

amassed at Belligam materials for the study of a life-time, and even obtained some consolation from finding confirmation of the fact which has recently been strikingly demonstrated by the *Challenger* expedition, namely, that life does not exist in anything like the same diversity of form in different oceans as on different continents; and that in essential features the marine fauna of one tropical coast differs very little from that of another. The account which Prof. Haeckel gives at some length of the daily routine of his life in Belligam is interesting. The Professor begins by congratulating himself on this accident of position as affording him twelve clear working hours in the day.

"I rose," he says, "regularly before the sun, and had enjoyed my first morning bath by the time he showed himself from behind the palm-woods of Cape Mirissa, exactly opposite my Rest-House. As I stepped on to the verandah to enjoy the sudden awakening of the glorious day, I was sure of finding Ganymede with an open cocoa-nut of sweet, cool milk, than which there could be no more refreshing morning drink. William, in the meantime, was shaking my clothes free from the millipeds, scorpions, and other insects, which had crawled into their folds during the night. Then came Socrates and served me with tea, accompanied by a bunch of banana fruit and the maize bread of the country. My usual beverage, coffee, is, strange to say, so bad in Ceylon as to be undrinkable, principally because the extreme moisture of the climate prevents the berry from drying properly.

"At seven o'clock my boatmen appeared to carry down my nets and glasses for the daily canoe expedition. This lasted from two to three hours, and on my return I busied myself in disposing my captures in glasses of different sizes, and saving such as could be saved among the few survivors. The more important specimens were microscoped and drawn at once. Then I had my second bath, and at eleven o'clock appeared my so-called 'breakfast,' consisting chiefly of curry and rice. The rice was simply boiled, but in the preparation of the curry my old cook, Babua, exerted all the ingenuity with which nature had endowed his diminutive brain to present me with a fresh combination every day. Sometimes the curry was 'sweet,' sometimes 'hot;' sometimes it appeared as an undefinable *mixtum compositum* of vegetables, sometimes as a preparation of the flesh of various animals. Babua seemed to divine that as a zoologist I was interested in every class of animal life, and that he could not do better than turn my curry into a sort of daily zoological problem. . . . He was apparently a staunch upholder of the theory of the near relationship of birds and reptiles, and held it to be immaterial what particular species of *Saurian* were prepared for the table.

"Fortunately for my European prejudices, I only became acquainted by degrees with the zoological variety of my daily dish of curry; usually not until I had swallowed a considerable portion of it in silent resignation. . . . My great resource as an article of diet was the fruit which abounded at every meal and made up for all that I suffered from Babua's curries. Next to the bananas of every variety, of which I consumed several at every meal, my standing dessert consisted of mangoes (*Mangifera indica*), egg-shaped green fruit, from three to six inches long; their cream-like golden pulp has a faint but distinct aroma of turpentine. The fruit of the passion-flower (*passiflora*) was very pleasant to my taste, reminding me of the gooseberry. I was less pleased with the renowned custard-apple, the scaly fruit of the *Annona squamosa*, and with the Indian almond, the hard nut of the *Terminalia catappa*. There are singularly few apples and oranges in Ceylon; the latter remain green, and are sour and not juicy; but the want of cultivation is doubtless chiefly answerable for the inferiority of this and other fruits; the Singhalese are far too easy-going to make any progress in horticulture. Refreshed with my modest repast, I em-

ployed the hot hours of mid-day—from twelve to four o'clock—in anatomical or microscopic work, in making observations and drawings, and in the preservation and storing of my collected objects. The evening hours, from four to six o'clock, were generally occupied with some lovely country excursion; sometimes I made a water-colour sketch, sometimes I sought to perpetuate one of the beautiful views in photography. Now and then I shot apes and birds in the woods, or collected insects and snails, or hunted among the coral reefs on the shore, adding many curious objects to my collection. Richly laden, I return to the Rest House an hour or less before sunset, and worked for another hour at the preservation and arrangement of my specimens. At eight o'clock, my second chief meal, or dinner, was served. The *pièce de résistance* at this was again the inevitable curry and rice, followed sometimes by a fish or a crab, which I enjoyed immensely, and then by some dish composed of eggs or meal, and finishing again with delicious fruit. . . . The important question of 'what to drink,' seemed likely at first to prove a difficult one. The ordinary drinking water of the lowlands of Ceylon is considered very bad and unwholesome, the highlands, on the contrary, being rich in springs of the purest and freshest water. The great rains which fall daily on the island bring down a mass of mineral and vegetable deposit into the rivers and the stagnant water of the lagoons is not unfrequently in communication with them. It is not customary to drink the water unless boiled or made into tea, or with the addition of claret or whisky. My friend Scott had given me an abundant supply of the last-named beverage, but on the whole, I found no drink so pleasant and refreshing as well as wholesome, as the fresh milk of the cocoa-nut.

"My frugal dinner at an end, I usually took a solitary walk on the shore, or delighted my eyes with the sight of the illumination of the palm woods by myriads of fire-flies and glow-worms. Then I made a few entries in my note-book, or tried to read by the light of a cocoa-nut oil lamp. But I was generally quite tired enough to go to bed soon after nine o'clock, after another careful shaking of the clothes for the expulsion of scorpions and millipeds.

"The great black scorpion (nearly a foot long) is so common in Ceylon that I once collected half a dozen in the course of an hour. Snakes exist also in great numbers. Slender green tree-snakes hang from almost every bough, and at night the great rat-snake (*Coryphodon Blumenbachii*) hunts rats and mice over the roofs of the huts. Although they are harmless and their bite not poisonous, it is by no means a pleasant surprise when one of these rat-snakes, five feet long, suddenly drops through a hole in the roof into one's room, occasionally alighting on the bed.

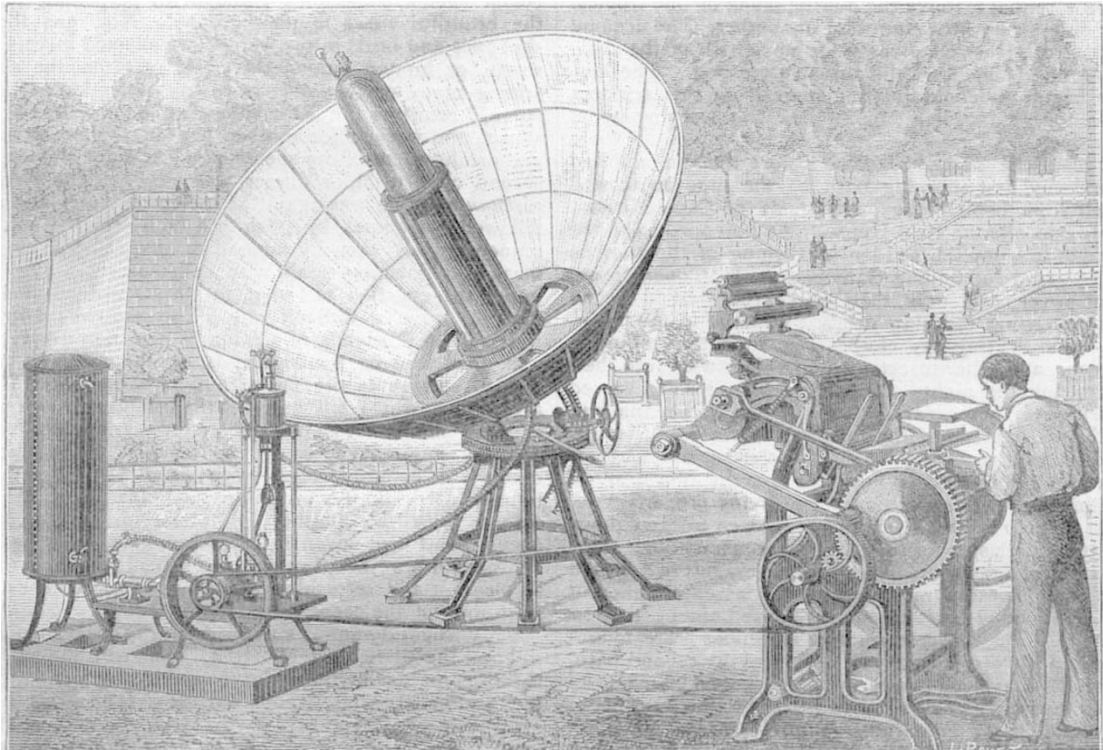
"On the whole, however, my nights in Belligam were but little disturbed by animal intruders, although I was often kept awake by the howling of jackals and the uncanny cry of the Devil-bird (a kind of owl, *Syrnium Indrani*) and other night-birds. The bell-like cry of the pretty little tree-frogs which make their dwelling in the cups of large flowers, acted rather as a slumber song. But I was far oftener kept awake by the whirl of my own thoughts, by the recollection of the many events of the past day, and the anticipation of that which was to come. A brilliant succession of lovely scenes, of interesting observations and varied experiences mingled in my brain with plans of fresh enterprise and new discoveries for the morrow."

#### A SOLAR PRINTING PRESS

IT was mentioned in a recent number of this journal that a printing press worked by solar heat had been exhibited in the Tuileries Garden in Paris on the occasion of a *fête*. We are enabled to give some particulars

of the contrivance from an account published in *La Nature*, from which the accompanying illustration is borrowed by permission of the editor. The solar generator was one of those devised by M. Abel Pifre, who has improved in some points on the original invention of M.

Mouchot. The insulator, shown in the middle of the picture, measured 3.50 m. diameter at the aperture of the parabolic mirror. It was set up in the garden, near the large basin, at the foot of the flight of steps of the Jeu de Paume. The steam from the boiler placed in its focus



A Solar Printing Press.

was utilised by means of a small vertical motor (shown on the left), having a power of 30 kilogrammetres, which actuated a Marinoni press (on the right). Though the sun was not very ardent, and the radiation was hindered by frequent clouds, the press was worked with regularity from 1 p.m. till 5.30 p.m., printing on an average 500

copies an hour, of a journal specially composed for the occasion, viz., the *Soleil Journal*. This result, though not indicating a revolution in the art of printing, may enable one to judge of the services these *insolators* may render in climates with a radiation more powerful and constant.

#### NOTES ON THE AYE-AYE OF MADAGASCAR

HAVING recently passed through that part of Madagascar which is the habitat of the Aye-aye, and having made careful inquiries from the Malagasy respecting the habits of this strange creature in its native haunts, I have thought that the information gained might be of interest to the readers of NATURE, and therefore note down the result of my inquiries.

The Aye-aye lives in the dense parts of the great forest that runs along the eastern border of the central plateau of the island, but only in that part of it which separates the Antsihànaka province from that of the Bétsimisaraka, and which is about twenty-five miles from the east coast, in latitude  $17^{\circ} 22' S.$ , or thereabouts. Possibly there are other parts of the country where the Aye-aye is found; but so far as my knowledge extends—and I have made inquiries in different parts of the island—this is the only region where the creature finds its home. In Carpenter's "Zoology" the Aye-aye is said to be "very rare in its native country"; and Mr. Gosse in one of his books conjectures that it is probably nearly extinct; but, from what I gathered from the natives, it seems to be pretty common,

its nocturnal habits and the superstitious awe with which it is regarded (and of which I shall presently speak), accounting for its apparent rarity.

The native name of the animal is Haihay (Hihi); but this is not derived from the "exclamations of surprise" which the natives "exhibited at the sight of an unknown animal," but is simply onomatopœtic, the creature's call being "Haihay, Haihay." The animal, as is well known, is nocturnal in its habits, prowling about in pairs—male and female. It has but one young one at a birth. It builds a nest of about two feet in diameter, of twigs and dried leaves, in the dense foliage of the upper branches of trees. In this it spends the day in sleep. The nest is entered by a hole in the side.

The teeth are used in scratching away the bark of trees in search of insects, and the long claw in dragging out the prey when found. A white insect called *Andraitra* (possibly the larva of some beetle) seems to form its chief food. I was told that it frequently taps the bark with its fore feet, and then listens for the movement of its prey beneath, thus saving itself useless labour. It does not flee at the sight of man, showing that for generations it has not been molested by him; which is indeed true, as the