

It is generally supposed that the coral insect is industrious; that it is a builder; and that by its labours, commenced at the bottom of the sea, the coral islands have been formed. This is only partly true. They live and multiply—that is all; and in doing this, a family that starts a habitation at the bottom of the sea, in time reaches the surface at low-water. The structure they form is not elevated one inch above the sea level, for the insect can only live in the warm salt water.

The older the coral shells or bone, the stronger is the colour, and the more difficult it is to procure. The money value of coral depends wholly on its scarcity, or the difficulty of obtaining it, although, as far as use or ornament is concerned, one kind is worth in reality as much as another.

At Honolulu and other places on the Pacific Islands, I have seen houses built of coral, which was as common as granite or sandstone here, and was worth no more. If the many-headed public, who suffer the sorrows of following fashion, could be made to believe that this common coral was seldom found, and was procured with great danger and difficulty from a depth of five hundred feet under water, it would immediately discover some heretofore hidden beauty in that particular kind of coral, which would become a valuable article of commerce. Those who are enslaved by fashion are very sharp in learning from others what is common from what is rare; and, without the slightest regard for the use of an article, the merchants who live principally by the vanity of others, regulate their prices.

To witness the forms of coral structures, one would think that the insects must have some means of communicating with each other at a distance, although they cannot leave their shells. Naturalists may be able to account for some of their peculiarities, but to me there is a mystery in the way they manage to construct formations of coral rock on mathematical principles. When growing in the shape of a tree, what teaches the insect to withhold extending its branches farther in one direction than another? When one tribe of insects commence a structure in the bottom of the Pacific, what enables them to extend it in two directions in a perfect circle until the two ends meet, forming a ring from half a mile to ten miles in diameter? What tells these insects, working in opposite directions, as generations after generations are moving farther from each other, that the circle they are building shall be a large one or a small one? These things, to an observing sailor, unacquainted with the theories of the learned, are always a mystery.

Amongst the South Sea Islands there is a little trade for coral; yet not much is done in fishing for it in the manner I have seen followed in other places. Most of the coral gathered there, of a quality valuable in the market, is obtained in small quantities from the shores of islands surrounded by a coral reef. Fragments of the reef become detached from the main body, and in violent agitations of the sea by storms, pieces of the right kind are sometimes thrown within the view and grasp of man.

The only opportunity I have met for seeing the coral fishery conducted on what may be called an intelligent manner, was off the coast of Africa, where for a few days I was near some natives of Algiers, who were fishing for coralline plants in the same manner pursued in the Strait of Messina. The coral fishery I witnessed was carried on from three feluccas anchored in about seventy fathoms of water. A felucca is the largest and fastest boat used. It has three masts with *lateen* sails, and a jib on a short bowsprit. It is also furnished with

long strong oars. During the time I remained near those engaged in the fishery, all three were visited, and I became familiar with the mode of gathering coral; but, being unable to converse with the men, I could learn nothing about the trade.

Two strong poles, about twenty feet long, are firmly fastened together at the middle, and at right angles to each other. On the under side of the poles is a net made of strong cord, and fastened to the extremities of the poles. A heavy stone, for the purpose of sinking the poles, is fastened where they cross each other, and a strong line is also tied at the crossing. One end of the line is held aboard the felucca, and the net is launched over where the coral branches are supposed to be growing beneath. The net sinks slowly to the bottom; and should it fall over the spot where coral is growing, some of the branches generally become entangled in its meshes, and are broken off and hauled up.

When the net and poles become firmly entangled below with large branches of coral, much force has to be used in freeing them, and often the end of the line has to be fastened to the windlass, and a few turns given to bring the net from the bottom. Only small portions of any large mass brought up on such occasions are of any value. Sometimes the net becomes so firmly fastened below, that it is torn in pieces in extricating it. It not unfrequently happens that the line by which the net is drawn up breaks, although, to avoid this, it is always made of larger and of stronger material than the net. Often the net is pulled to the surface and not the smallest fragment of coral is found attached to it. On one occasion I saw, as the net was brought near the surface, a large branch of bright red coral, which was hailed by the Algerine fishermen with shouts of delight. The instant the poles spreading the net touched the stem of the felucca, the branch, which was only hanging by what is best described as a twig, broke away and was lost. There was a sudden transformation of Algerine features from expressions of joy to those of anger and disappointment.

Notwithstanding these little misfortunes, the coral fishers are engaged in a profitable business, and make during the season, which lasts from the middle of April to July, enough to keep them, with a little economy, the remainder of the year. Should they be successful at every cast of the net, the coral, such as they procure, would become too common to please those affected with an insane desire for anything that requires time and toil in procuring.

The price of rough coral varies according to its quality and colour. The whims of changing taste, or want of taste, and the quantity in the market, have much to do with its value. I have seen it sold for about two shillings per pound, and have seen some sold for more than fifteen shillings. The great market for all the cheaper kinds of coral sold, is Africa, where it is an important article of commerce, finding its way far into the interior of the country, and is eagerly purchased by the natives for ornaments.

#### DER BLAUEN SEE.

In a corner of the French picture-gallery in the Paris Exhibition, there hung a small picture which, at a passing glance, might be thought an over-coloured and exaggerated fancy landscape. It represented a little blue lake, surrounded by rugged rocks, dark fir-trees, and all the charming accompaniments of Swiss scenery. Many pleasant associations recurred to my mind as I

recognised the scene, which I will now endeavour briefly to describe by way of protest against any charge of excessive colouring or artistic licence in the picture.

We had been travelling in Switzerland—a merry party of nine—and arrived one bright August afternoon at Kandersteg, the well-known village at the northern base of the Gemmi Pass. No sooner had we arrived there, however, and installed ourselves comfortably in *Hôtel Victoria*, than a fog came on, accompanied by large, heavy intermittent rain-drops. This did not augur favourably for the weather on the following day; and, as we had been unfortunate in crossing the Great Scheideck and Wengern Alp, entirely enveloped in clouds and rain, we decided to halt a whole day at Kandersteg, hoping that the weather might clear for the passage of the Gemmi. It grew very chilly as the evening wore on, and we were all delighted when the civil waiter, hearing our exclamations at the cold, brought in an armful of wood and quickly lit up a blazing fire. Two young English tourists came in about seven o'clock, tired and hungry, and after they had finished their evening meal we grew sociable, and endeavoured to arrange ourselves in English fashion round the fire. This was difficult, with the fireplace most awkwardly built quite in a corner of the *salle à manger*, and we must have formed a curious-looking group when we were all seated, with one whose feet were cold perched on the high mantel-shelf, and another, who had been bathing in a glacier-stream, and wanted to dry his hair, squatted on a low stool, with his head up the chimney. I forgot to mention a very pleasant French artist staying at the hotel, whose name we did not hear, though I have every reason for believing him to be the painter of the picture described, in the Paris Exhibition.

I always seized opportunities of this kind to study and compare the guide-books, of which we carried four by different authors. As I was doing so this evening, one of the Englishmen remarked that the prettiest sight in the neighbourhood was not mentioned in the guide-books.

"Indeed!" I replied. "May I ask what it is?"

"It is a small lake," he answered, "about two hours from here, between this and Frutigen. We were told of it by a Swiss, and we turned out of the road this afternoon to see it."

"Go and see it by all means," echoed his companion. "It is in its way quite a wonderful sight, or at least very interesting, and deserves to be much better known by tourists than it is."

I instantly turned to Ball's "Alpine Guide," my favourite amongst the books, fully expecting to find a description of it there, in spite of what had been said to the contrary; but no: the young tourist was quite right; it was mentioned neither in Ball, Baedeker, Murray, nor Bradshaw. The French artist was also enthusiastic about the little blue lake, and told us that it was known by no other name than *Der Blaue See*, and how he had sketched it, and what a unique study it made for a picture. We instantly resolved to make an expedition thither the following day, should it prove fine enough.

I started in the afternoon with one of my companions, and, after descending the steep hill that leads up to Kandersteg, retracing our steps of the day before, and walking for about an hour, we came to a bit of ruined castle, perched on a high rock that rises close to the road, on the right-hand side walking north. This was to be our land-mark; for we had been told to turn in from the road on the left, just opposite this old ruin.

We soon spied a footpath, leading across a plank laid over a narrow stream, and through some meadow-land bestudded with flowers. We followed this path, and presently saw a boy approaching us from a *châlet* on the other side of the meadow. He was a poor cretin, and could give us no information. The footpath, however, only led up to the *châlet*, at the door of which a woman sat knitting. From her we again attempted to learn the whereabouts of the *Blaue See*, but were again unsuccessful. Whether that *châlet* was inhabited by a family of cretins, I know not; but the woman only shook her head helplessly and muttered unintelligibly.

Returning to the road, we accosted two men who were building a *châlet* close by. They seemed very honest and intelligent, and when I held up forty centimes, and promised them to the man who should guide us to the *Blaue See*, one of them instantly threw down his tools and led the way.

We followed him by a little path very much like the one we had taken ourselves, but at a point rather higher up the road. Then began a real scramble, with no kind of path to guide us, first up a grassy hill, then through a wild glen, down which a little mountain stream was hurrying. This our impromptu guide pointed out as issuing from the *Blaue See*. Then we crossed the *Kander* (that flows all through this valley into the Lake of Thun), by a rough plank thrown over it; and after issuing from the wood, and climbing another steep grassy knoll, we looked right down upon the little blue lake. It was surrounded on two sides by fir-trees growing down to the water; on another by the steep rocks that bounded the narrow valley we were in, and on the side from which we overlooked it by low rocks rising roughly from the water's edge, but sloping away from the lake into rich meadow-land literally strewn with flowers.

The water was intensely blue—not the hazy cobalt of Lake Lemman, or the greeny blue of a deep sea, but a clear dark blue, unlike anything either of us had ever seen before. Two or three of the fir-trees had been uprooted—apparently by some tempest—and fallen into the lake; there they lay covered with what looked like a glistening crystalline deposit, every twig being distinctly visible through the clear blue water. This transparency was another peculiarity about the little lake; it was so clear, we could see every pebble that lay at the bottom, shining white and silvery like the fir-trees, for everything looked perhaps whiter than it really was, by contrast with the dark blue water.

This naturally deluded us into imagining the lake to be but a few feet in depth, though the artist told us afterwards that it was really much deeper.

I do not know whether I have done full justice to the beauty of the scene, or whether I have succeeded in conveying to my readers the same impression that it made upon me. It was little short of enchantment, and just as if some woodland fairy, wishing to prolong a moonlight effect, had by a touch of a magical wand changed every hue to silver and blue, and then carefully hidden it away from mortal eyes. Perhaps it would have looked still prettier in the sunshine; for I should mention that the sun had set, or rather disappeared behind the hills, by the time we arrived at the spot, although it was only half-past four on an August afternoon. It is often the case in these mountain regions for the sun to rise and set in the deep valleys several hours after or before it does so to the rest of the world. The inhabitants of the valley of *Lauterbrunnen*, for instance, never see the sun in winter until twelve o'clock in the day.

We were vexed when, with all our efforts, we could not make our guide understand that he might leave us to rest there, and find our way into the road again ourselves, for he persisted in waiting to conduct us back. He then led us partly round the lake, through the fir-wood, and along a wilder path than the one by which we had come. He pointed out the bit of ruined castle on the rock as Der Felsenberg, and when he had put us into the road again, civilly wished us good night, and went off quite contented with his forty centimes.

We sat round the fire that evening, discussing the cause of the singular blueness of the Blauen See. One thought it must be due to the action of sulphate of copper on the water, and all wished that we had brought some away in a bottle for analysis.

We were also comparing it with the Oeschinen See, another lake in the neighbourhood of Kandersteg, whither, in tourist-like obedience to guide-book directions, we had all made an excursion the same morning. I greatly preferred the Blauen See, but others differed from me; and certainly the Oeschinen See is romantic enough. Its celebrity consists in its great altitude, and in being entirely surrounded by snow-peaks (the principal of which is the Blümlis Alp), except on the west side, where a narrow valley opens on to a wild ravine, by which we ascended to see it. A German family joined us for this excursion, and we made a merry party altogether; consisting of five ladies and an elderly gentleman on horses, two ladies who were unequal to riding, in *chaises-à-porteurs*, eight bearers with two assistants, and six pedestrians. We had not gone far when one of the men commenced singing a wild Swiss air. His nine companions joined him one by one, in perfect harmony, and swelled the chorus till it echoed and re-echoed among the mountains, and then the voices gradually fell off until it quite died away. They kept on bursting out with it in this way one after another, during the whole expedition.

It appeared that they always began to sing as they came to a rough or difficult part of the road, to warn one another of it, and cheer themselves on. It would be well if we could all learn the life-lesson contained in this simple incident, to cheer the rough places in life's pilgrimage with songs of warning and encouragement. The fact that most of the men belonged to one family, by name Ogi, who act as guides, porters, bearers, etc., to the numerous visitors to Kandersteg, or travellers over the Gemmi, may partly account for the exquisite way in which their voices harmonised.

The Oeschinen See is much larger than the Blauen See, and this, with the snow peaks round, makes perhaps a grander scene than the other; but for all that I like the little blue lake best, and was delighted to recognise it as a perfect gem in landscape scenery, amongst many larger paintings in the French Exhibition.

### THE REIGN OF LAW.

It is interesting to note how two independent thinkers, exercising their minds on the same general topic, in different ages, both with the same grand wish to glorify God as the moral Governor of the universe, have unconsciously approached each other. We subjoin from the famous treatise of Hooker, "Ecclesiastical Polity," and from the now famous work of the Duke of Argyle, "The Reign of Law," parallels, not of language, nor of sentiment, nor even of thought, but of general subject. The profound conceptions of the great Elizabethan divine are in fine contrast with the practical, clear, and

full illustrations of the modern philosopher. Space will only allow the following instances:—

#### DESCRIPTION OF LAW.

*From Hooker.*

All things that are, have some operation not violent or casual. Neither doth any thing ever begin to exercise the same, without some fore-conceived end for which it worketh. And the end which it worketh for is not obtained, unless the work be also fit to obtain it by; for unto every end every operation will not serve. That which doth assign unto each thing the kind; that which doth moderate the force and power; that which doth appoint the form and measure of working—the same we term a Law. So that no certain end could ever be attained, unless the actions whereby it is attained were regular; that is to say, made suitable, fit, and correspondent unto their end, by some canon, rule, or Law, which thing doth first take place in the works even of God himself.

*From the Duke of Argyle.*

The whole world around us, and the whole world within us, are ruled by Law. Our very spirits are subject to it—those spirits which yet seem so spiritual, so subtle, so free. How often in the darkness do they feel the restraining walls—bounds within which they move—conditions out of which they cannot think! The perception of this is growing in the consciousness of men. It grows with the growth of knowledge; it is the delight, the reward, the goal of Science.

#### THE UNIVERSE WITHOUT LAW.

*From Hooker.*

Now, if Nature should intermit her course, and leave altogether, though it were but for awhile, the observation of her own laws; if those principal and mother-elements of the world, whereof all things in this lower world are made, should lose the qualities which now they have; if the frame of that heavenly arch erected over our heads should loosen and dissolve itself; if celestial spheres should forget their wonted motions, and by irregular volubility turn themselves any way, as it might happen; if the prince of the lights of heaven, which now as a giant doth run his unwearied course, should, as it were, through a languishing faintness, begin to stand, and to rest himself; if the moon should wander from her beaten way; the times and seasons of the year blend themselves by disordered and confused mixture; the winds breathe out their last gasp; the clouds yield no rain; the earth be defeated of heavenly influence; the fruits of the earth pine away, as children at the withered breasts of their mother, no longer able to yield them relief; what would become of man himself, whom these things now do all serve? See we not plainly, that obedience of creatures unto the law of nature is the stay of the whole world?

*From the Duke of Argyle.*

Each force, if left to itself, would be destructive of the universe. Were it not for the force of gravitation, the centrifugal forces which impel the planets would fling them off into space. Were it not for these centrifugal forces, the force of gravitation would dash them against the sun. The orbits, therefore, of the planets, with all that depends upon them, are determined by the nice and perfect balance which is maintained between these two forces; and the ultimate fact of astronomical science is not the law of gravitation, but the adjustment between this law and others which are less known, so as to produce and maintain the existing solar system.

#### THE RESULT OF THE INQUIRY.

*From Hooker.*

Wherefore that here we may briefly end. Of Law there can be no less acknowledged than that her seat is the bosom of God, her voice the harmony of the world; all things in heaven and earth do her homage, the very least as feeling her care, and the greatest as not exempted from her power; both angels and men, and creatures of what condition soever, though each in different sort and manner, yet all, with uniform consent, admiring her as the mother of their peace and joy.

*From the Duke of Argyle.*

The laws of nature were not appointed by the great Lawgiver to baffle his creatures in the sphere of conduct, still less to confound them in the region of belief. As parts of an order of things too vast to be more than partly understood, they present, indeed, some difficulties which perplex the intellect, and a few also, it cannot be denied, which wring the heart. But, on the whole, they stand in harmonious relations with the human spirit. They come visibly from one pervading Mind, and express the authority of one enduring Kingdom.