we did not discern on the groins and points of the rocks below any spatterings which would indicate the frequency of such an accident; nor can we suppose, from what we know of the economy of the works of God, and of the almost infallibility of instinct, that it is at all common. Probably the egg is rarely or never left improtected, except in unwonted circumstances, one parent relieving the other in incubation; and we could see how cleverly the old bird kept its frail charge between its legs, even as it moved to and fro. An intelligent observer of animals, who is familiar with these birds, told me that he had seen a gull attack a sitting mer with the design of robbing her of her egg. They engaged stoutly, the mer pushing her egg behind her, while she faced her enemy. At length she caught him by the leg, and pinched so hard, and held on so firmly, still all the while covering her egg in the angle of the ledge, that at length she fairly drove the robber off.

The chick does not sit betwen the feet of the parent, but cowers beneath one of its wings, which is drooped to shelter it - a touching sight, as every manifestation of parental care and affection in the lower animals is. If the account the fisherman at Flamborough Head gave Mr Waterton is correct, and there is every reason to credit it, the young are indebted for their first introduction to the sea to the parental care displayed in a very interesting manner. They take to the water and fish for themselves long before they are able to fly; and as they would inevitably be killed on the sharp points of the rock if they attempted to fall or leap down, the parent invites its offspring to climb on its broad back, and

thus carries it down. This we did not see; but we were witnesses, in plenty of instances, of the prompt and ample supply of food brought by the industry of the parent bird, either to its sitting mate or to its unfledged young. The air here, as on the other side, was filled with birds on the wing; and the sea below, not amidst the boiling eddies of the rocks, but outside, was even more densely crowded with swimmers; and ever and anon one would shoot by us with several little bands of silver depending from its beak, the fruit of its successful efforts. These are invariably carried, no matter how many they may be, transversely, held fast by the head, the body hanging down. When we remembered that each fish must be caught separately, we were at a loss to understand how the first captured could be retained in the beak in this orderly manner, or, indeed, how held at all, while another was seized. Would not the first fall in the act of opening the mandibles a second time? One of the party, with his fowling-piece, brought down a guillemot, returning with prey, and an examination appeared to me to resolve the difficulty. Ten little sandlaunce this illfated mother was bringing her chick, when the leaden shower overtook her. On opening the mouth I perceived the tongue large and muscular and its edges cut near the base into sharp teeth, pointing backward. I have no doubt that each fish, as taken, is placed between the tongue and the upper mandible, and firmly held by these serratures, while the lower mandible is allowed to open freely for the seizure of another, which, in turn, is secured in the same manner, until a sufficient booty is collected to fly home with.

The young of the sandlaunce, and a small fish called "brit", which Mr. Heaven believes to be the fry of some species of herring family, form the favourite prey of all these birds; and the rough water off this north-west is the favourite fishing ground for them. A very strong tide rums round this end of the island, the strongest in the whole channel; hence a "race" is almost always running; that is, a violent agitation of the water, a strong ripple in calm and smooth weather, and what seamen call a "bobbery", a tossing, breaking sea, when there is anything of a swell on. The fishfry delight in such a race, and are pretty sure to be found there in shoals.

The egg of the guillemot is large for the size of the bird, and of so unusual a form, that when once seen it is never likely to be mistaken for any other. It is a long cone, with both ends rounded. Its appearance is striking and bizarre; the ordinary ground colour being a fine green, variously

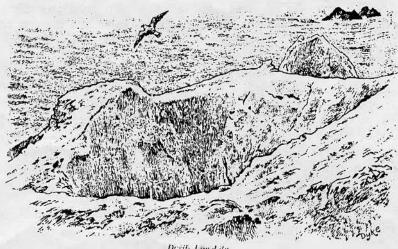


splashed and spotted with darker green or black. There is, however, much diversity in the colour both of the ground and of the markings; and, indeed, in the shape, though the characteristic form is generally maintained. The eggs are taken in considerable numbers by youths on the island, as well as by fishermen from the neighbouring coast. The explorer and collector is let down from above by a rope in the hands of his comrades; and, as he traverses the ledges, he picks up the eggs, and places them in a large pocket tied round his waist. In the season we see them offered for sale by the fishermen's children at Ilfracombe, at a penny each; and many are purchased as curiosities by visitors, who are struck with their singularity and beauty. If I mistake not, I have seen them sold also in the streets of London by sailors. In Newfoundland I have often eaten them, where they well-known by the name of Baccalao-birds' eggs. Their taste and flavour are by no means unpleasant; but the glair, which remains semi-transparent, has a curious appearance. On Lundy they are used in the preparation of cookery, but are eaten alone only by the poor. That rarest of British birds, the great auk, a species as large as a goose, there is some reason to believe, is occasionally seen at Lundy. A specimen was picked up dead in the sea near the island in 1829, and the fishermen have spoken to Mr. Heaven of having seen at the herring station an auk of very large size, which that gentleman has conjectured to be the species in ques-

Two curiosities were Chapter VIII proposed to us to be visited on the third day. The one was called the Devil's Limekiln, the other was the Seal Cavern. The morning rose in that cool and cloudless brilliancy which so often characterises the opening day at this lovely season. On the preceding evening, one of us, looking on the gorgeous western sky, had hopefully said, in the words of Shakespeare:

"The weary sun hath made a golden set, And, by the bright track of his glitt'ring

Gives token of a goodly day to-merrow." And now the morrow was come and the promise was not broken. Hope and hilarity were strong in our minds, as we rapidly completed our slight preparations for the morning's jaunt, and awaited the arrival of our kind guide; and I fear none of us were able to sympathise very deeply with the sorrow of the old farmer, who was bemoaning the loss of a thriving young bullock, that had just been found dashed to pieces at the bottom of the frightful precipices that form the north-west edge



Devils Lunckita

of the island. These casualties, however, are reckoned among things regular and to be expected in Lundy husbandry. Some two or three of the young cattle and horses are lost every year from this cause. They incautiously feed close to the edge, when a puff of wind catches them on the broadside, and over they go; to the no small joy of the carrion-crows who flock to the funeral feast.

At length, away we sallied through a gate at the rear of the farm, across wide, moory fields, till we struck a broad road, marked off by stone posts at regular intervals, each bearing the letters T. H. Our curiosity was excited by the boundary-stones; and we were informed that the ground so marked off is the property of the Trinity House, forming a road thirty feet wide and about a mile in length, leading from the beach where we landed to the lighthouse. This road, and the ground on which the lighthouse stands, form the only exception to the sovereignty of the island.

These boggy, elevated moors presented us with the yellow blossoms of the great spearwort (Ranunculus lingua); the rough water-bedstraw (Galium Witheringii), with its leaves, beset all round their margins and along the backs of their nervures, as well as the edges or the angular stem, with minute, barbed prickles, that catch the finger as it is passed up the plant, was likewise abundant here. The bog-pimpernel (Anagallis tenella) a lowly but lovely little plant, was likewise profusely strewn over the spongy moors, its sweet little pink blossoms occurring at every step.

Close to the south-west corner of the island we came rather suddenly upon the first object of our curiosity. In the midst of the heath covered slope yawned a terrific chasm, into which it made us shudder to look. Its form is irregularly square at the top, where it is about two hundred and fifty feet wide. The sides in some parts are quite

perpendicular, but gradually approach each other to the bottom, so as to resemble a funnel which we judged to be about as deep as the mouth is wide, or about two hundred and fifty feet. The edges and the sides of this fearful pit are fringed with a scanty but various herbage, among which we noticed many plants in flower. The upper parts were gay with the blue sheepsbit, and the flesh-coloured stonecrop; the thrift, the bladder-campion, and the samphire, were springing out of the crevices, and the yellow blossoms of the long-rooted cat's ear, closely resembling those of the dandelion, were mingled with them. On some of the ledges far down were growing large tufts of a coarse plant, which our friend informed us is occasionally used for spinach; we could not get near enough to examine it accurately, but it was probably one of the goosefoots.

The distant bottom of this whole was strewn with large blocks of alabaster, some of them twenty feet high. Among these there is, at one side, a narrow, door-like opening, which leads, by a natural tunnel to the beach at the foot of the cliffs. This affords the only means of access into the chasm; and is, from the precipitous character of the coast, available only with a



boat, and in calm weather, for when there is any swell the sea dashes furiously into the tunnel.

One part of the margin of the chasm forms a slender ridge like a wall, dividing it from a very steep declivity; along this precarious path one or two of our party scrambled on hands and knees, to gain a better view of the recesses of the abyss. While we were thus engaged a falcon flew out, whose red back and wings, as he emerged into the sunlight, shewed him to be the Kestrel: he hovered a while in the air over his den, facing the wind like a ship at anchor, in that peculiar manner which has obtained for this bird the appellation of windhover.

We turned our gaze seaward. There we beheld a vast cone of granite, almost insulated from the shore. The fishermen and the inhabitants believe that this rock, if it could be turned over into the limekiln, would exactly fit and close it. Hence they have named it the Shutter Rock.

The comparison of this deep pit, with an orifice at the bottom, to a limekiln is striking and felicitous; but why it should bear the devil's name I cannot understand. The habit, which prevails in all parts of the country, of associating the great adversary of God and man with those phenomena of nature which are vast, or grand, or terrific, is both preposterous and repulsive. It originated probably in the Middle Ages, when mankind were ready to attribute to Satan operations with which he had nought to do, yet strangely forgot his power as the great tempter to sin, and overlooked the real work in which he is ever engaged, of "blinding the minds of them which believe not, lest the light of the glorious gospel of Christ, who is the image of God, should shine unto them."

We threw ourselves down on the purple heath and the soft beds of wild thyme, that covered the broad slope between the limekiln and the edge of the cliffs. The sun was pouring down his fervid rays upon us as we reclined, and his disc of brightness was reflected in thousands of rippling waves, from the wide expanse of sea that lay stretched between us and the undulating line of the blue coast opposite. Just over against us, some five leagues distant, was the promontory of Hartland, with the picturesque little watering-place of Clovelly; from whence headland after headland, on the one hand those of Devonshire, on the other those of Cornwall, receded into a dim and undistinguishable haze.

Insect life was active and busy around us.

Little beetles, whose coats sparkled in the sun, were crawling on the herbage; a tiny attelabus, of coppery lustre, seemed rather common; the lovely green cicindela, sometimes popularly called tiger-beetle, from its beauty and voracity, was seen, but was much too agile and wary to be caught; and the rose-chafer, that peculiar accompaniment of a summer's afternoon, was buzzing like a bee among the flowers. Butterflies, too, of various species, were flitting to and fro; the large and small garden-whites were perhaps attendants upon man, as the cultivator of pot-herbs, their proper food but others were indubitably indigenous. The meadow-brown and the little gate-keeper were pursuing that low, dancing, jerking manner of flight, close to the turf, that distinguishes the genus to which they belong; the tiny alexis was opening and shutting its azure wings in the sun, as it sat upon the flowers, as if inviting capture, but darted away when aproached, with a swift, wheeling flight, and playfully returned to the same flower again. And we saw a rarer insect than any of these, the painted lady, come fluttering by on vigorous wing, and shoot away like a meteor.

Gulls were screaming in the air around, and circling about the cliffs, troops of guillemots were perched upon the ledges, one and another every instant dropping down like an arrow, into the sea, and presently returning with the captured prey; and upon the sharp edge of an insular rock outside the Shutter, known as Black Rock, sat a row of cormorants, preening their glossy plumage after the morning's meal.

We rose and pursued our sinuous way along the turf, by the margin of the precipitous cliffs of granite. A little way to the north of the Limekiln we came suddenly on the edge of a deep cove, at the mouth of which rose an enormous mass of rock, with walls as steep as those of a church, called Goat Island. It was the scene of a fatal accident not long ago. A party had come over to visit the island as we had done. A young man of their number must needs try, in spite of a warning and entreaty, to climb Goat Island, with no other purpose than that of displaying his agility and hardihood. He had proceeded some distance up the dizzy height, when, his foot slipping, he fell on the stones beneath and broke his back.

Into this cove we descended by means of the round and soft, yet sufficiently firm, hillocks of thrift, jumping from one to another. When these ceased, we had to scramble down by the fissures of the rock, until we came to a cyclopean wilderness of huge blocks and boulders of granite, strewn over the bottom, and piled one upon another, in grand confusion. They were worn smooth by the action of the waves, which had been beating on them perhaps for ages; and the lower of them were rendered still more slippery by the drapery of the green and olive seaweeds (Ulvae and Fuci) with which they were covered. It was, therefore, unpleasant and difficult, not to say hazardous, to make way among them by climbing over the masses creeping under and between them, and leaping from one to another,

Nor was there much, on such a shore as this, either of zoology or botany, to reward the search. Professor Harvey has truly observed, that "on a shore composed of granite rocks, where the masses are rounded and lumpy, with few interstices or cavities in which water will constantly lie, and presenting sloping ridges along which the water freely runs up and down, very few species of seawceds, and those only of the coarsest kinds are commonly met with." However, we had the pleasurable excitement of overcoming the difficulties of the descent and the exploration, and we had now to essay those of the ascent. When we arrived at the top, our clothes and hands were perfumed with the strong odour of the milfoil, through whole beds of which we had been penetrating; we found ourselves, moreover, nearly wet through with the moisture which yet loaded the herbage, from the dense fog of the preceding night.

Chapter IX A mid-day dinner left the afternoon free for a visit to the Seal Cave. A council was called on the practicability of effecting an entrance, and of the best mode of gaining access to it. Old Captain Jack and his son, Captain Tom, agreed in thinking that the low state of the water, for it was now spring-tide, would permit our approach to the cavern on foot, but that the surf would render it difficult for a boat to land, which otherwise would have been the most pleasant mode of reaching the spot. It was, therefore, resolved that we should approach it from the landward side, descending the cliffs at Benjamin's Chair. We wended our way, accordingly, as if we had been going to the Castle, but turning short to the right. we found ourselves at the edge of the precipice, in the middle of the south end of the island above a shallow bay called Rattle's Landing Place. A line, drawn from this spot to the landing-place on the eastern side, divides the island geologically. All to the north of this line, including the greater part of the island, is granite; the little corner to the south-east of it is the gray friable shale common to North Devon. The junction of the structures is well defined down the cliff. At the point of

union copper ore has been found, in sufficient quantity to warrant the formation of a shaft, the erections of which were pointed out to us.

A narrow track, easily overlooked by those not familiar with it, leads down to a little grassy platform. A huge perpendicular wall of granite forms the back, thirty feet high, profusely clothed with gray and orange-coloured lichens in loose shaggy tufts. A semi-circular horizon, dividing the blue expanse of sky from that of the sea more deeply blue, was in front. A magnificent scene it was in its grand simplicity; nor unappreciated, for it was evidently a favourite resort. A long tea-table, rudely made of unpainted boards, which the sun had warped out of all shape, had been set up under the rocks, and a bench on each side afforded accommodation for a rather numerous party. Nature had herself provided a throne of massive state, suited to the giant, whom imagination might picture as the presiding genius of the place, A square cavity in the granite wall formed a low-seated chair, furnished with projections resembling elbows, and a rest for the feet. This seat, which for some reason or other, unpreserved by tradition, is called Benjamin's Chair, gives name to the place. While we rested here, Captain Jack appeared, followed by two servants bearing a long ladder, a lantern, and a few tallow candles. We watched the proceedings with interest. The assistants, having fastened a long line to the ladder, go down with their charge; the one letting it gradually down from above, the other guiding it in its descent. Then down goes the Captain with the lantern, and we all follow as best we may; each one concentrating all his thoughts on securing his own footsteps on the giddy height; for we had to make a descent of four hundred feet down a cliff which, though not a precipice, was fearfully steep. But we all contrived to scramble down without in jury, except a sting on the finger, inflicted by a bee that considered himself insulted, when one of our party thought to obtain a little assistance by grasping a tuft of thyme which the busy insect had appropriated. "Take your time", said the Captain. "I have not gained much by taking thyme", grunbled E., holding up his smarting finger.

A more efficient help was afforded by the angular projection of the solid rock, which occurred here and there, and, in one portion of descent, by the sides of a watercourse, which, though the roughness of the way was increased by the rolled masses lying in it, was less perilous than the open declivity.

Sad witness to the power of the winds and

waves were lying in our way; for we saw, at a considerable height above the bottom, the blocks and ironwork of some ill-fated vessel, so firmly jammed into the crevices of the rock as to resist all efforts to dislodge them, without more labour than they were worth. These, as the Captain told us, were the relics of a fishing-smack that was driven on the rocks below, of whose hapless crew not one survived to tell the story. Behold us then collected at the bottom, or as near to it as we were destined to go; for, though it was spring-tide, and the hour of low-water, no beach appeared, but the clear transparent sea was washing the foot of the cliff. On a narrow slanting ledge, some eight or ten feet above the water-line, we were all perched in a row, like so many guillemots; and there we had quietly remain till some needful preliminaries were ad justed. We now perceived the use of the ladder, which was not at all intended, as some of us had naïvely supposed, to help us down the declivity The ledge on which we stood was not horizontal, but would have led us into the sea if we had pursued it. At a certain convenient spot, therefore, the ladder was set, and held firmly by the two men, while we one by one, shinned up to a higher ledge. Along this we crept in the same manner, our feet shuffling along the narrow shelf, our fingers hooked into the crevices above; for these ledges were barely wide enough for the foot to rest on lengthwise. As they all had a similar inclination, the same process had to be repeated several times, the ladder enabling us to mount to another ledge, when the one on which we were walking dipped into the sea.

While holding on to the broad surface of the precipice, and especially in the moments occupied in waiting for the ascent of those who happened to be foremost in the line, it was interesting to look down beneath our feet into the hollows between the rocky masses, covered with water of crystalline clearness, which rose and fell with every wave, but was prevented from breaking by the barrier of rocks outside, on which the violence of the swell had spent itself. In these hollows the large scaweeds were waving, the wrinkled fronds of the oar-weed, floating like the streamers of a ship, and the massive tangle tossing about its long many-fingered hands, as if in distress, with every undulation. The submerged rocks, too, were densely studded with the olive-coloured cups of the sea-thong; many of which were crowned with the singular appendages which bear the fructification; narrow forked straps or thongs, not more than a quarter of an inch in thickness, but stretching to a length of several yards, and springing from a point in the centre of each cuplike base

After rounding in this manner the face of the cliff for a considerable distance, we came at length to some rocks which were high and dry above water, where, as we stood, the wide mouth of the dark cavern



yawned immediately in front of us. Between us and it, however, lay an ample area, strewn with boulders of various shapes and sizes, but almost all covered with sea, which was breaking over them with a formidable surge.



Now another council of war. How are we to pass this Scylla and Charybdis in one? The ladder comes again into requisition; when laid down horizontally, its extremities just reach across the space, from our position to a dry rock at the cave's mouth; its middle being supported by the top of a boulder which rose above the surface.

We looked rather blank at this precarious causeway; our only chance of getting over dry lay in the nimbleness of our heels; for every breaking sea washed away the ladder, despite the effort rhe efforts of the servants to hold it firm at the ends. To him who was not agile enough to skip across in the interval between one sea and another, a ducking was inevitable,

By Captain Jack's advice, all of us took off our stockings and our upper garments, tucking up our trousers, and replacing boots and shoes for the protection of our feet in crossing. Captin Jack remained on the rock, and became the depository of clothes, watches. note-books, etc. "Here goes!" said one, and, rapidly stepping from rung to rung, adroitly effected the passage between the seas. "Oh dear!" said another, "I can never do that", "I think I can", said a third; "I'll try at least". He essayed it, but was scarcely half-way across when "Look out!" was the cry; and a green curling wave at the same moment swept the Indder from the grasp of the assistants, and

our luckless adventurer found himself, when the wave had passed over his head, up to the waist in water.

This was poor encouragement for the others, who, despairing of tripping it on such a light fantastic toe as the first had exhibited, determined to creep along on hands and knees, meekly resigning themselves to the brimt of the sea, with the philosophical exclamation, "Tis only a wetting!". When the hilarious mirth produced by these scrapes had subsided, we prepared to enter the cave. It was a noble vault, of sixty feet in height and twelve in width. For a little space we stepped over boulders; then a broad pool crossed our way, extending from wall to wall, seven or eight feet deep. Again the ladder was our medium of passage; now without risk, for the clear bluish-green water was unruffled as a mirror, and the narrow segments of the black tangle lay motionless in the depths, clothed with miniature forests of a tiny zoophyte the delicate zigzgged Laomedea. The damp walls of solid granite were studded with marine animals, but not nearly to the extent that I had anticipated. The low oval cones of the common limpet were adhering to the rock, with the little shelly

tribes of Serpulae, and small patches of

orange and olive-coloured sponges; and

some parts of the sides and rocky floor

were plastered over with what appeared a

coating of brown mortar, but which, when

examined, was seen to be an assemblage

of tubular cells, composed of grains of

sand, agglutinated together by an animal

cement, so as to form walls of exquisite

mosaic work. Each cell is inhabited by a

worm (Sabella alveolata) of curious struc-

ture, and instincts no less remarkable.

After we had passed the pool, the bottom consisted of fine wet sand, wet but firm, its level sensibly rising. The cavern grew every moment darker and narrower, and here the candles were lighted and distributed. Each of us carried a piece in his fingers, which soon became streaked with stiffened streams of tallow, and one fragment was committed to the lantern as a reserve in case of accidents...

We proceeded silently and with caution, for we were now approaching the principal chamber, the place where seals would be found, if any happened to be at home. But in order to enter this hall we must pass through a gallery so narrow that a person could only squeeze himself along it sidewise. It is just as the foremost emerges from this passage that the seals make their rush. Alarmed by the approaching footsteps, they wait with expectant gaze until the intruder appears in their doorway. The sudden flash of light from the candle is a

signal for their escape. With one bound the seal dashes at the man, who, if he is not thoroughly prepared for the shock, will inevitably be knocked over, while the seal makes good his exit across the prostrate person of his baffled invader.

All this was described to us while one of the servants, a cool, resolute fellow, used to the warfare, was exploring the passage, peering through the darkness with his light above his head, and a stout bludgeon grasped in his right hand, ready for a blow. This man told us, as we returned, that he had killed no fewer than five seals on one occasion within the cavern.

We were not, however, favoured with so stirring a termination to our adventure. No sound proceeded from the interior, as our vanguard passed beyond our sphere of vision, and we all in succession followed him.

We found ourselves in a gloomy chamber of spacious area, and so lofty that the united light of our feeble candles could not struggle to its roof. The walls were formed of the plain smooth rock, not particularly damp, and devoid of any incrustation or deposit of stalactite, the rock being composed entirely of granite, of which lime is no ingredient. There is a low and narrow hole at the farther end of the chamber, into which a man may enter by creeping on his hands and knees. It is believed to lead to another cavity, but none of us cared to explore it.

Our curiousity being satisfied, we commenced our return, which we effected in the same manner as our entrance, except that in crossing, by means of the ladder, from the cave to the rock where we had left the worthy old Captain, we were more unlucky, for everyone was washed off from his hold by the surf. This involuntary bath, however, was no great misfortune; for the beams of the burning sun soon dried our drenched garments. Indeed, the contrast which we felt as we emerged from the chilly cavern into the warm sunny air without, was like going into a bake-house on a day in November.

Chapter X I took the opportunity, before climbing the cliffs, of examing the rock pools that were exposed by the present low condition of the tide. It was evident how much superior, as a field for the zoologist or botanist, the shale is to the granite; for while the latter presented no tidepools, and comparatively few of the finer or more delicate seaweeds, the former, nearly clear of boulders, exhibited a comparatively level surface, hollowed into numerous pools, varying much in form, size and depth. Though the aspect was a southerly one, and much exposed to the

sun's rays, the seawceds struck me as unusually fine. Thus the dulse, (Rhodymenia palmata) a species common on our coasts, and eaten by the poor in Scotland and Ireland. was fringing the sides of the pools,



its broad, deeply cleft, dark-red fronds, developed in great luxuriance. There were also large and dense tufts of Chondrus crispus, the Irish or Carrigeen moss, which is sold to make jellies, for use in cookery, and for many other purposes. This, too, is a common species, and one that varies much with the locality where it grows. When found in shallow pools, considerably above low-water mark, it degenerates in size, becomes of a pale olive tint, and quite devoid of beauty. But see it at a lower level, growing in some deep shadowy pool, as I saw it there, and you would hardly believe it to be the same. The fronds form large, bushy, and wellgrown tufts, with the leaves clean and glossy, and of a dark-purple hue; but what gives it its particular beauty is, that every segment of its many-cleft leaves reflects the most refulgent hues of azure and steelblue. These tints, however, depend entirely on the submersion of the plant; remove it from the water, and every trace of them has vanished; replace it, and they as instantly reappear.

Another curious seaweed was Codium tomentosum. It forms thick cylindrical stems, much branched, and of a dark green colour. Its appearance is downy, and when touched, it has a soft spongy feel, and is enveloped in a slimy jelly. This curious plant was growing numerously here imparting a somewhat singular aspect to the shallow pools, from the green velvet patches of its expanded bases, as well as from the stems.

The great tangles and oar-weeds were abundant, as were the sea-thongs already mentioned; and among them grew a much less common species, at least on the English shores, the henware (Alaria esculenta), a large plant, much resembling the oar-weed, but of paler colour, and distinguished from it by having a stout midrib running through the whole length of the leaf. This midrib is eaten by the poor of our northern coasts, and in other parts of Europe.

Of marine animals I did not see many. The

chocolate-brown, or of all shades between that and glowing red. More rarely, it is dark olive, merging into grass-green; and not unfrequently specimens are found, especially such as are of a very large size, in which both of these hues are combined, the ground colour being dark-red, studded all over with small green spots. This is the best known of all our native species; indeed, it is the only one ever seen by thousands who fancy themselves familiar with our sea-anemones. The reason is not only the great abundance of this kind, but its habit of living within tide-marks; for such is its patience of exposure to the air, that it may frequently be seen sticking to rocks, particularly if shaded from the sun, not far below high-water mark, where it must be necessarily exposed to the sun for many hours out of every tide. Handsome as its appearance is, whether displaying its smooth and glossy coat, or expanding its crown of tentacles like a full-blown crimson flower, it is the least beautiful, perhaps of all, and is not worthy to be compared for beauty with some other species which frequently dwell in its immediate neighbourhood, but in so retired a manner, that few, except the professed naturalist, ever have the opportunity of admiring their charms; like modest worth, whose excellence is often unknown or unappreciated, because of that retiring humility which is its greatest grace, while inferior pretensions are honoured, because they are flaunted in the face of the day. In one of the crevices within the cavern I had noticed a specimen of a far nobler species, certainly the most imposing, if not the most beautiful, of all the British seaanemones, Tealia crassicornis. When contracted, its body is usually of a rich crimson or fine scarlet hue, often streaked irregularly with green, like a ripe apple. Instead of being soft and glossy like A. mesembryanthemum, it is hard and firm to the feel, almost like leather, and its whole surface is rough with numerous warts. It does not adhere to the exposed sides of rocks, but hides itself in dark holes and narrow fissures. Nor is it satisfied with this protection, but for further concealment it covers its body with a coating of gravel. This it does by means of its warts, which are the terminations of so many tubes, and which act as suckers, each one firmly attaching to itself a small pebble or frag-

ment of gravel. When the animal is dis-

lodged from its fortress, an operation by

no means easy, and deposited in a capa-

commonest species of sea-anemone

(Actina mesembryanthemum) was speck-

ling the rocks, in its many varieties, for it

is a very variable species, sometimes

cious vessel of sea-water, it presently throws off the gravel, bit by bit, and stands revealed in all its beauty, as if it were aware that its usual artifice would avail for its concealment no longer. Soon, however, it assumes a new form and greater magnificence. It expands a disk three inches in diameter, fringed with many rows of thick conical tentacles. These are of different colours in different individuals, sometimes clear pellucid crimson, at others purple, always surrounded with a broad ring of white. Another variety of very charming appearance has the tentacles entirely creamy-white. The animal has the habit of imbibing water, until all the tissues of the body, as well as the tentacles, are filled with it, and swollen to a surprising extent. All the rich colours, especially those of the tentacles, are softened, diluted, and rendered translucent by this process; and the gorgeous array exhibited by a finely coloured individual, when in this condition, can hardly be surpassed by anything of the kind.

With much fatigue and difficulty we made our way up the lofty slope, not altogether without danger, from loose stones which the climbers were perpetually dislodging from the rubble, and rolling down upon the heads of those coming below. Arrived at Benjamin's Chair, we sat a few moments to recruit ourselves, while our friend entertained us with anecdotes illustrative of the habits of the seal.

"I was one day standing", said he, "here at Benjamin's Chair, when I saw in the water below, which was clear and smooth, a large seal come up to the surface, carrying in its mouth a conger-eel, perhaps some eight or ten feet long, and as thick as my leg. The animal played with his prey, exactly as you have seen a cat play with a mouse; letting it go; then darting after it as it sought to escape, and catching it with perfect ease. All its motions were full of grace. At length the seal bit the fish in sunder with one snap, and, allowing one portion to sink, he ate from the other till he reached the head. This he rejected, throwing it from him; and then dived for the tail, which he brought up, and ate that in like manner."

"On another occasion, near the same spot,



I observed a seal treating a salmon, which he had caught, after a similar fashion. It was astonishing to see how utterly powerless were all the attempts of the salmon to escape before the rushing of the seal; it was overtaken and seized in an instant. When he was tired of his play, he suddenly tore offa large portion from the fish's side, and I assure you that the severing of the muscles was distinctly audible where I stood. In this instance the creature devoured the back part first and like an epicure as he was, reserved the belly for the bonne bouche."

"I believe our species is the common spotted scal (*Phoca vitulina*); I do not think we have any other."

As we were returning, we made a slight deviation from our way, to see a hole which had just been discovered, and which was the present wonder of the little island's population. One of the men had noticed, in a particular part of the moor, that the earth returned a hollow sound. On digging, a block of granite was found a little below the surface. It was about eighteen inches thick, and was estimated to weigh five tons; its ends rested on two upright slabs, between which was a cavity some six feet deep and as many wide. It was evident that the excavation had been, and the stones placed, by human labour, and the latter operation must have been one of no small difficulty, from the great weight of the slabs; but for what purpose it could have been made, whether as a place for temporary retirement, for some one who feared an enemy whom he dared not resist, or the secretion of valuable property in some of the troublous times, of which the island has seen many, there was no clue to inform us. No subterranean passage was observed, though the earth at one side was so loose as to suggest the notion that such a communication might once have existed; a fragment of pottery was the only object found. I was myself struck with a rank odour in the cavity, very different from that of newly turned soil; the earth, too, at one end, was black, and of an unctuous appearance, somewhat like that of a grave; but no trace of bone or other organised matter could be found.

The appearance of this rude structure somewhat resembled that of the monument known as Wayland Smith's Cave, near Ashdown, in Berkshire. This consists of a broad slab laid horizontally on several upright ones. The earth in the lapse of centuries had accumulated, until it was level with the flat slab; but the lord of the manor, about thirty years ago, cleared away the ground both within and without the edifice. Local tradition assigns it to an invis-

ible blacksmith, who was said to shoe traveller's horses there for a small fee. The money was to be laid on a stone, and the steed tied; in the morning the money was gone, and the steed shod. The prescribed fee was sixpence, and neither more nor less would do. Sir Walter Scott, in a note to "Kenilworth", suggests that this legend may have alluded to "the northern Duegar, who resided in the rocks, and were cunning workers in steel and iron"; for there is little doubt that the monument is an accessory of the pile raised over the tomb of Baereg, the Danish chieftain, slain here in the great battle with our King Alfred. It is possible that the construction, the opening of which we saw at Lundy, may have been an antiquity as great as its counterpart in Berkshire, or perhaps greater, seeing that the huge upper slab was here quite covered with the common mould; and, in default of any evidence to the contrary, we may conjecturally assign it to a similar commemorative purpose.

Chapter XI The next day was to find us upon the sea. Captain Tom Lee was going out to haul his pots, and we were to avail ourselves of the opportunity of becoming personally familiar with the vagaries of lobster-catching. A worthy fellow is Captain Tom; kindhearted and obliging, one that has read a good deal, and has seen somewhat of the world, and free in communicating the knowledge he has acquired. We found him to be quite an agreeable companion, when he favoured us with his society. He unfortunately lost his ship on the African coast not long ago: and since that time he has devoted himself to the fisheries of the island, which he prosecutes with energy and success. Captain Tom has been an attentive observer of the habits of animals. One anecdote of his was so good, that I think it worth preserving. But the Captain shall be his own narrator:

"A curious animal is the pig, gentlemen! Very cunning, too; a great deal more sensible than people give him credit for. I had a pig aboard my ship that was too knowing by half. All hands were fond of him, and there was not one aboard that would have seen him in jured. There was a dog on on board, too, and the pig and he were capital friends; they ate of the same plates, walked about the decks together, and would lie down side by side under the bulwarks in the sun. The only thing they ever quarrelled about was lodging.

"The dog, you see, sir, had got a kennel for himself, the pig had nothing of the sort: we did not think he needed one; but he had notions of his own upon the matter. Why should Toby be better housed of a

wet night than he? Well, sir, he had somehow got into his head that possession was nine points of the law; and though Toby tried to shew him the rights of the question, he was so pig-headed that he either would not or could not understand. So every night it came to be "catch as catch can". If the dog in first he showed his teeth, and the other had to lie under the boat, or find the softest plank where he could; if the pig was found in possession, the dog could not turn him out, but looked out for his revenge the next time.

"One evening, gentlemen, it had been blowing hard all day, and I had just ordered close-reefed topsails, for the gale was increasing, and there was a good deal of sea running, and it was coming on to be wet; in short, I said to myself, as I called down the companion ladder to the boy to bring up my pea-jacket, "we are going have to a dirty night,"

"The pig was slipping and tumbling about the decks for the ship lay over so much with the breeze, being close-hauled, that he could not keep his hooves. At last he thought he would go and secure his berth for the night, though it wanted a good bit to dusk. But lo, and behold! Toby had been of the same mind, and there he was snugly housed. "Umph! umph!" says Piggy, as he turned and looked up at the black sky to windward; but Toby didnot offer to move. At last the pig seemed to give up, and took a turn or two, as if he was making up his mind which was the warmest corner. Presently he trudges over to the lee scuppers, where the tin plate was lying that they ate their cold 'tatoes off. He takes up the plate in his mouth, and carries it to part of the deck where the dog could see it, but some way from the kennel. Then, turning his tail towards the dog, he begins to act as if he was eating out of the plate, making it rattle, and munching with his mouth pretty loud.

"What!" thinks Toby, "has Piggy got victuals there?" and he pricked up his ears, and looked out towards the place, making a little whining. "Champ! champ!" goes the pig, taking not the slightest notice of the dog; and down goes his mouth again to the plate. Toby couldn't stand that any longer; victuals, and he not there! Out he runs, and comes up in front of the pig, with his mouth watering, and pushes his cold nose into the cold plate. Like a shot, gentlemen, the pig turned tail, and was snug in the kennel before Toby knew whether there was any meat or not on the plate."

"Capital!" we all exclaimed; and so no doubt will my readers exclaim, since the narrative may certainly be relied on as authentic. I give it you as it was told to us; and I am sure Captain Tom is too veracious a man to invent or exaggerate the story.

The morning was foggy and unpromising. but the prospect of lobster catching overcame the disheartening effect of the mist, and we were all on the beach in pretty good time and in pretty good spirits. When we were at the water's edge the fog had lifted. not resting on the water, but with a thin stratum of clear air between, through which we could discern the surface of the sea to a considerable distance beneath the fog, which still filled all the higher air, and enveloped all the land in dense cloud. The massive headlands, progressively receding into the distance, loomed through the grey mist with fine effect, their grandeur heightened by the indefiniteness which they derived from their cloudy veil. We thought of some of the effects in Turner's pictures.

The boat was moored some distance offshore, and we were indebted to the kindness of a brother fisherman, whom our worthy skipper hailed, for putting us aboard in his punt. Here, then, we were embarked, Captain Tom and his man Dick, and we three idlers. Scarcely a breath of wind was stirring, and the misty air fell heavy and cold, but we pulled along inshore with hearty goodwill. The cormorants and gulls swept by us, wondering at the intrusion; the former, with outstretched neck and flapping wings, flying in straight lines, as if with some definite point in view, just as men of business press along Cheapside or Mincing Lane; the latter on easy graceful wing, sweeping round in circles, as if intent only on amusement, as ladies stroll in the parks. Presently came flying by two oyster-catchers, or, as the men call them, sea-pies, conspicuous in black and white plumage, and with beaks and feet as brilliant as red sealing-wax.

We passed some fine caverns in the cliffs, and on the points of the rock far above were seen two or three of the wild goats, of which there is a flock on the island. It was amusing to observe with what fearless ease and precision of footstep they jumped and scampered about the peaks, delighting to come to the very verge of the precipice, and to rum along the ledges not more then a few inches wide, or to stand



upon the tottering masses, and gaze down upon the sea.

When we came opposite the half-way wall, where the granite takes the form of ancient masonry - so that one can scarcely help imagining that the cliff's are crowned with the remains of walls and towers, built by fabled giants of the olden time - we began to find ourselves in the midst of a dense population of birds. There were plenty of guillemots, speckling the grey rock with their dusky forms in rows of black dots. Their numbers appeared to render sitting space an object worthy of contention; for whenever any of the flying squadron attempted to land, and to intrude himself among his resting fellows, he was invariably met with opened wings and beaks, and the most threatening demonstrations of resistance, like Caesar when he landed on our shores from Gaul. But the characteristic bird here was the kittiwake, or hacklet, a very small species of gull, with the upper plumage of a delicate French-grey hue, and the lower parts white. They also sat in rows on the narrow shelves, each one with a nest of dry grass beneath it, like so many Turks in a mosque, squatting each on his own bit of carpet. Their size, form and colour gave them the closest resemblance to doves - a resemblance which was not a little increased by some traits of their manners. Two sitting next each other would occasionally bring their beaks together in that playful toying manner which everyone must have seen our common pigeons practice, and which is so much like kissing, that it is hard to imagine it any other than an expression of affection. It was suggested that one was feeding the other, but I am rather disposed to put the former interpretation on the action. The common name of this little bird is derived from its cry, "Kittywake, kittykittywake"; but the sounds as correctly express the words "Get away, get away," which we took as a polite intimation on the part of the birds that our morning call was an unseasonable intrusion. We clapped our hands smartly, and the air was instantly filled with birds, though many of the sitters held fast to their nests. The guillemots flew out to sea, but the kittywakes, after a turn or two, in which their little black feet contrasted curiously with their snowy plumage, returned to pursue their domestic occupation.

We had lain upon our oars for a few minutes to gaze upon the birds, but time was going, and we had other fish to fry. The men accordingly gave way, and as the boat shot off, the little gulls, as if in joy, could not refrain from hastening our departure with renewed vociferations, which rose at the same moment from every ledge, as if by common consent, of "get away, get away!"

Near this part of the Chapter XII cliff's become much lower than usual. Here, in the time of Charles II, a fort was erected, which was furnished with brass cannon. Local tradition commemorates this circumstance in the title of "Brazen Ward", still applied to this point; and the old brass guns themselves are said to be visible in calm weather and clear water, far down in the depths, whither they were thrown overboard by the French when the fort was dismantled. This event took place in the reign of William III. The stratagem by which the unscrupulous Frenchmen got footing on our island, which might well have been deemed impregnable, is curious as illustrating the usages of war.

The island at that time was more extensively cultivated than at present, and supported a population more than twice as numerous. Barley, potatoes, and all kinds of culinary vegetables were raised in great abundance; the fields were well stocked with cattle, sheep and goats; a brisk trade was carried on in the skins of rabbits, which then, as now, perforated the barren slopes by myriads, and the resources were increased by the sale of feathers and eggs, the produce of the sea-fowl which every summer tenanted their cliff's.

Confiding in the natural strength of their insular rock, the inhabitants dwelt in unsuspecting security, not withstanding the war that raged abroad. One day an armed ship was seen to anchor in the roads. She hoisted the national flag of Holland, with which country England was at that time in amity, and presently a boat was seen to leave her side and pull for the landing. The crew, in imperfect English, contrived to make themselves understood. They stated that they had mistaken the proper channel, and had taken shelter in the road; that their captain was lying grievously ill, and that supplies of milk, and other luxuries of that kind, would be a desirable addition to his comforts, and would be gratefully received. The simple people believed the story, and readily granted such supplies as were desired, which were regularly fetched for several days in succession. At length the crew reported their captain was dead, and they requested, as the last favour, that if there were any church or consecrated ground on the island, they might be permitted to deposit the corpse in it; and they intimated also, that it would be an additional favour if the principle persons of the island would be present at the burial. Everything was promised without suspicion; and the

greater part of the inhabitants, arrayed in their best garments, assembled to render the last honours to the foreigner by following his body to the grave. They even volunteered their assistance to carry the corpse, as the chapel was more than a mile distant on the other side of the island, and the access to it was not, as now, by a good broad road, but by steep and difficult paths. The coffin, indeed, seemed more than unusually heavy; but they supposed that the deceased captain might have been a very corpulent man, especially as Dutchmen are reputed to manifest a tendency to a somewhat bulky build, and, therefore, this circumstance passed without exciting any particular notice.

The little chapel is at length reached, the corpse deposited on a bier, and the burial service commenced. A little hesitation occurs; one or two of the foreigners whisper among themselves; and then one of them steps up to the islanders, and respectfully intimating that the customs of their religion forbid those of a different persuasion to be present at that part of the ceremony which is now about to be performed. It will, however, he assures them, occupy but a few moments, after which they shall be readmitted to see the interment. The inhabitants comply with prompt courtesy, leaving the strangers in undisturbed possession of the chapel.

In a few minutes the door was thown open, and a band of armed men rushed out, who took their astonished hosts prisoners. The whole had been a ruse de guerre, a vile and complicated falsehood, with which the inhabitants, by their very kindness and courtesy, had been beguiled to their ruin. Instead of Dutchmen, they found they had to do with their wily bitter enemies the French; and learned, with unavailing regret, that they had helped to carry upon their own shoulders, in the coffin, those arms which were destined to make them captives.

The whole of the island was now ravaged without mercy; and not content with robbing the poor people of such portions of their property as could be carried away, the invaders wantonly and wickedly destroyed the remainder. The historians of the time state that the island contained at this period fifty horses, nearly the same number of meat cattle, three hundred goats and five hundred sheep. The greater part of the horses and cattle they hamstrung, so as to disable them for use, and the goats and sheep they threw over the cliffs. They took away even the clothes of the wretched inhabitants; and so bent were they on destruction, that a large quantity of meal happening to be in certain lofts, under

which was salt for curing fish, they scuttled the floor, and so, by mixing the meal and salt together, spoiled both. They then went over to the fort on the eastern side, dismantled it, threw the brass guns into the sea, as I have aleady mentioned, and left the scene of their villainous exploit destitute and disconsolate.

A little way beyond the Brazen Ward, there is, on a projecting headland, a large square block of granite, with one end resting on a smaller piece, exactly in the same manner as a brick is tilted on a bit of stick, to form a rude but effective trap for impnident mice. The block rests on a smooth platform, and stands in dark relief against the sky, while just behind it there is a natural perforation in the rock, through which the light streams brightly. The Mousetrap and Mousehole are the designations applied to these curious objects; and I thought them so interesting, that I begged to put on shore for a few minutes to sketch them. The swell made landing and re-embarking rather a ticklish business; but I managed to effect both the one and the other without a wetting, and found myself on one of the narrow ledges, just above the water line where I made the accompanying drawing of the scene.

We now approach Gannet Rock, the church-like mass of granite which I have before mentioned. It stands just in front of a projection of the coast, forming, with one of the points which we have just passed, a little bay, somewhat deeper than a semicircle. We understood that the Admiralty had contemplated to select this as the site of the Harbour of Refuge, which has so long been thought desirable on the internal side of the island. It is supposed that a comparatively little outlay would effect the purpose here, as all that is necessary is to fill in the interval between Gannet Rock and the Point and to form a pier or breakwater from the outside of the former, so as to narrow the entrance to the Cove.

By this time we had commenced the business which had been proscribed as the chief object of the excursion. All along this end of the island is excellent ground for lobsters, and here Captain Tom had sunk somethirty or more of his pots. These were in succession hauled up and examined. They are set at considerable distances apart, and the place of each is indicated by buoys of cork, affixed at certain intervals to the rope. But it was now springtide, and the time of high-water was scarcely passed; hence some of the buoys were submerged, their length of rope being insufficient for the depth of water. The position of these, therefore, could not be determined; and though the captain and

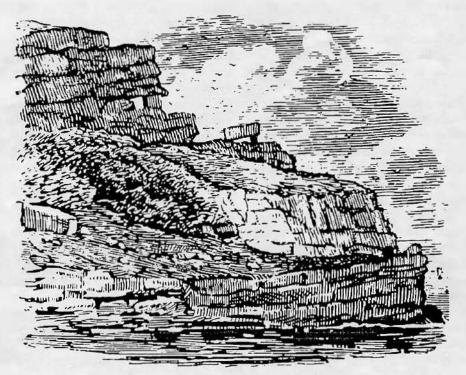
his man knew by the bearings of the land whereabout to look for each, they had to wait for the successive "watching" of each buoy, as its first appearance on the surface is technically termed, before they could haul.

The form of a lobster-pot is generally known, as there are few of our rocky shores where the simple but effective contrivance may not be often seen lying the beach. Their principle is that of a wire mouse-trap; they are made of strong osiers, with a rounded top, the points bent inwards at the centre, so as to allow of the entrance, but not of the escape, of the lobster.

Each pot, on being hauled to the surface, was pulled on board; the next thing was to take out the prey, if any were there. These were of four different kinds - the

him up stern-foremost.

The cray-fish, active, but large and unwieldy, seemed conscious that he had no powers of defence to be compared with those of his cousin. The claws in this species are small and feeble; but, equally unwilling to be made a prisoner, he endeavoured by agility to supply the lack of weapons; flapping round and round the circle of the pot, by means of rapid and forcible blows with his expanded tail. We noticed the singular sound produced by this animal when excited: the bases of the antennae are studded, as indeed is the whole surface of the animal, with prickles; and these it rubs with force against the sides of the shelly horn that projects from the forehead, by which a singular grating noise is made, accompanied with



The Mouse Trap and Mouse-Hole

lobster, the most valuable of them all: the sea cray-fish, or thorny lobster, larger, but in less estimation, the flesh being dry and somewhat hard; the common crab, the value of which is generally appreciated; and the spider-crab, or maia. of little value as food, though occasionally eaten.

It was interesting to notice the different habits of the species. The lobster was agile, but cool, and thoroughly prepared for war, holding up its large, formidable claws, widely gaping, in a reverted position over the back, so that it was rather a dangerous affair to get hold of one. The expertness acquired by practice, however, enabled the fisherman to dash his hand through the entrance of the pot upon the animal's back at the fitting moment, and suddenly to drag

a very perceptible vibration. Our friend the captain, who has the misfortune to be deaf, protested that he could hear the sound distinctly whenever he touched the animal with his hand; but I am not sure whether this was not a confusion of senses; a mistaking of the vibration of which his nerves of touch were cognizant, for such as would have been appreciable by those hard of hearing.

The crabs, on the other hand, both the common kind and the spider, were sluggish, inert, and helpless, yet somewhat awkward to take hold of, and to pull out of the entrance, on account of their breadth. The spiders, too, like the crayfish, are bristled over with stout, sharppointed spines. The contrast between the

agile power of the lobster and the torpidity of the crab, when taken from their proper element, is very striking. The former, as I have said, presents his threatening claws to his adversary, like a warrior skilled in the use of his weapons and prepared to use them; leaping and springing about, at the same time, with a sort of dashing recklessness, as hoping to find some possibility of escape, even from the worst circumstances. The crab seems paralysed as soon as he is taken out of the water. Though furnished with claws of a stony hardness, apparently superior in the power of grasping and pinching to those of his nimble cousin, he rarely attempts to use them; but folding them together, and crumpling up his legs stiffly across his breast, he is content to lie passive, and abide his fate. You may take him up in your hand, turn him over, and examine him; not a limb will he move; nay, you may even put him in your coat pocket, and carry him for a mile, and, on taking him out, find him as patiently resigned as when you put him in.

As soon as the captives were secured, any pieces of old bait that remained were shaken out into the boat, to the no great delectation of our olefactories. This was destined to be thrown overboard, but not here upon the lobster-ground, lest it should interfere with the temptation of the traps. Fresh bait was now introduced: the fisherman, taking a piece of skate about as big as his hand, pierced a hole through it with a marling-spike, to receive a wooden skewer, pointed at one end and cut in a peculiar manner, with a sort of shoulder in the middle. The skewer, thus baited, was put through the side of the pot, and the point being inserted between the close-set osiers of the mouth, it was then tightly driven in with a stone. By this contrivance the bait is fixed within the trap at such a height as prevents the captives from getting at it readily, while it cannot be reached from without.

The peculiarly rough surface of the spider-crab renders its shell a suitable *nidus* for the growth of parasitic plants and animals; and I think we did not take an individual that was not studded more or less densely with zoophytes of the genera *Sertularia*, *Plumularia* etc., sponges and seaweeds. Some curious forms inhabiting the deep sea are occasionally in this manner presented to the observant inquirer, which he would otherwise obtain only by means of the dredge.

The course of our examination of the successive lobster-pots had by this time brought us to the north-east point of the island. All the buoys had not yet been

"watched"; but there was here a tremendous sea running, and the swell kept setting us on the rocks so fast, that not only we landsmen, but even the fishermen, began to doubt the prudence of remaining in a situation so exposed any longer. Add to this, that heavy thunder-showers had already drenched us to the skin; we were thoroughly cold, and our limbs were cramped from sitting for hours in the sternsheets of the narrow boat. It was, therefore, not without inward satisfaction that we heard our friend Tom decide to give up the remaining pots, and make the best of our way into smoother water.

Chapter XIII We had contemplated another pleasure to be included in this little trip, which we felt reluctant to relinquish, although the rain by this time had begun to come down in that settled, steady manner, which makes you feel that it intends to do business for many hours to come. The men had put an oyster-dredge into the boat; and I for one looked forward with interest to this essay in rifling the treasure of the deep sea.

On the eastern side of the island the proprietor, some years since, had endeavoured to form an oyster-bed: the ground was suitable, and he had stocked it with living oysters. The result of the experiment had not as yet been tested, and it was proposed that we should make the first examination.

The dredge, as most of my readers are probably aware, is a bag attached to an iron frame, one side of which is bent outward, so as to form a sort of lip or edge, for the purpose of scraping the ground. The lower side of the bag, or that which drags over the bottom, is formed, not of any textile materials, but of large iron rings, interlocked so as to make a loose chain-work. To a bridle across the mouth a rope is attached, of sufficient length to allow the dredge to lie on the bottom at a considerable distance astern. In action, the dredge is dropped overboard carefully, so that it shall fall lip downward, the rope is allowed to run out to a sufficient length, and then is passed over the stern, and belayed. The boat is now rowed, or sailed, if the wind be fair, over the ground; and its motion being communicated to the dredge, the iron lip scrapes up and lodges in the bag whatever lies on the bottom. The mud, sand, and shingle, which are scraped up also, and everything, in short, that is much below the size of an oyster, passes through the iron meshes or links of the chain, while everything above their size is retained. After a while, according to the judgement of the operator, the dredge is hauled up, and the proceeds examined. For this purpose the rope is shifted to the middle of the boat, and the contents of the dredge are emptied out.

Our success was not very encouraging. We made three hanls, and brought up a few oysters, which were tolerably good. Some of them were evidently old fellows, so old that we conjectured that they might possibly have been among the original fathers of the colony. The rough and laminated shells of these were studded with small seawceds and zoophytes, and several of these agile creatures, the brittlestars, were sprawling their long flexible limbs, like so many snake-tails, over their surfaces. Some of the zoophytes I preserved for microscopical examination when I should arrive at home; and their elegant forms and curious structure well repaid the observation.

Among them was the beautiful Plumularia Catharina. This zoophyte, which may be taken as the representative of an extensive family, grows up like a tiny plant, having a single stem, with many branches, like a miniature tree, or many stems, springing up in a tuft or cluster, like a shrub. Both stems and branches are composed of transparent horny tubes, forming false joints at frequent intervals, and developing at various points little shallow cups. This is the skeleton. Every part of the tubular stem and branches is permeated by a fleshy core or pith, which in every one of the little cups develops itself into a polype, having many highly-sensitive tentacles, which expand like the rays of a star around the mouth. When in health, and undisturbed, these exquisite organs are stretched in all directions, resembling so many threads of spun glass; but on the slightest touch, or even on a shock being given to the vessel in which the animal is kept, the tentacles contract into shrivelled and shapeless lumps, and the whole animal shrinks down to the bottom of its cup-like cell.

Another of the plant-like forms of compound life, but belonging to a class of higher organic rank, was Crisia eburnea, called by Ellis the Tufted Ivory Coralline, an appellation which well indicates three of its prominent qualities; its stony coralline texture, its delicate whiteness, and its habit of growth in little bushy tufts, about an inch in height. The cells here are short tubes, and the polypes, which project from them, have a much higher organisation, a more complex form, and more precise and energetic motions than those of the Plumularia. The tentacles in this species are not contractile in their own substance, but are capable of being closed together in a parallel bundle, and of being withdrawn into the body, as into a sheath.. They are again expanded by the turning insideout of the integuments which sheath them, just as a stocking or glove is reversed.

The substance of the skeleton in the class of animals to which the Crisia belongs, is composed of lime: hence it is brittle, and of a stony hardness. If a small portion be held to the flame of a candle, there will appear, at the very edge of the flame, a light of most intense brilliancy, which is but another exhibition of the principle on which is produced the celebrated lime light, recently brought into notice for its superior power of public illumination. The whole of the substance of the cells, when viewed through a microscope, is seen to contain a number of clear oval grains, very much like the bubbles which we occasionally see in bad glass; they are, however, regular in size and in arrangement. Their nature and use are, I believe, entirely unknown.

Through one of these oysters I made acquaintance with another form of the same class, which has more the appearance of a membranous seaweed than an animal, the coralline (Salicornaria Bugle farciminoides). It forms many slender flattened branches, swelling regularly between the joints, and covered all over their surface with ridges or raised lines, set diamond-wise, and enclosing depressed cells of the same form. The polypes which inhabit these cells are probably similar in form to those of the Crisia; but I could not detect a single individual on the specimen that I examined, and I know nothing of them.

Upon the whole the excursion of this day, though accompanied with some unpleasant circumstances, from the state of the weather and the sea, was one of much gratification. The disageeables were nothing, or at least they lost their disagreeable character, as soon as they had actually ceased; while the pleasurable emotions produced upon the mind were repeated as often and as long as memory dwelt on them. For the memory of pain is not painful, while the memory of pleasure is often little less pleasant than the first enjoyment of it.

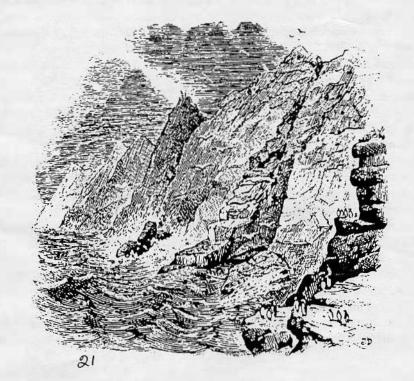
Dining with the hospitable proprietor, we gleaned some fragments on the natural history of this little isle, that we should have had no opportunity of learning by actual observation. The boggy moors in the elevated centre of the island afford a suitable rendezvous to the woodcock and the snipe; and sporting gentlemen occasionally come over, expressly to take the former on their first arrival, which usually precedes their appearance on the

mainland by several days. Swallows and swifts we should expect to find here; but I was somewhat surprised to learn that the goatsucker is a regular summer visitor, as we commonly associate this bird with groves and woods, of which the isle is absolutely deprived. Among the occasional visitants were mentioned the rose pastor and the hoopoe, both birds of considerable size and of great beauty. The wild duck, the widgeon, and the teal are sufficiently numerous to afford first class sport, The peregrine falcon breeds in the lofty cliffs, especially of the exterior side. One of the farm labourers shewed me a pair of well-grown birds which he had reared from the nest; they were in excellent health and condition, and in full plumage. The nest had been rifled by a boy let down from above for that purpose, at that part of the perpendicular cliffs which is immediately over the Seal Cavern. The fellow was in the habit of feeding his pets with the flesh of the puffins and guillemots, which his dog would catch for him in any desired quantity. The osprey, though less common than the peregrine, is not unfrequently seen fishing around the rocks.

Of small birds, the chaffinch and the linnet are common; but, what is strange, the sparrow is not found. The song-thrush is a constant resident, which finds its favourite food in the pretty banded hedge smail (Helix nemoralis) that is also common. The song of the skylark we heard saluting the sun on each of the brilliant mornings that we had spent on the island; and the pipit was hopping and flitting about the rocks all round the coast.

We had already noticed many insects, but were hardly prepared to hear that an entomological gentleman, well known to us by reputation, had recently obtained, during a visit of only a few days to the island, more than three hundred species, the great majority of which were beetles.

The scenery of the western side is more magnificent than that of the eastern. The precipices generally attain a more stupendous height, and the prospect seaward is an entire semicircle of unbounded water. expanding to an immense width. Alternate indentations and projections in the line of the coast, shallow coves and lofty promontories, occur all along; and as the visitor wanders by the margin of the cliff, he is continually charmed by newly-opening and ever-changing combinations of the massive granite rock, and resemblances the most close to vast works of human art. One of these promontories appeared to me peculiarly grand, and tempted me to spend an hour in endeavouring to convey with the pencil somewhat of its character, though with only partial success. There was a cavern cut, as it were, in the nearly perpendicular stone, of great height, but comparatively narrow, and with the sides so nearly parallel and straight, that it looked like a gallery or passage built with cyclopean masonry; while the massy abutments on each side were so symmetrical, sloping upward from broad pedestals, that I could have fancied them the enormous propylea of some old Egyptian temple, the stones of which were partially disjointed and disintegrated by the wear of four thousand years. The surf was boiling and beating without, rearing itself in futile rage against the foot of the promontory, only to be ever driven back upon itself, like brave warriors vainly assaulting the impregnable walls of some mighty fortress; or, as the poet has expressed it,-



"Wrestling with rocky giants o'er the main, Which spurn'd in columns back the baffled spray."

Within the cavernous gallery the water was smooth and glassy, rising and sinking indeed with ceaseless undulation as the wave rose and fell, but reflecting as from a surface of polished steel the blackness of the obscure interior. The utter solitude of the scene increased its grandeur; no trace of man or his works, no hut, no fisherman's net, no boat, not even a distant ship, broke in upon the majesty of nature; and though thousands of sea-fowl were playing about the point, or sitting in crowded rows upon the steps and pedestals, their distance reduced them to mere specks so minute as scarcely to be obvious to sense, and did not affect the general impression of lone-

Oh! it was beautiful to sit in the bright morning in the deep quietude of these heath-covered heights, and gaze down upon the glorious sea! To get under the shadow of one of the mighty blocks, squared almost as with the stone-hewer's chisel, that crown, as if with ancient ruined fanes, every projecting headland, and there enjoy the beauty and the exhilaration of the sunlight, without feeling its oppression! And how rich and glorious is the flood of light that bathes every object in the unclouded sun of summer! How full and deep the shadows, how broad the lights, on such a broken coast as this! How rich and lovely the colouring of blossomsheeted heath, expanded sea, and vaulted sky! "Truly the light is sweet, and a pleasant thing it is to behold the sun." What heart caumot respond to the exquisite stanzas of one who drew her inspiration from the grandest and most majestic scenes in nature? Who cannot sing [the] passionate lay "To the Sunbeam"? [Mrs. Hemans]

The chief curiosity of this side of the island is what is familiarly known to the inhabitants as the "Earthquake". It is a chasm, evidently the result of a convulsion of nature; and local tradition confidently assigns it to that tremendous shock, in 1755, in which Lisbon was overwhelmed, and which was felt over nearly the whole of Europe. The ascription to it of such an origin has been ridiculed, but on very insufficient grounds. No one. I think, can look upon it without feeling the conviction that it has been produced by an earthquake; and the one to which it is currently assigned is to the full as likely to be the true one as any other.

We were directed to pursue the coast-line, along the edge of the cliffs, until we should reach the middle of the island, nor was there any difficulty in finding it, or recognising it when found. It is a yawning chasm, or cleft, in the granite, running along in a line irregularly parallel to that of the precipice, for about five hundred feet. The width varies in different parts, but may be taken at fifteen feet upon the average. The sides of the cleft are quite perpendicular, to a depth of fifty feet. They are fringed with luxuriant ferns, and the common flowering plants that grow upon the sea-cliffs. The whole ground and rock round about, for some distance, is much shaken, and broken into chasms and fissures.

There is a second smaller cleft, which I had well-nigh overlooked, though it is, in fact, the more interesting of the two. It is situated much nearer to the edge of the cliff, and goes down to a depth nearly double that of the former. The rocky sides, which are from three to six feet apart, are very plane and parallel, yet slightly approaching as they descend. We were able to scramble down to some depth in the narrow fissure, and to obtain a glimpse, through slender cracks and crevices, into cavities apparently large, but unconnected with the air, and utterly dark. They gave forcible intimations, however, that the tearing of the solid granite had been much more extensive than one would suppose from merely viewing the superficial chasms.

A short time ago a large and beautiful amethyst was discovered imbedded in the rock some distance down, partially exposed by the cleft, in the line of which it happened to lie. The proprietor, who had himself made the discovery, and who thus possessed a double claim to it, wished to obtain the aid of a professed lapidary in extracting it; but, meanwhile, some greedy and dishonest person, who had got wind of the discovery, endeavoured to secure possession of the prize. The unskillful hands and clumsy tools employed managed, indeed, to deprive the rightful owner of the gem, but with no advantage to the covetous plunderer. In the rude efforts to extrect it, the beautiful crystal became split and crushed to worthless fragments. We saw the hole which the rough chisel had produced, and the remains of the lovely gem still partly embedded in the stone, but beaten and pounded to a purple dust. A much smaller specimen was subsequently discovered near the former, and this was extracted without injury. Its value, however, was far inferior to that which the former would have possessed.

In the angles and crevices that occurred in the obscure walls of the chasm, I found several colonies of that curious insect the seaside bristletail (Machilis maritima). It

is interesting to observe the brilliant refulgence of metallic colour bestowed on a creature nocturnal in its season of general activity, and haunting obscure recesses during the day. The insects of this genus are clothed with minute scales, whose edges lap over each other. In full-grown specimens of this species the scales reflect prismatic colours, undistinguishable, indeed, into individual rays, yet producing a combined effect of varied hues, very rich and lustrous. In many specimens, especially those of younger age. the colouring is much less conspicuous, or altogether lacking, being replaced by a dark iron-grey tint. The scales, taken singly, form beautiful microscopic objects; they bear the closest resemblance in form, structure, and markings to those which cover the wings of butterflies, and to which all the varied hues and patterns of those lovely insects are owing.

We returned from the Earthquake through the Valley of the Punchbowl, the course of a little brook, which originates near the middle of the island, and forms there a pond of considerable expanse, and then winds, half concealed, through a spongy bog to the edge of the cliffs. The smaller didweed (Lemna minor) was found partially covering the surface of the pool with a mantle of deceitful verdure; and one of the numerous kinds of pond-weed (Potamogeton) was floating in the brook, together with the water-crowfoot (Ranunculus aquatilis), a plant remarkable for the very diverse appearance assumed by its leaves under different circumstances. It commonly grows in the midst of water; such of its leaves as reach the surface, and are exposed to the air, are three-lobed and very slightly notched, while such as grow immersed in the water are cut into narrow threads, almost as fine as hair.

The mossy bog, which felt to the foot as if we were treading on a saturated sponge, yielded us two interesting plants. The one the asphodel (Narthecium ossifragum), a spike of small lily-like yellow flowers springing form a creeping root. The other was the sundew (Drosera rotundifolia), one of the few plants that form natural insect-traps. It was the first time that I had seen it in a living state, and I looked with much interest on its radiating crown of rounded leaves, each set at the end of a flattened foot-stalk, and covered with red hairs or bristles. On plucking a leaf to examine it more closely, we perceive that every one of these minute hairs is tipped with a globule of fluid, as clear as a dew-drop, but clammy and adhesive as glue, capable of retaining small flies and other insects which incautiously

alight on the leaves. This viscous fluid is exhaled by glands at the extremities of the bristles, under the influence of the sun's rays, whence the common English appellation, as well as the scientific one, the word **Prosera** being derived from the Greek drosos, dew. That the object of the secretion is the capture of insects is highly probable, from what we learn by comparison of these with other plants, where a similar end is obtained by different means; but of what benefit to the plant the prey can be, when captured and detained by so ingenious a device, botanists have not yet been able to decide. It is conjectured that some element may be given out during the decomposition of the animal substance, which may be requisite for the sustenance, or at least the heaith, of these strange plants. Both the asphodel and the sundew were growing in considerable abundance in this particular locality.

We came now to the curious object which gives name to the little valley, the Punchbowl. It is a basin of the common granite, four feet in diameter, and one in depth, with a uniform thickness of six inches. Both the concave and the convex surfaces are segments of very perfect spheres; and the whole conformation is so regular as scarcely to permit a doubt that it is the work of art. And yet, when we inquire what could be the purpose of such a piece of sculpture, and how it could have got to a situation so wild, so remote from any trace of man, and altogether so unlikely as the side of this boggy valley. especially considering that its weight must have presented no small obstacle to its removal from any other locality, - we know not what answer can be returned. The only suggestion that appears at all probable to my own mind, is, that it may have been the baptismal font of some very ancient chapel, of which no other vestige remains. Even its hard and solid substance has begun to yield to the gnawing tooth of time, -"tempus edax rerum"; for the vicissitudes of the seasons are already dissolving the bond which united the heterogenous materials of feldspar, mica, and quartz, in one mass, and disintegrated nodules are lying loosely in the concavity, as if a smart hailstorm had just expended itself.

We could not leave the island without paying a visit to the lighthouse. We had watched evening after evening, from the thronged promenade of Capstone Hill, its brilliant torch-like flame, as it appeared, first a tiny spark, gradually increasing to a ruddy glare, then waning to a spark again, and after a few seconds of total darkness, reappearing, to go through a similar evolution. Night after night, on those dewy summer evenings, had we lingered on the rocks, with scores of other idlers as interested as ourselves, to mark the first appearance of the light on distant Lundy, and, watch in hand, to count the moments which, with unvarying regularity, elapsed between the successive revolutions.

The lighthouse, which has been built rather more than thirty years, is placed on the highest sumit of the island, a point not quite five hundred feet above the level of the sea, but its own height elevates the lantern eighty feet above this. The white pillar-like structure is conspicuously visible from almost all parts of the island, and it often seems nearer than it really is, It looked but a little way behind the Farm, but we found it the walk of a mile. Lapwings were wheeling round us with their well-known rapid circling flight, as we walked across the moor, uttering, sometimes close to our heads, and the next moment at a distance, their plaintive cries of, "Peewit! peewit!"

The lighthouse appears a structure of great strength, built of massive hewn stones of granite, as well as the accessory buildings appropriated to the use of the lightkeepers. From the purity of the atmosphere on this lone rock, the whiteness of the stone is still unsullied by speck or stain; and the period of its duration is as yet too brief for the action of the weather to have had any perceptible influence in wearing down the angles of the stone, or even in defacing the lines of the quarryman's chisel.

A staircase of stone steps leads up to the lantern, which is a room fifteen feet in diameter, surrounded by panes of thick glass about two and a half feet square. The light is placed in the centre, within a cage, having an octagonal revolving frame. Each of the eight squares of which it is composed, consists of many large lenses of varying powers, so arranged that the light shall be the focus of all. In order to accomplish this the central part of every lens, except the midle one, is cut away, and thus we behold a perfect lens in the centre, surrounded by successively diminishing segments of larger lenses. Square mirrors are placed both above and below, in many rows, at such angles as shall reflect upon the surface of the sea.

The whole combination of refraction and reflection has the effect of producing a most intense glare, when the eye of the beholder is immediately opposite the centre of any one of the lenses. The power of the light, indeed may be imagined, from the fact that it shines with a strong and vivid glare at Ilfracombe, which is twenty-two miles distant. But this intensity of light is only momentary: by means of wheel-

work, the motive power of which is a weight-and-chain pulley, like that of a clock, the eight-sided frame revolves around the light, with a uniform motion, performing the complete circle in sixteen minutes. Thus a period of two minutes elapses from one moment of greatest intensity to the next; the interval being occupied by a gradual diminution of the apparent light, until the dimmest point is attained; and then a gradual increase to the brightest. At a great distance there occurs an interval of total obscurity; but this is only because the rays are too feeble to be appreciable so far. Within a circle of a few miles the light never quite disappears.

The fatality which the lanterns of lighthouses occasions to birds has often been mentioned; it is, however, a curious circumstance. Lundy Light, it appears, is responsible for its full share of these casualties. The keepers informed us that sometimes four dozen birds are found in a single morning, either killed or helpless, outside the lantern. They mentioned blackbirds as habitually flying against the panes, and fluttering down until they are caught in the gallery. Snipes dash against the glass with such force as to cut open their breasts; a result, no doubt, promoted by the sharp and knife-like ridge of the breast-bone. Probably many of these accidents are attributable to the early habits, wakeful and active before the glare of the artificial light has been dimmed by the advancing day; but, doubtless, many occur to migratory birds, performing their long aerial voyage; as birds of passage are generally believed to perform their journey under cover of night.

I did not hear that these involuntary attacks had ever the effect of injuring the plate-glass against which they are directed; but at the Eddystone Lighthouse it is recorded that one of the panes was shivered to pieces by the forcible flight of a gull. to which it was no less fatal. The bird was found dead in the gallery, a pointed fragment of the glass, two inches in length, having penetrated its throat. The force of the shock was less a matter of surprise, when it was discovered to be that large and powerful species, the herring-gull. So great is the power of the lenses, that, when the sun is shining, the keepers are compelled to exercise caution in entering the lantern for the purpose of cleaning the lamps. The concentrated rays would quickly set their clothes on fire, if brought into the focus; blinds are therefore necessary, which are always kept down during sunshine.

The lamp is a large Argand burner, of four

circular wicks, placed concentrically, or surrounding each other, with intervals between. In descending, we were shewn into a chamber filled with the large cylindrical glass chimneys to be used for the lamp; here they are kept in store, arranged on shelves round the room. Eighteen dozen, as we were told, was the number that we saw. The stores are replenished at certain intervals from a vessel loaded and sent round by the Trinity House, to visit in succession all the lighthouses on the coast.

At the bottom of the edifice there is a second light-chamber facing the sea. Here are placed nine hemi-spherical reflectors, made of copper, polished and silvered within their concavity. They are set in two rows, four above five, arranged in the arc of a large circle. A lamp is placed in the focal centre of each, the smoke from which is led off by a tube, passing through each reflector to a common chimney behind.

This lower light is chiefly of use to ships when near the island. As long as it continues in sight, when approaching the shore, they are safe; but the moment it is shut in by the immediate summit of the precipice, they are in dangerous proximity to the rocks, and must haul off till they see it again.

The fogs, which are so prevalent on this coast in winter, are the most fatal occasions of shipwreck. It is then in vain that the watchful keeper trims the lamp, and in vain the inventions of optical science are employed to magnify the light. The dense and blinding mist absorbs the rays, and intercepts the friendly warning. About three years ago, the keeper informed us, a vessel came ashore in a dense fog on the rocks just below the lighthouse. All the crew took to their boat, but were never afterwards heard of, being doubtless swallowed up in the tremendous surf that dashes-in during heavy weather among those rugged rocks. One person alone was saved, a sailor-boy, but a passenger on board this craft. The boat had put off without him; but the crew, on discovering that he was left behind, told him to jump overboard, and they would pick him up. He. however, was afraid to do this, as he could not swim; preferring to take his chance where he was.

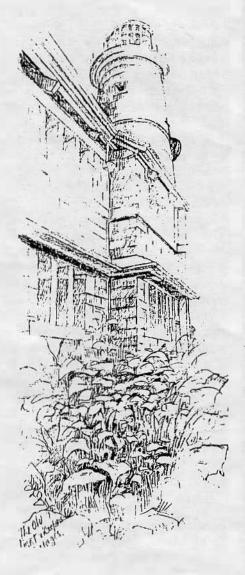
The poor lad remained on the wreck till morning dawned; meanwhile the tide had receded, and had left the vessel high and dry upon the shore. He found he could with ease jump down from the bows upon the rocks below; whence, with no great difficulty, he clambered up the precipice, told his sad tale, and met with hospitality and sympathy.

After drinking in the wide-spread prospect lying in a vast circle around, looking by turns upon the long range of English and Welsh coast, upon the sea, sleeping and sparkling in the sun's bright rays, and upon the island beneath, whose whole outline the eye could here take in, almost as if it had been laid down in a map, we cast "one longing lingering look behind", with a moral certainty that we should see that sight no more, and bade farewell to the lighthouse.

It proved indeed a farewell to the little isle itself; for, as we descended, we saw a skiff even now approaching the shore, sent expressly from Ilfracombe to fetch one of our party to a near relative in urgent sickness. There were several points of interest which we had only imperfectly, or not at all, examined; and we would willingly have spent another day on the pleasant little spot. But this was now out of the question; the case was pressing, the wind was fair, the boat was waiting at the beach; we took a hasty leave of our kind and courteous friend, and were in a few minutes skimming the waves, and looking back to the fast-receding rock, where we had spent a few days of almost unmingled gratifica-

\*Philip Gosse is incorrect in attributing the entire Beach Road construction to Trinity House. Thr roadwork from the beach as far as the Battlementswas undertaken by Mr. Heaven in 1838 after Trinity House had expressed the opinion that it would be impossible to carry out.

\*The total area of the island above sea level is approximately] [15.728 acres, but is shown on the deeds as 1047 acres.



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