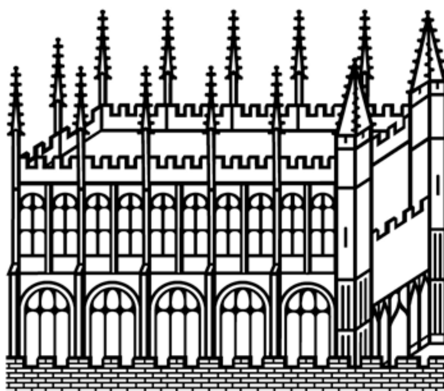

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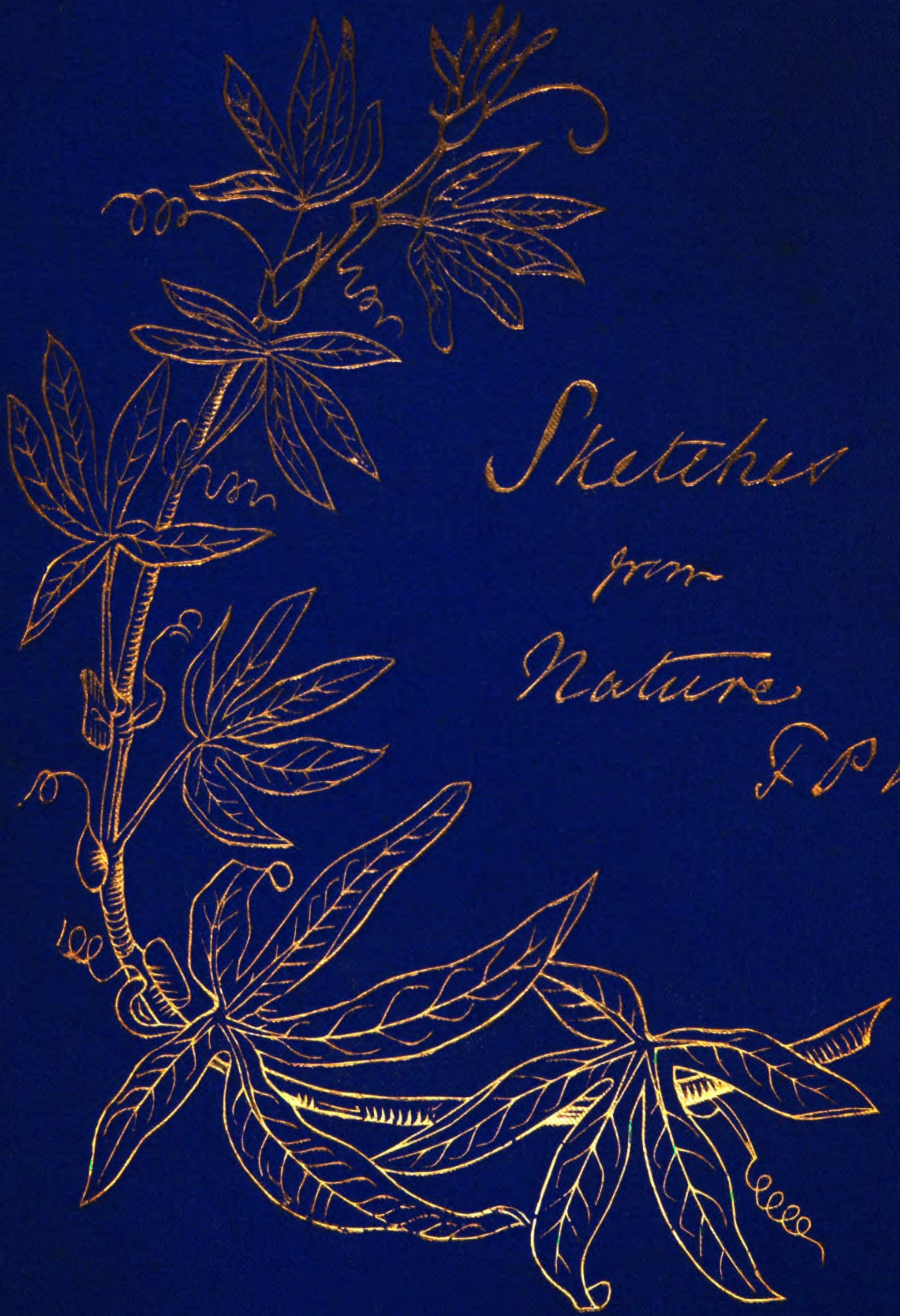
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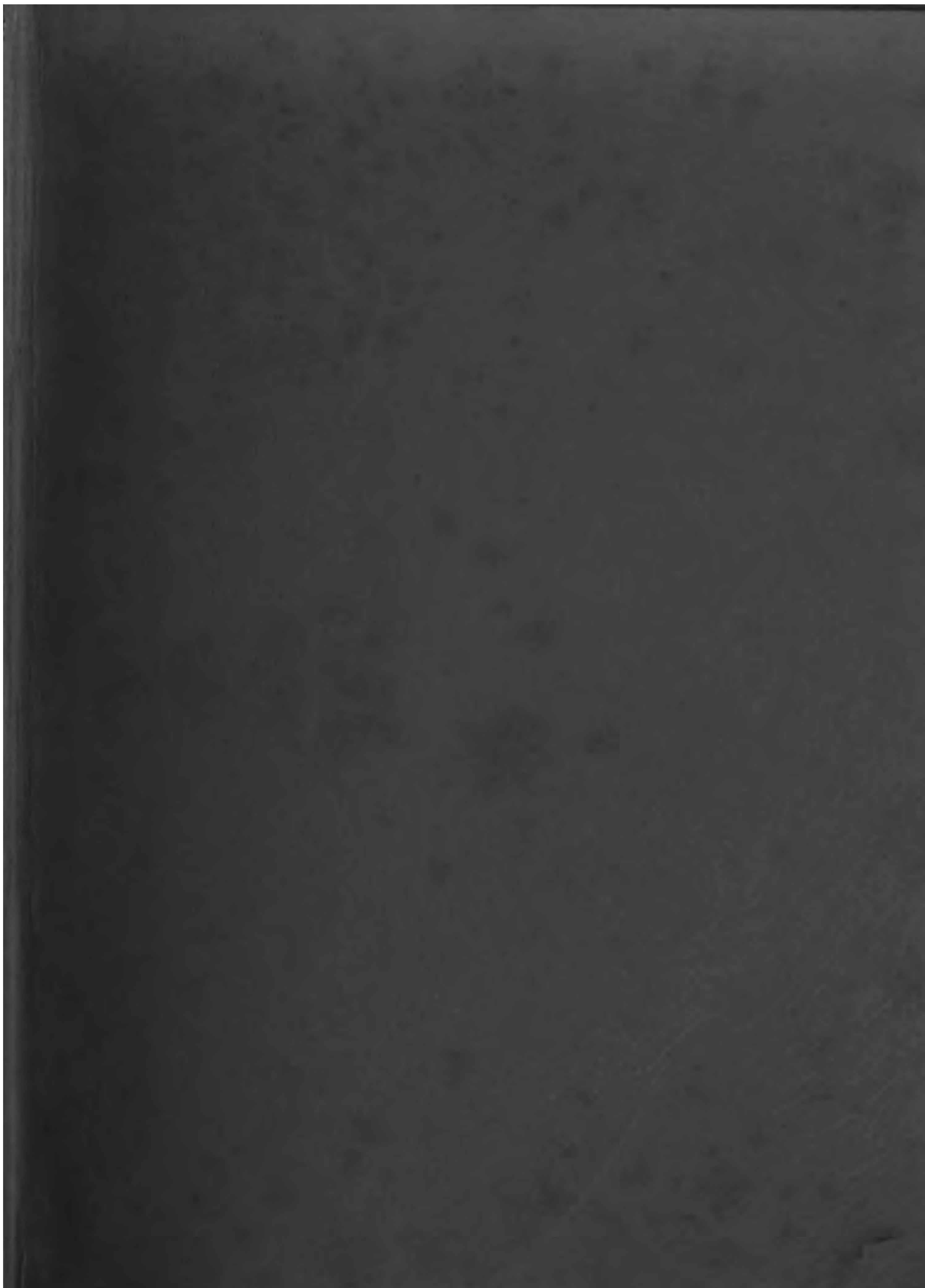

SKETCHES FROM NATURE

WITH PEN AND PENCIL

SKETCHES FROM NATURE

With Pen and Pencil

By LADY VERNEY

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LONDON

DALDY, ISBISTER & CO.

56, LUDGATE HILL

1877

198. g. 100.

LONDON:
PRINTED BY VIRTUE AND CO. LIMITED,
CITY ROAD.

PREFACE.

THESE stray "Sketches" have been gathered out of different homes. Many of them appeared in "Good Words;" several are now printed for the first time. The five at the beginning of the second part were published in a periodical destined for younger readers.

"Sketches from Nature" have always a certain charm for the maker of them, as in some degree recalling the "Nature" which inspired them. If they have something of the same effect on my readers I can wish for nothing more.

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SKETCHES FROM NATURE.

PART I.

OUR ANCESTORS.

IT is only in districts so bare, rocky, and inaccessible as to be left somewhat in the state of nature, that any traces can now be found of the men who have preceded us in Great Britain. As civilisation increases, the salutary superstitious awe which has preserved to us the Cromlechs and the Maenhirs dies away. The "Nine Maidens" in Cornwall are cut into gate-posts; a midshipman flings down the great Druidical Logan-stone; improving farmers plough down Celtic camps and cart away old British barrows; so that the few remains, *in situ*, which are still left to us become each year more precious.

There is a bare mountain on Holyhead Island, fronting the stormy Irish Sea, where the steep cliffs, some seven hundred feet high, with strange contortions of strata, are pierced and worried by the fierce

contending tides into weird caverns, only to be approached by water. In front, a long ragged edge of black reef runs far out among the waves, over which the boiling surf dashes, and the meeting currents form a dangerous "race." The rough mountain side, sloping to the south, is covered in autumn with a beautiful diaper of bright pink and purple heather, looking like velvet, golden gorse, and green fern, through which pierce the sharp-edged crags. Here, just below the highest point, backed behind to the north by the inaccessible cliffs, and with a sort of terrace wall of defence in front, looking west to the wide lonely sea and the distant mountain range of Carnarvonshire to the south, and commanding all approach by land, are a number of rude circles of stone and earth, the remains of the huts of some of our earliest ancestors.

The village, if so it can be called, at Ty Mawr seems to have been a considerable one: above fifty huts can be easily made out, and there are traces of more. Some stand singly, some are in clusters, but arranged without any plan. They are built of unhewn stones, without mortar, the double walls filled in with sods to keep out the wind, which would otherwise have whistled through the dry masonry. These in the memory of man were still breast-high. The circles are about twelve or fifteen feet in diameter, and the

opening is always to the south or south-west. The roofs seem to have been made of poles gathered to a point like a tent, and covered with turf, or "stepped

BEEHIVE HUT.

over," each stone projecting beyond its neighbour till all meet at the top. Very perfect specimens of these "beehive huts" are still to be found in the Isle of

Arran, and on what is little more than a bare rock, one of the Skelligs, off the coast of Kerry, where they have been long preserved as the holy abodes of anchorites.

Circular dwellings seem almost universal among savage tribes, and Dr. Livingstone describes how vainly he tried to teach his African natives to build a square hut; the moment his back was turned they reverted to their old practice.

In the neighbourhood of Salisbury a curious variety of the same form of construction has been found, belonging to some troglodite tribe; dome-shaped round caves, wrought out of the drift-gravel, resting on chalk, singly, or in groups communicating with each other, from six to fourteen feet in diameter. In the recent survey of Palestine similar troglodite abodes have been discovered, which are still inhabited by men, goats, cows, and sheep, who live promiscuously in circular or oval caves, rarely six feet high. "After a downpour of rain, the filth, the damp, the smells, and the vermin in these holes make an English pigstye seem a palace in comparison with them."

The lake villages, built on platforms raised on piles driven into the mud, remains of which have been discovered in many of the Swiss lakes, were also circular; they were made of a sort of basket-work,

twisted round more solid upright poles, and lined with clay.

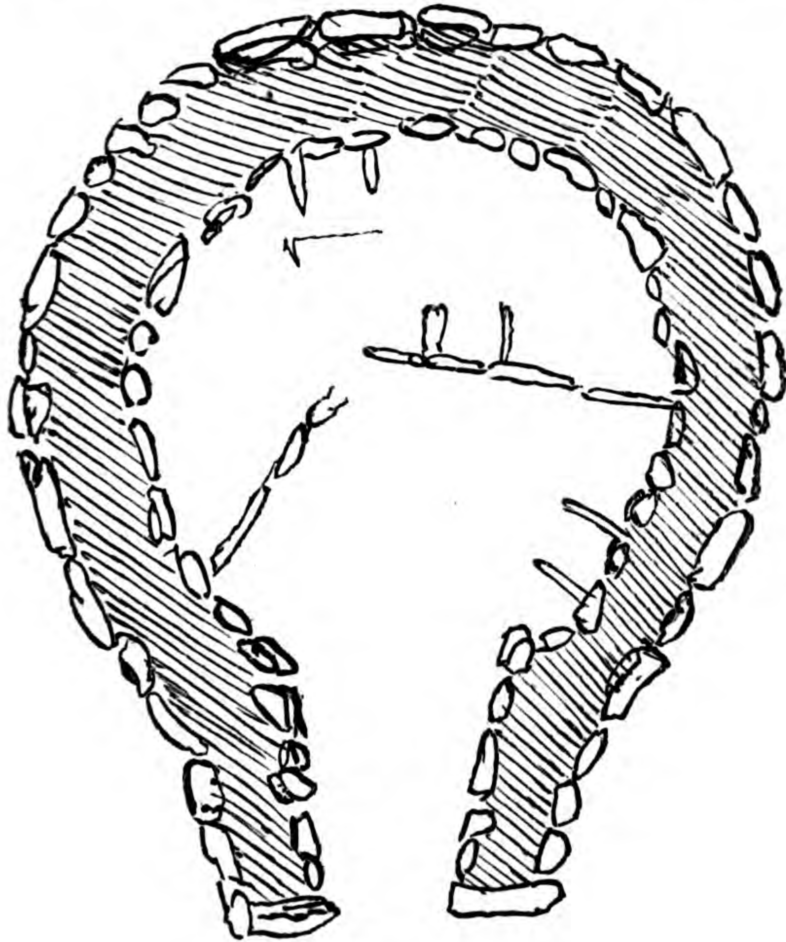
The Irish Cloghauns are of later date, but of the same construction; they have often a small inner pen, without door or window, opening only into the larger den. This is also found in the Welsh huts, and here the dogs are supposed to have been kept.

"Our ancestors" must have been extraordinarily hardy; * there are no signs of any fireplace or exit for smoke in the ordinary huts at Ty Mawr. The general cooking must have been carried on in a large central hut, in which three rude hearths were found, or out-of-doors, as is done among the negroes.

Heaps of flat stones and round pebbles from the shore, half calcined, lay within and without them, which had evidently been used for the stone boiling process, still to be seen among many savage tribes. In the absence of metal of any kind, and where the pottery is too rude and badly baked to stand the action of fire, stones are heated red-hot and put into

* "The power of resisting cold among the iron men of Siberia at the present day is very remarkable," observes Wrangell. These are probably much in the same stage of civilisation as our ancestors. Frequently, in the severest cold, when their fire had long been extinguished, he has seen them with their light jackets slipping off, and scarcely any clothing, sleeping quietly, completely exposed to the sky, and their bodies covered with a thick coat of rime. Chest complaints and bronchial affections are unknown among them. Cold alone is not so unhealthy as is commonly supposed.

water, in which small fish, grain, &c., can be cooked. Fynes Morison describes such a process going on in Ireland as late as 1600. For the cooking of large animals a hole was made in the ground, lined with



COOKING HUT.

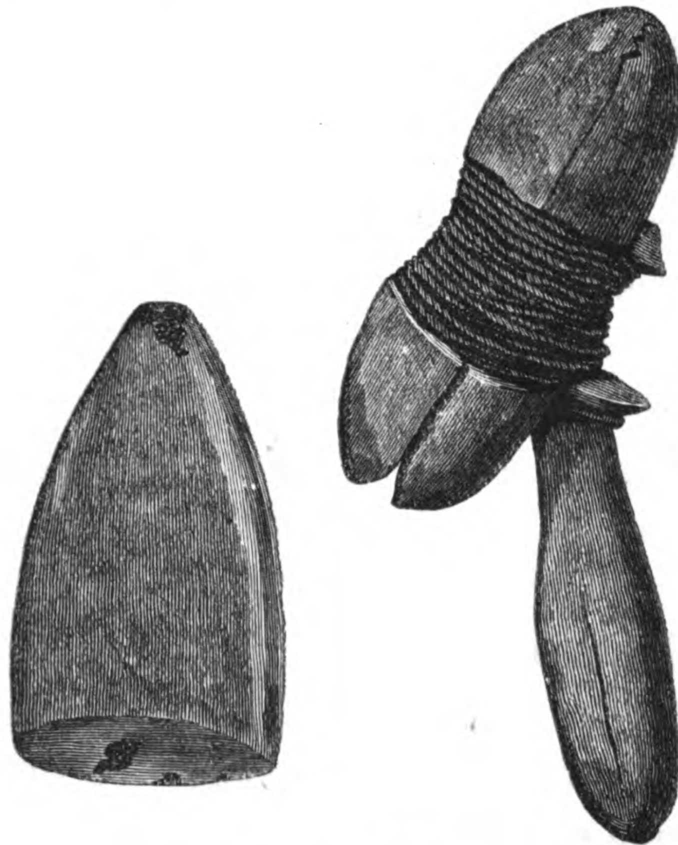
stones, and filled with hot embers; these were then brushed out, the meat put in, and covered over with more hot stones, blazing heather and fern, and lastly sods again. The juices are so well preserved by this process, that those who have tasted

the result in the South Sea Islands, &c., declare all other cookery inferior to it. Another form of the earth-oven is to line the hole with a hide which will hold water; this "paunch kettle" combines the advantages of boiling and baking.

We have forgotten the extreme difficulty of obtaining fire in early times—the laborious contrivances of the rotating stick, the "fire-drill" with or without a thong, still to be found among the Australians and other savages, which must have been used by our ancestors. When we remember that flint, steel, and tinder continued to be our own only device for the purpose far on into this century, and that lucifer matches date from only some thirty or forty years ago, the progress of our race seems to have been slow indeed.

The tools and weapons of this early period were of flint, flaked to a point or an edge, an art still practised by the "flint knappers" of Suffolk, who make "strike o' lights" for the East and Brazil, and flint locks for the old-fashioned gun. How these were hafted might have been difficult to ascertain, as the wooden handles have mostly perished; but here again the modern savage helps us to understand his prototype. On the next page is a celt made of greenstone, brought from the Sandwich Islands, tied into a handle

of very hard wood by grass string. The Australians use a strong resinous gum instead of the cord. Sometimes the stone is forced into a socket of deer's horn. With such weapons "our ancestors" must have been among the most defenceless and helpless



STONE WEAPONS.

of animals, while the beasts with which they had to contend were often larger and stronger than their present representatives—the great Irish elk, with horns eleven feet across; the mammoth, rhinoceros, cave lions, hyenas, and bears, whose bones are found

associated with flint weapons in Great Britain; together with the urus, a primeval ox, which still existed in Germany in the time of Cæsar, and is described by him as little less in size than an elephant; besides the treacherous wolf, which seems to have inspired the same horror and loathing in the old world as in our own. It must have required an extraordinary amount of courage and craft to attack such animals as these, in the hand-to-hand struggles necessary with missiles so blunt, and which could be thrown so short a distance. "How do you kill?" said a traveller, by signs, to a savage, showing at the same time that the point of his weapon could not penetrate an animal's hide. The man pointed to the eye.

It was only, however, the heroes and braves who would dare such encounters, and the misery and dread endured by the rest of the tribe must have been great, when searching for wild fruits or snaring small animals in the thick forests, which even at the time of the Roman invasion still clothed the bleak hills and dreary morasses in Anglesey and Holyhead Island, now singularly bare of trees, but with records of long passed away "woods" and "groves" in the local names.

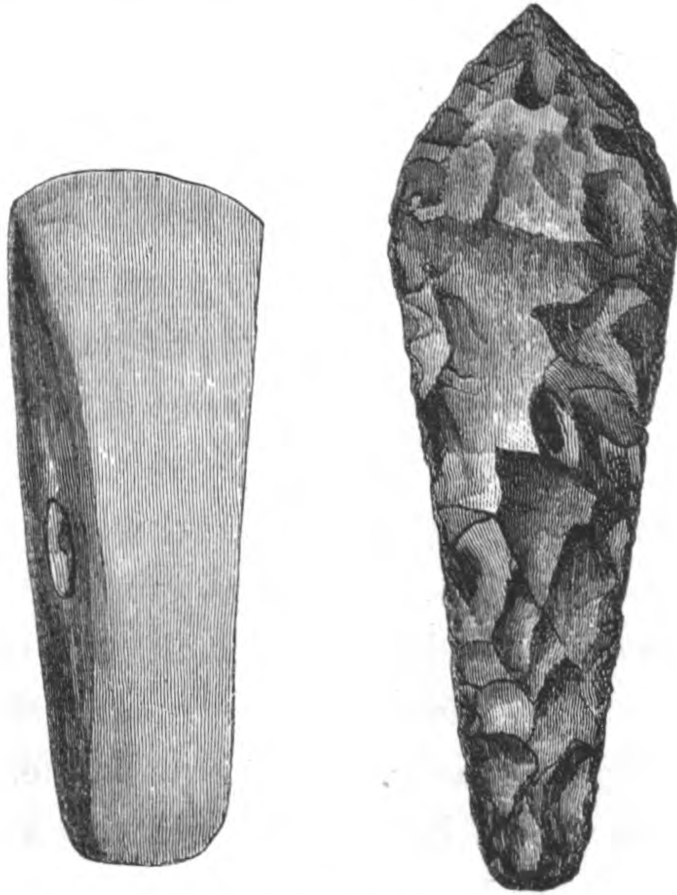
The large part which the fear of wild beasts bore in our forefathers' lives, even in far higher civilisations than ours, may be seen when Orion, the mighty

hunter, is promoted to a place among the stars for his great feats in the chase; and in the "glorious" feats of Theseus and other godlike heroes of the old mythologies, whose great work has ever been the destruction of huge lions, bears, &c., the dragons and other mythical creatures, growths of the terrified imaginations of the helpless savages around them.* Of the twelve labours of Hercules, nine concern the quelling of wild beasts of some kind—the Nemæan lion, the Lernæan hydra, the stag with golden feet, the wild boar, the carnivorous birds, a "prodigious wild bull" in Crete, Diomed's mares, which were fed on human flesh, the monster Geryon and his flock, "which eat men," and lastly Cerberus, the three-headed beast of death. These were slain by main force with his club or by stratagem; his arrows never kill, and of weapons he is hardly supposed by the story to have possessed more than our own savages.

In natural caverns and rock shelters, in holes scooped out of softer materials, in lake villages and beehive huts, squatted "our ancestors," flaking their flint knives, chipping at their arrows and spear-heads,

* The descriptions of the dragon, or "worm," destroyed by St. George—the one which burst open after swallowing St. Margaret!—and the "dragon of Wantley," nearer home, bear so curious a resemblance to the strange reptiles of an earlier period, the Plesiosaurus, &c., that one is tempted to ask whether a stray specimen may not have survived in some out-of-the-way jungle till the arrival of man upon the earth.

binding them to their handles with sinews, and rubbing their stone and bone tools to an edge. Time was of no object to them, and, indeed, any amount of it was well spent which produced a really serviceable



FLINT AND STONE WEAPONS.

weapon. Indeed we must grant them considerable ingenuity, when with these rudest of implements they somehow managed to cut down timber, scoop out caves, dress posts for huts, grub up roots, prepare firewood, dig peat, kill animals, cut them up and

scrape their flesh from the bones, and even to use for agricultural purposes.

The dwellers at Ty Mawr were already in the second stage at least of the race. The earliest men of whom we have any trace seemed to have lived by hunting and fishing alone, to have cultivated no grain, and had no domestic animals, and to have possessed no means of self-defence except such as was afforded by the inaccessible places they resorted to. But some rude agriculture must have been practised near these huts, for a number of stone querns, hand-mills, and mortars were found here. The grain, probably parched, was rubbed into a coarse powder on a saddle-shaped mealing-stone, or bruised with pestles in shallow stone mortars. A quern was the next step. Even now we have only improved the use of the same motive power. Water-mills, wind-mills, steam-mills, are only modifications of the old principle. Some of the American tribes have not even now reached the level of the quern, and pound their maize to the present day.

There were several varieties of these grain-rubbers found at Ty Mawr. A slab of stone hollowed towards the middle by use in grinding, with a rounded saddle upon it; mortars of different shapes; a circular disk of stone, concave, rotating on a lower convex one, by

means of a wooden handle, which is worked by two persons. These sit with the mill between them, and feed it with grain through a hole in the uppermost slab, the meal falling between them, as may be seen to this day in Africa, where Sir S. Baker says he must have eaten pecks of dirt from the coarse sandstone rubbed in with the meal. It was the common mill used in the East: "Two women shall be grinding at a mill," is the familiar instance given of persons in the closest possible proximity.

The daily providing of a sufficient amount of meal prepared in this manner entails hard and incessant labour, and is generally done by the women. It is told of St. Columba, when studying under St. Finian, where the duty of grinding the corn for the religious community was done, as was usual, by the younger students, how he always got through the work when it fell to his lot so quickly, that his companions complained, jealously saying "he had surely had the help of an angel in his task."

The meal, when kneaded, was made into flat cakes, covered over among the hot stones, and heaped with blazing heath, a variety of which rude baking still survives in old Welsh farmhouses.

As for their other food, remains of shell-fish were found in the huts, and there is a small bay or port

among the rocks, where probably "our ancestors" put to sea in calm weather to fish, in some variety of the coracles of hide stretched over wicker-work—in which frail barks, at a very much later period, St. Columba crossed over from Ireland to Iona.

The difficulty of procuring food must have been tremendous in winter when the sea was rough and the summer stores exhausted; but once a year at least there must have been plenty to eat at Ty Mawr, when the sea-birds, which visit the coast by thousands, lay their eggs on every corner and narrow chink and ledge of the precipitous rocks to the north. Daring climbers, probably helped by a hide rope from above, swinging themselves up and down, as now at St. Kilda's, "hanging on by their eyelids," would soon secure a feast for the whole community.

Spindle-whorls were found in the huts, therefore some primitive spinning was practised there with wool or flax, and some sort of weaving from the fibre, such as is found among the relics preserved in the mud of the lake villages, which are our best storehouses of knowledge as to the implements and food of the Stone and Bronze periods.

Next to these in interest come the objects found in burial-mounds and places of interment. With the dead men and women were placed the things which

would prove most useful to them in the next world, as they had been in this, together with the most valuable of their possessions of all kinds, their best tools, pottery, and ornaments.

An elaborate necklace, or rather gorget of jet, was found, with two urns, in a rocky grave on the Holyhead Mountain. The forms of the vases, whatever

PRIMITIVE VASE FROM A BARROW.

may have been their object, whether incense cups, food vessels for the dead, &c., taken out of the Welsh tumuli, are often in good taste, so are the borders, running lines, dots, &c. upon them; they are in general very rudely baked, and sometimes seem to have been fired merely by being filled with hot ashes, and to have been supported by basket-work. There are, however, no designs upon them of any kind, and

no such proficiency in art as is shown in a spirited relief of a reindeer scratching its ear with its hind foot on a bone implement found in an Auvergne cave, and now in the Salisbury Museum. The drawing of this is full of talent and of the observation of nature, though the owner must have been a degree lower in civilisation than an Esquimaux, as it was clear from the remains found with it that his tribe possessed no domestic animals.

It is beyond measure difficult for us to realise existence without metal of any kind; with no nails, needles, pins, or screws; with nothing but strings to fasten together either the poles of the hut, the ends of a garment, the shaft and head of an arrow, the handle and celt of the axe, or the parts of a canoe. It is almost impossible to strip our minds down to the level of the dwellers in these low-domed earth and stone huts: with no light except from the door, probably closed at night by a skin; with no warmth but from the stones used in cooking, their own animal heat, and that of the dogs (which, however, is such as to make an Esquimaux hut almost unbearable to Europeans); with no air such as we should consider essential to life. In such a den, huddled together like animals, crouched the skin-painted, half-naked savages from whom we all trace our descent. A strange life, fighting with the ele-

ments, must these early men have led in winter on that exposed spot, amongst the wild winds and storms which haunt the bare summit of the cliffs. Driven by the stern, relentless, impalpable, invisible, resistless power of air, wrapped often for weeks in a fearful curtain of sleet and foam, rain and spray, the sky and sea mingling in one wild cold whirlwind of fury and noise, whether they turned to the water or the land in their efforts to obtain food, it is easy to see how the beliefs in the Prince of the Powers of the Air of old mythologies must have grown up in such places—of spirits who walked upon the wings of the wind, such as the Valkyrs, messengers of Odin, who rode through the air over the sea on shadowy horses, from whose manes fell hail. on the mountains and dew in the valleys, or who came surrounded by fiery lances in the Aurora Borealis, which was the special servant of the god of battles. Or of the giant who ruled the winter, sitting at the "top of the North," in the shape of an eagle, surrounded by ice and snow, the waving of whose wings produced the bleak north wind. Heimdall, the heavenly watchman, standing on the rainbow Bifrost, the bridge by which the gods visit earth, is a fairer vision. He "could hear the grass grow in spring, and the wool on the sheep's back." The great serpent, or "worm," Jormun-

gandur, who was cast out of heaven by Odin, and surrounds the world with its tail in its jowl, sullenly waiting revenge at the last day, is commemorated in the name of the promontory almost in sight of the huts—the Great Orme's Head.* His turning makes the storms to rise and the sea to roar; "the worm lies and rocks," and the waters heave.

Nature-worship takes strange forms in different soils, but the principle in all is the same—the warding off of the hostile influences of baleful spirits by sacrifices and rites, generally through the medium of some "intermediate man," priest or sorcerer, who obtains frightful ascendancy over his tribe by his power of propitiating the gods of the storm, the lightning and sea—who can stay disease, can grant success in the chase, and secure the good bearing of the crops of grain and wild fruits.

A very remarkable museum of prehistoric remains has been recently collected at Salisbury, the neighbourhood of which is peculiarly rich in them. On its shelves spoils from all countries are to be found—the scanty relics from the dwellings of the living and the dead—from Tumuli, Barrows, "Lowes" in Derbyshire and "Carnedds" in Wales; from Danish Köckenmöddens,† the mounds of shells and refuse

* *Orm* is Danish for worm. † Kitchen dunghills.

left by fish-eating tribes on the shores of the Baltic; from Lake villages in Switzerland; from Crannoges, or artificial islands of refuge, in Ireland and the Spree Wald of Prussia; from cave dwellings in Auvergne, Belgium, and Great Britain; with a rich collection from Mexico and the United States, illustrated by specimens of similar implements, ornaments, and pottery from modern savage tribes.

The relics of a past Stone Age, says Mr. Tylor, are to be found underlying the civilisation and savagery of every country, the most modern and the most ancient alike. We have but to search, and traces of the London mammoth and the London savage are unearthed under Gray's Inn Lane, in the "drift;" while similar remains are discovered in Etruria and America, in India, Northern Asia, Assyria, Egypt, and Africa.

It is not possible for us to make these dry bones live, to conceive of the life of the past, without reference to present forms of the same customs still to be found lingering among modern savages.

On the other hand, the existence of many strange superstitions among ourselves can only be explained by the study of the notions haunting the early twilight of our race, and remaining to our own day in curious forms of what Mr. Tylor calls "Survivals."

These are sometimes pathetic, as when the war-horse is led at the funeral of a soldier—relic of the times when the favourite charger was sacrificed at the grave of a chief, as at the burial of Patroclus. The actual sacrifice of a horse took place at Treves, at the funeral of a general, as late as 1781. Sometimes they are ludicrous, as when the belief in dreams and the influence of the planets causes Zadkiel's Almanack to be sold by thousands; or in the salutation still preserved in most countries after a sneeze, which the savage believes to intimate the entrance of a spirit; the drinking of healths, survivals of the libation to gods and men. Sometimes they are pernicious, as in the fear of saving a drowning man, still haunting many sea-coasts, a dismal result of the belief that the water spirit was angry when his victim was snatched from him; and as in the odious spirit-rapping, every particular of which can be paralleled among the rites of sorcerers and diviners among savages at the present and in past times.

Strange revelations rise up for us out of the graves where they have been hidden, who can say for how many thousand years? Mr. Bateman, the great authority on tumuli, barrows, and interments, in Derbyshire and elsewhere, shows that sacrifices of slaves at the death of a chief, suttee, infanticide, grisly and

cruel rites of all kinds, were carried on among "our ancestors." The life which they led must indeed have been a gloomy, hard, and grovelling one. In perpetual danger, and always on the look-out for evil of all kinds; harassed by suspicions and anxieties; suffering from hunger and cold, from the elements, "enemies," and wild beasts; giving way to every passion, as is seen to be the case among their modern representatives; ill-treating the weak, the women and children, on the smallest provocation; gorging themselves when they had food, and suffering sullenly when they had none. With no rest to their souls from the machinations of evil spirits, which "swarm in the dark;" from "witches who ride at night on wolves, with snakes for bridles," in gloomy, inaccessible forests; from the demons of the woods, the winds, and the waters, whose ill-will brought down disease, sorrow, and misfortunes of all kind upon them, and always on the watch to propitiate them and their interpreters, the wizards and medicine men, by dismal sacrifices.

Such an existence as this must indeed have been but little better materially than that of the beasts, while the faculty of looking forward to evil, and remembering sorrow and pain in the past, give our race powers of suffering such as no animal pos-

sesses. Our own civilisation is but skin deep, our Christianity as yet more in word than in truth; but we may thank God with all our hearts fervently, that at least we have risen out of the state of "our ancestors," inhabiting the hut circles at Ty Mawr, on the bleak Holyhead mountain.

OUR ANCESTORS.—SECOND PERIOD.

THE HOME OF AN OLD WELSH SAINT.

THE accounts of the lives of the (very numerous) Welsh saints which are to be found scattered up and down the "Book of Llandaff," and similar chronicles, are as full of puerile miracles and pointless wonders as those contained in the sixty volumes of "Acta Sanctorum" collected already by the Bollandists.

There is, however, one name which occurs again and again in the Welsh records, and always in connection with some useful work. No miracles are reported of St. Seiriol, but we hear of the college which he founded, the roads which he made, the works which he fostered.

Dr. Livingstone, pleading for the multifarious improvements which true missionary enterprise should

bring about, says that the monks were the first to introduce decent agriculture into England and elsewhere; they brought in fruit-trees, such as apples and vines, garden flowers and vegetables, beehives, water-mills for grinding corn, and some sort of rude mining. They first emancipated their serfs, and taught them; they established in their cloisters dispensaries for the cure of the sick, almshouses for the infirm, and nurseries of learning. Seiriol was a missionary of the true type.

His home, the Cor* Seiriol, is situated on the bare bleak point of Penmon in Anglesey, where the skeleton rock pierces through the thin covering of soil and scanty herbage, running out far into the lonely sea. On the northern side it seems as if one were reaching the end of the world, but towards the straits on the southern slope lies a little bosom or combe sheltered in the low hillside, and raised on a shelf above a small bay. Here nestles a group of ruins, looking older than the hills themselves, of a Priory and the "Capel Seiriol" (part of the church, however, has been rebuilt at a much later date). The stones are black with age, put in without mortar, and seem to be bound together by the ivy, trunks of which are so large that they almost look like trees.

* Cor, or Bangor, simply means a college.

They were, however, built many centuries after the rude constructions of St. Seiriol, which indeed were probably only of "wattle and dab," ozierwork and mud, as the palace of "King Howel the Good" at Tare is described to have been in the sixth century "in common with the Welsh and Breton churches."

The walls of the Priory and of the older part of the Church are so thick, and the windows so small, that the place seems to have been intended partly as a refuge to be defended against the pirates who might make a descent on that exposed promonotory. A tiny cloister with round arches, ornamented with rude dog-toothed and zigzag mouldings, adjoins the church, and a font, like an Egyptian altar, is just visible in the darkness of an inner sanctuary. The whole stands on a paved terrace which is approached by a long flight of stone steps.

Below is a large dovecote, a columbarium, square and squat, of the most solid construction, roofed with stones up to a point, with no timber of any kind employed, and finished off with a tiny belfry. This belongs to the twelfth century; the ruins are supposed to be earlier still, but the date is difficult to ascertain.

Seiriol belongs to the border-land between legend and history. He is supposed to have lived in the days of "Maelgyn Gwinedd, who was king of North

Wales when Arthur, son of Uther Pendragon, reigned in Britain." The bard "Taliessin, 'the radiant front,' 'a golden-tongued knight of the Round Table,'" is called the Welsh "poet laureate!" Maelgyn, who is described as "sagacious, bold, and rigorous," in the "Black Book" of Basingwerk Abbey, is said to have founded the Priory, dedicated to St. Mary, about 540, and to lie buried in the "Priest's Island," on the other side the point. Seiriol was one of the "seven blessed cousins of the Island of Britain." The Welsh dealt much in the sacred numbers of 7 and 3 in their commemorative sayings and triads. Another of the seven was St. David, Dewi, or "the fat," by no means a heroical designation for the patron saint of Wales.

The College on Penmon Cor Seiriol "became so famous that the men of Llychlyn (Scandinavia), who were settled in the Isle of Man and Scotland, resorted thither in great numbers for useful and religious knowledge. This and the School of Beuno" (another of the cousins) "being the most celebrated for learning of all in North Wales."

St. Cubi, "grandson of Geraint, King of Cornwall," also one of "the seven," had founded a similar society on the Holyhead mountain, at the other extremity of the island of Anglesey, where, with the exaggeration found in all the stories, five hundred students were

said to have collected. The two heads (and cousins) used to meet halfway between their homes, to discuss the affairs of their colleges, "at Llanerchymeth, where are two handsome wells, ten yards apart, Ffynnon Seiriol and Ffynnon Gubi. Here until late years a great concourse of people used to resort, to wash off their various diseases." "And because Cubi's journey was from west to east, so that he had the sun in his face both coming and going, he was called the yellow-faced, while Seiriol, travelling from east to west, had it always at his back, and was called Seiriol the Fair."

The old Celtic fountain worship seems to have passed on in Wales into the new religion, and almost every church there has a holy well near it; sometimes it is a "cursing well," where a pin thrown in with the proper imprecations will bring down all sorts of evil on man and beast, sometimes a "wishing well," sometimes it is good for the sickness of men, sometimes of beasts. "To invoke the grace of God, and of the blessed so and so, on the cattle, with an offering at his well," is a common formula concerning a saint.

Seiriol's other well at Penmon was a "wishing well," as was Cubi's on Holyhead "mountain," where the spell is good to the present day. It consists in taking up water from the spring at the bottom of a

steep track in your two hands, and carrying it to the altar of his now ruined chapel without spilling it. "You then will marry your love."

The popularity of the saint is shown in an ancient Welsh poem, which tells how the mendicant friars of a later date hawked about images of Seiriol and other saints, and sold them as charms, requiring in exchange cheese, bacon, wool, and corn.

"One bore by turns the blessed Curig" (the saint of Capel Curig), "under the folds of his mantle. Another youth carried Seiriol and nine cheeses in his bosom."

The whole island was then still covered with thick forests; the dark groves mentioned by Tacitus, destroyed by Agricola, must have grown again, for Edward I. is said, in the "History of the Princes," to have "cut his way through the woods of Mona," and Sir John Pryse, in the life of Hugh, Earl of Chester, says that the King of Man used to send for timber to Mona. Large trunks of beech and other trees are found in the bogs at this day.*

Beyond the promontory is a small rocky island,

* It would be curious to ascertain the reason why the neighbourhood of the open sea was no obstacle to the growth of great woods in the older world. The "immense forests" on the flats of Holland (relics only of which now remain at the Hague and Haarlem) enabled the Batavian tribes long to withstand the Romans; but it is now as difficult to make them grow there as in Anglesey, where out of shelter.

"called the Priests' Island, because many bodies of saints are deposited there, and no woman is suffered to enter it," says Giraldus Cambrensis, in the account of his tour through Wales in 1188. The remains of a small ruined chapel tower are still to be seen there, with some curious interments made in a circle, with the heads outside. "The small island almost adjoining to Anglesey is inhabited by hermits living by the work of their hands and serving God. It is strange that when any discord of human passions arises among them, all their provisions are devoured and infested by a species of small mice, with which the island abounds, but when the discord ceases they are no longer molested," goes on Giraldus.

The difficulty of obtaining provisions on this barren rock must have greatly enhanced the privations and, probably, the sanctity of the hermits; they lived chiefly on fish, the wild fowl, which are almost uneatable, and their eggs. The passage between them and the main island was wide enough to make it impossible to reach them when the weather was stormy, in canoes hollowed out of the trunk of a tree, or coracles made of wicker-work covered with skins,* so that their supplies must often have reached starvation point.

The hermits were succeeded by the puffins. Priest-

* One of the miracles of St. Cadoc is "putting to sea in a boat without skins."

holme became Puffins' Island; and these again, in the struggle for existence, were ousted by the rabbits, who now reign supreme.

The hermits were evidently an offshoot from the main establishment at Penmon, which "was granted with its appurtenances to the Prior and Black Canons of St. Augustine in the seventeenth year of Edward I." "Capel Seiriol was liberally endowed by Llewelyn the Great." Richard II. was also a benefactor; he gave the Prior two livings, "which he served with very great favour and credit."

The hermits were often called "Culdees, signifying separated or espoused to God, and were an order of lay religious monks or presbyters, governed by an abbot or head chosen by themselves. Their churches are in obscure corners and solitary places, having commonly wells of clear water near them." The Culdees are said to have "consulted more their own retiredness of life than the convenience of congregations," which certainly was peculiarly the case with the dwellers on this barren rock. "One Seiriol," says Leland, writing in Henry VIII.'s time, "lived on the island as a hermit in the sixth century;" but if he was ever there at all, it must have been very seldom—he was far too busy with his college to spend much time in such barren work. "He had also a

hermitage at Penmaenmawr, the place being then an uncouth desert with steep rocks, inaccessible owing to their steepness, and the woods so thick that if a man entered them he could see neither sky nor firmament." [The whole coast is now one long series of watering-places, set with trim villas, lodging-houses, and hotels, while the mountains themselves are entirely bare of trees.] "Across the strait did Seiriol cause a pavement to be made, whereupon he might walk from his church at Prestholme to his chapel at Penmaenmawr, which pavement may at this day be discovered when the sea is clear, if a man liste to go in a boate to see it. Sythence thys great and lamentable inundation of Cantrew Gwalodd, the way and passage being stopt in the strait, in regard the sea was come in, and beat upon the rocks of Penmaenmawr, this holy man Seiriol, like a good hermit, did cause a way to be broken and cut through the main rock, which is the only way to pass that strait that the king's post hath to ride, to and from Ireland."

Camden's account of the place in 1586 is: "To the east lies Inis Legod, that is the Isle of Mice, and under that Priestholme, i.e., the isle of Priests, where I saw nothing but the lower steeple of St. Cyriac's (*sic*) chapel, visible at a great distance. The neighbours report incredible things of the infinite breed of

sea-fowls here; and what's no less strange, that a causey went from hence through the very sea to the foot of that huge mountain Pen Maen Mawr, for the convenience of such as came in pilgrimage hither." Evidently a tradition of the earlier state of the coast before Anglesey was cut off from the mainland by some great geological convulsion.

The extreme importance of roads for the civilisation of a country is nearly forgotten in the present day in England, where they have come to be considered as a matter of course, but—with the exception of the great Roman lines of communication—they hardly can be said to have existed much more than sixty or seventy years, when Telford designed and carried out some of the most important of our highways.

At the beginning of this century the road round Penmaenmawr is described as "a mountainous pass, no wall between the narrow path and the precipice overhanging the sea; the trembling traveller" (on horseback, of course, no carriages were possible here) "was under the neccessity of leading his horse over rugged and slippery steps cut in the rock, beetling crags over his head, and foaming waves lashing the gigantic mountain side. It was a tremendous scene when we passed, the sky like a dark ceiling, the wind terrific," &c.

"During the last twenty years of the last century," according to another account, "the only possible mode of travelling in Wales or of the transmission of goods and parcels was by the pack-horse. When my friend went to school in Shrewsbury, he was given in charge to the carrier and mounted on one of his train of horses. As the journey took four or five days there were places of rest on the road, like an Eastern caravanserai. The sign of the 'Packhorse,' at Welshpool, was a well-known and established hostelry."

> "A Cambro Briton, versed in pedigree,
> Upon a cargo of famed Cestrian cheese
> High overshadowing, rides."

Seiriol, as "a good saint indeed," seems to have done his best for his country in the matter of roads, as in other respects. What must have been the state of civilisation and the condition of the people whom he had to deal with is shown in the celebrated personages chosen to be immortalised in the different "Triads:" "the three bloodstained chiefs of the Island of Britain;" the three discolourers of the Severn, of ditto; the three Viragoes; the three arrant drunkards—one of whom, "the king of Gwyddno, in a fit of intoxication, let in the sea through the dams which secured Cantrew y Gwaelod (now the bay of Cardigan), whereby the whole country was inundated and sixteen cities

destroyed;" this was said to have happened in 520. The massacres in the bloody battles are dwelt upon and exaggerated with evident pleasure: "fifteen thousand men were slain" in such a combat, ten thousand in another; "the ranks fell as the corn in harvest beneath the hand of the reaper," chants one poem. The saints must indeed have been valuable as representing milder manners and a higher ideal of life when oppression, rapine, and murder were thus rampant on the earth. At a later time "the Church" took care to profit by the remorse she awakened in the consciences of her penitents, and the amount of the penalties she exacted for the foul crimes of violence which were common may be read in the long recital of "uncias" of land thus acquired which are recorded in the "Book of Llandaff" and elsewhere. Still it must be remembered in her favour, that she exercised nearly the only police which was possible in those times, and constituted the only defence of the poor and weak against the tyranny of the strong and powerful. Anglesey, whether or no from the influence of her enlightened saints, seems to have been particularly well looked after: not a beggar was to be seen there, says Giraldus.

Our pilgrimage to Penmon was made in the autumn. Beyond the point lay the sharp reefs, the

stern rocky headlands where shipwrecks are common even at the present day, with the warning beacon of a lighthouse. The avenue of old thorns which led up to the Priory was so hung with red berries that they looked like the great fuchsias with which the cottage gardens on that sheltered coast are full; a row of walnuts remaining from the old monk's orchard threw their shadows over the green sward round the ruins, flights of pigeons were tumbling and cooing about the dove-tower, the ducks were diving in the little monastery fish-ponds, and in the little wood behind, whose gnarled trees were protected by the hill from the violent salt sea-winds which swept the point above, Seiriol's "wishing-well" came welling up out of the living rock as pure and abundant as when the old saint had prayed over it; the extreme retirement and stillness of the place were very striking—it was indeed "a home of ancient peace." A pair of old Spanish chestnuts and a group of lofty ash stood on the green slopes to the sea, between whose trunks the great Penmaenmawr, standing up out of the sea 1,500 feet nearly sheer, and her sisters, the whole range of Snowdonia on the other side the Straits, the majestic mountains drawn in pale blue and grey tints, were dimly seen in the bright, delicate autumn mist, laced

as it were with sunshine. Little fishing-vessels with brown and white sails and black hulls sailed by, reflected in the calm sea. It was so still that the poppling sound of the wavelets below falling, "just where a reach of silver sand marks where the water meets the land," could be distinctly heard where we stood, while flights of terns sat on the shallows where the smooth yellow sandbanks were gradually showing their backs like huge sea monsters, and the white gulls hovered over our heads. It was the very perfection of a place of seclusion from the world, and quiet leisure for the sake of contemplation and study.

Presently came up a puffing, snorting, inharmonious black steam-tug, leaving a long streamer of dirty smoke behind it, as it brought along a couple of much larger vessels, doing its work against both tide and wind, but making itself eminently disagreeable, "explaining its views," "announcing its objects;" while a little cutter just beyond lay behind a headland nearly becalmed, her white sails all set, trying slowly and leisurely to tack to and fro. It was the difference between the ideal of the past and the present. The "separating one's self to God" of the Culdees, or the fussy, hurrying, bustling, noisy life of action which we all lead.

Still the objects of good men even in such different periods of the world's history must always be the same, however their means of arriving at them may change; and standing thus on his beautiful "home," it was pleasant to know how much there is still in common between the best work of the present day and that of the old saint, philanthropist, road-maker, well digger, schoolmaster, and physician, Seiriol, and to feel how truly he was indeed a "man of God."

BEES IN THE PAST AND PRESENT.

"So work the honey bees;
Creatures that by rule in nature teach
The art of order to a peopled kingdom.
They have a king, and officers of sorts:
Where some like magistrates correct at home,
Others like merchants venture trade abroad,
Others like soldiers, armèd in their stings,
Make boot upon the summer's velvet buds,
Which pillage they, with merry march bring home
To the tent royal of their emperor;
Who, busied in his majesty, surveys
The singing masons building roofs of gold,

The civil citizens kneading up the honey,
The poor mechanic porters crowding in
Their heavy burdens at his narrow gate;
The sad-eyed justice, with his surly hum,
Delivering o'er to executors pale
The lazy yawning drone.

Thus doth heaven divide
The state of man in divers functions."

Henry V.

IT was "high" summer; the air smelt like a nosegay with the June flowers—gorse and broom, the late May and the early honeysuckle—as I rode over the wide wild sweeps of the New Forest to a little island of cultivated ground in the middle of the bare heath. It looked as if it might have been enclosed from the waste somewhere about the time of the Red King—boundaries are very ancient in those parts, and changes slow. The family of the man Perkins who picked up the body of Rufus, and carried it in his cart to Winchester, still inhabit the same little freehold patch, near the spot where the dead tyrant was left lying after Tyrrell's shot had delivered the land from his oppression.

Two very large oaks and an ancient yew bore their witness to the age of the little home surrounded by its quickset hedge full of ferns. An orchard of merries (the small black cherry, *mérise*) and old apple-trees grew on one side, a bunch of lilacs and laburnums

on the other, and an avenue of white narcissus, "bloody warriors" (wallflowers), blue larkspur and crimson peonies, backed with a row of hives, led up to the door of the mud cottage. Mud has an evil speech in the world, but it is warm in winter and cool in summer, and if not very "seemly," makes a pleasant home.

A pyrus and a passion-flower were in bloom upon the walls, but I missed the busy hum of "the yellow bees in the ivy bloom" as I entered the open door.

I had come to condole. Ursley* had lost her old man since I last saw her. She greeted me affectionately, coming out of the great cavernous open fireplace, with the settle on each side, and a smouldering peat fire on the ground. Her short blue gown and brown petticoat were as beautifully neat as usual, and the eternal black silk bonnet was on her head, without which no one ever saw her; I wondered sometimes whether she slept in it. She was above seventy, but her refined face, of a type not uncommon in the South Country race, with its delicate features, fine-cut and intelligent, was in wonderful preservation; her teeth, her hair, her senses were almost as perfect as a girl's. Her manners were those of a perfect lady, courteous, quiet, kind—respecting herself and me:

* A contraction of Ursula, as old as James I. See "Fortunes of Nigel."

and no duchess could have been more dignified and self-possessed in her reception of me.

"Ah yes, the old man's gone sin I've a seed you. He were a deal o' trouble, *to* be sure, hollerin' and squealin' a' night, terrable," said she. Our smooth-tongued disguises of such matters, when they take place, did not enter into her code of "the become." "He were off o' his head most times, and kep' callin' out there was fuzzen i' the bed, and hitting out at the boughs like, thinking he were in the woods. But there, we must just bear what God A'mighty puts upon us, we've nobody to look to but just He! and He does best for we. The Lord He knows—the days seems long and lonesome to me, that they do, and I shouldn't care if I were to go too, but then we must just wait for Him to call, you knows."

When our lamentations and condolences had come to an end, she brought out a bottle of mead from the three-cornered cupboard in the wall. It was her last, as I found afterwards, but her Arab hospitality did not allow her to hesitate at setting her best before a guest, and mead is an honourable drink ever since it was the food of gods and heroes, in the old days, and England was "the honey island" pre-eminently.

"And the bees? what is become of them?" in-

quired I, as the golden syrup flowed into the broken cup before I could stop her.

"A' gone—a' dead," answered she, with a sigh. "We were very sore put about when the old man went, and I were bad a bed, so there were no one gie it a thought to go and tell the bees about the death, and there they a' went and died!"

"What, for sorrow? did they take it to heart so much as all that?" said I ignorantly.

"Well, I can't say for sure how 'tis, but they allus does like that, you know: if you don't go for to give three raps at each pot, and tell 'um their master's gone, they'll allays serve you that way and goes off stupid."

"Is it only the master's death you must tell them, Ursley?"

"Nay, any one as belongs to the house. One wouldn't go for a distant cousin—for why, they wouldn't know he, ye see."

"And do they make any answer when they're told?" I asked.

"There's a sort of a kind of a rush inside o' the hive, I mind hearing, when I telled 'um once my mother were gone. They've one vaïce for when they're pleased and one for when they're angered. They're very cunning is bees,* and knows a many

* "Let my right hand forget her cunning."

things—they bides at home quiet when the weather's a goin' for to change. I conceits they's got a manner o' government and minds their horficers, as is over them, for to do and to be, quite uncommon; not rampaging like some o' they fellows one sees nowadays, that can't rule theirselves, and won't have none to rule 'em. There if a swäarm breaks, the half that hasn't got the queen is just lost like, and goes wandering about nohow here and there. I ain't afraid to handle um, I could shake um into the pot, if my maister weren't there, and they hadn't got too high up the trees; they'll hang to a bough in a bunch as big as a black hat, sticking a' close together to the queen, clinging on one to t'other, so that you'd have thought they must a' have been stiffled. You puts honey and sugar inside o' the hive to tempt 'um; but there, they has their whims like! they'll fancy one man, and they won't fancy another, and they'll take to a hive, or they won't, there's no telling. Last summer a swäarm went rampolling all over the country right away. I followed after, tinking with a key on the warming pan—they do love the näise o' the brass, it makes them bide, and lures 'em back—they likes music, the bees does—but they wouldn't hearken that time, and never come back no more."

"Tell me, Ursley, didn't you lose a horse once with them?"

"Yes, he went too nigh the bee-pots one while, and out they came after he. They ain't affeared o' nought, they're a' for war once they're angered, and they just set on him till his head were black wi' them, like as if you'd pitched it. We'd much ado to get him off, for he were blind with pain not to see which way the enemy lay. And there he were just stung to death, and he swelled and he swelled wi' the poison, do a' we could, till his legs stuck straight out, like out o' a barrel, and in two hours he were dead.

"Bees is in the Bible, but you'll know that better nor me. Samson rent the young lion as if he'd been a kid, you mind, and after that he found a swäarm o' bees and honey in the karkass. 'Out o' the eater came forth meat and out o' the strong came forth sweet,' says Samson, playing his riddle like to the Philistines. 'What's sweeter than honey? What's stronger than a lion?' says Philistines mocking, when they'd wormed it out of Delilah, the hussy! Men's but a poor lot to keep secrets from such as her, once they gets betwixt she's fingers."

Ursley had been by no means the weaker vessel in the late household, and she knew it; she had but a low opinion of men in general, "as poor creeturs wi'

drink, and spending their money foolish and a' such-like ways."

"'Dustrious busy little things bees be about a place. I misses 'em, I do, I can tell 'ee. Be ye going? Well, it has been nice to see yer face agin. Terri-able kind you was when little Tommy died," and she followed me out to gather me a "posy" of her best flowers. "Lad's love" (southernwood) "for the smell," and her one pansy. "I thinks very much o' he (there's plenty o' buds, don't ee mind). I don't know what you names 'um, 'Love in idles' is what I've heard 'um called. See you there! you likes to hear tell o' they bees," and she pointed to a humble bee flying into the open door: "they say 'tis lucky for a bumbledore to come into the houseplace, though for that matter I haven't much to do wi' luck seemingly!" and she smiled sadly as we parted at the little wicket.

There is a curious vitality in popular beliefs in the world's history. Here was the association of bees with the idea of death; their pleasure in the sounds of brass, of music; the good omen of their appearance, which are found in some of the most beautiful of the Greek myths; "the courage and warlike ardour" with which Aristotle credits them, "so that the strongest animals do not affright them;" the recognition of their sense, of their knowledge of weather; the

respect for their "cunning," their orderly, industrious ways, and the sort of police they entertain; the feeling that their community is an emblem of civil society and good government.

It was a lingering relic of the old-world, sentimental, poetical belief, the transfiguring of material nature, which could only be interpreted in the early childlike ages of the world by supposing each portion of earth, air, fire, and water to be animated by some god or godling. Their reciprocal action and their influence on man were all accounted for on personal principles. The deification of the year, the sun and moon, of streams, woods, and winds, bees, birds, and beasts alike, was the only expression possible of the laws which rule the universe in that stage of human development.

Now we exercise a patient observation on nature, analyzing, investigating, calculating, and combining our facts, and say coolly with Professor Haughton, "Bees construct the largest amount of cell with the smallest amount of material;" or with Quatrefages, "Their instinct is certainly the most developed of all living creatures with the exception of ants." "The hexagons and rhomboids of bee architecture show that proper proportion between the length and breadth of the cell which will save most wax, as is found by the

closest mathematical investigation," says another great authority. Man is obliged to use all sorts of engines for measurement—angles, rules, plumb-lines —to produce his buildings, and guide his hand; the bee executes her work immediately from her mind, without instruments or tools of any kind. "She has successfully solved a problem in higher mathematics, which the discovery of the differential calculus, a century and a half ago, alone enables us to solve at all without the greatest difficulty."

"The inclination of the planes of the cells is always just, so that if the surfaces on which she works are unequal, still the axis running through its inequalities is in the true direction, and the junction of the two axes forms the angle of 60° as accurately as if there were none." The manner in which she adapts her work to the requirements of the moment and the place is marvellous. A centre comb burdened with honey was seen by Huber and others to have broken away from its place, and to be leaning against the next so as to prevent the passage of the bees. As it was October, and the bees could get no fresh material, they immediately gnawed away wax from the older structures, with which they made two horizontal bridges to keep the comb in its place, and then fastened it above and at the sides with all sorts of irre-

gular pillars, joists, and buttresses; after which they removed so much of the lower cells and honey which blocked the way, as to leave the necessary thoroughfare to the different parts of the hive, showing design, sagacity, and resource.

Huber mentions how they will find out a mistake in their work, and remedy it. Certain pieces of wood had been fastened by him inside a glass hive, to receive the foundations of combs. These had been placed too close to allow of the customary passages. The bees at first built on, not perceiving the defect, but soon changed their lines, so as to give the proper distance, though they were obliged to curve the combs out of all usual form. Huber then tried the experiment in another way. He glazed the floor as well as the roof of the hive. The bees cannot make their work adhere to glass, and they began to build horizontally from side to side; he interposed other plates of glass in different directions, and they curved their combs into the strangest shapes, in order to make them reach the wooden supports. He says that this proceeding denoted more than instinct, as glass was not a substance against which bees could be warned by nature, and that they changed the direction of the work *before* reaching the glass, at the distance precisely suitable for making the necessary turns—enlarging the cells

on the outer side greatly, and on the inner side diminishing them proportionately. As different insects are always at work on the different sides, there must be some means of communicating to each other the proportion which is to be observed; while the bottom being common to both sets of cells, the difficulty of thus regularly varying their dimensions must be great indeed.

The diameter of the cells also varies according to the grubs to be bred in them. Those for males have the same six sides, with three lozenges at bottom, as those for workers, and the angles are the same; but the diameter of the first is $3\frac{1}{3}$ lines, that for the workers only $2\frac{2}{5}$. When changing from one size to another, they will make several rows of cells intermediate in size, gradually increasing or diminishing, as required. When there is a great abundance of honey, they will increase both the diameter and the depth of their cells, which are found sometimes as much as an inch or an inch and a half deep.

The mixture of solitary and joint work amongst them is very difficult to define. Though there are many thousand labourers in a hive, they never begin to build in different places at the same time, as they could not then ensure regularity of distance, or equality of comb size. They wait for the "master-

mason" to choose his site and lay his foundation, then the others come in and complete his work. At exactly one-third of an inch on each side of the centre comb two more foundations are then laid—that is, at a sufficient distance to enable two bees employed on different cells to pass without jostling. Outside these again, other combs are added on each side, at exactly the same distance; and, besides the thoroughfares between the combs, they are pierced in several places by holes as postern gates, to save time in passing to and fro.

The building of the cells proceeds thus, according to Huber. When the founder bee has established its foundation of wax, placing it vertically to the plane from which, if possible, the comb is to hang down, the other bees then begin to manipulate the material which they bring up with wonderful operations of the tongue. They work one on each side, with such accuracy and nicety, as never to penetrate the thin layer of wax, and so equally, that the plate which they produce is of equal thickness throughout, its surfaces being parallel. The angles of the hexagon, and of the sides which join it, are all equal, and the three rhomboidal plates of the floor have always one particular diameter, the opposite angles, two obtuse, two acute, being always equal, and covering in the top and bottom of the hexagon cell exactly.

The first cells have but five sides, in order to give the work strength in hanging to the upper surface. Two cells below are then worked out to one behind, for the first beginning.

The eye of the bee is extremely convex, with hexagonal facets. She must therefore be very short-sighted, probably for the convenience of work carried on at such close quarters, yet she can travel great distances in the most unerring right lines. When a bee hunter desires to find a wild nest in a pathless forest, he " lines a bee " home—*i.e.* imprisons a laden bee in a quill, and marks its course when set free. Straight as an arrow, as if it carried a compass in its little head, it flies through the wood. He then catches a second bee, carries it to some distance on one side or the other, and agains tracks its flight exactly. At the point where the two lines intersect each other the nest will be found.

That most sagacious observer, Andrew Knight, tells how, when a colony or swarm is ready to move, its delegates are sent forth to investigate and report. He has watched them examining every cranny of a tree, testing the dead knots, and any crank places where water could enter. They will discover an eligible cavity at a great distance from the hive, and in the closest recesses of a wood. Sometimes two swarms

with their property will coalesce, when they will fly in an almost direct line to their new home, showing that the pioneers had in some way communicated the result of their researches. That bees should accept a hive in the place of a suitable hole in a tree, which must become every century more and more difficult to obtain in a cultivated country, is clearly the result of habit produced by domestication during many generations, rather than anything inherent in their nature. It is a proof of a change in their manners, of acquired ways of life, transmitted from past times, which is extremely curious as evidence of the accumulation of knowledge and experience. "Some families of bees show a greater disposition to migrate than others," adds Mr. Knight.

"Beasts in general, although they evidently have a language, yet it is one which seems to be capable only of expressing passions—love, fear, anger—not ideas. They cannot transmit the impressions received from outward objects, as, for instance, they can tell of the approach of an enemy, but cannot explain of what kind. A language of more extensive use has apparently, however, been given to bees; something, at least, very like to the passing of ideas takes place between them," says Mr. Knight, "by means of the antennæ. When these are removed

they are evidently unable to communicate with each other."

It is strange how often the hunger of the mind for knowledge, a hunger which like that of the body, seems implanted in us in order that we should feed both the one and the other with food convenient to it, is satisfied with the mere husk of a word. "It is instinct," we say, and rest content with our ignorance. What do we mean by instinct? How is the conception in the mind of the insect put into execution, at once, without either tools or experience? In this case the idea is a most elaborate one, six squares of wax put together in a hexagon, roofed in with three rhomboids, set at a very peculiar angle in a pyramidal cone, and surrounded with a number of fragmentary cells adapted to the unequal surfaces with which the insect has to deal. It is certainly no mere mechanical act which produces them, for each change requires a separate thought and a fresh contrivance. How is the model in the mind of the bee transferred into fact by the mouth and feet of the little worker? *We* require long practice, much measurement, elaborate calculations and instruments, to make the simplest construction, and can trust neither our eyes nor hands without all these combined.

With the bee, to will and to do seems to be almost one

act, which is Dante's definition of the Divinity, "Dove si puote ciò che si vuole." The range is small indeed, but, as far as it goes, it is so nearly akin to our conception of divine action, that no less a man than Sir Isaac Newton declares (though the passage is somewhat obscure) that he can only explain it by conceiving the Deity to work directly on matter through the animal; whereas, with man there is an intermediate agent—namely, the independent mind of a human being, or, as Pope puts it—

> "And reason raise o'er instinct as you can;
> In this 'tis God that acts, in that 'tis man."

The question is now so keenly investigated and so earnestly debated, that we may, perhaps, gain some further insight into the matter.

The contrast between these modern methods of dealing with the problem and the manner in which the ancients considered it, is indeed curious. The Greeks treated the bee as an object of religious contemplation, as "a royal and sacred animal, the emblem of calm activity, rule, order, and noble efforts," and all sorts of presages were drawn from its different qualities. Virgil, in the fourth Georgic, declares that "she partakes of the divine intelligence" (a sort of converse of Newton's idea). She is the pure, the wise, the holy above all.

This sacred being produces "an ethereal essence out of flowers, which was the most agreeable offering to the gods, and the most wholesome food for man." Pythagoras was said to have lived on honey alone, and his followers derogated from his example by adding a little bread. Democritus was supposed to have "prolonged his days by breathing its beneficent emanations," adding the smell to the taste. It also restored sight to the blind. "He who eats of it each day cannot fall sick," says another authority. The Essenes, *i.e.* the priests of Diana at Ephesus, called themselves kings of bees, as of the holiest and purest of creations, "full of sense, industrious in work, friends of order, and, at the same time, warlike."

The "gods are nourished on nectar and ambrosia"—the essence of milk and honey, the purest food of which they could conceive. The infant Zeus (Jupiter) was brought up in a grotto in Crete, by Melissa, the nymph of honey, and fed by the sacred bees. In token of gratitude he had gifted his nurses with their beautiful golden hue, and the power of braving tempests. He was called "Father of the Bees."

They were sacred to Demeter (Ceres), who, as goddess of the earth, mother and nurse of all being, receives all living things into her breast, and thus rules over the dead. Her priestesses were the nymphs

of the bees, Melissæ. Prosperity, wisdom, innocence, and justice were supposed thus to be symbolized. Proserpine, daughter of the infernal Ceres, who directs souls in their passage through life, and delivers them from the bodies which weigh them down on earth, was the Queen and Virgin of Bees. Thus they became the emblem of death. Honey was the symbol of the last sleep, partly from its soporific qualities, partly from the ancient belief in the sweetness of death, while gall was supposed on the other hand to typify life. "Bitter and sweet is the destiny of man," and the opposition and continual mingling of the two qualities in his fate is the source of a whole series of myths and symbols running one into another.

There was another curious antithesis of which the Greeks seem to have been very fond, the work of destruction in the world producing life. The bee, "type of the soul, is generated spontaneously in the decomposed carcass of the bull," said they. This last was the incarnation of the idea of the fertility of the earth, and therefore the type of matter; while as the bee was held to symbolize the return of the soul to its celestial country "across the path of the sun, and beyond the sphere of the moon," the image became "a consoling sign of the permanence of the principle of life."

In India, the great bee of a dark blue colour is found sitting on the head of the god Krishna, and overshadowing him with its wings.

Poets and philosophers alike agreed in praising "the innate love of order of the bees, their chastity, their laborious active lives, the peaceful work of which produced such admirable food for gods and men," and contrasting them with "the noisy and lazy wasps, types of impurity, greediness, and indolence" —a very unfair description as far as the laziness is concerned, if the wonderfully elaborate paper nests which they construct are considered.

"The bee, whose superior instincts led it to love all beautiful things, delighted in measure, rhythm, and harmony, particularly in the sound of brass;" a metal which the gods of the planets had caused to come out of the earth, and which was sacred to them.* The noise of brazen instruments had therefore the power of bringing back to a hive the dispersed swarms which were going abroad. The sound was as agreeable to

* "And mix with tinkling brass the cymbals' droning sound."
Dryden's translation of Virgil.

The fourth Georgic is entirely occupied with an account of the treatment of bees. It is in a curious transitional tone, between the more ancient view of their divine nature—to which it alludes in an unbelieving sort of poetical tone—the literalism of the Manchester emblem of commerce, a globe surrounded with "busy bees," and the strict scientific investigation into their habits, their powers, and inteliigence.

them as it was to the moon, Selene, who bore their name and was scarcely more divine. She was delivered by the clanging of cymbals "from the powers of darkness" in times of eclipse.

The characteristic of swarming made the bee the emblem of colonisation, the representative of the manner in which the parent country sent forth her superfluous children, "to seek fresh fields and pastures new"—a process, indeed, which the Greeks carried out in a more systematic fashion than ourselves. The hordes of isolated individuals which now pour forth at haphazard to reach some distant country, are a poor substitute for the old idea of an orderly combination of different kinds of citizens sent forth to a new home, to work together in a fresh commonwealth modelled upon the old, "like the bees."

The Greeks were so much struck by the surprising instincts of the bee that it seems to have become one of their most important symbols, to which many of their highest and holiest ideas were attached. The rules for the initiated in the ancient worship of Demeter, for instance, command "the union of firmness and gentleness, of voluntary privations, and of severe and continual exercises of body and mind, so as to fit a man to repulse all attacks upon order, and to defend the institutions consecrated by

the faith of his fathers," all of which was considered to be symbolized by the bee. She was called a "happy omen for the warrior, who, like her, watches over the safety of his country," for she too was "always ready to make the sacrifice of her own life for the public good."

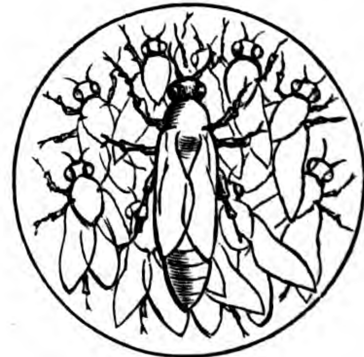
The idea of a noble combat, a generous strife, is one running through the most remarkable of these myths. In them were embodied the holiest and most religious aspirations of the period—especially of the spirit engaged in the coils of a mortal body, but struggling to set herself free. "Souls, which have not lost sight of their celestial country, but which, like the bee, aspire to return thither, and seek by works of purity and justice to merit this return, are called Melissæ." Even as late as the time of Porphyry, the same idea is insisted on; he speaks of her as the type "of the soul which has lowered herself by taking on a body; yet still she dreams of the return upwards, she does not forget the place of her birth, and returns thither."

It is most difficult, in our hard-headed, practical age, to conceive the wealth of imagery and symbolism, of fanciful allusions, and similes where no likeness exists, of emblematic dreamy poetry involved in these conceptions—the transfiguring of the material world,

the transforming and "supernaturalising" of lower existences, the transferring of conscious thought to what we now consider inert matter, or merely mechanical action.

The manner in which the myths run into each other, and in which every god has many forms, so as to be not only himself but some other at the same time, in a different view of his attributes, makes the puzzle to our prosaic minds still greater.

Yet still, the extreme beauty of this side, at least, of nature worship, the lofty conceptions of the objects of the life of man, and of the result of death, which were thus set before the minds of the initiated, and instilled into the young, may make us doubt whether all has been gain in our social aspirations, since the time when the bee was engraved on the reverse of the coins of Athens and Ephesus, as the emblem held up of the ideal life which their citizens were encouraged to lead.



1873.

ANTS.

I MET to-day two straggling streams of workers moving along a hillside path, one to, the other fro—black-bodied, six-legged, with a most determined aspect, and an almost forbidding look (I forgot to mention that there was a magnifying glass in my hand). Apparently each and all were much pressed for time; they hurried along singly, none speaking to his neighbour, each seemed intent on his own object, though the result was to be common; each bearing his own burden, not often helpful to others, except in the general cause, self-concentrated, eager, bitter, obstinate, self-willed, narrow, conscientious, ambitious. I followed them till I reached a disturbed ant-hillock which had been lately overthrown, and where the possessors were repairing their home with the most vehement industry.

Who directs them? Each seemed to be going on

his own hook, minding his own business, hardly conscious of the existence of anything but himself; "frightfully in earnest," as Disraeli once said of Gladstone. Yet the work was all in common; the community of goods, indeed, seemed absolute; no one had any personal property whatever; house, stores, eggs, everything belonged to all—a most republican form of society!

No one interfered with the rest; there was apparently no chief, overlooker, or director; yet the work went on apace, the repairing and building up of the ruined city "with neatness and dispatch."

Some seized a pellet of earth or a stone, and dragged it backwards up the steep incline, using their hind legs to cling on to rough places, while they hauled away at a weight greater far than that of their own bodies. Some hoisted aloft in their front arms, as it were, a stick or piece of grass twice or even thrice their own length, and moved forward bearing it in the air. Each addition was placed in what each considered the best position; but the general form of the dome grew in a curiously regular diminishing curve, as if every ant bore the architect's elevation in his waistcoat pocket. Some of the workers were making desperate efforts to move heavy (to them) beams of wood, but after superhuman exertions gave up the attempt when clearly

beyond their strength. If a thing, however, was anyways within the bounds of possibility, it was wondrous with what obstinate pertinacity they would return, *e.g.* to a pellet which had rolled away from them, even to the bottom of the hillock, again and again, and begin once more to haul it up; tugging, lifting it over stones and under sticks, tumbling over with their burden on the other side of an obstacle which they had scaled, and lying for a few seconds quite exhausted, yet never leaving hold of their load, and setting off again undauntedly as soon as they recovered breath. Occasionally two or more were helping at a task; but they generally seemed to prefer working alone.

The ant-hill was on a steep, rocky, wooded hillside, pink with spikes of heather, feathered with bracken, which hung over the nest, while tall mountain grasses with bright glazed red and amber stalks sprang up through the moving mound of life. The August sun shone on the pleasant spot, and through the white stems of the birch and the gnarled trunks of the old oak I could catch sight of the river running at the bottom of the deep valley, while the sound of the dashing water among the stones far away, came up with a soft murmur to my mountain perch. There was a "susurro" of wind among the trees, the twitter

of the autumn note of a bird, and the buzz and hum of insect life hovered round, but the ants seemed all silent; and the sort of low hiss which arose from the collected workers, resembled the noise of a London street more than any form of speech.

The rest of the world seemed wrapped in a sort of lazy content in the soft sunny weather, but the ants did not seem to be enjoying life any more than the men whom one meets hurrying along the Strand.

Probably the appreciation of a beautiful view is not facilitated by crawling over grass and sand, with one's head close to the ground! Besides, the faculty of admiring scenery is not only the distinctive quality of man, but is confined to a very small educated section of them; and I doubt whether the ants are ever likely to be educated into lovers of the picturesque, they are too hardheaded, businesslike a people. One feels sure that they keep their account-books admirably, and have always a balance at their bankers, and that their stores are all labelled, and always to be found at once on the right shelves.

There is, however, a softer side to their characters. They are warm friends and allies, and assiduous nurses, carrying out the eggs of the community on fine days to warm and comfort the unborn children—not their own, but the nation's; and if you try to take an egg

away, the guardian will be cut to pieces rather than give up his charge to the foe. He is enduring, brave, bold, enterprising; faithful to his friends, cruel to his enemies.

His muscular power is astonishing. He is said to be the strongest being of his size alive. And as to his mind, M. Quatrefages, an eminent French naturalist, after saying that instinct is more developed among insects than in any other creatures, adds that ants stand highest in this respect, "possessing qualities which seem to resemble those which education, perhaps, masks among men." The distinction between intelligence and instinct as shown amongst them is difficult indeed to define. On one occasion he watched them dragging the outer case of a cockchafer into their nest. The opening was too small, and the workers pulled down part of the walls; some pushed at it from without, some dragged it from within; still the magnificent beam, which was probably intended to make a whole ceiling, could not be got in. At length they left it, and increased the size of the opening, when the wing was finally swallowed up, though probably half-a-dozen interior partitions must have been thrown down before it reached its proper place; after this the door was built up again. Among monkeys, the animal "nearest in structure to man, no

fact has been observed marking deliberation and judgment in common to so high a degree."

Huber mentions how a vaulted ceiling had once been begun by the ants, intended to meet the wall of an opposite chamber; but having been started too low, the roof would only have reached half way up. Suddenly, one of the ants visiting the works was evidently struck with the difficulty; it took down the ceiling, raised the wall on which it rested, and then built a new one with the fragments of the first.

It is baffling to think how entirely we are outside such intelligent and advanced organisations as these. We cannot guess at their thoughts or feelings; their external habits even are unintelligible to us; we seem not to have a point whereat to touch. To-day they were quite unconscious of my existence; perhaps I was too big to be seen; they took no more notice of me than of a stone as long as I remained still, and if they stung me when I interrupted their business, it was my finger, not me, which they attacked. A short-sighted man, however, the other day, who approached his face too near to a nest, was spit or shot at (whatever be the engine used to eject the formic acid) for his pains, and was obliged to draw back his eyes precipitately from the sharp, stinging volley.

"The eyes of insects," says Sir Benjamin Brodie,

"consist of a large number of hexagonal and transparent plates, not in the same plane, but forming a large part of a sphere, each with its own peculiar retina; the range is enormous, but there can be no such distinct picture as in our eyes, and they must have difficulty in distinguishing far things from near."*

The outside pile of twigs and straws of an ants' nest is merely to throw off the rain; underneath this they excavate in the earth, horizontally, a number of apartments and galleries, where the larvæ and pupæ can be received at certain hours of the day, with funnel-shaped passages leading to them. In the centre is a large chamber, loftier than the rest, held up by beams which cross the ceiling, and little columns of earth which the ants temper with rain-water with their teeth. At night they close their dome on all sides with little pellets of earth, kneaded and moulded, and open them in the morning. On rainy days the doors are all shut; in cloudy weather only a few avenues are open, which they shut when rain begins.

* There is an extremely strange variety of eye in a South American ant, whose "third order of workers have enormously large hard heads, the front of which is hairy instead of being polished, and in the middle of the forehead is a twin ocellus, or simple eye of quite different structure from the ordinary compound eyes on the sides of the head. It reminded me of the Cyclops."—BATES'S *Amazons*.

They pass the night and the colder months underground, when they are torpid and require no food.

They seem to understand each other by means of the antennæ. No doubt touch, when sufficiently cultivated, is an extraordinary medium of communication even in man, as was seen in Laura Bridgeman, the blind, deaf mute; but one would like to understand the ant's finger alphabet.

The hand in man is considered a wonder of usefulness, but the ant seems able to use his six feet indifferently as prehensile organs, to hold, to pull, to lift, to drag, to cling. The keenness of their smell appears to be marvellous, so that not so much as a cockroach can die in the corner of a dark room, but the enterprising portion of the ant race living in India, who eat everything and go everywhere, contrive to find it out and carry it away. The wholesale destruction of paper and parchment by ants in the East and South is a very serious bar to the progress of a race. Humboldt declares that in South America there are no documents, written or printed, more than a hundred years old, owing to their ravages; that civilisation is checked by the constant renewal and care required for the preservation of books and papers, and that comparatively little is there transmitted to posterity in consequence.

In India, the precautions taken against their voracity are many and ingenious, but the man is almost always baffled by the insect; wood, paper, cloth, provisions, everything but metal is consumed; even the legs of tables are hollowed out, and left standing as empty shells, which give way at a touch. In one case, some preserves had been put in a closet, isolated from the wall, with the legs set in basins of water. The ants, however, were not to be so outwitted; they crawled up to the ceiling and let themselves down, each ant hanging on to the one above him, till the last link touched the goal, when a stream of hungry applicants ran down and made short work of the coveted treasure. Did those who thus profited give any of the food to the self-sacrificing members of the living chain, I wonder? And what reward did the patriot receive who held on to the ceiling and bore the whole weight of the rope of ants?

Indeed to us the most extraordinary of their qualities is the power of self-sacrifice, the almost moral elevation whereby the good of the individual is given up to that of the community. A line of ants on their travels were once seen trying to pass a little stream, which proved too rapid for them to cross. At last they hooked themselves on, each to each, and thus gradually made a chain, which was carried obliquely to the other

shore by the current. Many were drowned and lost in the process, the foremost of the band were often baffled and knocked about in the rushing water, but the floating bridge was at last complete, and the rest of the army marched over in safety upon the bodies of their self-sacrificing fellows. Could any so-called reasoning men have done better, or as well? Our pontoons are not made of living men.

No wonder that the emmet has been held up as a model of wisdom and industry since men have "made morals" at all; that Solomon declares the ants to be "a people not strong, but exceeding wise," who "prepare their meat in the summer;" that Milton talks with respect of "the parsimonious emmet, provident of future—

"In small room large heart enclosed."

But the highest praise he has received is from Mr. Darwin, who says that "the size of the brain is closely connected with higher mental powers, and the cerebral ganglia of ants is of extraordinary comparative dimensions. Still cubic contents are no accurate gauge; there may be extraordinary mental activity with extremely small absolute mass of nervous matter." It seems as if the fineness of the quality was more important even than its quantity. "The wonderfully

diversified instincts, mental powers, and affections of ants exist with cerebral ganglia not so large as the quarter of a small pin's head." A son of Mr. Darwin succeeded in the anatomy of an ant's brain, and his father observes: "It is one of the most marvellous atoms of matter in the world. More so even than the brain of man."

Yet such is the prodigal wealth of nature that millions on millions of these "marvellous atoms" come into the world every summer, with apparently no other end than to be eaten and crushed, and to die in a hundred different ways, after their few days of life. Their great use in the world, as far as we can fathom it, is as scavengers; but, if we had been born ants, we should probably consider this a wretchedly perfunctory account of the "be all and end all" of our existence.

The ant may not be able to see very far, but one has a painful perception that our own vision is relatively not much less narrow.

TENDRILS AND CLIMBING PLANTS.

Notes from Mr. Darwin.

A SHORT paper upon Tendrils and Climbing Plants was published by Mr. Darwin some years ago in a scientific periodical which comes into the hands of few but scientific men, and is now out of print.* It is a perfect model of accurate and delicate observation, and the help to be derived from it towards the enjoyment of what we ought to see around us is so great, that a sketch of its contents is here attempted, in order that a more general public may share the benefit of Mr. Darwin's teaching as to the manner in which nature should be watched and questioned.

It is a proof of how dull and unobservant we most of us are, that such beautiful contrivances should so long have passed unnoticed. The absence of in-

* It has since been reprinted.

telligent perception among men in general must indeed be great when these simple observations of objects which are before us all were never made until a German botanist, M. Hugo Mohl, wrote a paper upon the revolving motion in tendril-bearing plants in 1827. This was followed by two memoirs in 1843 by a Frenchman, M. Dutrochet; while the great circle of cosmopolitan science is carried on by the observations of the American, Mr. Asa Gray, and finally by the Englishman who has now methodised and interpreted the whole subject.

Plants mount and cling by four different methods: firstly, those which twine their whole bodies round a support, like the Hop, the Honeysuckle, and Wistaria; next, those which hang on by their leaves, like the Clematis; thirdly, the "real tendril-bearers," as the Passion-flower; and, lastly, the Hook and Root Climbers, as the Rose and Ivy.

These all have the most determined likes and dislikes, and will only do exactly *as* they please, *when* they please. For instance, one particularly dainty Australian plant refused to cling to the thin or thick sticks, branched twigs, or stretched strings supplied to it by Mr. Darwin, but hung out its long arms helplessly in the air, until at length, when a pot with a second set of uprights was placed alongside, it found

what it wanted, *i.e.* a number of little parallel posts, when it immediately travelled laterally backwards and forwards between them quite happily, with a sort of weaving process, sometimes embracing several supports at once, such as its parents had been accustomed to cling to in the thick scrub at home.

Some of the Bignonias are wonderfully clever in their ways. One of them ascends an upright smooth stick by spirally twining round it, and "seizing it alternately by two tendrils, like a sailor pulling himself up by a rope hand over hand." Another of the family is "the most efficient climber" which Mr. Darwin knows, "and could probably ascend a polished stem incessantly tossed by heavy storms."

The tastes and distastes of the Virginian Creeper are especially strong. It does not approve of sticks or boughs, but when it meets with a flat wall, or even a smooth board, it turns all its tendrils towards it, which bear a number of branches on each stem like fingers, and spreading them widely apart, brings their hooked tips into close contact with the surface. The curved ends then swell, become bright red, and form neat little cushions—like those of the feet of a fly—which adhere so tightly that even after the plant is dead they may be found still sticking fast to their places. A strain of two pounds has been borne by

the single branchlet of a dead tendril, estimated to have been nearly ten years exposed to the weather.

Tendrils have a curious tendency to turn *away* from the light. In one instance Mr. Darwin placed a plant of Bignonia—with six tendrils pointing different ways—in a box, with one side open to the light, set obliquely; in two days all six were turned, with unerring accuracy, to the darkest corner, though to do this each had to bend in a different manner. Their habit of inserting their tips into all the little dark holes and crevices they can find, by which they assist their chief to ascend, is, perhaps, owing to this taste for darkness. In some cases they have been seen to try a small fissure, and when for some reason it does not suit their taste, to withdraw their little noses again, and choose another more convenient, after a manner which in an animal would be called instinct. Indeed it is most difficult to define the limits either of intelligence or motion—both of which we are apt to confine to animals—when we find that the young shoots of Spiral Twiners, and indeed of many other climbers, have an extraordinary revolving motion in search of a support. Some of these move in a course *with* the sun, or the hands of a clock, *i.e.* from left to right; but a still larger number revolve in the opposite direction. To take very common instances: the Hop

turns *with* the sun's course, the garden Pea *against* it. In the case of one revolving tendril which Mr. Darwin watched attentively, he says, "It travelled so rapidly that it could be distinctly seen moving, like the hands of a gigantic clock." The tip of the shoot, thirty-one inches long, upon another plant growing in a pot on the study table of this indefatigable observer, revolved in a course opposed to the sun, making a circle of above five feet in diameter and sixteen in circumference, in a time varying from five hours and a quarter to six hours and three-quarters, so that it travelled at the rate of thirty-two to thirty-three inches in the hour. "It was an interesting spectacle to watch this long shoot, sweeping night and day this grand circle in search of some object round which to twine."

If the tendrils can catch nothing they contract into a close spire, or sometimes turn round and hook themselves on to the stem behind, serving thus to strengthen it. A tendril begins by being long and straight, with an extremely sensitive end, which has a natural tendency to curl round a support, like the tail of a monkey. As soon as it has secured its hold it begins to contract spirally, and the consequence of being tied at both ends (as may be seen by twisting a string thus fastened) is that the spires turn in contrary

directions, with a short straight portion between. The two sets are the same in number, whether consisting of over thirty or only four turns, though often distributed differently. Here, for instance (Fig. 1), in the caught tendril of a Passion-flower, are five in one direction, then seven on the opposite tack, and the addition made even by the remaining two required to complete the sum being added by themselves at the end where it has taken hold. There is an odd number only apparently

Fig. 1.

while the plant is preparing to add a twist to the lacking account, which is done as soon as it has the means.

The extreme elasticity of this species of support enables plants of a most delicate structure to brave a violent storm. "I have gone out," says Mr. Darwin, "to watch the Bryony on an exposed edge, as the branches were tossed to and fro by the wind. Unless the tendrils had been excessively elastic they would have been torn off, and the plant thrown prostrate. As it was, the Bryony safely rode out the gale, like a ship with two anchors down, and with a long range of cable ahead to serve as a spring as she surges to the storm." He might even have added that it has the advantage of the new chain over the old hemp cables, the play of the spires answering to the relief given by the links of the chain.

A very perfect specimen of tendril is that of the Cobœa; it is much branched, and each tiny point is terminated by a minute hook, hard, transparent, sharp as a needle. "On an eleven-inch tendril I counted ninety-four of these beautifully constructed little hooks." Every part of every branch is highly sensitive, and the tendrils catch hold with peculiar readiness. All its operations, too, are conducted with unusual rapidity, and are therefore particularly well

fitted for observation. A tendril, for instance, revolved only for thirty-six hours after the time when it first became sensitive, but during that period made at least twenty-seven revolutions. The "perfect manner in which the branches arrange them-

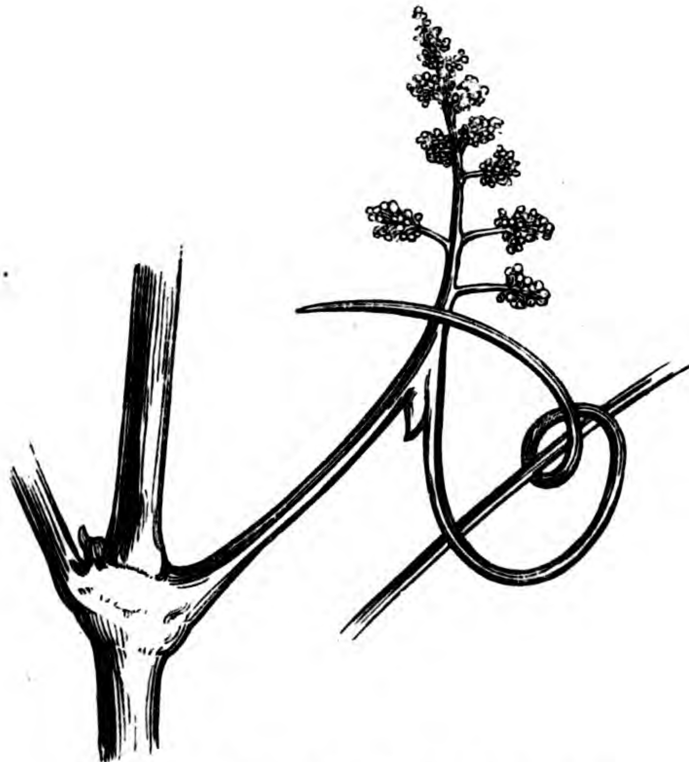


Fig. 2. From Mr. Darwin's Paper.

selves when they have caught a support, creeping like rootlets into crevices, is quite a pretty sight," and one which is the more easy to study as the upper surfaces of the branchlets are angular and green, and the lower sides are rounded and purple. The wind will often assist these extremely flexible tendrils to

seize a distant twig, which it could not have reached alone by its revolving movement.

The provident Vine puts forth a strong tendril just under its flower (Fig. 2)—although this is of course quite light, and stands upright—in order to be ready to support the cluster of grapes when it comes, which it knows will hang down, and be too heavy for the stalk to carry without help. This looking forward

Fig. 3.

and making provision for the future wants of its children is very curious, and more than many human parents are equal to.

The Leaf Climber, such as that of the Clematis (Fig. 3), is very pretty and efficient, the leafstalk curling round its support and doing duty as tendril.

A variety developed from the stalk of a composite leaf like the Lathyrus, or Everlasting Pea (Fig. 4), seems to form a connecting link between the two

classes of tendrils proper and leaf-climbers. And the Maurandea shows another variation, where the footstalk of the flower has a twining grasping power.

Lastly come the Hook Climbers, such as the Rose, the least efficient of all, only fit to mount amongst tangled masses of vegetation; and the next lowest in dignity, the Ivy, which cannot pass from branch to

Fig. 4.

branch, and must creep along continuous surfaces, as its rootlets will only adhere by long-continued and close contact with a steady support; but which has the intelligence to change the form of its leaves and shoots, and omit the rootlets upon them, when it has reached the top of the wall or tree, and there is no longer any use for these in climbing further.

The whole question of the power of motion in

living things is extremely curious. It cannot be said to belong exclusively to animals, since when it is necessary for the well-being of plants they are capable of acquiring a certain amount of it. As, however, their food is brought to them by the wind and rain, and by the ground to which they are fastened, their wants, in a general way, are limited. The spontaneous revolving motion first described is the most interesting of all, because it is continuous, and seems to depend upon no outward stimulus, but is contingent upon the youth of the part and upon its vigorous health. There are other movements, however, such as that of the pistil and stamens at a particular period of plant life, and the periodical closing and opening of petals which takes place with the presence and absence of light. There is a change also in the position of the leaflets morning and evening, in the Sensitive plants, the Clover, and Robinia acacia. The manner also in which tendrils can change their direction, when this is found to be for the benefit of the plant to which they belong, is truly wonderful: they turn sometimes upwards to grasp a support above, sometimes downwards to serve as grapnels, sometimes dividing their forces, and crawling as it were over a surface, to fix their claws into the holes which are most likely to be of use in assisting the

shoots to ascend. "Some of the most perfect tendril-bearers rise high in the scale of organisation." They may be seen putting out their tendrils ready for action, like the tentaculæ of a polypus—bending to and from the light, or not in the least attending to it, as is most advantageous to the welfare of the plant, their master. During several days the internodes or tendrils, or both, spontaneously revolve with a steady motion till they strike an object, when the tendrils grasp it firmly; in the course of some hours these contract into a spire, dragging up the stem, and forming an excellent spring. When the work required is done all movement ceases; the tissues of the tendrils become wonderfully strong and durable; they have finished their task in the most admirable, one might say intelligent, manner.

Indeed, there is something almost ludicrously human in some of the descriptions. "A tendril which has not become attached to any body shrinks to a fine thread, and drops off," or else hardens into "a useless self-involved spire." People like these, attached to no "body" or thing, and withering mentally and morally, or becoming "useless fine self-involved spires," are only too common in everybody's acquaintance. Elsewhere it is said "that the gain in strength and durability in a tendril after its attach-

ment is something wonderful;" and there can be no doubt that the "increase in strength" and worth of a character which has become strongly "attached" to an "object" *is* astonishing.

One great charm of these investigations is that they may be carried out almost anywhere. There is no better specimen of the revolutions both of the internodes of stems and of tendrils than in the common Pea, which was, indeed, studied most accurately by Dutrochet, who drew up an elaborate diagram of its elliptical motions.

In the most ordinary garden, where a row of Peas or of French Beans is to be found, and where the Ivy and Honeysuckle cover the walls—in the most uninteresting country walk, where, at least, the Bryony, Traveller's Joy, and Wild Rose may be found in the hedges—on the window-sill of a dark little town house, from which a Cobœa or Convolvulus may be trained, or in the back yard, where a few pots of Nasturtium, Cucumber, or Hop are kept—it will be found possible to observe and enjoy these exquisite contrivances towards an end. But how few of us trouble ourselves to see what is before our eyes, or to understand what is going on under our very noses!

To help the many, before whom these and similar

delicate operations of nature are thus going on unnoticed, to look out for an interest so pleasant and so easily attainable—to teach us what to observe, and how to look at it—these observations of Mr. Darwin's are indeed invaluable.

BEHOLD ALL CREATURES FOR OUR SPORT OR USE.

I SAW to-day, high up in the air, above a large tree in a lonely field, a little cloud of gnats or flies, so far from the ground as to be almost invisible, except when the sun shone upon their gauzy wings. They were gyrating in a regular circular dance, following each other in and out and to and fro, in an intricate measure, cutting and crossing and floating round and round, evidently to their own supreme satisfaction. A little farther on in the heart of the wood we met a line of ants marching from their high-piled nest to some object unseen to us—straight on, determined, not to be interfered with or turned aside. Presently we crossed a streamlet, where in a quiet pool, sheltered by stones, a little company of about a dozen very small brilliant metallic-looking beetles were swimming rapidly in a circle, in and out, with

the utmost regularity, never interfering with each other or losing their places—a "round dance" of exquisite order, dexterity, and grace. It was very pretty to watch, but was going on without certainly the slightest reference to my pleasure or convenience; indeed, in the strange severance between our races the beetles were evidently as unconscious of my existence as if we had been in separate planets.

We have an inveterate and extraordinary belief rooted in us that all nature was created with some reference to ourselves—that all plants, birds, and beasts were intended for the pleasure or the use of man; and as to those tribes which by no manner of means can be coerced into this theory, we proceed very summarily, to the best of our power, to do away with them from off the earth as useless.

It is the conviction of a people dwelling much in towns or on cultivated land, of an unimaginative race, self-involved, proud, unsympathetic—who have so disciplined their horses and their dogs, their tulips and their currant-bushes, that these have no life independent from their masters—who recognise no existences beyond themselves and their belongings. But a man who has lived much in the woods and hillsides, alone, face to face with nature for any time, becomes aware that he is only one of God's creatures;

and that the sunshine and the shade, the early and the latter rain, are probably intended for the use of other organisations besides his own—for their pastime, subsistence, and comfort, as well as for that of the human race.

"Each after his kind, and God saw that it was good," is a beautiful expression of the thought that "this great globe and all that it inhabits" is not intended to be confined to the use of man alone.

Science has been playing of late into the hands of our vanity: the lightning is made to carry our messages, night is turned into day by the gas out of a rock, water in the shape of steam is made to carry us round the earth, the very refuse and waste left from other products are found to be precious, and are made to yield valuable dyes, oils, and useful drugs for our omnivorous wants and gratifications, till we have begun to fancy that only time is required to "show a use" for us in all remaining natural productions. Yet when we turn to the infinitely great and the infinitely small—to telescopic and microscopic wonders—we discover whole worlds utterly independent and unconscious of us and our requirements.

Even among the races where an individual here and there can be made serviceable to man, such as

"that great leviathan whom Thou hast caused to play," we can hardly fancy that the special object of the whale's life is to give us sperm oil, whale-bone, and blubber. Mr. Wallace is eloquent upon the birds of paradise, confined to two or three most remote islands, in a sea scarcely ever visited, and seen only by a few ignorant savages, which are yet the most exquisite, the most original of creations. He tells of what are called by the Papuan natives *Sacaleli*, or dancing parties, where the birds collect at the tops of the trees in the lonely woods, to hover and play for hours, shaking their wings and crests, the long trains of exquisite bright golden feathers erected over their heads, and quivering in the sunshine like a cloud of glory, their crimson, blue, or green heads shining with metallic brilliancy, evidently showing off for the pleasure of their more quietly dressed Quaker-looking lady friends—a sight which never is or probably will be ever enjoyed by cultivated man. Even our pride cannot conceive the *raison d'être* of the seven hundred and fifty new beetles and flies which Mr. Wallace discovers in three days in the island of Borneo, to be that one out of their myriad numbers may have the honour of being stuck with a pin on a card in the collection of even that distinguished naturalist. There are "many mansions" of

life, of use, of beauty, unknown to each other, living side by side and yet apart in the world, doing each their own work, completely unconscious of that of the rest—children of the same God, having as great a right and claim to a happy life as we ourselves. There was much truth in St. Francis of Assisi's fantastic reverence for "his brothers and sisters" of the animal creation, which we might often do well to remember. *Mia sorella la vacca* would not suffer as she does on railway trains, *mio fratello l'asino* and the horse would less frequently be ill treated, if we realised their rights in life as well as our own.

No doubt, in one sense, the law is absolute of the "survival of the fittest," and that the lower races will, in time, where coming into collision with the higher and stronger, give way before them. For instance, as the world becomes more peopled, there will be no room for organisations like that of the tiger, which requires a whole province to supply himself and his (not large) family with "butchers' meat;" but this very partially solves the great question of our use and abuse of our position with regard to animals. Indeed, the infringing on the liberty of other lives in our own fancied interests has been proved again and again to be a mistake. Small

birds have been supposed to be injurious to grain and fruit, and they have been destroyed without mercy in France and Switzerland. The consequence has been that devouring insects have increased to such a fearful extent, and have so damaged the crops of those countries, that solemn decrees have now been issued for the protection of those valuable sparrows, &c., which it is the object of some wise "small bird clubs" in England to destroy. We have not yet even taken pains to make out which are the races that are and which are not useful to ourselves.

Again, the population of the great oceans which cover so large a portion of our planet carries on an existence utterly independent of us. Those billions of billions of *globigerinæ* which are tranquilly depositing at the bottom of the ocean their infinitesimal portion of a future chalk bed—those innumerable star-fish and corallines, a specimen or two of which clings to the filaments of the rope of a dredge from the *Challenger*—of what "use" are they to man? Yet who can doubt that each and all have their object in the vast scheme of the universe.

With regard to the races beyond the ken of our unassisted senses, it is beyond measure startling to watch the inhabitants of a drop of water in a

solar microscope—swallowing each other, pursuing each other, seeking their prey, their loves, their hates, with the utmost excitement and plenitude of life, fearing us not, seeing, hearing, knowing us not—as utterly unconscious of our existence as we a few seconds before were of theirs. Their very shapes are hideous in our eyes, "portentous," when thus brought out by the magnifying lens and the light. One carries an enormous head garnished with prongs or spikes, the next seems all paunch, with no head to speak of at all. Legs come out in the wrong (!) places and in unpleasant numbers. One beast wears his eyes in his stomach, another on his back. The proportions of their bodies, their colour, their complexions and manners, are all utterly repulsive to our ideas of beauty. What are we that we should judge? They are not for us or by us—or indeed in our world at all, but by this accidental glimpse. Yet each atom, invisible to the naked eye, is finished with an exquisite nicety, fitting him to fulfil his position in life with unerring forethought, adaptation, and success. Each little primary cellule (in plants and animals indistinguishably alike), representing the simplest form of life—a little bag—yet knows how to extract water and gases from the earth and air, which it digests and transforms, by some marvellous chemical

action, into the wondrous varieties we see around us in different plants—

> "God is great in the great, but greatest in the small."
>
> St. Augustine.

Then if we turn to the other extreme of remoteness from our world—by distance in one case as by size in the other—and look through a telescope at the stars on a bright clear night, shining in every variety of size and distance, through the vast spaces which separate us from even the nearest of those mighty worlds—filled with what strange varieties of life who shall discover?—we are chilled with the sense of how utterly indifferent and unconscious are their inhabitants of our existence, our hopes, our fears, our objects; they would not even be aware of the change if the whole of our planet with its contents were swept away to-morrow.

There is something inexpressibly lonely in the feeling of isolation when we attempt thus to realise how far apart are the different portions of God's creation. And the more we become aware of its extent and variety, the more we seem to require the rest given by a principle—to be reached through a different set of faculties from those used in the scientific investigation of nature—the belief that all are bound together into one great whole—the dependence upon a Father,

the Spirit of good, God—the binding together, the *religio*, under the power

> "Which wields the world with never-wearied love,
> Sustains it from beneath and kindles it above,"

as Shelley has put it—certainly a man not likely to exaggerate the necessity of this link between the Great Spirit, by whatsoever name He be called, and the individual sentient atoms, whether conscious or unconscious of His presence.

The "Essay on Man" is no longer regarded with the respect it used to win. Yet it would be difficult to put the idea of the connection of the universe with the Divinity in truer or more beautiful words than Pope's, which, after all, are a variation on the theme, "In Him we live, and move, and have our being:"—

> "All are but parts of one stupendous whole,
> Whose body nature is, and God the soul.
> This changed through all, and yet in all the same,
> Great in the earth as in th' ethereal frame,
> Warms in the sun, refreshes in the breeze,
> Glows in the stars, and blossoms in the trees,
> Lives through all life, extends through all extent,
> Spreads undivided, operates unspent,
> Breathes in our soul, informs our mortal part,
> As full, as perfect in a hair as heart.
> * * * * * * *
> To Him no high, no low, no great, no small,
> He fills, He bounds, connects, and equals all.

THE NAMES OF PLANTS.

THE titles given by our ancestors to distinguish one plant from another, before they were marshalled by Linnæus into battalions of orders and species, distinguished by the number and construction of their stamens and pistils, or arranged into more natural families by Lindley and the later botanists, are often extremely poetic. There is a wealth of imagery and of fanciful allusions in them, "playing with words and idle similes," which is sometimes very interesting to trace out.

Some plants are named according to the "doctrine of signatures," *i.e.* the notion that the appearance of a plant indicated the disease which it was intended to cure, like the "Eyebright"—"the black purple spot on the corolla proved it to be good for the eyes," said the medical science of the day.

Next come the similitudes. The "Day's Eye" opens at sunrise and closes at sunset—

> "As a daisy, whose leaves spread,
> Shuts when Titan goes to bed."

The "Hell's-weed" (the dodder), which strangles the plant to which it attaches itself.

The Columbine, so called because in reversing the flower the curved nectaries look like the heads of doves (*colombes*) sitting close together in a nest.

There is a whole garden-full of plants sacred to the Virgin Mary, to whom all things pure and lovely were dedicated, generally because they flower at some period connected with "Our Lady's" days—the Visitation, the Assumption, her Birth, Baptism, and Purification—such as the "Lady's Smock," "Lady's Mantle," "Lady's Fingers," "Lady's Slipper," "Lady's Tresses," (the pretty little green Ophrys with a twisted stem). The "Virgin's Bower," also called "Traveller's Joy," begins to blossom in July, when the feast of Visitation occurs, and is in fullest flower at the Assumption in August.

The "Lady's Bedstraw" belongs to no particular month, but has a very particular story for its name. The different plants were summoned to come and form a litter for the Virgin and Child in the stable at

Bethlehem. They all began to make excuses one after the other; some were too busy, some declared themselves too insignificant, some too great, or it was too early or too late for appearing. At last this pretty little white star offered herself humbly for the place, and was afterwards rewarded for her virtue by her flowers being glorified by a halo of golden yellow.*

St. John's Wort, St. Peter's Wort, flower about the time of their respective Saint's Days. The Star of Bethlehem, Rose of Sharon, Joseph's Walking-stick, Jacob's Ladder (the beautiful Solomon's Seal), are apparently accidental fancies.

The Holy Ghost flower, the Peony, flowers of course at Whitsuntide. Lent Lilies tell their own tale.

A series of traditions connects the peculiarity in certain plants with an event in Bible history. The Knot-grass, Polygonum persicum, has a large black spot on its smooth leaves, caused "by a drop of blood falling from our Saviour, at the time of the Cruci-

* The legends took in birds and beasts, as well as plants. "They say the owl was a baker's daughter," sings poor Ophelia. The story tells that our Saviour went into a baker's shop and asked for some bread; the mistress put a piece of dough into the oven for him, but her daughter said it was too big, and took away all but a little bit. It immediately swelled to an immense size. The girl began to cry "Heugh, heugh," and was transformed into an owl, to cry thus all her life as a punishment for her hardheartedness.

fixion, on one of the plants which grew at the foot of the Cross."

The "Judas-tree" is that on which the wretched traitor hanged himself in his misery—rather an unsafe stem to choose, but then it broke under his weight, as we are told.

The Cross was made of the wood of the Aspen, or trembling Poplar, and its leaves have been smitten by the curse of perpetual quivering restlessness ever since.

The "Virgin's Pinch" is the black mark on the Persicary.

"Job's Tears" are so called "for that every graine resembleth the drops that falleth from the eye," says old Gerarde.

In the Passion-flower, all the five emblems of the Passion are to be found by the faithful—the nails, crown of thorns, hammer, cross, and spear. "Christ's Thorn," the Gleditchia, is the plant from which the crown of thorns was supposed to have been made.

Cruciform plants are all wholesome, "the very sign of the Cross making all good things to dwell in its neighbourhood."

Evergreens have always been held emblematical of the hope of eternal life. They were carried with a corpse and deposited on the grave by the early Chris-

tians, to show that the soul was ever living. An earlier Pagan use was when the Druids caused "all dwellings to be decked with evergreen boughs in winter, that the wood spirits might take refuge there against the cold, till they could return to their own homes in the forests, when spring came back again." One group of plants has been named in memory of human virtues and graces, quite independent of any qualities of their own. Honesty, Heartsease, Thrift, True Love, Old Man's Friend, Rue, the Herb-o'-grace, can have merely fanciful analogies, unless the little seeds kept so tight in its round purse can be supposed to symbolise "honesty." Some resemblance to bird or beast has given their names to the Mouse-ear, Larkspur, Crowfoot, Cranesbill, Coltsfoot, Adder's-tongue, Cat's-tail, Pheasant's-eye, Mare's-tail, while the small Scabious, whose root seems to have been bitten off, is called the Devil's Bit.

Others owe their names to their virtues as simples, —All-heal, "Feverfeu" (fugis). "The Sea Spurge is full of milke, goode against choleric humour." It is called among women "Welcome to our house." The "blessed thistle, Carduus benedictus, is good for giddinesse of the head, it strengtheneth memorie, and is a singular remedie against deafnesse," we are told in old Gerarde's herbal. "Get you some of the

Carduus benedictus, and lay it to your heart; it is the only thing for a qualm," says Margaret, in *Much Ado About Nothing*, quizzing Beatrice about Benedict. "Benedictus, why Benedictus? You have some moral in this Benedictus," answers Beatrice testily.

Each month had its own particular flower—the "Christmas Rose," the pretty green Hellibore, Snowdrops, the "Fair Maids of February," the "May-flower," the Hawthorn that covers the hedges with beauty, and the "June Rose."

The "Poor Man's Weather-glass," the Pimpernel, closes when there is rain in the air. "At what time in the month of August the husbandmen having occasion to go unto their harvest work will first behold the floures of Pimpernell, whereby they know the weather that shall follow the next day after. If the floures be shut close up it betokeneth raine and foule weather; contrariwise, if they be spread abroad, faire weather." The yellow Centaury and Sundew only open in bright sunshine. The "Shepherd's Hourglass" tells him accurately the time of the day. The extreme regularity, indeed, with which many flowers open and close at particular hours, having apparently no reference either to light or temperature, is such that Linnæus made a dial of plants, by which a man might time himself as with a clock by watching

their petals unclose. The Goat's-beard, for instance, is stigmatised for its lazy habits by the opprobious epithet, "John, go to bed at noon," but then it opens at four in the morning; the Convolvulus Major also shuts at twelve o'clock; the Dandelion opens at seven and closes at five; the Ear Hawkweed has a very short day, it wakes at eight and goes to sleep at two; the red Sandflower begins at nine and closes at three; the Evening Primrose opens only at sundown; the night-blowing Cereus only after dark, probably all for some reason connected with the fructification. The sleep of plants is a most curious and interesting study of itself, too long, however, even to touch on here.

The merely pretty allusions are many—Venus's Looking-glass, Love in a Mist, Love lies bleeding, Queen of the Meadows (the beautiful Spiræa), Crown Imperial, Monkshood, Marvel of Peru, Herb Paris, Enchanter's Nightshade, Silver-weed, Goldie-lockes, "a moss found in marish places and shadie dry ditches, where the sun never sheweth his face."

Why the insignificant Vervain, or "holy-herbe," is "cheerful and placid," and why she was so much valued in ancient days, seems a mystery. "If the dining-room," says Pliny, "be sprinkled with it, the guests will be the merrier." "Many odde old wives' fables are written of it, tending to witchcraft and

sorcerie, which honest eares abhorre to heare." The Welsh name means "hateful to the devil."

The Mistletoe, "air tree" in Welsh, probably owed its sacred properties to the "uncanny" mode of its growth, particularly when it was found on the groves of oak which were held to be holy by the Druids.

Little bits of historical allusions and national loves and hatreds crop up amongst the flowers. The striped Red and White Rose, "York and Lancaster," symbolising the union of the Royal Houses, has a pedigree of nearly four hundred years to show.

The early Willow Catkins are called "Palms," from having been in use as a substitute in Northern countries for the Palm branches, which were carried on Palm Sunday in procession; the name must, therefore, belong to the earliest times of the Roman Catholic faith in England, when the practice began. "Wolf's Bane" points to the time when the beast was still alive and dreaded in the English forests.

"Dane's Blood," the dwarf Elder, has peculiarly red berries, and shows the fear and hatred left behind them by our grim invaders a thousand years or so ago.

The English are accused by the Scotch of having introduced the Ragwort into Scotland, and they call it there by a very evil name.

"Good King Henry" is a very inconspicuous ordi-

nary wild plant; but as no King Henry, bad or good, has existed in England since the time of the eighth, the name is certainly very old. Other Christian names have been given, apparently merely from sentimental reasons, Sweet Cecily, Herb Robert, Basil, Sweet William, Lettuce, Robin run i' th' hedge, Sweet Marjoram, Lords and Ladies.

The fairies have their share in plant nomenclature. "Pixy Pears," the rosy Rose-hips, which form the fairies' dessert, the "fox" gloves, which the "good folk" wear, the "Pixy Stools," or mushrooms, which form "the green sour ringlets, whereof the ewe not bites." Here the grass is made green by the fairies dancing on it, and the stools are set ready for them to sit on when they are tired.

There remain a number of names, which have accidentally been chosen to express particular ideas. "Lad's Love" is given to your flame in the countryside when, as is not seldom the case, the swain's words are scanty—

> "Violet is for faithfulness,
> Which in me doth abide."
>
> *Sonnet,* 1584.

The "Pansy," "that's for thought," or "Heartsease," is still called in country places "Love in

Idless," as in the Shakspearean compliment to Elizabeth in the *Midsummer Night's Dream*—

> "Yet marked I where the bolt of Cupid fell,
> It fell upon a little western flower,
> Before milk-white, now purple with love's wound,
> And maidens call it Love in Idleness!"

"Rosemary," "that's for remembrance." "I pray you, love, remember," says Ophelia in her madness. It was carried at funerals—

> "Marygold that goes to bed with the sun,
> And with him rises weeping;"

and the marsh edition of it, "all aflame," as Tennyson describes it.

"Speedwell," said the little blue Veronica in the hedge, to the old folk who went before us. "Forget-me-not," called the turquoise-blue Myosotis from the water as they passed by. "Turkscap Lilies," "Bloody Warriors," the dark Wallflower, filled their gardens, and bright blue "Canterbury Bells," common in the hedges of Kent, cheered the pilgrims on their road to the shrine of St. Thomas.

We pay for the convenience of our present nomenclature by the piling up of Greek and Latin words on each other, the barbarous compounds, and almost unpronounceable words, such as "Habrothamnus," "Ortiospermum," "Intybaceum," and the like.

While the utterly irrelevant proper names, such as the "Wellingtonia," for a pine-tree belonging to the far West American mountains, scarcely ever heard of while "the Duke" was still alive, the roses dedicated to French marshals, most unfloral of men, are symptoms of the present poverty of our faculty of language.

The hosts of new shrubs and plants now continually introduced require a more systematic kind of name-making than of old; but we cannot help sometimes regretting the poetry of invention which has passed away from us, the loving transfer of our human thoughts and feelings to the inanimate things around us, the beautiful religious symbols into which our ancestors translated the nature about them, and which so often must have helped them to "rise from Nature up to Nature's God."

THE FATE OF PETS.

'TIS a doleful history, comprising more misery in a small way than is to be found in any of the other minor accidents of life; as most people can tell for themselves, or may see in the "heartbroken utterances" which appear in papers like "The Animal World." Indeed, if we—

> Sit upon the ground
> And tell sad stories of the fate of pets,
> How some were drowned at sea, some stolen by thieves,
> Some dead of grief for loss of those they loved,
> Some poisoned by their foes, some sleeping slain"—

we shall find that though, like poor Richard II.'s

kings, they were not "all murdered," their fates are hardly less tragic.

Here are a few of the dolorous ends which have come within my own knowledge, and any one conversant with beasts could add to the list by scores.

An Englishman high in office in the East had an infant tiger brought to him after a royal hunt in which the mother had been slain. It was about the size of a large kitten, but more bulky, more solidly and heavily framed, with deep brown stripes on its tawny back, and broad black and white streaked and whiskered muzzle. It was still in the sucking stage of existence, was brought up by hand, and grew extremely playful and amusing. There is something particularly piquant in the innocent infancy of beasts of prey, in the unconscious possessors of such enormous powers of mischief in the future—in nursing tiger cubs or playing with a baby Czarovitch or an infant Sultan; and the ambassador loved the beautiful, lithe, graceful, young terrible well. It became in return very fond of him and followed him all about the house, mewing much like a cat, and lying on its back with its four paws in the air to be caressed.

By-and-by, as the beast grew larger and stronger day by day, the play became fiercer, and the tap with his great paw, even with sheathed claws and amiable

intentions, was no joke. When he opened his lips at the roots and showed his ranges of beautiful white teeth, the horrible grin struck terror into the attendant dark men. The "Sahib tiger" was treated with great respect, but his temper became uncertain. Once in his wrath he killed a dog, and there was no knowing with whom his majesty might next be angry. His extraordinary muscular strength was developing fast, and one day, lying on his back with his four paws raised, he suddenly sprung up after a dog that had offended him without turning or touching the ground.

The servants attached to the service entreated that my lord might at least be shut up; this was done, but the beast grew so enraged at his captivity that his master once more let him out, saying, "He was still but a child tiger, and harmless if he was left alone; it was the fault of those who teased him if he behaved ill." As he himself only came across the *patte-de-velours* side of the tiger's character, he would not believe the stories told against his pet. His own bedroom opened on to a verandah looking into a court, round which the house was built, after the fashion of the East. At the beginning of the night the tiger lay on a carpet spread for him in the verandah itself. As the night grew cooler he crept quietly in and made

himself comfortable within the room, and when it became almost cold (the time was winter) he mounted upon his master's bed and cuddled close up behind him. Who could resist the charm of such amiable gentle manners from the owner of such fangs and claws?

Still, however, he grew more and more fierce to the outside world; fitfully his enormous strength came out in his rough play; his roar shook the souls of the dark men; the glare of his eyeballs turned them green with fear; more than once he had knocked down a man, without as yet intending malice.

At length it came to pass that the great Sahib himself went out for an unusual number of hours or days; when he returned he found his savage pet writhing in tortures of pain. No one would account for what had happened, or give the smallest explanation of the creature's state. It was evident, however, that poison had been used. He was near his end; the groans grew weaker and weaker, and the beast died licking the hands of his master, who stood by helpless to give him any relief. It went ill with the Persian suite that evening.

This was a better ending, however, to the story than in another case, where the master of a similar pet coming home in the dusk saw his tiger in the "com-

pound" playing with a great ball, rolling it hither and thither with his paws. Coming near, he saw to his horror that it was a man's head, which the beast had bitten off at the neck in a sudden attack of spite, and, being far too well fed to care to eat it, was using it as a dreadful plaything.

Number two of the pets of my friends was a squirrel, which had fallen in its infancy out of a nest in a pine-wood. This, too, was brought up by hand. At first it was a little hairless thing, with a bare tail like a rat's, but gradually it put on its furry coat with a white waistcoat and bushy train. A bright-eyed, graceful, quick-tempered, agile little companion it proved. Its favourite haunt in winter was up the wide sleeve of its mistress's gown, where it would lie comfortably perdu in the warmth for hours. One cold day it had not been well; she was going to church, and not liking to disturb it she left it in its nest; but when once safely within her pew and the service had well begun, it became evident, to her dismay, that the squirrel had taken a particular dislike to the sound of the preacher's voice and the noise of the singing. He kept up a low suppressed hiss whenever a passage struck him as not to his taste, and scolded sometimes so loud that she was afraid her neighbours would think her possessed, and that she

would have to walk out in the middle of the service.

The squirrel never went to church again.

He always appeared at dessert, and was allowed to run about the table, where he never overthrew or disturbed anything, but deftly careered in and out among the glass and the dishes, or sat up on his little hind legs, and took what was given him, handling a nut in his fore-paws with delicate precision, cracking it with his sharp teeth, his merry little head on one side, and an occasional sweep of his beautiful brush of a tail.

His great delight was to mount on to the highest cornice or curtain-rod he could find, and sit chattering in triumph, or to run up the shoulders of his friends, and sit upon their heads.

His mistress was so afraid of his coming in harm's way that she took him out with her on her visits; and one day in a strange house she put the cage with the squirrel in it on the top of a chest of drawers, and locked the door of her room. When she returned, she found that the dog of the house, who must treacherously have secreted himself under the bed for the fell purpose, had pulled down the cage, broken it open, and was hard at work worrying the poor little inmate, which was at the point of death, when its mistress came in

only in time to rescue the body, and have the melancholy satisfaction of burying the remains decently.

Case number three regards a pair of small ring-tailed monkeys, which were sent as a present from their native home to a lad at college. They were of that charming kind described as "consisting of four legs and a tail, tied in a knot in the middle," the tail forming the most important member of the concern. They were landed in London, and sent to the town house of the family, who happened to be from home. The butler, not much pleased at their sight, shut the new arrivals up in the pantry alone for the night. It was late autumn, there was no fire, no comfort, no care to be had, and the next morning the little monkeys were discovered locked in each other's arms, and quite dead.

To tell of the parrot whose wings all unused did not save him from dying by a fall out of window; the lap-dogs which have been overrun by carriages, suffocated, bitten, stung to death by wasps, drowned; how the poodle-dog belonging to the wife of a governor-general fell overboard, and was seen by its mistress to be swallowed by a shark—would all be too "long to tell and sad to trace;" and as a relief to my own and my readers' feelings, here is a story of a less harrowing description.

A busy man, who once wanted to finish some literary work, took refuge for the purpose in a quiet, out-of-the-way French town, where he set up his quarters at a comfortable auberge with a pleasant garden. Therein he fraternised with a small pet owl which had lost its leg. It hopped about after him in its own fashion, and was most affable and companionable, and a great resource in the limited amusements of the place.

At last, one day, he missed his friend, and hunted up and down vainly for her for some time. He had just finished his work, and having given warning that he should leave the next day, he demanded his bill while he ate his last dinner, where there figured a curious little round morsel of game, "bien accommodé," with sauce, but which struck him as having no legs.

"What bird is this?" he said to the servante, but she seemed to be suddenly called away.

When the landlord brought up his account that night—"By-the-bye," said the guest, "what is become of that nice little owl I was so fond of?"

"Monsieur," said the host, going on with the bill, "has been content of the service?"

"Quite satisfied," replied the Englishman, "but I am very sorry about the owl; what is become of her?"

"Monsieur has had his potage, his rôti, his doux, and his gibier each day he has been here?"

"Yes, yes," said the other impatiently; "but what about the owl?" A horrible suspicion began to cross his mind.

"Monsieur, on this the last day, behold, with all my possible efforts, I could get no game, alas, for Monsieur's dinner!"

"What!" cried the horrified guest; "you did not kill the little owl for me?"

"Oh, non, monsieur! il est mort tout seul!"

The stealing of pet dogs has become a regular trade, or rather an art, according as it is now pursued: the *stalking* of the master or mistress, so as to know all their haunts, and time the exact instant most propitious for the capture of the well-watched beast. While calculations, made upon the most refined psychological principles, of the precise moment when the agony of the bereaved will bring about the highest amount of reward—how not to offer hopes too soon, and not to delay too long—all this may be said to have reached the dignity of an exact science. "How do you settle the amount to be asked, is it according to the breed of the dog?" said the fleeced but happy recoverer of a beloved pug to the trader. "Oh no, sir, we charges arter the feelinx of the parties."

Perhaps the only really happy and satisfactory pets are wild animals, which lead their own natural lives, obtaining food by their own exertions, but adding a friendship for man and an occasional luxury at his hands to their usual course of woodland existence. A squirrel in this way has been known to enter the open window every morning where a family was at breakfast, run up the back of the master, and nestle in his coat-collar, when it received a nut.

Besides these are the creatures kept for use, not for play, who, even though their food be found for them, are quite unspoiled by luxury, and lead a life of independent usefulness as the helpmates and companions of man. A collie dog, on whom the most important part of his shepherd master's work depends, the retriever, who "can do anything but speak," these are friends, hardly to be degraded into pets.

The faculty of taming wild animals, which some men possess in so remarkable a degree, would be worth studying more accurately. It seems generally to depend on the strength of the instinctive part which we share with the animal creation; the deaf and dumb often possess it to a great degree; patience, quiet tenderness, and a determined will are certainly required for any great amount of the power.

An old man who led a secluded life in an ancient house, in the midst of trees and fields, might be seen with the robins, tomtits, &c. perched on his shoulders and taking crumbs out of his mouth.

A more extraordinary proof of confidence in birds was to be witnessed one year in the crowded Tuileries gardens. An old man in very shabby dress might be seen any day summoning birds from the trees and houses round; pigeons, sparrows, thrushes, &c., came flying up, fluttered over his head, alighted on his hat, his shoulders, and arms, and sat there caressing him. He did not feed them, at least ostensibly, and when, after a time, he had apparently had enough of their company, with a wave of his hand he dismissed his winged court, which all flew quietly away at the signal. They wanted apparently nothing but friendliness from him, and on his part it was not done for money, but simply for his own pastime, for when the reception was over he walked away among the crowd, which seemed too well used to the sight to take much heed of it.

In general, however, we are too stupid in our intercourse with animals to attempt to understand the language they use, or to try to perfect the signs by which they are to interpret our wishes; although the occasional instances of such communion, often acci-

dentally obtained, show how much might be done in this way.

A cat in a Swiss cottage had taken poison, and came in a pitiful state of pain to seek its mistress's help. The fever and heat were so great, that it dipped its own paws into a pan of water, an almost unheard-of proceeding in a water-hating cat. She wrapped it in wet linen, fed it with gruel, nursed it, and doctored it all the day and night after. It recovered, and could not find ways enough to show its gratitude. One evening she had gone up-stairs to bed, when a mew at the window roused her; she got up and opened it, and found the cat, which had climbed a pear-tree nailed against the house, with a mouse in its mouth. This it laid as an offering at its mistress's feet, and went away. For above a year it continued to bring these tributes to her. Even when it had kittens they were not allowed to touch this reserved share, and if they attempted to eat it the mother gave them a little tap, "that is not for thee." After a while, however, the mistress accepted the gift, thanked the giver with a pleased look, and restored the mouse to her, when the cat permitted her children to take the prey which had served its purpose in her eyes. Here was a refined feeling of gratitude, remembered for months after the benefit conferred, quite disinterested, and placed above

the natural instincts—always very strong in a cat—towards her own offspring.

If the question of the capabilities of animals, their affections and powers of memory—both evidently great—their degree of ideality—often extremely strong in a dog—particularly the amount of their reasoning power, that is of foreseeing the consequences of an action and guarding against it, or accomplishing a new and untried object, were as closely studied as they might well be in the very intimate intercourse existing between pets and their masters, much would be done towards reconciling outsiders to that very exclusive relation, and making pets an interest instead of a nuisance to the public in general, as is now too often their fate.

A YOUNG INDIAN PRINCE.

IN that strange "fortuitous concourse of atoms" which streams perpetually from the most distant parts of the world into that Alexandria of the West—London the cosmopolitan—there came to us in the summer of 1870 a young Indian sovereign prince, the Maharajah of Kolapoor.

It was the first time that a reigning Hindoo prince had ever ventured to travel so far, and the journey was a great event among his people, who were much distressed at the idea of his crossing the "black water." The whole undertaking was one, indeed, requiring a degree of resolution which it is difficult for us to realise. He belonged, however, to the Mahrattas, who are more enterprising than most races of Hindoos, and had had an English tutor and an officer of the Indian Service residing with him, so that he spoke English well, and had thus acquired a certain

knowledge of modern history and of the politics and statesmen of the day, which enabled him to be interested in the conversation going on around him.

He was barely twenty, though he looked much older; a small-made man, with extremely slender hands and feet; his complexion of that pleasantly brown colour which looks as if it had been just ripened by the sun, not scorched black; his eyes very large and lustrous, but without much expression, and a contemplative, rather childlike look; when he spoke, his white teeth shone brilliantly and lighted up the dark face.

He was a kindly, gentle young prince, not wanting in intelligence, with a sort of easy dignity, as of one used to be obeyed, but apparently quite contented to remain languidly in any place where he happened to be, so that one wondered the more to see him venturing so far from home.

He was ordinarily dressed in a kind of dark green cloth coat, with a curious turban on his head formed of rolls of red muslin twisted into thin coils, without which he was never seen in public, any more than Louis XIV. without his wig. He would have considered it an act of rudeness on his part to show himself bareheaded, though he pulled off his headgear when with his own people only. He had never been alone in all his life, and used to sit chatting and laugh-

ing with his attendants who were on terms of perfect ease with him, strangely mixed with the oriental depth of respect and reverence with which they treated him.

He was already married, and a child had been born to him just before his departure from Kolapoor. "Only a girl," however, much to his disappointment, as a daughter could not inherit. The Mahrattas are monogamists; but sovereigns and very great chiefs are sometimes, though only for reasons of state policy, allowed by the "sages" to take a second wife. "Their canons are rather elastic, but they would be ready, I have no doubt, to prove that if Henry VIII. had been furnished with half-a-dozen wives simultaneously, and George IV. and Napoleon with two apiece, there would have been less of a strain on the consciences of Wolsey, Eldon, and Talleyrand."

In the Rajah's case, a little extra princess, then about nine years old, and named Tara Baee, married to him in her infancy, was growing up in reserve. She was the daughter of a very ancient and noble family, the Naik Nimbalkur of Phultum (not far from Poona); a house which was said to have already reigned a thousand years at the time of the Mahommedan invasion, and whose clan furnished many brave leaders to the Mahratta cause in the succeeding struggles.

She was described by a lady who saw her a few years before as a lovely little child about two years and a half old, who came in escorted with a great pomp of attendants. They bore a sort of canopy over her, nominally to protect her from the gaze of mankind as she descended from her gilt coach; but the decorum was only a sham, as she could be perfectly well seen under it. She was dressed in a short armless purple velvet jacket, and the *saree*, the long graceful drapery worn by all Hindoos, wound about her. Her little arms and ankles were covered with bangles, she wore a large ring in her nose, and several pairs of ear-rings hung round the lobes of her ears. If she had been old enough for "company manners," she would have inquired the ages of her visitors, and the ages of all their relations and friends, which is the correct style of conversation. As it was, her whole little soul was absorbed in a parasol, which had been brought by one of her guests, an instrument which she had never seen before, and which she kept on opening and shutting with great delight all the time of the visit.

"I shall bring the Ranee to see you in England," Rajaram said to his English friends; but this was intended to refer to the mother of his child, not to this little lady.

He had expressed a wish to see ordinary country life

in England, and accordingly came to pay a visit at Claydon. He was attended by three of his thirteen native servants, his English footman, and the English officer who accompanied him everywhere; but the accommodation required for the native suite was by no means inconveniently large. The Rajah himself accepted a bed, but slept on the outside of it, wrapped in a magnificent pelisse of scarlet cloth embroidered with gold. The attendants lay in rugs on the floor in their master's room and the dressing-room adjoining. His religious ablutions every morning were long and most scrupulously performed. Everything about him was kept with great cleanliness and nicety—but to be touched by no intrusive housemaid.

There was at first some difficulty in the arrangements concerning his food. Not only must the killing and the cooking be done by the hands of the orthodox, but the passing of the shadow of any but a "twice born" * over a dish, when prepared, would render it unfit to eat. All approach by the servants of the house during these operations was warded off very energetically.

A small garden house having been cleared out, "Dunderbar," a tall handsome fellow clad in brown

* A twice born is a Brahmin, or a Chetrya, the two highest castes, or a man who has become so by penances or good works.

cloth, with a red turban like his master's, the "cook," of a rather darker shade, in white garments with a red fez, and a third tall fellow, whom the English servants nicknamed "the kitchen-maid," in blue cotton with a white turban, encamped there with an immense chest which they brought with them. They built their charcoal fire in the corner, and established themselves beside it, squatting with their multitudinous copper vessels big and little, without handles, employed alike to cook with on the fire and to fetch water, as they would use none which they did not themselves draw at the well.

They brought their own rice, spices, meat, and flour with them, and accepted nothing on the spot but live fowls, eggs, and vegetables; they were very liberal in giving away their food, to which the cloves, curry powder, &c., which they used for everything alike, gave a certain sameness of fiery taste almost intolerable to Western palates, but which was otherwise very good. They all ate with their fingers, but scrupulously washed their hands afterwards. The rest of the day the attendants sat munching cloves and nuts of various descriptions, smoking from a common pipe, which each passed on after taking a single whiff. One of them was always left on guard, lest the vessels, &c., should be touched, and thus

defiled. They were extremely intelligent, and showed themselves very quick in comprehending everything that was required, though they had little language but that of signs in common with those who had to deal with them.

A morning room was given up to the Rajah with an entrance on the garden, through which his meals were brought without danger of contamination. The cook, in his white garments, his feet bare on the rough gravel, but his head scrupulously covered—for in India respect is shown in exactly the opposite way to that in Europe—bore in aloft on one hand, the arm bent back, a little tray covered with a napkin. The Rajah was extremely kind and courteous, making very pleasantly such pretty little speeches as his *métier* of prince required. "I am enamoured of your garden," he said to the rector's wife, as she showed him her parterres. He had even got up the little bits of society "slang," and declared he had "enjoyed his visit immensely!" He played eagerly at croquet, a great resource in the dearth of points where intercourse was possible, and the wide green English lawn under the shadow of the old oak-trees was an oasis of common interest for the dusky little Eastern prince and the fair-haired, fair-skinned Western girls and children, very curious to watch and consider; while at a

respectful distance his three attendants stood following the success of their master's strokes with anxious interest.

He wrote afterwards in his diary: "I was quite 'khush' (happy) and comfortable at Claydon. They made very good arrangements for my comfort and happiness."

It was strange to look on the "mild Hindoo" and remember the fierce ancestry he came of. He was a collateral descendant of the great Mahratta chief Sivagee, the founder of the Mahratta empire, in the days between our Restoration and Revolution, who bearded the power of the Mogul emperors when at its highest, and rose upon its ruins. "The little mountain rat," as Aurungzebe at first contemptuously called him, won from the Great Moghul a territory on the western coast of India extending one hundred and twenty miles in breadth and four hundred in length, from near Goa to north of Bombay, which Sivagee possessed at the time of his death, aged only fifty-two, in 1680.

He was "an ardent patriot" and a "man of real genius" in his own way, raising the despised Hindoo race to sovereignty once more, against the dreaded Moghuls. His powers of organization, the manner in which he inspired his followers with his own

undaunted enthusiasm, were very remarkable, while the excellence of his internal regulations for governing the country he had won was no less great, as we are told by the historian of the Mahrattas, Mr. J. Grant Duff. The wisdom of these arrangements was so great, that his plans for the benefit of his race continued to be carried out after he had himself passed away. On the other hand, his craft, his meanness, the manner in which he seemed to prefer deceit to open force when both were open to him, make him odious in Western eyes. He appears, however, to have sincerely believed himself to be inspired in all his important actions by the goddess of War, Bowannee. The same sort of belief has been held to justify many ferocious deeds in many countries, and under faiths very widely different, but a more treacherous and cruel action is nowhere to be found than the one which contributed most to confirm his powers. Find-himself unable to cope in the open field with the neighbouring Rajah of Bejapore, who had sent a large army against him, he affected the greatest sorrow for his rebellion, and promised that he would surrender the whole of his country to the Mahommedan general, Afzool Khan, if he would come to a conference among the fastnesses of the hill country. The Khan, confident in his own strength, was thus lured on to grant a

friendly interview, which was arranged to take place at the foot of his enemy's own hill fortress. Afzool was attended by fifteen hundred men, while the rest of the troops were stationed not far away. Sivagee had excited his own followers by declarations that he was called on by Bowannee herself to punish the violators of the Hindoo temples and gods; and having posted his own men so as to cut off the retreat of the Mahommedans, he came down to meet the unsuspecting general, apparently unarmed, but wearing chain armour under his cotton gown, and holding hid in the palm of his right hand a horrible arrangement of crooked steel blades called wagnuck, "tigers claws," which fastens on to the fore and little finger. Afzool Khan approached, clad in a muslin garment, and as he raised his arms for the usual embrace, Sivagee struck at him with the wagnuck, and finished him with the sword presented to him by the terrible goddess of war herself. The Mahommedan army was completely surprised and nearly cut to pieces, and Sivagee's power was assured from that moment. The sword has a temple dedicated to it in Sattara, where offerings of flowers are still made. It is, in fact, a sort of incarnation of Bowannee. An irreverent Western curiosity, however, having dared to examine the sacred relic, it was discovered to be a nearly straight Italian

blade, with the maker's marks and "Genova" still legible in more than one place. It was probably

Maharaja of Kolhapur

procured (whether by the goddess herself, or by some more prosaic means, must remain a mystery) either

when fighting with the English of the "Factory" at Surat, as our settlement on that side of India was then humbly called, or from the Portuguese at Goa.*

Since those days the chiefs have mostly degenerated in vigour as well as in fierceness, and their lives are generally a wretched combination of petty intrigues, gossip, and worse things. The love of jewels among the men gives an idea of the depth of inanity which they sometimes reach. They are often hung over with necklaces, rings, bangles, and head ornaments, as if they were dummies set up for the purpose of exhibition. One Rajah had himself photographed with his ten fingers extended, every joint of each being covered with rings, rendering it impossible for him to use his hands for any purpose whatever.

A young prince who, instead of following this traditional life of indolence and sensual self-indulgence, undertook a journey entailing so much exertion, difficulty, and danger, was only the more to be respected.

Rajaram was an heir only by adoption, as the previous sovereign of Kolapoor had no son; but the British Government in this case acknowledged the

* Another sword belonging to Sivagee, inherited by a Rajah of his family, was presented by him to the Prince of Wales during his late tour, and is now at South Kensington.

much-prized right among the Hindoos of transmitting their titles and estates to an adopted child —a privilege which was again exercised after his death by the State and the Ranee at Kolapoor. The East India Company, in very similar circumstances, some years ago, refused the same right to the Rajah of the neighbouring state of Sattara, according to the letter of a treaty, where the word "heir" had been understood by the Hindoos in the sense of their own law and usage, but which was held by the Company to bear only the English meaning—"a policy which entailed a festering grievance for many years in the feelings of the people, and has been condemned by some of the highest Indian authorities," said one who has done so much for the welfare of the country which he loved both wisely and well.

Kolapoor is one of several little-known and little-visited independent states belonging to the Mahrattas —a race which for every reason it is very impolitic for us to neglect, says Sir Bartle Frere, one of the most competent men on such questions. "They have far higher national capacity in every respect than any Indian race, not excepting the Sikhs and Punjabees, and are likely to play a very prominent part in India hereafter—with us, if we are wise, against us, if we drift on. The chiefs have been degraded by the

confiscation of a large portion of their estates, and by their exclusion from the management of affairs, far more than by any fault of their own."

Kolapoor is in the Bombay presidency, situated on the western side of India, and consists mainly of a fertile plain lying east of the line of the Ghauts. Cotton, tobacco, and corn flourish in its deep black soil. Roads till within the last few years there were absolutely none. A nephew of the poet Southey, who crossed the territory some twenty-five years ago during the rains, wrote word that he had tried twenty-four different modes of crossing swollen rivers during his journey of one hundred and forty miles; among which were—1, swimming with his clothes *on;* 2, with his clothes *off*, and upon his head; 3, on horseback; 4, on the ferryman's back; 5, on a basket; 6, on a door; 7, on a ladder; 8, on inflated skins; 9, on a netful of hollowed pumpkins; 10, holding a bullock's tail; 11, by a buffalo's tail, which is safer, inasmuch as he swims better than his fellow-beast, but requires a more wary hand upon him, since he is so fond of the water, that when he reaches the shore he is quite ready to turn round and swim back again. The last item in the list was a sugar-boiling pan; and there was but one bridge among the twenty-four modes of transport, which last

was not, after all, in the territory of Kolapoor, but in that of Sattara.

Even lately, on a progress made in 1866 by the then Governor of Bombay, Sir Bartle Frere, to visit the Rajah who had adopted Rajaram, the edge of the cotton-fields was found a better line than the ordinary tracks along which to drive and ride. At night the party encamped in the open country, and when they reached the river Kistna they crossed over in circular wicker baskets made of cotton-twigs covered with leather, which whirled round and round in the stream, while a body-guard of natives escorted them to guide the baskets in the proper direction, swimming all round on inflated skins. Having once more resumed their march, the Governor and his daughter were met by the Rajah himself, with a magnificent procession of elephants and horses, in gala dress with splendid housings. The elephants had arabesques painted on their broad foreheads, and silver bangles on their post-like legs. The horses were still more liberally adorned —one white horse had stripes of magenta painted over him, face and all.

Everything was going on with great ceremony and decorum, when suddenly an infant elephant, which had accompanied his mother to increase the number and grandeur of the retinue, took fright, probably not

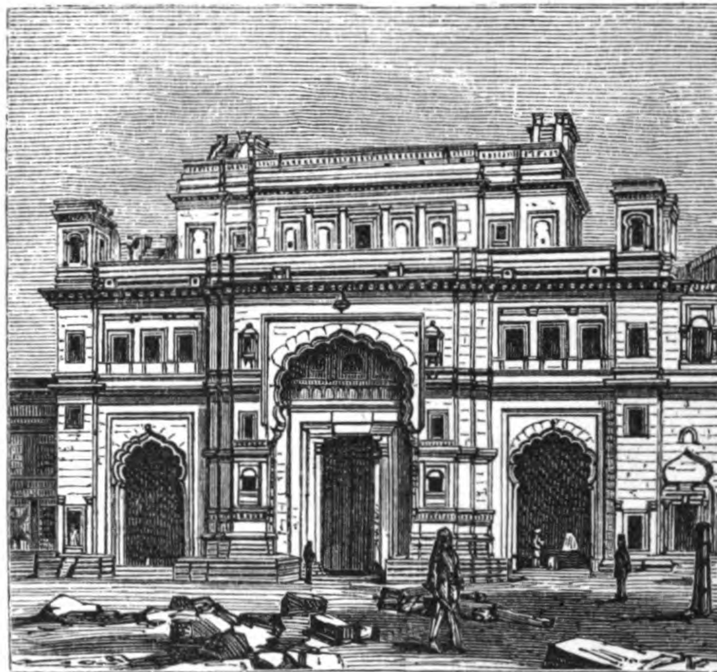
having been used to so much company, and ran away.

He was so small that he passed under the legs of the

others, one of which had such a bad temper that he was only brought out on great occasions, when every animal possessed by the state was mustered. Offended at the liberty taken with his legs, and regardless of hospitality, he charged down on the English party. It was no laughing matter. The heavy beast rushed on, swaying violently from side to side, as is the habit of elephants when they are angry, till he had thrown off his riders and twisted the howdah on one side. The mahout, however, seated on his head held firm, and did not altogether lose control over him as he plunged into the crowd, where he nearly overturned the Governor and his suite; and at length the attendants succeeded in directing him into the open country, where he was harmless.

The whole procession then once more resumed its decorum and its march to the city of Kolapoor. The town consists of a large but not very interesting collection of low houses, chiefly built of mud, and of one story only; the palace, a huge square building, is entered by a very handsome gateway, with three deep horseshoe arches lined with beautiful fretwork. It is built round a great courtyard, the walls adorned by gigantic frescoes in brilliant colouring of scenes from the Hindoo mythology, "very startling and effective."

On the evening of the day of his arrival the Governor paid his state visit to the Maharajah. It was growing dusk, and the lines of streets were marked out by little lamps suspended from the ends of bamboos fastened to the tops of the houses—a most picturesque mode of aërial illumination—while flowers



GATEWAY OF THE PALACE, KOLAPOOR.

were scattered about in profusion. These, the great staple of Indian decoration, are always exquisitely arranged, and are cultivated for the purpose everywhere. Before the centre arch of the entrance to the palace stood two sentry-boxes, in each of which towered an elephant and his rider, a Brobdignag edition

of the sentinels at the Horse Guards, of a very majestic description.

The hall of ceremony where the Durbar was held is supported by columns covered with scarlet lac, like sealing-wax, and the walls were ornamented all round with the same, looking extremely brilliant when lighted up. The Rajah sat at the head of a long line of followers up one side of the room, opposite the Governor, who headed a similar line of his own suite on the other side, and as the hall was narrow they were thus within speaking distance of each other without compromising the dignity of either. Both host and guest had garlands of flowers hung round them—necklaces of white jessamine, of the beautiful Stephanotus, and sweet-smelling tuberoses strung on threads, five together, and fastened with a rose at intervals. Through a veiled door at the end of the room the ladies of the zenana looked in and giggled. An entertainment then followed in a hall lined throughout with white marble, with white marble columns, and chairs of the same set against the wall, and of course immovable. Sweetmeats mixed with flowers were laid out on the table, an innovation in honour of English customs. Within was another apartment belonging to the zenana, the decorations of which were all in black marble, with columns of black basalt,

where the chief princess—in this case the Akasahib, a married sister of the Rajah's—did the honours to the Governor's daughter, assisted more humbly by the Ranee. In a Hindoo establishment the wife is quite second in position as long as the mother and sister of the chief are alive, and to turn these out of a house would be looked upon as an act of cruelty never even to be thought of. Their family affection is often extremely strong, and the Akasahib, who followed her brother to the grave in a very short time after his death, was supposed to have died of grief at his loss. The great man is expected to shelter all his relations under his roof in patriarchal fashion, and the palace was honeycombed with a number of little courts for the different families, with small rooms opening on them, entirely open on one side, and lighted only in this manner, after the manner of those at Pompeii.

The Rajah, having no children living, adopted on his deathbed the son of a sister, a lad of sixteen, whom he had brought up as his own child, and the adoption having been recognised by the British Government, the young Prince Rajaram was taken out of the wretched moral influences of a native palace, and placed, together with two of his cousins as companions, under an English tutor and a carefully selected set of native attendants. He succeeded to the principality

about two years afterwards. The little state contains about two million inhabitants, including feudatories, over whom the sovereign has power of life and death; and a tolerably large revenue is collected from the inhabitants, thanks to its inexhaustibly fertile soil, where the same crops have come up on the same ground for centuries, without manure, and as yet with no signs of failure.

About the beginning of 1870 the young prince determined to spend the time before reaching his majority in a pilgrimage to England, which he reached in June. He hired a house in London, and worked hard at seeing the sights required from a conscientious traveller: attended debates in both Houses of Parliament; was present at a Queen's ball in gorgeous apparel, where, in his cloth-of-gold tissues, necklaces, and strings of jewels, he looked like the prince of a fairy tale. He paid a visit to the Queen at Windsor, who, he said with much pleasure, "was very kind to him;" attended a meeting of the British Association at Liverpool, where, being asked to speak, he said a few words, much to the satisfaction of his audience, on his intention to do all in his power to encourage the cultivation of cotton on his return to India; went into Scotland, where he distributed the prizes at a great volunteer festival, and made a second

little speech, greatly to the purpose, about the good feeling growing up between East and West, and on the friendly relations of India to England. He ended by a visit to the Maharajah Duleep Singh, in Suffolk, which he much enjoyed. He had been greatly pleased, altogether, with his treatment during his whole stay, when he turned his steps homeward to India through Belgium, the Tyrol, and Italy, the road by Paris, where he otherwise wished to have gone, having been rendered impossible by the war with Prussia. At Innsprück he was overtaken by the winter. The snow fell, and his followers were extremely anxious to carry back a box of the unknown substance to "show the strange stuff to them at home." Even the moderate degree of cold in an English October had tried the men very painfully, and probably affected poor Rajaram himself. He was taken ill at Florence with a heart complaint and rheumatism, from which he had already suffered during his journey. He disliked all advice but that of a Mahommedan physician who had accompanied him from India, and the end came at last very suddenly, though the best doctors in Florence were summoned to his aid for the satisfaction of his affectionate and judicious guardian, Captain West.

Almost as soon as the breath was out of the Rajah's body, his poor attendants began their preparations,

intending at first to burn it on the Lung' Arno, as the ceremony must be performed on the banks of a river. This, as in the very midst of the city, could not be permitted, and with much difficulty Sir Augustus Paget obtained permission from the Italian authorities to allow the funeral to be carried out after midnight, at the end of the Cascine, two miles from the town, according to the proper rites.

It was a dark night; a blustering tramontana was blowing, and the cold was biting, says an eye-witness; the pile had been built already breast high, and near it was a fire, round which a group of Hindoos were standing sadly and silently. "The Rajah was the kindest and best of masters, and these poor fellows are as grieved at his loss as if he were their own father," was the affectionate tribute of his English servant.

Presently came up an omnibus containing the body, which lay upon a plank supported on the knees of his attendants. As it was borne along to the pyre, the light from the feeble paper lanterns fell on the placid features of the young Maharajah. The turban and a richly embroidered robe which wrapped the corpse were of bright scarlet; the bracelets, necklaces, and jewels round his neck and arms were said to be of great value, and to have been consumed in the

fire. The body was then laid reverentially upon the pile; one attendant placed betel-leaves in the mouth and hands, a second piled camphor around it, another anointed it with ghee. Strange ceremonies were performed with a white linen cloth, which was folded and unfolded, while prayers were offered up; dough was kneaded and placed alongside the corpse, which was then carefully fenced in with logs and planks, forming a sort of box, into which were thrown perfumes and essences; fresh logs were piled up for about a couple of yards more; camphor, and a mixture of beeswax and turpentine, and a quantity of brushwood and shavings were added, and the mass was then kindled. The flames shot up brilliantly, driven by a strong gust of wind, throwing a lurid glare on the numerous spectators, the muddy Arno, the black clumps of trees, not yet quite bare of leaves, and the groups of Indians of every different shade of colour, from coal black to light brown, with their glistening white teeth, and turbans differing in shape according to the rank of the wearers. Each had his settled station near the funeral fire, and stood gazing intently on it during the long cold hours of the night, with a kind of mournful forlorn resignation which was extremely touching—many of them were weeping bitterly. At ten the next morning the

body was all consumed, the embers were extinguished by water from the river, the ashes were collected and placed in a porcelain jar to be carried home. Everything used in the funeral pile was then taken out in a boat and sunk in mid-stream, and the attendants traced the form of a heart with fresh mud on the spot itself, around which were placed small vessels containing rice. Then all the Hindoos knelt and prayed with their faces to the ground. The dismal ceremony was finished, and the forlorn retinue departed in silence, bearing with them the vase with the ashes in it, to be thrown into the Ganges when they reached their native land. The next day they had all left Florence.

And thus, far from his Indian and even his English friends, away from his country, his young wife and child, amongst men of an alien religion and of a foreign and unsympathising race, the poor boy-Rajah passed away. His death was a real misfortune, seriously to be regretted for every reason. He had made a great effort to visit England, had learned much, and was quite disposed to use his experience on his return to Kolapoor, and introduce many reforms, especially with regard to the education of women.

The English authorities had wisely discouraged any

important changes being made at Kolapoor during Rajaram's minority, lest they should be supposed to have taken place under pressure; and great fears were entertained that the reactionary party, which is very strong, and always "improves" such occasions to the utmost, would succeed in setting forth the perils and sin in changes of all kinds, showing how the wickedness of travelling is punished, and enforcing the moral of the danger of going among alien and heretic nations by so distinguished an example. The crisis, however, passed off with less excitement than was expected. There was much trouble about the succession, but a promising boy, about nine years old, of the line of Sivagee, was at last selected with the consent of the British Government. The "sugar of joy" was then distributed through the town from the palace in token of delight. The ceremony of adoption next took place by the "senior widow" of the Rajah, the little princess Tara Baee, then ten years old, taking precedence of the other as having been married first when only a baby. She took the boy in her lap, fed him with sugar, and laid her face on his head at the place where the skull joins, which was tantamount to accepting him as her own child. They were then both led before the image of the family god, and the various Hindoo rites duly performed. The little prince next took his seat on the

"gadee," and received the homage and presents of the leading chiefs of the South Mahratta country, after which the British official formally announced his accession in a short speech, earnestly hoping that "he would follow in the steps of the late Maharajah, whose loss was so deeply lamented by all classes." A great feast, where five thousand rupees were distributed in alms, ended the ceremony.

The Ranee mother on this occasion wrote a letter to the Claydon friends of her son, inclosing the photograph of the little heir and several others of the family. The letter was on a grand scale, written on paper nearly three feet long, and inclosed in a bag of crimson and gold "kincob," with a great hanging seal. It was headed by portraits (gilt) of the family god with an elephant head, and the redoubtable Bowannee with a peacock behind her. A beautiful gilt arabesque border passed between each line and surrounded the whole. It began thus :—

"To the dignified and exalted lady who sits behind a curtain and rides upon an elephant." The epithet implying that a great lady must be concealed by a screen is curious, as the word is Persian, for which there is no Hindoo equivalent in common use. It shows that the custom was adopted from the Mahommedans, and that it was a class word denoting high rank. The

letter proceeded: "When the Rajah, now in Heaven, was in Europe, you showed a great regard for him: this I used to learn from my son's letters. Your now remembering me makes me experience in my own person what he used to write. It is my hope that mutual regard will thus be kept up." She then mentions the accession of the new Rajah, aged nine years; and a postscript on the reverse side of the sheet, in her own hand, adds very sensibly, having said all she wanted to say, "What more should I write?"

Much pains have been taken with the education of the boy, and when the Prince of Wales held his great Durbar the young Rajah was present. He was described as "an intelligent bright-looking lad about fourteen, coming up dressed in gorgeous apparel, pink and gold, with a great train of elephants and horsemen." He spoke English well, and the Prince talked a good deal to him, and gave him a riding whip, to his great delight.

The little state appears to have prospered. Much had been done for education. During Rajaram's lifetime thirty-two schools were opened with good teachers, especially a school for girls, under the patronage of the Akasahib; but much remains to be done for the women. The poor little Ranee, the "senior widow," was not

required to perform suttee, which has been abolished under our rule; but in a letter from her father to the governor, he wrote pathetically how he had hoped "to see his daughter in the happiest position possible, but, alas! the Almighty Providence has in his goodness thought otherwise, and has snatched away from this world in the bloom of his youth the deceased Rajaram Maharajah, leaving my daughter, aged ten years, a widow for life." The full meaning of these words is hardly understood in Western ears. The sufferings and deprivations inflicted on a widow even of this age, never a wife, are grievous. Her head is shaved, she is to wear only "mean clothing," and is required "to do menial offices." She is never allowed to marry again.

The manner in which women were treated in Europe produced a great impression on Rajaram, and he had engaged a lady to go out and teach the ladies of his family. He "wished particularly," he said, "to have the Ranee instructed."

The husbands of the country seem certainly determined to ensure a considerable amount of grief for their loss, of some kind at least, among their widows!

And this is a change which lies at the root of all real improvement in India. "While the zenana remains what it is, the lowering effect of its atmo-

sphere upon the men of the higher classes, in childhood and manhood alike, is almost as injurious as to the women themselves."

"I was born in this courtyard, I have lived and been married in this court," said a poor Hindoo princess, who longed after better things, "and in this court I shall die," she added with a sort of groan.

The condition of the women is clearly not the consequence of any want of capacity among them. "When a native state is prosperous and well-ordered, it is two to one that it is administered by a female ruler," said a great authority.

That the members of princely Hindoo houses should obtain an experience and acquire ideas only to be attained by a visit to Europe is so important, and the difficulties thrown into their way, both natural and supernatural, are often so great, that it may be well to record how affectionately Rajaram spoke of the kindness shown to him in England, how much he seemed to enjoy his visit, what true interest was shown in his welfare, and what sorrow for his fate was felt by all classes who came in contact during his stay with the gentle, kindly young Maharajah of Kolapoor.

THANKSGIVING DAY.

THE sight of great masses of human beings, men, women, and children, all stirred by the same feeling, swayed by the same thought, is always of itself very striking; but when there are miles of such crowds, and we know that these were only the representatives of the sentiment of a whole people, there is something like awe in being thus brought face to face with that entity, a nation, which we talk of so glibly, and yet which we so seldom realise—whose collective strength when roused to feel thus like one man, is far mightier than that of the units who compose it would ever lead one to imagine.

It is well sometimes to be reminded practically of our national life, generally moving on so unconsciously, as was shown in the strong feeling evoked against the idea of yielding in the question of the "Indirect Claims," in the excitement on the "Slave

Circular," and against the conduct of Turkey, and as on "Thanksgiving Day," when we were one in sympathy with the Queen and her children. The degree of interest and loyal affection has, indeed, surprised some wise and many foolish men, who thought that the day for such manifestations was past; while abroad it was a source of curious wonder, malevolent or admiring according to the politics of the papers. Ill-natured, as when the Republican correspondent of the *Siècle* says: "I have had a glance at the streets. The spectacle is really revolting. I ask myself if these are really human beings. You cannot conceive what an ignoble sight is presented by this people in its monarchical loyalty. They are mad this morning: they will be drunk to night." Or admiring, when the *Presse* says, with a touch of regret for the absence of such a union of feeling in France: "Truly when we witness such a spectacle, we cannot abstain from admiring the British people, its political good sense, and the wonderful organisation which preserves it from violent revolutions. It is then we recognise England as the classic land of real liberty and parliamentary government soundly administered." Or when the *Débats*, representing, perhaps, the most thoughtful part of the French people, quoted with much feeling a speech of the French ambassador at the opening

of a hospital in London: "This public expression of English loyalty by a solemn thanksgiving induces a comparison between the institutions to which England is indebted for two centuries of prosperity, and the revolutions through which France has been struggling for the last eighty years. Since the compact sealed between the nation and the Crown in 1688, England has never once seen its laws violated, either by the caprice of a sovereign or the revolt of a mob."

The impersonal character of the rejoicing was exceedingly touching. Whatsoever pageant was to be seen had been contributed by the people themselves; the procession in itself was nothing—a few ordinary carriages and horses, with such an escort of the Life Guards as may be seen in the Park continually; while the joys and sorrows, the sickness and health, of those so far removed from the spectators would have seemed to make real sympathy almost impossible. Yet the purely sentimental interest was quite unmistakable—the loyal feeling for the Queen, as in some sense the mother of the nation; the tender rejoicing with her, and for her, upon her son's recovery; with the wife who had nursed him long and lovingly, and with the children so nearly left fatherless; and lastly, an amount of simple honest pleasure at the sight of the young

fellow risen, as it were, from the very brink of the grave. And that well-crowded carriage, filled to overflowing, in most unstately fashion, had in it something which went to the hearts of the spectators; its inmates had any amount of carriages at their command, but preferred to take their rejoicing, as they had endured their grief and anxiety—together, as a family. The Queen, the Prince, and her grandson sat in very close proximity; the three generations which, if England continues in the same mind as on that February Thanksgiving Day, will in succession reign over her, not as imposing their will upon the nation, but as the trusted executors of her laws, and the promoters of every good thing within her four seas. These are the engagements which people and sovereign (for the present and the future) freshly ratified together in some homely sort of fashion, as they faced each other for nearly four hours along those lines of crowded streets, and in that solemn church where together they knelt, giving thanks to Almighty God with one heart joyfully.

Mr. Freeman tells us that England has preserved the unity and identity of her history and institutions in a very remarkable way as contrasted with France and Germany. "From Hengist to Victoria she

has always had what we may fairly call a Parliamentary Government." France has tried every form and variety of mode of rule, kings and despots of every hue, brilliant states-general, conventions, directories, consulates, empires. The very variations in the maps of Germany are sufficient to show what changes of every kind have there taken place. "The homely Parliaments of England, altogether guiltless of political theories, have had no longings after great and comprehensive measures; but if they saw practical abuses the king could get no money till matters were set right; if they saw a bad law they demanded its alteration; if they saw a wicked minister they demanded his dismissal. It is this sort of bit-by-bit reform for six hundred years which has saved us alike from magnificent theories and from massacres in the cause of humanity."

A constitution is like a great forest tree, it takes centuries to grow to perfection, and when once destroyed cannot be replaced; and the bran-new attempts which have been made in various countries, when not growing out of the past, have been like the trees of liberty which the Parisians are fond of planting, which wither away because there are no roots in them. The English, it has been truly said, "are not an envious people." We do not dislike

seeing different "degrees and manners of men." There is none of the desire for equality distinctive of the French. Although the wish to raise themselves is strong in the Anglo-Saxon race, it is not accompanied by any longing to pull down other men; and on the present occasion it was very clear that the joys and sorrows of the Queen and her children were taken to heart by the nation as a family matter coming home to each one of them.

The day began somewhat gloomily, there was a symptom of rain, and a fear that the Prince would not be allowed to risk the fatigue of the procession, or at least that he could not appear in an open carriage; it would not do to run the risk of killing the subject of our rejoicing; but before twelve o'clock the weather cleared, and the immense masses which crowded all the spaces near Buckingham Palace, when they saw the open carriage containing Queen and Prince drive out of the great gates, set up that rejoicing shout of welcome which, without cessation or even lull, met and followed them through the seven miles of streets leading to and from St. Paul's. There was a moment of anxiety at the starting of the procession to see whether the necessary roadway could be kept clear from the enormous crowds, hard pressed from behind, and with scanty standing-room; but the order of the

people was complete there and everywhere; there was no rushing at any point; even when "loosed" by the onward march of the *cortége* they forebore to attempt to follow it. The Speaker's great glass coach, weighing three tons, and so heavy that it was difficult to find two dray horses strong enough to draw it, led the way. It was escorted by running footmen, and looked as if it had dropped out of a mediæval pageant, with the Speaker himself in his black and gold robes; the whole array was much more imposing than that of the Lord Chancellor in his modern carriage and dark liveries. The Queen was in the ninth carriage drawn by six horses, preceded and followed by Life Guards, who constituted the only feature of what could be called "pomp" in the whole arrangement.

Pall Mall is one of our few stately streets, containing as it does the nearest approach to Italian palaces of which London can boast; and it looked its best—the variety of outline told well against the sky, while the colours with which balconies, stands, and walls were dressed gave it the cheerfulness which our sad-coloured houses generally lack. Trafalgar Square was a sea of heads, and then came the lines of streets from the shop-windows of which the goods had been everywhere removed, and replaced by rows of living heads. Windows, balconies, roofs,

pavements, and side-streets were all crowded, while every space where a stand could be erected was filled to overflowing. The people, indeed, had—

> "Climbed up to walls and battlements,
> To towers and windows, yea, to chimney-tops,
> Their infants in their arms, and there had sat
> The live-long day, in patient expectation."
> *Julius Cæsar.*

The constant repetition of reds and yellows was a little wearisome in the decorations; but the lines of streamers, stretching across the streets, redeemed the monotony; and here and there the householders had massed their flags and their effects, which showed itself in a pretty fragrant shape at one point, where a hundred yards or so had been strewn with violets.

Ludgate Hill especially distinguished itself. The very derivation of the name is generally as much forgotten as the mythical king of London himself. The gate which once existed here—used as a prison till the last century—had been built up in evergreens and flags, while an unusual *entente cordiale* between the two sides of the street enabled a very pretty and at that time an original decoration to be carried out. Red Venetian standards, forty feet high, were planted on either side, with coats-of-arms half-way up, containing the shields and crowns of all the kings of England for a thousand years, from Alfred to Victoria; while shorter blue

masts bore the names of a hundred of the principal towns in the United Kingdom, India, and the colonies. This was the only portion of the route which the Queen passed over twice, leading up as it does to the grand Cathedral, the heart of the wonderful life of our enormous London, and which forms so noble a centre for the devotions of a great city. Over its front portico was inscribed, "I was glad when they said unto me, Let us go up unto the house of the Lord."

The crowd in the interior of St. Paul's during their long hours of waiting, as they looked at the grand harmonious lines of the building, the magnificent vault of the dome, and the massive strength of the piers, ought to have determined to assist in carrying out Sir Christopher Wren's designs, and doing justice to his memory. It is said to have nearly broken his heart one hundred and ninety years ago to leave his work unfinished—a mere skeleton, as it were, requiring that warm clothing of colour and ornament which the national feeling was asked to give as a memorial, "completing the Cathedral with the greatest richness of sober decoration" The steep inclines of heads and variety of dress, the crimson cloth covering the scaffolds, helped on this occasion to conceal the nakedness of the cold interior. Broad streams of

light pouring down from the lofty windows shone upon thirteen thousand of the most distinguished of every class in Britain collected there, and the Queen had not forgotten to ask that seats should be kept among them for a certain number of working men.

As the clock struck one came the punctual Queen up the long clear space from the western end of the nave, her sombre mourning on this day relieved by a good deal of white "miniver" fur. On her left was the Princess, in dark blue, holding a child by the hand, and on her right the Prince, in a field-marshal's uniform, looking somewhat pale and worn, leading another little boy, and followed by a long train of princes and princesses, soldiers and statesmen. As the organ pealed its loudest they passed slowly up to the seats prepared for them just under the dome, and knelt in the midst of their people.

The service itself was hardly adequate to the occasion. The Archbishop's address was good, and his clear voice was audible afar in the church, which is said to be one of the best adapted for hearing ever built. The music was well performed; but instead of some magnificent and appropriate works by the great masters having been chosen, the organist had been allowed to "compose for the occasion." The only successful part was at the close, when a very common-

place hymn was sung to a very ordinary psalm tune, which, however, being well known, was joined in by all present. This produced a mighty roll of sound, and gave the feeling of common worship—prayer and praise in common—particularly required upon such a day.

M. Taine is so good as to say of us in his last book, "Le fond est toujours religieux en Angleterre;" and although we may think that in this he does us almost too much honour, yet there could be no doubt of the religious feeling of this manifestation—the quiet, almost tender, character of the rejoicing, and, best of all tributes to the day, the entire absence of drinking or riot after the ceremony was over. Both the "colour" and thought of the inscriptions on the houses were very striking :—

"We asked of Thee life, and Thou gavest it him, so shall we sing Thy glory and power."

"Given to a nation's prayers."

"Give thanks to the Almighty for the restoration of our Prince."

"Thanks be given to Thee, O God."

These, and hundreds more, testified in an unmistakable manner to the feeling among the common dwellers in those myriad houses. On such occasions as these unpopular sentiments are not hung out

"for daws to peck at;" the bootmaker who put forth, "More is wrought by prayer than the world dreams of,"* felt sure that there would be a response among his neighbours and the crowd. Even the less serious mottoes, such as "So, happy be the issue of this good day and happy meeting," from *Henry V.*; "The nation's and the mother's heart are one;" and "England rejoices with her Queen," on the arch in the Circus, had a touch of real feeling in them.

The good humour of the crowds was unbroken during the day, and during the blocks occasioned by the illuminations at night; there was no impatience at the necessary inconvenience caused by their numbers, but a willingness to be pleased, and to make the most of any little diversions which came in their way, which was of itself a sight. In one instance a red mail-cart, with the familiar V.R. upon it, drove up along the sacred cleared space, and the crowd began to cheer, as if to keep their hands in; the mail-cart bowed graciously on all sides, then was overcome with emotion, and had recourse to its pocket-handkerchief, and finally disappeared, still bowing, amidst applause and laughter.

Sailors were everywhere welcomed warmly, as is always the case in England. A stoppage took

* The passing of Arthur.

place in Fleet Street to allow a lady to get out; there was a cry to move on; but when they spied a naval uniform by her side, "It's a sailor!" cried the mob; "one cheer for the blue jacket!" and all was smooth again. The Admiralty had arranged that men of every branch of the service should be sent up to join in the ceremony. The way was kept by them opposite St. Paul's—a very popular variation, though the soldiers were well received throughout the route. All the ships' lights which could be collected had been contributed for the illumination of the cathedral, and twelve men from the *Fisgard* placed, trimmed, and lighted three rows of lamps as soon as it was dark—green, white, and red—encircling the dome at different heights, while coloured fire of different hues lighted up the front of the cathedral.

The Thanksgiving was not confined to Great Britain, but at the same moment was being carried out in the colonies and India. The fellow-countrymen of so many different faiths—Hindoo, Mahommedan, and Parsees, Jews and Christians of every denomination—joined to keep the day. The Guicowar gave a lac of rupees for a public work in honour of the event; Mr. Sassoon erected a high school as a thanksgiving offering; the Parsees, headed by Sir Jamsetjee Jejeebhoy, met at the Fire Temple; the Jews held a solemn

service; about ten thousand Hindoos of all denominations assembled at the Mombadabee Temple, and offered up thanksgivings; meetings were held by the Mohammedans and every sect of Hindoos; more than one hundred thousand persons joined in the various services in Bombay alone.

So ended one of the most successful days ever known in the rejoicings of a nation. Such celebrations have been mostly for the accession to a throne or a marriage pageant; youth and hope, pleasant visions for the future, curiosity and the pride of life, have mingled largely with the feeling of the crowds. Or they have been for victories by sea and land—that is, for the suffering and humiliation of other nations, with a dismal background even for the victors of bereaved mothers and wives, ruined families, the happiness and welfare of thousands gone for ever, the sorrows of sick and wounded men, with health and comfort ruined. Or they have been for the funeral of a great general, with memories of past triumphs. But in this case there was no novelty; the Queen and Prince might often be seen elsewhere; there was no expectation of excitement of any kind; it was only a family rejoicing. The expression of the thousands of faces was that of quiet pleasure, content, satisfaction, emotion; which was reflected in those of the guests (as they might well be

called) of this "people's reception." The Queen, Prince, and Princess were clearly touched beyond measure at the feeling shown; while the almost entire absence of cases of disorder or drunkenness in the police courts next morning testifies to the self-control and good conduct which had been exercised even by our rudest classes.

There is an ideal, a "sentimental" side to the roughest and wildest among us, a chivalrous feeling which we might do well to cultivate more: man does not live by bread alone. In England, at least, it is not too late to weld together the bonds which should bind different classes of society, each of which has a duty that cannot be left undone without loss to the rest. There was one redeeming feature in that feudal system which has so nearly passed away, in the strong tie which existed between different orders of men. The chiefs of a clan felt themselves bound as a matter of duty, as well as of self-interest, to provide in sickness and want for their dependants, to protect and assist them in return for their service, in fatherly if somewhat arbitrary fashion, while the degree of self-sacrificing affection which they received in return was often wonderful. Both felt themselves in turn the servers and the served. This relation is to a great extent passing away. That we may reach a brother-

hood of men better than any past relation between them, may well be hoped; but in the transition state we seem often to drift into a set of individual repulsive atoms, each man and each class trying after its own gain and welfare to the neglect of the common weal, that "best for all, which must in the end be the best for each." The getting on system, with "the devil take the hindmost" as its axiom, the selfish spirit of the abominable old rhyme—

> "As I walked by myself, I said to myself,
> And the self-same self said to me,
> 'Look out for thyself, take care of thyself,
> For nobody cares for thee'"—

can be no improvement for the world in any sense. Instead of that ideal which Macaulay makes the old Roman fancy in a past golden age, but which we trust to see in a "good time coming"—"when none were for a party, but all were for the state," &c., &c.

No one can have lived much among working people without feeling that there is much besides political economy, however true its doctrines, to be considered in dealing with them; their grievances are often "sentimental," in the feeling of want of sympathy and want of consideration in those above them, particularly among the town populations, where such intercourse is more difficult than in country districts.

Still, in England there is no real rankling between classes, as in many foreign nations. And there is amongst us a belief in the division of labour. The millions who thronged the streets must feel their power, yet, when once their share in the choice of their rulers has been made for the time, they are content that their government should be done by delegation—the symbolical and ideal portion, as it may be called, by the Queen, whose part in the constitution was seen on that day to be very real in the binding together of the whole; the executive and legislative by the little crowd of gentlemen in plain clothing, Lords and Commons, who slipped in from the river, by a back street, from a penny steamboat, through a side door, into the national church, to take their unostentatious part in the general thanksgiving.

In France "every soldier considers himself as good as his officers," and the refusal to obey these completed the disorganisation which ended in the misfortunes of Sedan; every shopboy and artisan seriously entertains the hope and prospect of changing the institutions of his country, and, perhaps, of ruling over it as its head. It is not good that this should be the ideal of a nation. The chance of the wisest reaching the chief places, which should be the object

of all government, is not increased by the notion that it is every man's business to conduct the affairs of his country. A certain amount of training is needful, from the cobbling of shoes to the management of the affairs of a nation; and in this, the most political country that exists, where most men take a strong interest in what is doing by and for Great Britain, they yet generally seem to feel the moral in the fable of "the belly and the members," that "all cannot be at the head of things." Our contrivances for obtaining the wisest men for our leaders may want much improvement, but certainly neither America nor France appear to be more successful in their methods of search or their choice of statesmen. There is a passage describing an ideal perfect state in Mr. Jowett's "Plato," which declares that the habit of obeying the laws is so invaluable, that changes should be soberly and cautiously introduced, as the traditions of order may be lost in the search after theoretic improvement of the machinery of government. It may therefore be hoped that our "bit-by-bit reforms" will continue to bring about the improvement, not the reconstruction, of our institutions. The æsthetic feeling of England objects to the chosen of the nation, a plain man in a plain coat, being set up, as in some countries, to have his arm treated like a pump handle by any number of

men who choose to shake hands with him. The pomp of a military monarchy is as little to our minds. We have struck a middle course as to our rulers, in the rather haphazard fashion which is our wont, but which, on the whole, suits our feelings and our taste.

The Queen's short letter thanking the people for their affection, and making no mention of the foolish and wicked attempt upon her life by a mad boy, which had just taken place, fitly crowned the record of this great national demonstration.

SKETCHES FROM NATURE.

PART II.

THE DWARFS' FOREST.

"Then up there rose a wee grey man
Frae 'neath the moss green stane
His face was wan like the colly fleur,
For he neither had blood nor bane."

WE have found the place where the wee grey men used to live (if ever they lived at all, which, strange to say, it seems there are people now found to doubt; but then everybody doubts about everything nowadays). There is a great plateau of rugged, rocky, boggy moorland in the middle of Devon called Dartmoor, which stretches high and treeless over many thousand acres, and is singularly wild and barren. A number of round-shouldered valleys run up into it, worn by the action of the bright brown streams, large and small, many of which fall into the Dart. In one of the most secluded of these, far up in the heart of the hills, beyond all

traces of man or cultivation, where the boulders of blue-grey granite are strewn on the steep bare hill-side, and piled up here and there into fantastic tors, there nestles in among the stones a forest of lilliputian oak, fully grown, but only from four to ten feet high, with trunks two feet and more in diameter, looking old beyond description.

The wood ends at a tumbling, wild, dashing stream, rushing down from the central bog of the moor, which is almost impassable; and the patches of moist treacherous ground about its banks, bright with green and yellow sphagnum, asphodel, and moss, are fringed with long sedge-rushes haunted by adders.

The moors were rich and brilliant in colour with their autumn tints, and the deep brown of the oaks and fern, the cold grey granite, and the purple heath were all melting into a soft blue distance. As we came up the combe, the trunks of the little trees looked generally about the height of a man, and mostly bigger round than his body; they were often hollow and decayed away, almost into soil. Strange, wicked-looking little antiquities they seemed, which might have been coeval with those prehistoric folk who used the flint weapons; and I hope had the nice little elephants, three feet high, "like pigs with

trunks," to play with, whose bones have lately been discovered in some rocky caverns of probably a not much earlier date.

The soil is extremely shallow, and the branches all slope one way, driven by the fierce Atlantic gales, which are felt even in this inland spot, and which blow without a stick to stop them from America to Dartmoor. Shaggy, contorted, and bent, the tangled mats of boughs run out horizontally for ten or twenty feet, covered with tufts of feathery fern; while long grey beards of moss wave to and fro, and give a most weird look to the whole. One could believe in any amount of cluricaunes and pixies dwelling in such a strange, haunted-looking forest; instead of which it had been taken possession of that day by much less picturesque people—the statisticians, botanists, and geologists who came down upon it from the Exeter meeting of wise men.

I sat down alone amongst the queer little pigmies on the hillside; the rest of the party had gone on to the Devil's Tor. The dusk was beginning to fall, and I was very still, watching the young moon, which was rising over the valley, when suddenly it seemed to me as if the wee grey men must have come back again, for there certainly sat one in the shadow, where I was sure he had not been before;

he must have come up out of the ground! He was quite of the right height and colour, and was look-

ing intently at me, as I could just see in the gathering gloom. Presently he slowly put up one short

little arm, and then the other, and wiped his nose upon them—as is much the habit of fieldfolk in Devon and elsewhere; perhaps pocket-handkerchiefs were scarce, too, among the little grey hillmen—and then he remained motionless, and so did I. But I was meditating a rush in order to seize him by the waist, when, as is well known, if I could only keep my eye upon him he would have been obliged to show me where to dig for the crock of gold, or give up the little purse with the ever-renewed penny in it; the only difficulty being, that if he can but cajole you into once turning your head the spell is broken and he invariably vanishes. I was measuring my distance, when his great suspicious eyes shone, it seemed to me, even in the dusk, and suddenly he came down on all fours, and drummed violently with his hind legs upon the ground, as a signal of danger; for there was a very distant noise of voices, which he heard long before I did. Alas! he was only a coney, who had made his dwelling among the rocks; set, however, in a post of much dignity and responsibility, as sentinel to a large colony of friends and relations, who ordered their outcomings and ingoings according to the telegraphic thumps which he delivered for their guidance. And then the outside car drove back again down the steep

hillside, and I heard a voice say, "You must make haste, Tomkins, or we shan't be in time for the express from Plymouth." We were in full nineteenth century again, and cluricaunes, and pixies, and Pucks all vanished as I reluctantly turned away.

Still, as we drove slowly along the rough heath track, I looked back regretfully, and saw the rising moonlight, though the sun had not yet quite disappeared, lying softly and tenderly upon the grey hillside, the grey stones, and the weird little dwarf forest, over which the night wind, which was beginning to rise, sighed with a hollow sort of music among the fern. And it somehow seemed to me as if the instant our backs were turned—geologists, botanists, statisticians, and all—the little grey men came back again and took possession in spite of our scepticism; and it is my full conviction that they are all there now.

Go and see for yourselves. But you will not find them! Did you never look for a robber or a ghost behind a curtain? He is not there; but the moment you have gone once more to your seat he has got in again somehow, behind your back, and you cannot help returning to look again. Still he is never to be found. It is only the haunting sense of the

unseen. "Nature abhors a vacuum," you know they say.

That is the way, I feel sure, with the wee grey men in the lonely little Dwarfs' Forest, commonly called Wistman's, that is "Wise man's," or Wizard's Wood, on Dartmoor.

THE NIGHTINGALE'S NEST.

MAY-DAY MORNING.

WE have been paying a series of morning visits. It was a fine, sunny, warm May day, and nobody was at home, so I took advantage of my friends' absence to examine their houses. It seemed a little impertinent, but let us hope they did not find it out.

First came a nuthatch's home in an old pollard oak. Do you know him? The least of the woodpeckers —short, thick, big-headed—who takes a nut in his

large beak, inserts it cleverly into a cleft in the rough bark, and clinging topsy-turvy to the trunk, sets to work hammering with his head till he splits open the shell with the sharp point of his bill, and enjoys the inside. I found half-a-dozen empty nut-shells in as many slits of the tree.

The irregular hole he had chosen was not far from the ground, and large enough to admit objectionable persons, so he had nearly closed it with tempered clay, leaving only a neat round mouth, the edges carefully smoothed, so as to admit his wife and himself without damage, but only just sufficiently big for their own use. It was lined with beech and birch leaves brought from other trees. I suppose those of the oak, nearer at hand, were too large and "crinkledy" for the space inside—it was so deep, however, that our fingers could not reach the two speckled grey eggs at the bottom.

A little farther on was a low clipped holly-hedge not four feet high, the sharp pointed leaves so close that I could not get in a finger without being scratched. But in their midst was the pretty little nest of a hedge-sparrow, with five sky-blue eggs, looking extremely comforable set round with spines and spikes. How the birds contrived to build it without being torn to pieces one cannot guess.

In just such a nest, in the same hedge, a year or so back, a lazy cuckoo had dropped her egg. When the young intruder came out of its shell, as it grew and grew and wanted space, it ejected the rightful occupants one by one—first went an egg, then each little bird in succession. When we looked in the whole nest seemed filled with one big mouth, always wide open from ear to ear, and always crying for "more," while the poor little foster-parents flew wildly backwards and forwards, at their wits' end to provide enough for its voracious maw. It was like the story of the Fairy Changeling in the Irish legends, where the ugly uncanny thing has been put by the fairies in the place of the poor baby which they have carried off, and which eats the wretched people out of house and home. But the hedge-sparrows, puzzled and tormented as they must have been by their hideous selfish sham child, never relaxed in their tender care, and they were even seen following and feeding him after he had left the nest, and was awkwardly "stravaging" across the grassplot, in a hobble-de-hoy schoolboy state, scarcely fit to take care of himself, yet too proud to stay at home and be looked after.

But I must keep to the visits really paid on that pleasant May morning. We strolled on through an open grove of tall birches, whose feathery boughs

were hung with the bright, early spring foliage, more yellow than green. The large rude nest of an ugly hawfinch, made of twigs and little else, was balancing itself on a long loose elastic branch some twenty feet from the ground; it moved with the gentle breeze of that quiet day, and must have been a lively cradle for the young finches when the storms blew.

Next we reached a sunny sandy sloping bank, ending in a dry ditch covered with brambles, in their spring costume, light and elegant, before they were hardened by the world and bad weather. Groups of bluebells and curly-headed ferns pushed their way through the tangle. The "rathe [early] primrose" was nearly over, but small bright white strawberry stars were coming out up and down the banks. This seemed to be a most popular spot with the birds, there was a perfect street of little homes. First a blackcap's nest, made of bents and lined with hair. A few steps off came the lovely domed nest of a willow-wren, a little ball of brown bracken lined with bright green moss; it belonged to a decidedly more advanced order of architecture, as it was covered in from the rain. It is curious, however, said my companion, that the birds who are most susceptible of culture, the higher minded birds in short, build the rudest nests. For instance, the bullfinch, who can be taught all manner of accom-

plishments, and whose affections are so strong that a bird has been known to die in a fit of pleasure at seeing his mistress return after an absence, puts together only a few rude bits of twig; while the chaffinch, who is but a stupid little bird, ornaments and cockers up his exquisite little cup of moss and hair with bits of white lichen or red worsted, anything, in short, which he can pick up that is bright and pretty, evidently put in merely for the love of beauty—pleasure to the eye, not use.

After these works of art I rather despised a thrush's somewhat coarse nest of sticks plastered with mud, in a thorn-bush—though it was full of eggs—and a blackbird's farther on, in a rhododendron bush, was quite beneath my notice, with five extremely ugly children in it, all mouth and legs, which opened their yellow gullets as if they expected us to drop in worms.

But then came our pearl of finds. In a low tump of grass and fern and flowers and leaves, not a foot from the ground, arched over with brambles as a defensive outwork it is true, but only just concealed by them as they bent over the little home—which I should have passed a dozen times without remarking anything particular, so artistically natural was the disposal of the whole—had a nightingale built her nest; it was surrounded by a wreath of brown

oak-leaves, set quite regularly, overlapping each other, with a curious little waterfall or tail, as it were, apparently of the rejected leaves, but which were nearly as carefully arranged as the wreath itself. It was very deep, like a coffee-cup, and lined with bents; delicate, graceful, light, and airy it looked, like its builder, and one little olive-green egg just laid was lying at the bottom, slim and dainty.

"What a charming dwelling," said I, "and so comfortable!"

"For the children, perhaps," answered my companion, "but I don't think it is so for the mother. In these deep nests she has to sit with her tail almost upright at one end, and her little head cocked up at the other, her eye looking over the edge to spy mischief, instead of the comfortable way in which the birds who make flat nests can lie at their ease."

We went wandering on again; aromatic smells came from the ground-ivy under our feet, little white-tailed rabbits sprang across the path, sweet scents and sweet sounds were in every direction; it was the first hot day and a paradise for all living things, including ourselves. The nightingales were answering each other through the wood; from near and far away the long notes came thrilling through

the air. At this time of the year they seem to sing all day as well as all night long. When do they find time to sleep? One cannot imagine such a life of pure music—perpetual, indeed, as theirs seems to be during the month of May. Presently, at a burst of song, we looked up, and there among the almost bare boughs just above my head sat the melodist. The

motions of his throat were distinctly visible against the sky, as he poured forth a strength of joyous harmony almost incredible in its delicate power and the length of the prolonged notes, when compared with the tiny brown songster we were watching, from whom the sound proceeded; while every now and then, at one particular trill, came a jerk of his tail as if to help him to utter it. There was a thrill of joy in

the music. How could the nightingale ever be called sad ?

My Mayday visits had been very successful, though I had not gone many hundred yards in the wood. But then I had a guide who knew the manners, the feelings, and the customs of the inhabitants; while of most of us it is true, that "eyes have we, but we see not; ears have we, but we hear not," though unfortunately we all still go on "speaking with our mouths" just the same.

THE LIGHTHOUSE DONKEY.

I HARDLY know how to tell my story in proper terms, it is so exceedingly immoral, showing as it does the success of envy, malice, and all uncharitableness; how a cruel, premeditated, and unprovoked murder may be committed without any punishment, and the murderer live on respected and apparently contented, though suffering, we must hope, internal agonies in his conscience.

I must begin, however, at the beginning.

There is a lighthouse built upon a rocky islet jutting out into the stormy Irish Sea, surrounded with dangerous reefs, where vessels of old were continually wrecked, and even now often come to grief. It is joined to the mainland by a small suspension-bridge, and can only be reached by a staircase of some three hundred and sixty-five rude steps winding down the face of the cliffs, the rocky ledges in one place little

better than a ladder, while on either side the precipices rise five hundred feet sheer out of the sea. Upon this island live the lighthouse-keeper, his wife, and donkey, and up and down this path these three pass every week to get their provisions at the nearest little town some three or four miles away. At the top of the rock is a shed where a small cart is kept, to which they harness the donkey, make their expedition, and return again along the craggy, steep mountain road behind the promontory. When the party once more reach the top of the steps, the cart is put away into the shed, the goods are bound on the back of the donkey, who, with much neatness and despatch, proceeds to step with his load carefully down the stairs and across the little bridge, then up again into the island, carrying everything safely into his rocky home.

Things had thus gone on very prosperously for some time, though living was a little scanty, as the island produces little but sea-birds, which lay their eggs on the ledges of rock all round. These are so narrow that if a human hand attempts to lift an egg, it is impossible to replace the round and slippery thing once more, and it rolls into the sea. Yet here, on a margin of two inches or so, the guillemots may be seen sitting each on her single, long, bluish egg, their little white stomachs bolt

upright, in rows close together, but apparently quite comfortable. The gulls and razor-bills take it easier, and squat less stiffly over the two eggs which they lay. The clamour of the clouds of birds all talking at once is deafening. The colony is most regular in its habits; it appears on the island always on the same day in February, having previously sent an embassage of select birds about a fortnight before to see that the rock is still in its right place, that their seaside lodgings, food, &c., are all in readiness. After their young ones are fledged, the birds all leave the cliffs on the same day in August, and their children are not allowed to return to the community, it is said, until they are two years old.

The birds are preserved with almost religious veneration; in a fog, when the light is invisible, and the bell, which is supposed to sound a distance of two miles, is unheard in the thick air, the noise of the birds gives warning of the dangerous coast at hand.

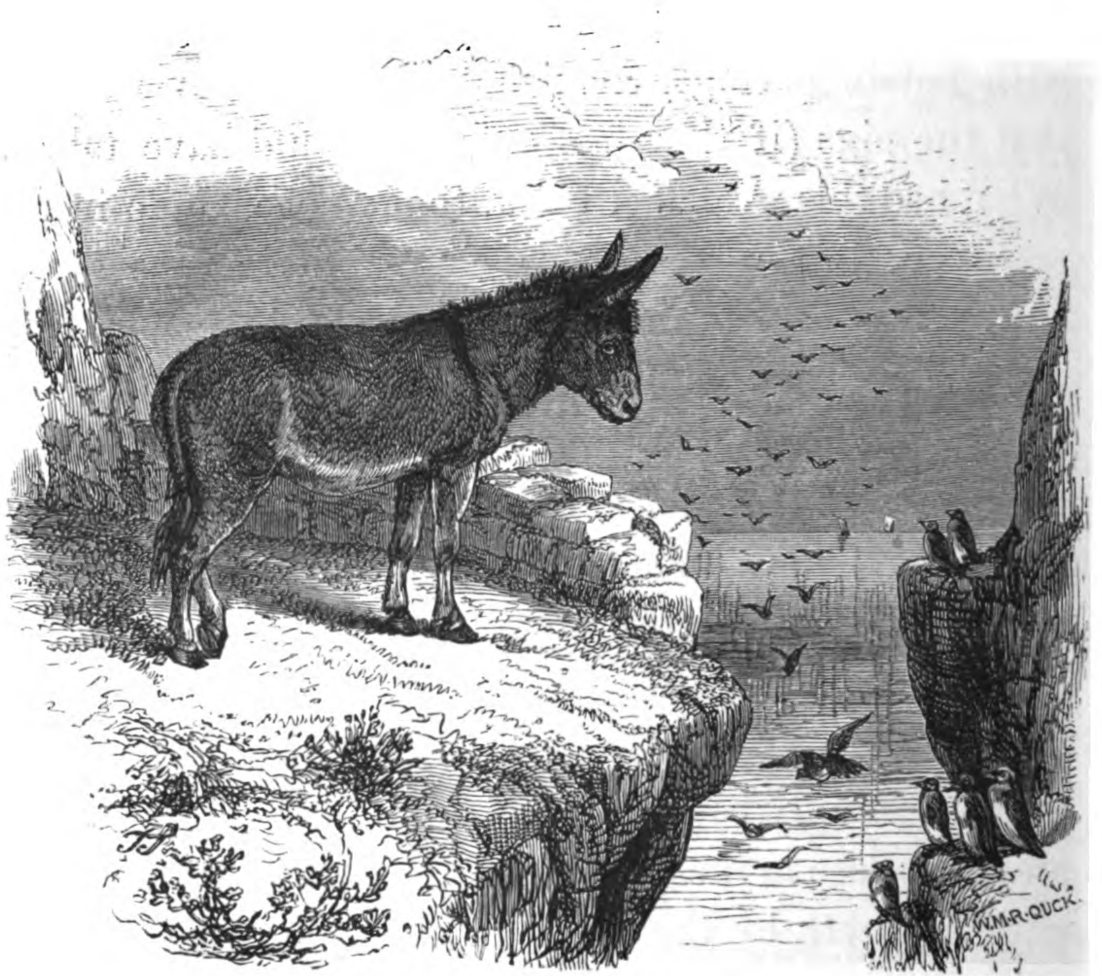
Nothing could exceed the peace and harmony of the island. The gulls and the donkey did not in any way interfere with each other; he was happy both in the society of the summer and the solitude of the winter; when in an evil moment the lighthouse keeper took it into his head to add a pony to the

establishment, which was brought down the endless steps with a great expenditure of trouble.

The donkey was hurt as to his feelings as well as in his stomach. Clearly there was neither room nor a living for two on that bare rock; the blades of grass were already so scanty that he had to eke out his dinner with potato parings, &c.; indeed, he ate everything that the pigs (if they had existed) would have taken. What had this wretched beast, thought he, to do in his territory, infringing on his rights, taking the bread out of his very mouth? He was naturally excessively cross, and gave way to his temper, and plagued and tormented the miserable pony out of his very life. Still the obdurate lighthouse keeper would not rid him of his enemy, and the donkey began to see that there would be no end to his annoyances unless through his own exertions.

One day, prompted doubtless by the devil—at least *he* would certainly have laid the blame there—he suddenly crept up close to the pony's side, seized him traitorously with his teeth by the scruff of the neck, dragged him to the edge of the rocks, turned round, and kicked him nearer and nearer to the precipice (everywhere but a little way off), and at last fairly pushed him over the edge into the breakers below. It was all too quickly done for a rescue; the lighthouse man from

the top of his tower, helpless to interfere, saw the poor pony, still alive, floating out to sea over the reefs, the gulls hovering above him ready to fall on him and banquet upon his remains !



An attempt was next made to bring in a she-goat; but the donkey was so much the strongest and most astute of the two, that she was obliged to be carried away almost immediately, or it was clear she would

have soon shared the pony's fate; and the donkey now reigns undisputed lord of the situation!

I saw the murderer, standing quietly munching an indescribable something, apparently with much enjoyment, under the shelter of a low wall overlooking the restless foaming waters far beneath. But although he seemed to be ruminating sternly, it did not appear to be on his crimes. I thought he had a very bad expression of face, and that his eye was wicked; but as I was above a quarter of a mile away, on the top of the cliffs, this may have been the effect of a vivid imagination. What is certain is that he is very handsome of his kind, large and prosperous looking, and certainly does not pine under the remorse which, according to all codes, human or beastly, a well-regulated donkey ought to feel for this his most abominable and wicked action.

Here is a picture of the murderer—if Madame Tussaud should desire to add him to her collection of such persons.

THE SHOVEL-NOSED SHARK.

THIS is a "sketch from nature" of the jaw of a young shark, a tender innocent, indeed, he might be called, for if his life had not been cut short by cruel fate he would have attained to the dignity of nine rows of teeth, instead of the poor five which, as may be seen inside the mouth, this little victim had been obliged to put up with. A shark's age is counted by the number of these rows, and his jaws are the most awful engine

of destruction which exists in the animal world: they are the best possible means that could be devised to seize, to cut and tear, and finally to hold fast any slippery subject, though of no use to chew or masticate.

Still there seems a superfluity of naughtiness in this array of edges and serrated points, set thus in one range following up another, which he can erect or depress at his pleasure. It is almost dangerous to run one's finger over them, the points are like knives, the jagged edges along the finely modulated curves of

each three-cornered tooth are so keenly sharp, even in the lowest, almost embryo, row.

There is a sort of hinge in the middle of both upper and lower jaw, and from this centre the teeth point different ways, gradually diminishing to a mere root; each is a brightly polished piece of ivory, and each little jag of the graduated saws is exquisitely finished, and varies according to its position. The mouth in question, when open, measures nine inches across, and is about two feet round, but in a full-grown monster the jaws are wide enough to pass over a man's shoulders without touching them. The nose is

blunt and rounded, with very small eyes almost at the top of his head.

The shark is the scavenger of the sea, the equivalent of the hyena on land, and he swallows whole whatever offal is flung overboard from the ships—bolting it without any action of the teeth, unless when his prey is too large to go conveniently down his throat, and he breaks it up as it passes.

The coats of the stomach are extremely strong, and some crushing action appears to go on inside it to prepare the food for the gastric juice, as a substitute for the mastication with which other warm-blooded animals reduce it to a pulp in their mouths.

He is so fearless in his voracity, and follows a ship so pertinaciously, that his habits are better known than most of the sea denizens; and familiarity certainly does not in this instance breed either respect or affection.

With the passengers on board the merchant vessels to and from Australia shark-fishing is a favourite pastime. The capture of one of these twenty feet long was thus told: "Our ship was at anchor, and I was holding a line over the side when the rope began to quiver. I felt that I had hooked some big fish, and pulling it cautiously, a large shark came to the surface. I called out loudly, when all the passengers came to

my help. He struggled, however, so violently, lashing the water with his tail and trying to bite the hook asunder, that we were obliged to keep dipping his head under water, and then haul him up two or three feet, so that the water ran down into his stomach. We went on repeating this till he was nearly drowned; then sending a running bowline down the rope by which he was caught, and making it taut under his hindermost fin, we clapped the line round the steam-winch and turned the steam on. Some of us then hauled his tail up, while all available hands dragged at the other line which held his head. As soon as we got him on board he sent about three feet of the ship's bulwarks out by a lash of his tremendous tail, which was cut off by the boatswain with a hatchet, while a dozen of us with bowie knives finished him and opened his maw. Inside we found six large snakes, two dozen lobsters, two empty quart bottles, a sheepskin and horns, and the shank-bones of beef which the cook had thrown overboard two days before. The liver filled two large wash-deck tubs, and when the cook melted it down we got ten gallons of oil which sold at Brisbane at 4*s.* 6*d.* a gallon." When his remains were thrown over the side they were, as usual, very soon disposed of by his affectionate friends and relations who were waiting

near, delighted to profit by the good fortune of his death. The flesh is not bad eating when the fish is young.

The shark is always attended by a small blue pilot-fish, which swims about five yards in front of him, and evidently guides him and warns him of danger, his unwieldy size and length making it difficult for him to turn. The pilot-fish appears to do his kindly offices from pure friendship, with no filthy lucre of gain; but he probably benefits in some way by the leavings of his great ally, or the small fry which gather round a dead prey. There is another attendant, more strictly speaking a parasite—the Sucker-fish, about sixteen inches long—which attends the shark, fastening itself on by a curious patch at the back of its head, not unlike the sole of an india-rubber shoe. This adheres with such force, that a strong man can hardly drag the fish away when it has attached itself by it to the deck. Sometimes twelve or fifteen of them may be seen hanging on to one shark. Probably they find it convenient to seek their food, travelling thus as it were on their own carriage, free of cost or trouble, and rushing through the water at a rate which their unassisted exertions would certainly never attain. But, on the other hand, they must endure some very "bad quarters of an hour," when their great

friend gets into trouble, hanging helplessly on as they do to his fortunes whether good or bad.

The perils of death at sea are certainly doubled in the regions where these dreadful jaws are to be found. And the certainty of such an end was one of the most touching features of the simple heroism shown by the soldiers on board the *Birkenhead*. She was a transport vessel, as is well known, employed during the Caffre war to take out detachments to various regiments in South Africa, with their wives and children. She struck on some sharp reefs infested with sharks near Simon's Bay, and it was soon found impossible to save her. The men were drawn up on deck by their commanding officer, and not a soldier stirred from his place as the women and children were put into the few boats and sent off in safety to the land, the whole body of men, with their officers, standing as firmly as if on parade. They then all threw themselves into the sea, securing whatever loose spars, hen-coops, or floating gear of any kind they could lay hold of. One of the few survivors described how if so much as a leg hung down from the miserable refuges to which they clung it was snapped off by the sharks, while all who attempted to swim were pulled under and devoured immediately. Few indeed were those who reached the shore in safety, but the

memory of their quiet obedience to duty and chivalry towards the weak, in full view of such a frightful death, will live in the hearts of England as a proof of the noble qualities so often shown by the British army—far more difficult to attain than to face a whole array of cannon in even a Balaclava charge amidst the excitement of battle.

There are many braver things done in quiet unobserved moments and obscure corners of the earth, indeed, than before the enemy. A young officer of engineers was stationed some years since in New Zealand in a very out-of-the-way district, far from the settled country. He was a gallant fellow, full of high aims and objects; besides which he rode well, shot well, could manage a boat and swim admirably, and had attained a twofold influence among the natives by his fearless courage and his noble nature.

One stormy winter's afternoon, the sea running high and a tremendous surf over the bar, which was notorious for sharks, a ship was seen labouring into the roadstead of the small port near which he lived; she was hoisting signals of distress, and was believed to be an expected emigrant vessel, and therefore with many women and children on board.

The weather was so bad that there seemed no chance of her outliving the gale, and not a sailor

on the shore would lend a hand to help, when Captain Symonds proposed to man a boat. Perhaps it may be said they knew the perils to be encountered better than a landsman, however expert. Captain Symonds then called upon the Maories to join him, and they immediately followed him for the sake of sufferers not of their own race or country, and with a risk of life which the Englishmen refused to encounter.

The boat pushed off; the wind was on the shore, the surf running violently, with a cross-sea which made it more dangerous. Still, however, the little boat held on till within a few cables' lengths of the distressed vessel, which was watching them anxiously, when the tremendous heave of a wave struck her side, and she was capsized. Captain Symonds was seen swimming undauntedly towards the shore, holding on by an oar, but he was swallowed up by the sharks before he had made any way. Two of the gallant black fellows escaped. The vessel perished in the gale, with all on board.

A far higher kind of courage was required to face such a death on that dark stormy winter's evening, in the attempt to rescue unknown passengers on board an unknown ship, than to storm the worst breach ever surmounted in war, surrounded by comrades and with the hope of renown. In what was then so remote

a field, far from all help of sympathy, the young soldier was ready to risk his aspirations, his healthy love of life, and longing after distinction, with the brilliant career open before him, for the sake of simply doing God's work at the moment it was required, with no interior bargaining as to the "worth while" of the sacrifice. It was as gallant a deed as can be found even in the long record of brave and obscure self-sacrifices made by our English soldiers and sailors in all parts of the world, the greatest portion of which are scarcely heard of at the time, and are too quickly forgotten afterwards.

The sharks are certainly not heroic themselves, but they are the cause of a great deal of heroism in others.

SWALLOWS.

"Oh, swallow, swallow, swallow, flying south."—*The Princess.*

IT had been a cold, wet spring—east wind and sleet and misery; the flowers were late, the insects which live on them later; nobody seemed to have the

heart to hatch any eggs, or any plant to open a bud. I suppose the swallow newspapers had neglected, however, to mention this, or perhaps their English "own correspondent" had been deceived by an odd fine day or two into fancying that it was spring. Anyhow the swallows appeared from Africa, or wherever it is they spend their winters, before the world here was ready for them. They came in, buffeted by the storms on their passage north, weak and tired, and finding nothing to eat and not much shelter on their arrival. Accordingly, a number of their little corpses were found strewn about, looking very dismal, on the gravel path leading up to our door. We lived just out of the town.

Next day the children found three birds in the nursery, which had taken refuge through the open window. One lay on the floor apparently dead, another hung by his feet, head downwards, from a towel-horse, the third crouched in the corner of a shelf.

I had just come in from a long and cold professional drive, and, after running up-stairs to see my wife—for a new baby had arrived only the week before—was going down again to get some dinner.

"Poor tinies!" said Susy, following me with one of the birds in her little hot hand; "what can I do for it, papa. You are a doctor, you must know." The

children were now all standing round the table to help me to eat the cold mutton.

"I can't bring the dead to life," said I; "it's been starved. There's nothing for the swallows to eat, that's all that's the matter with them." I was very tired with my day's work, and scarcely looked up.

"It isn't quite dead; the little heart beats. Papa, you *must* see to it, and cure it," said Susy, jumping on my knee and jogging my elbow.

The children had chopped some meat fine and were putting it into the bird's mouth, but it could not swallow; one little particle which went down seemed nearly to choke it; crumbs of bread were even worse.

Fat little hands now took hold of my face and shook my chin. "Papa, you must doctor it!" was the chorus.

"You musn't bother papa," said Lizzie, sagely—she was older than the rest, and considered herself a sort of deputy mother when the real one was up-stairs—and then she forgot herself, and began insinuatingly, "You know you can do anything, papa."

"Go and ask in the kitchen for a little of mamma's broth in a cup," said I, at last, with a groan, having swallowed my food, and lying half asleep in the arm-chair. "You're worse than the widow; and the unjust judge was very much to be pitied; there's a great deal more to be said for him than I thought!"

Except the baby—baby no longer now that a new one had taken his place—everybody went off together, and everybody returned together, escorting the cup with great pomp and a tremendous noise.

"I wonder all the little birds didn't awake from any amount of death," said my wife, smiling, when she inquired afterwards what we had been about. "It's time I should be down-stairs again; you'll let the children worry you to death."

"Now, papa, what next?" said the company eagerly, each child with a bird in hand crowding round me.

"Make haste, papa!" cried Tommy; "mine's almost gone."

"The broth's too hot," said I, with my eyes shut, out of the depth of the arm-chair. "You must cool it; pour a few drops into the saucer."

I took up my first patient, who seemed indeed at his last gasp, and lay quite still in the doctor's hands. I pressed the sides of his throat gently, just under his chin, with my finger and thumb, to open the mouth and excite the muscles used in swallowing, and into it let fall a drop or two of the broth from the end of a finger. The bird opened its eyes, but closed them directly. I repeated the dose again, and yet again; he began to shake himself; a little more, and he had hopped upon

my hand, and in a few minutes had begun to preen his feathers, sitting on the back of a chair.

"*He's* quite jolly; now you must see if you can 'do' for mine," said Tommy, pressing forward, scientifically interested, as it were, in the experiment, but not caring much for the individual; while the little girls were entirely engrossed in the birds themselves, and did not care at all about the abstract question of the cure.

The third was a difficult case, very long in reviving; but at last he also "came to," and the birds then all flew merrily out of the open window.

In a few days our weather improved, the sun came out, and the swallows began to build their nests under the eaves of the gable of an old house which stands at right angles to us. The children declared they could see a certain red thread which Lizzie had tied for purposes of recognition round the leg of one of the birds, whom, for some inscrutable reason, they all called "Tommy."

The skimming and gliding of the indefatigable little parents went on the whole day. They were always on the wing, without pause or rest, sweeping the air high and low in search of insects to satisfy those outrageous little gormandizers, their children. As these grew older, they kept up a most ugly, pertinacious, obstinate twitter whenever there was a pause in the feeding.

"More, more, I haven't had enough." "It's my turn now: why didn't I have that last fly?" they went on saying over and over again most distinctly.

It is said that very self-sacrificing parents sometimes have most selfish children. I am sure it was so here, but then this was probably made up for by their spoiling their own children in the next generation quite as much, when they in turn grew up.

I find it rather difficult to provide food and clothing for my own six; but what would it have been if they required a mouthful all round every five minutes, and during the whole day through? So, on the whole, I resigned myself as better off than the swallows.

The flies and beetles on which they feed are so small that many hundreds must be swallowed for a meal, and on a fine day the throat and pouch of a swallow have been found quite stuffed with them. Its head may be said to be all mouth, so wide and gaping are their short beaks; they have little more to do, indeed, to catch their prey, than to fly with open mouths and close their beaks when they meet with an insect. "The sharp click may be heard on a calm day," says Bishop Stanley. "The bird is so light that it weighs little more than an ounce, while the spread of its wings when full grown is eighteen inches, so that it can turn, wheel, rise, and fall as quick as thought."

The power of its muscles must be greater in proportion to its size, or at least more continuous, than that of almost any living thing. If you watch other small birds, their wings in general have difficulty in keeping them up in the air above a few hundred feet, while the swallow is rarely seen to perch as others do, much less to rest on the ground; but high in the air, piercing the bright blue sky above our heads, where its little white breast glistens like a star—far up, as far as our sights can reach, swooping down to the shady lawn under the big oak-tree, razing but never touching the earth, his dark wings and white body, the beautiful little forked tail and bright black cap on his head, sweep past with the very poetry of motion—so graceful, so determined, so easy, so wonderful in its precision of aim, and rapid beyond conception. Ninety miles an hour has been calculated as its speed in quiet weather, says the Bishop, while that of the swift is even more.

The nestlings were just about to fly, when one morning I heard a frightful outcry from the children in the garden behind the house alongside our next neighbour's fence. The old house had just been taken by a new and "improving tenant," and the gardener, with a long pole in his hand, was going stolidly and sternly round knocking down the nests in the eaves, "to tidy up a bit." The parent birds flew madly

backwards and forwards, seeming as if they would dash themselves to pieces against the stone wall in the way of the stick. But all in vain: down came the mud and straw, down came the miserable nestlings, which lay dying in the ruins of the poor little happy home.

"You are a very wicked man," said Susy, marching solemnly up to the offender, "and God will punish you for being so cruel!"

She was an exceedingly shy child in general, and I was as much surprised by this act of courage as if I had seen her attack a battery.

"You mind your own business, little miss, and I'll mind mine," answered the man angrily.

"Perhaps they'll build again," said Lizzie, taking a hopeful view of the case.

"It'll be no use if they do," replied her mother despondingly; "it's so late in the season that they won't have time to hatch another brood."

After a day or two, however, of fluttering, lamenting and consulting, the birds began to build in the same place once more, and I obtained for them a bill of indemnity for the future from the proper authorities. In spite of our dismal prognostications, the swallow pair brought up their second family in very tolerable time, as the autumn, luckily, was long and fine, and then

went abroad as usual with all their sons and daughters.

Next spring, under the same projecting eave of the same gable, a new nest began to grow like the old one.

"Look, papa! I'm sure it's my Tommy; I can see the thread I tied round the bird's leg, though it isn't red any longer!" said Lizzie one day, after anxiously watching the building operation. The bird fluttered round the window as she spoke, bowing its tail up and down with the sort of courteous motion which is its wont. "That's because it knows us," said Lizzie, as it flew off again. I saw the thread myself distinctly.

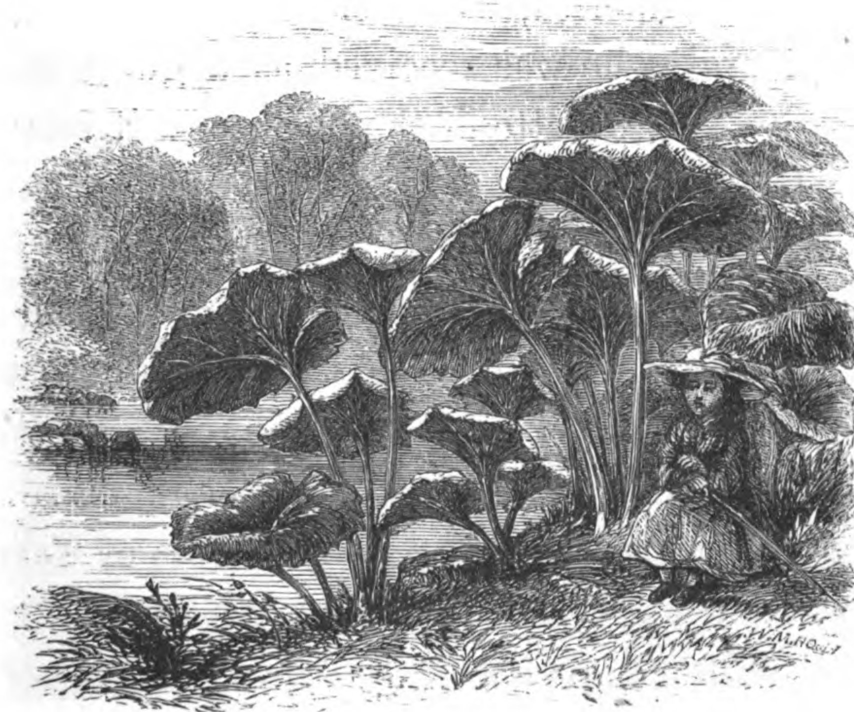
What marvellous compass within its breast had guided it back with such unerring accuracy from such far-distant regions? Sierra Leone is one of the habitual winter homes of the bird, three thousand miles off by the most direct way, and swallows have been repeatedly caught at sea on board ship, flying in the straightest line which could be steered by the best sailor from the Land's End to the West Coast of Africa, on a course where any rest is nearly impossible. If, however, it takes the overland route and by the Straits of Gibraltar, it probably roosts by day, as the flights of swallows are never seen, and must therefore pass by night.

What instinct, what habit of thought, what love of its old home, had brought that little atom back to the same place, over such thousands of miles of land and sea? Many eaves as good as ours, many places as fit or fitter, must it have passed over. One house, one field, must look pretty much like another from high up in the air, as it travels aloft at a speed far beyond that of the most rapid of trains.

It had left nothing but recollections behind it; yet here, after all its wanderings, constant to the old haunts, it had returned safely once more to the old trees, the old roof, to that indescribable something which we call home, which, meaning as it does associations and affections, seems to us such a peculiarly human instinct.

Mr. Wallace puts the swallow among the birds whose nature is progressive, who are able to adapt themselves and their nests to new circumstances. For instance, no early individuals of the race can have had any eaves under which to build. The savage tribes of early men constructed no houses; in North America any sort of roof is not three hundred years old. But it is now peculiarly upon these dwellings of man, seeking out apparently the company of our race, that the swallow delights to make his home; and this, therefore, gives us a fellow feeling for him which we have with scarcely

any other bird. His presence brings good luck in the superstitions of all countries; his destruction is considered as a sort of sacrilege. Even upon a church his nest is looked upon with favour, and now, as in the far-off day when David wrote, "Yea, the swallow hath found her" there a place "where she may lay her young" in peace and security.



A MAN OVERBOARD.

H—— had been travelling for many months in South America, when on his way to England from Valparaiso he was received as a guest on board H.M.S. ——, a corvette of the old type: it was before the days of steam, at least in the royal navy.

It was February, and therefore autumn in the Southern Hemisphere, when we passed round Cape Horn, where it may be said to be always winter. There had been icebergs in sight, but we gave them a wide berth, for they are dangerous neighbours. As we sighted the bleak, barren, snowy heights of Terra del Fuego, the wind was west, and we were running right before it with a high following sea.

There was a sailor on board who had been in a cavalry regiment, the Scots Greys. My heart always warmed to a soldier, past or present, and he was a sort of friend of mine. His name was Morrison.

I was walking up and down at the stern, passing and repassing behind the two quartermasters at the wheel (when it is rough the strength of one man is not enough to control it, there are often eight in a large ship). I was watching the enormous waves over which, and through which, we were cutting our way. It is a magnificent spectacle, and the waves in the Pacific are said to exceed in length those of any other ocean. They ranged now, I was told, from twelve to fourteen feet below, and as much above the level in height, so that when we were in the trough of the sea the summit of the wave was from twenty-four to twenty-eight feet above us—Admiral Scoresby calls "the storm wave thirty feet high." In very heavy weather it is not uncommon to see a large vessel disappear, masts and all, in a neighbouring trough of the sea.

Suddenly there was a cry from the fore part of the deck, "Man overboard!" and a strange shock seemed to run through the whole ship at the sound. A heavy lurch threw me off my legs; but I jumped up on the signal locker, and looked over the taffrail down below, where I could see Morrison swimming breast high out of the water, nearly upright, and looking up at the ship. As we swept past him he did not seem in the least frightened, and I thought I had never seen

a man swim better. "Never mind, Morrison, we shall soon be after you," I shouted; but the noise was probably too great for him to hear me. Captain S—— had rushed up to let go the lifebuoy; this should fall instantly on the mere pulling of a trigger; but, alas! some ropes had fouled it, and it was not free for perhaps a minute, while meantime we were sweeping on at the rate of twelve or fourteen miles an hour. As the buoy fell the fuze ignited, and it struck a light; but we had now left the man a hundred yards or more to windward. By this time every one was on deck; six men had jumped into the jolly-boat hanging at the quarter, which was lowered as rapidly as possible—a very dangerous operation in such a sea. She was nearly capsized and swamped by the water rushing over her, but got away safely. She was no sooner clear from the ship, however, than the captain ordered a larger boat to be lowered, to provide if necessary for the safety of the men in the first boat.

In the meantime two men had been sent up the mizen-mast with orders not to lose sight of the buoy. Evening was coming on, and the poor fellow could not now be seen, but his whereabouts was plain. A couple of albatrosses had been following us for many days, circling in their rapid flight round and round the ship, even when she was thus rushing before the

wind, to pick up anything which was thrown overboard. They were now hovering over the man's head, poised upon their enormous white wings (which measure sometimes seventeen feet from tip to tip), and occasionally swooping down to the level of the waves.

We could see the first boat pulling towards the place as hard as the men could row, and the order was given to bring the ship to the wind—a perilous manœuvre with the sea running so high, but the only chance of keeping near the man and the boats, the lessening light making the look-out every moment more difficult. The whole ship's company were now assembled on deck, and I saw in their anxious faces the small chance there was of saving poor Morrison. The suspense had become intense.

At length when it was nearly dark the boats returned, and we thought at first that the search had been unsuccessful. Presently, however, we could see that some one was being supported by the men's knees, and Morrison was with difficulty hoisted on board. He had been found floating on his face, while on the body were the marks of the talons of the albatrosses, whose grip had probably prevented it from sinking; and the last sight which he could have been conscious of must have been that of these huge birds flapping their wings over his head. In all probability, however, be-

fore he was struck by them he had been drowned by the force of the waves beating over his head and face.

When brought up he was carried to the half-deck and stripped, while everything that was possible to restore animation was done by the surgeon, who employed the men of his mess in rubbing the body from head to foot for a couple of hours; but it was all in vain. I went down again and again, and found his comrades standing and sitting silently and sorrowfully round him as he lay on his mattress, with the calmness of death on his face. He was a remarkably fine strong fellow, the largest man in the ship. When it was clear that all was over he was given up to his own mates to watch during the night. But now a change came over the sailors; they were alarmed and distressed at having a dead body on board, and were anxious to get rid of it as soon as possible—a strange superstition among men who carry their lives in their hands, and are in danger of some kind at almost every moment of the day. Two or three times in the night I went in and found some of them watching the corpse with perturbed, half-frightened faces, in the dim light of the ship's lantern swinging over them.

In the morning the poor fellow was sewn in his hammock, and a couple of shots fastened to his feet; the corpse was then placed on a grating opposite the gang-

way and covered with the union jack, while the captain read the beautiful burial service over him. A funeral at sea is always a very solemn and impressive scene. The rough fearless countenances of the men, all in the prime of life, standing round, their grief for their comrade and the sense pervading the whole congregation of the like danger impending on each and all, with the thought of the homes they all hope to revisit, make a common feeling among them which strikes deep, at least for the moment. The sea was still running so high that it was with great difficulty, even holding on by ropes, that I could keep my feet. When at the words—altered as it is from the burial service which is used on land—"we now commit his body to the deep, to be turned into corruption, looking for the resurrection when the sea shall give up her dead," the eyes of all followed the corpse as it shot down into the "yeast of waves," and disappeared like a flash of lightning, and each man turned to the work of life again. "Ready, aye ready," for the lot which is sent us, however sudden the call—the lesson had never come home to me so deeply before."

COMPARATIVE COOKING.

THE difference between man and other animals is said to be that the human beast alone "cooks his food." The Englishman, however, seems to require the least amount of cooking of any of the species in a civilised state. He does not, indeed, eat his meat raw like the lion and the wolf; "but why," says Mr. Thackeray, apostrophising Britannia, "oh why, those bleeding legs of mutton?" His vegetables are not left quite in the state best esteemed by the cow and the rabbit, but, compared with the seventy-eight ways of cooking potatoes said to be practised by the French and Germans, our fashion of paring, boiling, and spoiling the root, as we generally contrive to do, is the very rudest approach to the culinary art.

Charles Lamb's well-known description of the discovery of roast pig—how a Chinaman's house having been burnt down, an infant pigling perished in the

flames; how, his delicious little carcase having once been found and eaten, houses and huts without number came afterwards to be burnt, only to attain the coveted morsel—ends with saying that at last it was found out that roast pig could be obtained at a less sacrifice. Our kitchen grates seem to be only the first step in the process of "evolution" from this wholesale conflagration to the tiny handful of fire, over which, with a far less amount of good material, the foreign peasant contrives to produce a savoury meal in the *pot au feu*, instead of the miserable heavy suet dumpling, cold fat bacon, ill-cooked cabbage, new bread, and cheese of our English country working class, or the half-burnt beef-steak and underdone mutton of the artisans. The savoury stew which is the staple of foreign cookery can only be produced by a long process, lasting six or seven hours, over a very slow fire, which brings out the hidden juices of the materials: odds and ends of all kinds, vegetables of every sort, remains of crusts of bread, bones, pieces of fat, lumps of meat, things which too often in an English house are thrown to the pigs, flavoured with sorrel and other herbs which we rarely think of using, produce a compound which the best cook need not disdain. Above all, a considerable amount of variety is secured.

Mr. Smiles, in his account of the settling of the

Huguenots in England, mentions particularly the excellent cooking which they brought with them, and their habit of utilising scraps. Till that time the tails of oxen were thrown away as useless; they first introduced ox-tail soup, now considered one of our dainty dishes.

The difference between French and English cookery was brought very vividly before us in a curious manner a summer or two back; and though it seems beginning a good way off from the subject of cooking, I must give the whole story as the evidence of an eye-witness.

"I had been looking at some repairs in a cottage, and lamenting over the usual ill-cooked dumpling which I saw put on the table, with baker's bread, tea, and cheese, an expensive and innutritious meal, when riding on down a green lane overshadowed with old oaks and ash, I saw, far away over the hills, a mysterious object sailing majestically along, which, as it came nearer, resolved itself into an enormous balloon. I turned my horse and rode back with it, keeping up with some difficulty, as the wind was high and it went fast. The long ropes hanging from it passed so near the roofs of the houses in a small village that there was considerable danger of the chimneys being carried away. It swept over the flat

fields, the car dashing through the hedges, and carrying bushes and small trees before it; it rose, and then fell again with a sort of majestic curtsey, till at last the car became entangled in the branches of some high elms on a lonely field belonging to a farm of my own, on a low hill in a very secluded part of the country. There was a lull in the wind, and we hastily fastened what ropes we could reach to the trunks of the largest trees near the enormous inflated circle of the balloon now caught in the branches. We sent a boy up a tree where he could look into the car, but there was no one in it, dead or alive, or any sign whence it came. Soon after it came down and lay on its side upon the ground.

"By this time, from all the outlying cottages and farms, from all the neighbouring villages, people were flocking to look at the wonderful sight; we could see them coming in all directions over the fields and up the hill. The great fun was to get through a rent into the inside, and walk all round what looked like an immense circular hall fifty or sixty feet across; the gas had risen to the top, and still kept the whole distended. The balloon was made of very thick silk, and covered with a beautiful network outside, every knot finished so as to be quite a work of art. Up this some fifteen or twenty young fellows had climbed,

though with one strong puff of wind she might have been off again. A couple of policemen now came up and cleared the place—only just in time, for the wind suddenly increased a little, the immense mass rose upright, and lifted from the ground; at least sixty or seventy people had hold of the ropes, which hung in different directions, but in a moment these were pulled from their hands, and if there had been many times the number the impetus would have been irresistible. As it rose with a slow majestic movement and a feeling of power, as if unconscious of any check, the crowd, now numbering nearly a thousand, hailed it with a loud cheer, heedless of the danger of the men clinging to the netting. Most of them let themselves drop, some from a considerable height, but one man, a tailor, had somehow entangled his foot and could not get it loose. A young soldier, lately returned home, rushed up, and as the balloon lowered again a little he contrived to climb up and free the tailor, who threw himself down and was caught by the bystanders; but again it stood upright, as if about to ascend with a sort of careless indifference to our efforts, and the tailor's liberator lost his head, fell from a great height, and came to the ground with a terrible shock, which laid him up for months with bruises and a broken limb.

"After this last feat the balloon seemed to think it had done enough, and came again wearily to the earth. We found and opened the valve with great difficulty, and the gas made its escape, though with extreme slowness. The crowd melted away, and we set the two policemen to watch over the waif and stray during the short summer night. There was nothing, however, to indicate whence it had come from, and we had no clue to the owners. No one came to inquire about it during the whole of the next day, and it was not till late on the following morning that a Frenchman appeared to claim it. We now learnt that it was the captive balloon, which had made its escape from Cremorne Gardens, where it was fastened by a very thick rope, attached through the bottom of the car, to a wheel worked by machinery, which allowed it to ascend to a certain perpendicular height for the benefit of sucking aeronauts, when it was drawn down again, like a bird with a string to its foot. The rope had broken suddenly, and the balloon—fortunately empty at the moment—escaped alone on its travels.

"About twenty Frenchmen arrived that evening to take the whole thing to pieces; and they were two days busy in packing the remains into three large waggons. There was but little damage done to it,

only one or two slits in the silk, the loss of a good deal of rope, and the escape of the gas, which was, however, sufficiently serious, as the cost of refilling it, when required, amounted to £500.

"And now to come down from the clouds to the cooking-pots. With the men came the wife of one of them, a very good-looking, respectable young Frenchwoman, whose business it was to cook for the party. One of the men who spoke English got her some bricks, and built her a rude cooking-place under the great elm at the village cross-roads. Vegetables were obtained out of the cottage gardens, and a little meat; she walked about the fields plucking herbs from the hedges, —sorrel, dandelion, chevril; the *pot au feu* was filled from St. Botolph's well, and was soon simmering over her improvised kitchen range. The women of the village came round to stare; and there was a good deal of scorn expressed at the 'rubbish' she used, and the 'messes' she was getting up. But the proof of the soup was in the eating; and they could not deny the talent required to get excellent meals for twenty hungry men out of such materials for two whole days.

"The cooking powers of the two nations was curiously contrasted in the camps of Aldershot and Chalons, which I happened to see on two following

years—the palatable, wholesome food produced by the French soldier in his little tent, and the wretched result of the Englishman's work with a far greater amount of conveniences in his hut."

Indeed, every nation may be said to do better than ourselves. The Hindoo, with a few sticks, a handful of charcoal, and half-a-dozen pots, will produce an exquisite dinner, and, on a march, the curry will be made with a fresh flavour continually. The Arab, with a number of little holes in the ground, will get as good a result as is produced by the "half a ton of coals in a month," which is expended in some of our enormous kitchen ranges. A bag of charcoal, price 3s. 6d., will last a week in a French *four de campagne.*

At the National Training School of Cookery, lately established at South Kensington, not only is any one who wishes it instructed how to cook really well, but women can be taught gratis how to turn every scrap to the best account—to make the most palatable food out of the least amount of material—with the stipulation that they are to hold themselves ready to go out as instructors to any towns and villages as ask for such help, to instruct the wives of the artisans and labourers now wasting good food from sheer ignorance.

The whole of England may wish the plan success.

The middle class are not much further advanced in the science than the artisans; and only those who can afford a professed cook (and, indeed, not even these by any means always) have much chance of obtaining that real necessity for health and comfort, properly cooked food. Boiling, roasting, stewing, do not come by nature; a mutton-chop and a potato should be served up with as great pains as the smartest dish. There is nothing so extravagant as bad cooking; and it is a national misfortune to go on, as we do in England, spoiling and wasting better materials than are to be found in any other country. The sodden vegetables, the meat grilled or roasted to a cinder, the best part of it feeding the fire, the comfortless meals for a tired man coming home at night, and which often drive him to the refuge of a public-house—these are questions which concern the poorest household. Good cooking, as intended to be taught at South Kensington, is no luxury, as is often supposed, for the rich; it is a necessity—first, for good health, which requires food to be properly prepared if it is to be properly digested; next for economy, which requires the best result to be obtained with the smallest cost; and lastly for comfort in the household both for husband and children. It should therefore be as much part of a

"working" woman's education as learning to read and write.

[Some interesting details have been lately given of penny Cookery classes at Birmingham, and it is hoped that such a class may soon be established in a poor part of London. The School Board for London announce that they intend to urge that payments should be made by the Education Department to classes on Practical Cookery in day and evening schools, as is done for other subjects. Lectures on the preparation of food in relation to health have been given with much success as a branch of "sanitary work."]

BIRDS OF PASSAGE.

WE were sitting in the still wintry evening by a solitary pool in the heart of a great tract of beautiful wild woodland country full of old oaks, holly, and heather. The dark firs which surrounded "Blackwater," and gave it its name, were reflected in the quiet water, with the white stems of the slim young birches, the tall grasses, the reeds and flags; a pale red and yellow light shone behind the black trunks of the trees; when a flight of wild ducks, in wedge-shaped squadron, passed over us, their eager heads outstretched before their bodies—rapid, determined, unswerving, straighter than an arrow. They were headed by some king, or dux, who was clearly quite as certain of his way through the "pathless fields of air" as if it were a turnpike road lined out with hedges on either side. They were probably coming from Norway, or even Lapland, apparently to some

prearranged station amongst us, some wild moorland tarn, some pool in the midst of a wide wooded district like our own Blackwater. Is their chief a travelled duck, and has he been here before? Is he chosen for his knowledge by the community in council? Does he, as is supposed, sometimes fall back into the ranks when weary, and by what right does the vice-president succeed? Supposing Nestor to be slain by some undiscriminating gun, who then is trusted to lead forth the fresh flights of the community?

There is nothing more wonderful in nature than the passion of desire for "foreign parts," that seizes certain birds at certain seasons of the year—the mysterious reaching forth after some generally unknown summer land, as in the ardent longing of Goëthe's Mignon song, set to music by Beethoven—

"Wo bist du, wo bist du, mein geliebtest land?"—

far away over the cold dark sea or the bare snowy lands, not to be reached except by hundreds of miles of flight through the dark chill wintry air. How do those who have been there before communicate such an abstract impression to their untravelled comrades of what must be to them so distant and mysterious a country in every sense.

In the fields below we had been watching a cloud

of fieldfares practising their manœuvres for their flight abroad, and almost invisible when their wings and bodies were seen edgewise in the course of their gyrations. Their "intelligence department" was perfect, the very vigilant sentinel on watch warning the main body of our dangerous proximity with a peculiar jarring cry, as they were comfortably busy picking up their food after, I suppose, they had finished their field-day.

The movements of the starlings are even more wonderful. They probably migrate only to different parts of England, or across the Channel to Ireland; but their preparations are elaborate, their evolutions are performed with the most wonderful precision. As we came along through the forest we had seen them above our heads wheeling, charging,—"forward" went the right,—"at the double" advanced the left wing, ending with a noisy simultaneous plunge into the thickest part of the wood, and a sudden halt, or "stand at ease," in the deadest silence, of the whole battalion among the branches. They evidently follow some very distinct word of command, their discipline is admirable, and they obey implicitly, though the general in this case cannot be distinguished from his men. The manner in which each bird is in his place and keeps his place, in the exceedingly complicated

performances of the crowded *melée*, is most remarkable. There is never the slightest jostling, though at the mouth of the Humber (for instance) the flights are so large as almost to obscure the air. Who settles on the pivot bird in one of those whirls, when

the whole body seems to turn on itself as one, in the smallest possible space and time? and how does each member of the community measure his distance so as never to touch his neighbour in the closest and most rapid flight—each bird having to perform his part of a graduated scale of velocity in the concentric

circles, when the slightest mistake in distance would crush the inside performers.

The "Blackwater" Pool was a favourite haunt of the heron, who had a settlement on some lofty trees not three miles off, and other wild fowl; it communicated with a small river just below, whose running waters were open to them for food, even when the ponds were frozen. It is only in very long-continued bitter weather that the wild swans and solan geese ever come to us; but in a still higher water, lying in a hollow of the low heathery hills, which is called by the appropriate name of "Wind-whistle," and round which the sundew and asphodel, the cotton-grass and bog myrtle, grow luxuriantly in the treacherous boggy soil, a flock of swans, during one very severe winter, passed apparently just within range, but the shot glanced off from the breast of the one which was hit as from an armour of proof, and only a couple of pure white feathers came down to earth. In general the flight of the wild geese is so high that only their very peculiar cry, something like a dog's bark, reveals their whereabouts, invisible in the clear air. "Gabriel's hounds were passing," said the old folk lore: "the dogs of Anwyn," i.e. Hades, the lower regions, is the Welsh version: or the "Wild huntsman," of the Hartz Mountains, the "Wilde Yagd" is known in

most northern lands, and always with some weird legend attached to it, by the awestruck hearers of the "eerie" sound without sight, high in mid-heaven above their heads. The story varies. "A wicked sportsman who hunted on Sundays" is the Puritanical English version, or "a lord who wronged the poor." The German version has a deeper dye of wickedness and horror in the tale of abominable cruelty to man and beast; but in all countries the sinner is condemned to hunt on, in frost and snow, wind and tempest, till Doomsday.

The east coast of England is the landing-place of the chief part of our visitors. The distance from the last headlands in Norway from which they would start is about three hundred and fifty or four hundred miles to the point of Kinnaird in Scotland; and the nearest shore of England, which would land them somewhere in Northumberland, is scarcely farther off. If the flight of ducks is calculated at from sixty to a hundred miles an hour, five or six hours would bring them across the sea. The wind has much to do with their arrival; they usually come with a northerly or easterly gale. The flight of the woodcock is still more rapid; it has been reckoned at from a hundred to a hundred and twenty miles an hour. They might thus reach

Ireland, whose bogs they seem much to affect, without difficulty in a direct flight, or, perhaps, pausing at the Shetland Isles for a halt. On the Holyhead "mountain" the gamekeeper hoists a flag to announce their arrival, or the sportsmen would not be in time for such passing visitors; they are often off again the next day, across the Irish Channel. In the Scilly Isles they light in great numbers, apparently on their way to Brittany.

The birds obtain information in some strange manner of a congenial state of flood, and during the past winter forty or fifty snipe were suddenly seen in a flooded meadow, which was very rarely under water. When disturbed, they fly in a long, loose, zig-zag, twisted line, called a "wisp." Our ancestors were much more particular than we are in their varieties of descriptive names. Dame Juliana Berners, Prioress of Sopwell Nunnery, in Hertfordshire, in her treatise on Hawking and Hunting (a curious subject for a nun!), in one of the earliest books printed, by Wynkyn de Worde, 1486, gives two whole pages of the proper terms to be used for the "companys of bestys and foules," most of which are now forgotten; "a herde of swannys, and of wrennys, a muster of pecockys, a bevy of ladyes, and of quayles, a cherme of goldfynches, a watche of nightin-

gales, an oost of sparowes, a chatterynge of sterlynges," and so on.*

There is much greater elaboration in the definition of natural objects to be found in the earlier stages of language and civilisation. Savages have fewer objects of observation and of thought, and therefore spend their strength in dwelling on the details of each. An Arab is said to have seventeen names for different modifications of the idea "lion." Instead of our awkward paraphrases, "a tawny lion," a "black-maned lion," a "lion of a year old," he has a separate word for each. Dame Juliana even gives three different names for the flights of different kinds of wild ducks: "a sorde of malardes," "a springe of telys," "a covert of cootes."

The migrations of the great armies of ducks is always at night, and in the fens the whistling sound of thousands of wings whirring along, the shrill calls, the wild cries of the flights of birds, are exceedingly striking; their intelligence in obeying the word of command is wonderful indeed, for each individual of the mass must be guided by the voice of the leader alone in the dark nights when scarcely anything can be seen. The ordinary notes of birds seem to us rather pointless and monotonous—one phrase which they continually

* The hawking Prioress was a cheerful lady, and not afraid of a joke; she includes in her list, "A superfluyte of nonnys," and "A bominable sygte of monks."

repeat; but the signal calls of birds of passage are marked, warning, full of anxious meaning. Their organs of sound are very much developed; the windpipes of the duck tribe are straight and horny tubes, with a peculiar cavity at the lower end, "involving the whole principle of the clarionet," and enabling them to utter a long clear loud note, or cry, which can be heard at a great distance. "A lion's voice would be lost out of a balloon, but a lark is heard even when the bird is out of sight."

Birds have means of obtaining knowledge evidently greater than ours by the eye, which, Sir Benjamin Brodie says, is a more complicated and perfect organ with them than it is in man. The eye of the eagle is nearly as large as that of the elephant, he has a wider range of vision, and can distinguish objects at a distance when they would be to us altogether imperceptible, while other birds have a like power in a lesser degree.

Their porous bones are full of air, which is warmed by the heat of a circulation greater than that of any other creature. Their "unique powers of respiration" enable them to render themselves light or heavy by inflating their elastic and powerful lungs with air, whose warmth enables them to rise and float, or, by expelling the air, to contract their bodies and sink again. The muscles of birds of passage possess

extraordinary "staying power" and activity, and enable them to dart up through a breeze, blowing contrary to the way they wish to go, into a current of air higher up in the right direction, the existence of which must become known to them by some strange mysterious sense.

Their light weights are carried with the wind at a tremendous pace, which may, perhaps, be the explanation of the safe arrival of such dainty little morsels as the golden-crested wrens, with their short wings and apparently fine-lady, delicate habits, who yet are not afraid to cross the sea. They often land near the lighthouse on the point north of the Humber quite tired out, where, among the rough low rushes near the sea, they can be knocked down like butterflies with a cap, if seen before they have recovered their little senses and spirits after their exertions.

In their night flights birds are naturally attracted by the bright lights in the lighthouses, which must be very inviting when seen as they pass high up in the air, and they often dash themselves to death against the thick glass of the lanterns in their eager pursuit.

The return of birds of passage to England is generally exceedingly regular. Punctually to their time, the gulls return to the South Stack, near Holyhead, on the 10th of February, and a list has been published of

the days when the different travellers may be expected in England; but the reasons for emigration have still to be discovered, the search after a supply of food is not enough to account for their movements. The swallows leave warm pleasant climates to go to such inhospitable places as Port Famine (lugubrious name), near Cape Horn, in the south, and Iceland and Hudson's Bay in the north, where often the summer is so late that the cold kills the insects and the young birds die of hunger. Why should the woodcock leave England in early spring for Norway, when there are good breeding-places here and the supply of insects is sufficient? Why should the swallows remain here when gnats and flies are more abundant further north? and the redwing and fieldfare leave us when their food here is plentiful?

These questions have all yet to be answered, and every person, young and old, who brings careful study and minute observation to bear upon this, as upon all other questions of natural history, is doing good service to the general cause; their little facts, accurately noted, may be of service to the great men who use and marshal the materials supplied to them into large and important generalisations, and no one can tell beforehand which will be the brick necessary to clinch an arch.

LITTLE MARY CRADOCK.

I SAT waiting for a busy man, and as the old horse moved slowly backwards and forwards for the benefit of his health in the north-east wind, sharp, though it pretended to be May, we came opposite a cheap draper's at the corner of a poor street. The windows were full of earnest adjurations to "purchase this splendid article, the only thing worn, price five-pence three-farthings;" or "this entirely new and fashionable design in mantles, just out, at less than cost price." I wanted a ball of string, and utilised my enforced leisure by going in to get it. It is a tedious business to buy even a ball of string at a cheap draper's, and I had long to wait. Presently the shop door opened and two little children came in hand-in-hand; their brown frocks were of the simplest possible stuff, but there was quite a poetry of neatness in the exquisite nicety of their dress, the little lines

of white frill round their throats and sleeves, the strings of coral round their necks. They had nothing on their heads, but their beautifully plaited hair hung down their backs. There was almost a foreign air about them, but their accent was purely English. Altogether they had a refined, cared-for look, contrasting with their premature shifting for themselves, which was very touching.

They were both very pretty children, with small regular features, but the anxious considering expression in the dark pale face of the eldest was much too old for her years. Her long eyelashes almost rested on her cheeks, and when she raised them the large liquid-brown eyes had a whole world of thought and feeling in them. She began in a low, gentle, shy voice to set forth a long list of infinitesimal wants to the shopman. "Three small hooks and eyes, half-a-dozen pearl shirt buttons, two large horn ones, a reel of black thread, a skein of worsted," and so on. She was very clear and precise in her enumeration, and evidently scrupulously exact, and while the shopman was very patiently looking out her requirements, she ranged three pennies and a halfpenny, kept tight and hot in her little hand, on the edge of the counter to pay for her large order. I spoke to her, and asked if they lived near. "Not far," she said in a reserved

tone. How old were they? "Annette is six, I am eight," she answered, but in the same cold, self-contained manner. They had evidently been told not to gossip with strangers.

"What little things to send on errands!" I said to the shopman.

"They do their work much better than the big ones," he replied. "We'd ten times rather have such than their mothers. They loiter and talk and look at a dozen things without buying; these do their business and have done with it."

I had at last received my string; I could not infringe further on the quiet dignity of my little companions, and went away.

Not many days after I was waiting again in the same neighbourhood, but this time in one of the busiest of the busy London thoroughfares. It was in the height of the fearful rush of the season, and I sat watching the heavy omnibuses crowded with masses of human beings which came bearing down upon us. Great waggons crushed heavily on; dashing Hansom cabs swung recklessly past—cutting in—swinging—turning—crossing; horses were prancing and plunging; it was a network of legs and wheels, a perfect Babel of noise and bustle. As I looked on I noticed two little girls, with a small boy about two years old

between them, hurrying along the pavement. The nurses held tightly on to the child's hands, and his black beads of eyes peered out of his shelter with the wide-awake sharp expression of a London baby. Suddenly, to my distress, the convoy began to attempt to cross the street in the face of the hubbub, and I recognised the long tails (though the heads were now covered with hats) and the brown frocks of my small acquaintances of the week before. It was a raw, gusty, disagreeable day, the water-carts and the east wind were fighting against each other, and water and dust had been churned into a sort of greasy mud. The horses had a very infirm footing on the slippery steep incline of the wide street. There was no regular crossing, but the children were following the lead of some older adventurous passengers. I watched the perilous passage anxiously, too far off to be of any help. All seemed at first to go on well; even that incarnation of the London savage, a butcher's boy, had turned aside for them in his reckless course. They were so small and innocent-looking that the omnibuses swerved an inch or two in their favour, and the prancing horses in a barouche drew up by a hair's breadth to let them pass. I began to breathe, they were already half-way across in safety, when the little group was cut off from the rest of the company

and stopped in the very middle of the road by an enormous dray with four horses, which was taking its slow length along. They stood beside it as behind a rampart of defence as long as its course lasted, but it had stopped the way for a whole entanglement of impatient cabs and carriages, and as the last heavy wheel rolled stolidly on, two violently driven Hansoms cut across each other, both trying to be first in the narrow free way which now opened for them. There was just time for the children to get past the rival horses' heads, not the twentieth of a second to spare, when to my horror I saw the little nursechild slip on the greasy pavement. There was a tumbling heap of little petticoats for a moment, and a frightful confusion of hoofs and wheels and children's limbs. The horses had, almost miraculously as it seemed, avoided trampling on them, but the wheels had been less merciful, and by the time I reached the spot the bystanders were raising a fainting child from the ground, with a poor little crushed bleeding foot and ankle which I could hardly bear to look at. Everybody was very helpful, some water was brought from a shop, smelling-salts came out of somebody's pocket, sal volatile from the chemist's below; but there was nothing really to be done but to take her to the nearest hospital. A policeman came forward and took hold of

the hands of the two younger children. "Where do you live?" he said in a very fatherly tone. "Mary knows, we haven't been there long," replied little Annette, pointing to her sister and sobbing. "But at least you can show me the way to it," inquired the man kindly. She nodded and pointed down the street. "Robby and me can find it," she said, and they trotted off trustfully, one on each side their guardian, as we drove away.

"Where's Robby, he's not hurt, I hope?" asked the poor child, waking up from her swoon. "I *did* try to push him out of the way of the wheels, and Annette too. You'll tell mother," and she relapsed into a half-conscious state.

It was not very far to the hospital, but it seemed hours before she could be delivered over to the shrewd, quick-looking surgeon and the pleasant-faced nurse. He shook his head.

"It's a case of amputation—chloroform: she won't feel it," pronounced he gravely and decidedly, and the poor little prostrate form was hurried off, the large eyes looking round with a puzzled, half-scared expression, which was infinitely pathetic, at my face, as the only one she had ever seen before.

"She'd better be kept as quiet as can be," said the nurse kindly, when I asked how soon her friends

might see the little girl. "They'll do no good, and only worry her by crying, most likely."

I had no means of communicating with the child's home. She herself could not be troubled about it, and the policeman must be trusted to give the direction of the hospital to which he knew she had been carried. "You'll get the address for me as soon as you can," I said, as I went away. It was now nearly dark.

The next morning, when I went to inquire for Mary, "She's asleep," said the nurse, "she's going on all right, but it's a nervous little one, and best kept quiet. Chloroform's all very well, but it's the being sick after it's over, and the first dressing, and the healing, which must be gone through all the same, and all the rest that's so trying; as we nurses know—none so well. You'd best not see her yet. Her father came late last night, and here's the address where they live, which he gave me—Jem Cradock's the name."

I went in search of the place. At the end of a quiet *cul-de-sac*, opening out of the great thoroughfare, were a pair of lofty iron gates belonging to the departed greatness of some old-fashioned "mansion" —*entre cour et jardin*. I passed in. A wild tangle of lilacs and pink May in full flower, great bunches of white elder, and broad-leaved sumach, with tall elms

overarching the whole, were growing about deep hollows, where the bricks had been dug out of the foundations of the deceased great house, and upon the desolate heaps of refuse overgrown with long grass. Only the gloomy backs of a few almost windowless houses looked into the space, which was very large, and everything was so still that the birds were singing as in a country lane; yet on all sides the roar of the great city seemed to hem it in, and was heard rising and falling occasionally, but with the continuous undertone of the sea—the silence seemed like a presence, by force of contrast. The garden had once run down to the edge of the river, but the new enclosed foreshore of the embankment had isolated it from the world beyond with a broad strip of frowsy, untidy, unoccupied land shut in by a high fence. Amongst the grass, surrounded by the flowering shrubs, overshadowed by the tall trees, was a large old boat, evidently dragged up and forgotten when the river wall had been first made, and now left stranded, far from the only element where it could be of "any use or significance" whatever—left behind in the race—empty, useless,—"remote, unfriended, melancholy, slow." It was very strongly built, and there was a good deal of work left in it, if it could have been in its right place; but now it lay blistered by the sun,

its planks gradually rotting away—mouldering piecemeal, in unlovely decay. *King Theodore* was painted in rude red letters on the bows. Poor *King Theodore!* I felt quite sorry for him—one out of sorts with fortune, like his namesake—"out of gear" in the world.

I made my way to the door of some old stables which had belonged to the ex-great house, and had not been pulled down. I was met by a groom coming out from attending to his horses.

"Jem Cradock—yes, that's me. You're come to see my missis?" said he. "It's a poor place, will you walk up-stairs? She've just a-been brought to bed of her fourth, yesterday, and she've a-been rarely put about with all this worry, so to speak. She took on greatly about Mary. I'd a hard matter for to pacify her last night, when I come home."

Then, as we went up the steep rickety staircase, he went on—

"I were out a'most all yesterday, and the nurse she just sent the children off to be out of the way for the day to their aunt's—that's my sister—and there wasn't anybody to see to them there, I take it—she's so busy, is my sister—and so they gets into trouble trying to come home, I suppose. Mary's such a one to be with her mother."

The room was small and dark, looking out, not on the

garden, but on a narrow yard beyond, which was very close even on this breezy day. The poor woman's pale face was so painfully eager and nervous, that it made one's heart ache to see her, at the time when she most required rest of mind and body. A wailing baby lay on the bed beside her.

"Had I seen her child? was she in great pain? what did she say? She was a great help to her mother, was Mary. Where's Mary?" she sobbed pitifully. "Oh, Jem, why weren't you there, not to let her be sent off like that out of the house when I couldn't see to it?" and the big tears rolled down her white cheeks.

I saw where Mary's large eyes and long lashes and clear brunette complexion came from. Annette was from Jersey herself, she told me.

The two other children were playing in the room. "She couldn't bear them now out of her sight," said the loud-voiced drabby nurse, when I proposed to take them away for a time.

"You'll have her in a fever, if you don't keep her quieter than this," I said to the husband, as I came away to get some more and better help.

Jem began explaining rather confusedly about his being away till so late the day before; his broad, good-natured, weak, handsome face, had a sort of

blush up to his red ears. I am afraid it had been enjoying itself at the public-house, instead of helping in the trouble at home. To conceal his shamefaced look, he stooped down and took up a child on each strong arm, and little Robby crowed with delight, and patted daddy's face as he went along. He was evidently fond of his children, and kind to them after his fashion, and when he remembered them. He now carried them both out, and put them into the old boat, the sides of which were too high for them to crawl out unassisted.

"There!" said he, with great satisfaction at his own invention, "they'll be safe here, anyhow for a while out of harm's way, and I shan't be far off with the horses. Mother was Jersey born, and knowed as much about a boat when I married her as I does of a horse, so I think she'll be pleased like to know they're in it."

The two small young faces peered curiously and rather anxiously over the weatherbeaten timbers as I handed up all the things to play with that we could lay hands on. I looked back as I left the place. The weather had recovered its temper. The shadows of the trees flickered over them, the soft May wind blew the petals of the laburnum in their faces. Robby had hooked himself on by his arms over

the edge of the boat; Annette was resting her round cheek on her hand: they looked like the cherubs

at the foot of the San Sisto Raphael,—without any inconvenient little stomachs to be filled, or active

little limbs to be clothed, while the bright eyes watched me intently as I walked away, promising to return.

The poor woman's recovery was very slow. I thought she looked more white and more nervous than ever when next I brought her news of Mary.

"She was such a one to help at home; she'd more thought in her little finger nor yonder woman in her big body," said she irritably, as the heavy-handed, heavy-footed charwoman clattered among the crockery, and disturbed the equilibrium of everything which could be shaken or overset. Poor Annette's fastidious neatness was cruelly insulted by the din and disorder of her drabby nurse, but this was to be remedied to-day, and more efficient help was to come.

"And Jem says she's lost her foot," she went on; "it's bad enough for a man, but for a little girl, and such a pretty one, and so light to go," she sobbed. "Folk mayn't like to marry her with but one poor little foot, perhaps; and how's she to get her living with crutches like that? My little Mary, ma petite, my darling, my pretty one!"

"She'll get about wonderfully, they say, with an artificial foot. You'll hardly find out that she's got one, for she's so young that she'll learn to manage it like a real one; she's doing very nicely at the hospital,

and they're all so fond of her in the ward, and pet and spoil her to your heart's content. I wish you could see her; she looked quite happy to-day, and a little colour in her cheeks."

But Annette the mother refused to be comforted; she pined to go and see her child or that she should come to her, and neither the one nor the other was possible.

Although the shock had been great to the nervous child, she was up and about before her mother. It was the first day that the poor woman had come down-stairs, and she insisted on sitting under the trees, with an empty chair beside her, watching anxiously for the sound of the wheels which were to bring her Mary home. Presently the great iron gates creaked majestically, and poor Mary on her crutches came slowly in. Annette held out her arms; she was white even to her lips, and looked as if she were going to faint; but she recovered herself, and sat stroking her child's face, and crooning inarticulate welcomes, with a shower of pet names in her long-unused Jersey patois, which seemed to come more naturally to her in moments of emotion. "Mon chou! mon ange! mon petit cœur! my precious!" And then the two sat side by side in silence, holding each other by the hand.

"Was it very bad, Mary?" said her mother at

last. "And your poor foot gone and all!" And her tears began to flow.

"They were all so kind," answered the little girl cheerfully; "and nurse had a canary sung so nice; and Mrs. Jones gave me, oh! such a pretty picture-book (it's in my box), and a doll with real petticoats to take off. They were all quite sorry when I came away."

"And you can't get about without your crutches," sighed her mother, not listening to the list of delights, and even, I thought, a little jealous of the new friends whom her child had made and whom she herself knew nothing of.

"I'm to be measured for my foot in next week," answered Mary proudly; "and I shall walk now soon so nice with the crutches. There was a little boy, younger nor me, used to hop about so funny with them. He'd get across the ward so as they could hardly catch him; and I can do a great deal too: only see!"

And she began to show off her proficiency; her mother uttering a faint cry at the sight, doleful enough, of her efforts to make the best of the great loss. The wind had been tempered to the shorn lamb, but the poor mother's tears were hardly to be wondered at.

I thought I detected a strong effort in the child to bring forward all the cheerful side of the story, springing almost unconsciously out of her old life of ardent devotion to her mother; but the struggle was growing almost too much for her, as I saw in her little quivering lips and drooping head.

"Here's some bread and butter, and tea and cake —we're making a feast for Mary's coming home so well," made a wholesome diversion.

"And you haven't seen the baby," said the new nurse, judiciously bringing forward the very ugly little red bundle which few but mothers can admire.

And presently, to the joy of his little daughter, Jem rode in at the gates, mounted on one horse and leading another, with a grin and a smile of welcome, and, coming out again from the stables, seized hold of the younger children, who had been kept till now in the background, and hoisted them both into the old boat, where they sat looking down on us as out of a big cradle, munching cake and drinking mugs of tea, in a serious, earnest state of mind, as if they were performing a grave and solemn duty to themselves and the public.

Even poor *King Theodore* had found a certain use by waiting patiently for his time.

The cloud had lifted from poor Annette Cradock's

face, as Mary crept very close to her in the little low arm-chair, her small arms and soft cheek resting on her mother's hands and lap, with a sort of protecting comfort and care in them which was inexpressibly touching from the child to the parent. The sun shone, both morally and materially, on the little group, for that evening at least, and I came away.

A PAIR OF FRIENDS.

HE was a good deal above seventy, and she was only two and a half; but this did not prevent there being a tender—I might almost say a passionate—attachment between the two. They lived side by side in a pair of cottages in their secluded corner of the world, but had no other connection with each other. The hamlet was a most picturesque one, of the true old English type: half-timbered black and white

houses, with sharp gables, heavy red stacks of chimneys, and projecting eaves of thatch (full of swallows' nests in the spring season), were scattered irregularly up and down between the tall elms, oaks, and limes, which grew in and out of the steadings of a couple of quiet-looking farms, and among the hedgerows of the bright green meadows which surrounded the village for miles in every direction.

The twin cottages, with their garden-plots, bright with flowers, stood opposite a triangle, where three roads met, in the middle of which grew a great tree, to whose trunk are periodically nailed the small notices, public and private, which comprise the general life of the community; while close by is the village well, with its little conical tiled roof, to protect the users of the pump. Farther on comes the wheelwright's, with bright dabs of colour on his shutters, and the still brighter red and blue carts which he adorns. A box hedge, which Evelyn might have envied, and some elaborate works of art in Yew, looking like gigantic green dumb-waiters, grace the gardens of the cottages farther on, while a high kitchen-garden wall, fringed with ferns and mulleins, mark the remains of an old manor-house, now dwindled to a farm, at the "Town end."* The grey old church, with its low stone tower,

* "Town," originally meant only an enclosed space.

and fourteenth-century windows, closes the whole, the road going no farther; and about it sleep the "forefathers of the hamlet," who have been buried there for a thousand years more or less—certainly long before Domesday book shows that a church existed on the spot.

Old "long Jem" Brazill had lived all his life in the place. He was a lonely man and a stern one. His wife was dead; and he was supposed in former drinking bouts to have beaten her more than once. "What's wronged on earth will be righted in heaven!" she had consoled herself by saying; but there seemed to have been a doubt in the popular mind whether she intended thereby that she hoped to be able to return the cuffs she had received here below. His three sons had wandered off in different directions. One had "listed" as a soldier; but this was all that was known of them; there had been little tenderness in the family.

Jem was a tall, gaunt, severe-looking man, who had been one of the strongest and best workers in the village, but was now so crippled by an injury, and by repeated attacks of rheumatism, that he could but just hobble from his bed in the corner of the room to the great open fireplace and back again. He was "done for," "washed and mended," by the old "dame" next door, a good deal older than himself, indeed consider-

ably above eighty, but as hale and strong and hearty as most women of half her age. And the small Rachel had followed her granny into the house almost ever since she could walk, to protect and patronise Jem as befitted her advanced years.

She was a little scrap of a child with dark blue reflecting eyes, and long, curly, golden-brown hair, quite healthy in spite of her precocity, and with a very strong will.

"'What, be ye goin' in to my Jem, granny? I must come too, and help,' she'd up and say when she saw me ready for to go to Master Brazill's. She were a wonderful one for to trade wi'," the old woman told me. "And then she'd drag up her cheer to the table alongside he, when he was goin' to get his dinner, and her legs was too short to hang down, and they stuck out straight. 'And who asked you for to come in here?' says the old master, rather grim. 'I be come to my Jem,' says she so cheerful. He were a very temperous man, but he did love she, and if he didn't see her for a bit he'd go on, 'Where's my girl? you send my girl in to me.' Then another time she'd be to him in the garden, and say, 'Gie me a gilliflower, Jem,' and he'd pick her one, and she'd be sot on the dreshle and talk to him so. 'It do smell good,' and she'd play wi' 'em, and pick 'em to bits ever

so long. She *were* fond o' flowers, she'd bring her pinny in full on 'em and sot 'em up upo' the cheer and all about. 'Aynt they pretty, granny? they do be nice,' she'd go on, so pretty."

One day when I came in the old man had had news of his soldier son. "He have a been killed in a sharp battle out in the India country, and there came a horficer yesterday, his master, and telled me all about it. From what I could make out o' him, my Tom had a been wounded, and he'd a pulled off his coat, and were sot down, when a bomb-shell blowed he all to bits. There was a biggish river where they was a-fighting, and the enemy they was drownded one atop t'other, so that you could ha' walked on 'em for to cross over, they lay so thick. And the gentleman's house" (the Rajah's) "what made the battle, lay just across, and a deal o' firing there was, and they took the place, but my poor boy he were dead. He were a good lad as ever lived, that's what he were!"

Old Jem felt the loss a good deal; he cared for his son much more dead than when the young man was living, and he "took on" about it sorely.

The next time I saw him he was "unaccountable middling," he told me. "It's a toiling life to lead, wi' all these yecks and pains. The Lord, he knows —He's very good, and gives me time to repent o' my

sins; and there I sets and thinks: I've just had my dessarts, I've had a hard heart. I shall be glad to go in His good pleasure; but there, we've nothing to do but to wait; we can't do nothing afore we gets our orders for to go, wheresoever. I were all over bad last night, and with such a grumbling in my head, but I prayed to the Lord, and he holp me. I told* the clock best part o' the long night, I can tell ye I did. I scarce know whether I were awake or no, but such a lot on 'em comes trooping in round my bed, and sings out quite loud, men and women, and middling boys, all dressed so fine, white and golds, and I says, 'Don't you make that nayse o' Sunday night,' and they goes on just the same. So I riz me up in bed and says, 'Well, if so be you won't be done, I'll just set up wi' you and sing too.'"

"Has little Rachel been in to-day?" I said soothingly.

"Haven't she just! She come and says, 'Shall I break up the wood, my Jem?' as if she could do it with them little hands of hers. 'No, that'll never do!' says I. So she goes and gets the broom and sets to sweeping, after her manner, you know. I'd made her a little 'un, but she looked up in my face so sharp, and dragged out the big 'un, and just set to wi'

* "He *telleth* the number of the stars."

it, dragging it after her up and down the house. She's a very cunning* little wench, *to* be sure, for all she's only in her three, and a way o' her own too !"

The summer went by; the damp autumn leaves were blowing about; the place looked sad when I came back to it after a couple of months. It was evening, and a great bank of dark cloud was heaped up high into the zenith, but through a rift far above our heads shone out a single little bright star, and just over the horizon gleamed a few streaks of deep red sunset light, where the storm curtain had lifted a little.

"They tells me Rachel have a got the whooping cough, and that it's a turning to the deflammation," said the old man uneasily, as I came into the dark room where he sat, solitary and sad.

The cough increased day by day, and it was very distressing to witness the child's struggles for breath. A sick child is a most pathetic sight—the helpless dependence, the trust in its eyes, asking for the relief which it is such a heartbreak for the loving ones about it not to be able to give.

She lay on her grandmother's lap, and would go to no one else for hours and hours of the long weary evening.

"She ailed unaccountable, and coughed that bad as I never heard," the old woman told me next day.

* "Let my right hand forget her *cunning*."

"'I be going to die, granny,'" says she last night. "'So am I too some day, dear,' says I, not to let her think too much; but she know'd better, and she's gone back, that's what she is, to Heaven; it was afore daylight. And old Jem he just wriggled in for to see her, and laid three rosebuds (they was all that was left) upon the little dead body. 'Nobody musn't move them away,' he said. There she used to put up her two little hands and say something, we couldn't tell what, but she meant it for a grace, when we was having our meals like. She died so easy, with just a smile on her face—so pleasant. You'll come in and see her," and she opened the door where the child lay. She looked like a marble baby, as still and as white, with the bright eyes closed and the little bud of a mouth shut, and the colour faded out of the rosy cheeks; but with a strange look of rapt surprise, as if the spirit had opened on a new and beautiful life, and had just marked the impression on the forsaken shell it had left behind. "Their angels do always behold the face of my Father which is in heaven," I felt as I turned away from the beautiful little image, so calm, so pure, so restful, after the distress of the previous days.

I went in next to her old friend alongside.

"I never did think to miss anything so much," said he; "she were a wonderful rare little 'un; she'd

come and stand by my side where I sat, and look up in my face. 'He's my old Jem,' she'd say. 'Have you a took my Jem his pudden?' she'd ask her granny, and she'd stand by my knee and ate the sop out o' the tea, 'ducks' she'd call 'em, and bring me a bit o' a posy or that like, and comfortate me. She'll never come in no more," said he with a deep sigh—"little creetur. I shall go to her, maybe—perhaps—God willing," he ended after a long pause.

The two friends are buried not far from each other in the quiet churchyard, which lies high, and looks over a wide expanse of meadow, and wood, and hedge-rows, and spires of half-hidden villages, and lines of winding white roads, with a very distant line of low pale blue hills, far off as eye could reach.

"James Brazill, aged seventy-five," says one stone. Rachel has only a brief line on her little wooden memorial, "Aged two years nine months and three days." But—

> 'It is not growing like a tree
> In bulk, doth make man better be,
> Or standing long an oak, six hundred year,
> To fall at last a log, dry, bald, and sere.—
> A lily of a day
> Is fairer far in May;
> Although it fall and die that night,
> It was the plant and flower of light.
> In small proportions we just beauties see,
> And in short measures life may perfect be."

"She had done what she could;" her little life on earth had not been wasted.

THE END.

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