

NATURAL HISTORY.

THE BURYING BEETLE.

A foreign naturalist gives a very interesting account of the industry of this insect. He had often remarked that dead moles, when laid upon the ground, especially upon loose earth, were almost sure to disappear in the course of three or four days, often in twelve hours. To ascertain the cause, he placed a mole upon one of the beds in the garden. It had vanished by the third morning; and on digging where it had been laid, he found it had been buried to the depth of three inches, and under it four beetles, which seemed to have been the agents in this singular inhumation. Not perceiving any thing particular in the mole, he buried it again; and on examining it at the end of six days, he found it swarming with maggots, apparently the issue of the beetles which M. Gleditsch now naturally concluded had buried the carcass for the food of their future young. To determine these points more clearly, he put four of these insects into a glass vessel, half filled with earth and properly secured, and upon the surface of the earth two frogs. In less than twelve hours, one of the frogs was interred by the two beetles: the other two run about the whole day as if busied in measuring the dimensions of the remaining corpse, which on the third day was also found buried.— He then introduced a dead linnet. A pair of the beetles were soon engaged upon the bird. They began their operations by pushing the earth from under the body, so as to form a cavity for its reception; and it was curious to see the efforts which the beetles made, by dragging at the feathers of the bird from below, to pull it into its grave. The male having driven the female away, continued the work alone for five hours. He lifted up the bird, changed its place, turned it and arranged it in the grave, and from time to time came out of the hole, mounted upon it, and trod it under foot, and then retired below, and pulled it down. At length, apparently wearied with this uninterrupted labour, it came forth, and leaned its head upon the earth beside the bird, without the smallest motion, as if to rest itself, for a full hour, when it again crept under the earth. The next day in the morning the bird was an inch and a half under ground, and the trench remained open the whole day, the corpse seeming as if laid out upon a bier, surrounded with a rampart of mould. In the evening, it had sunk half an inch lower, and in another day the work was completed, and the bird covered. M. Gleditsch continued to add other small dead animals, which were all sooner or later buried; and the result of

this experiment was that in fifty days four beetles had interred, in the very small space allotted to them, twelve carcasses: viz. four frogs, three small birds, two fishes, one mole and two grasshoppers, besides the entrails of a fish, and two morsels of the lungs of an ox. In another experiment, a single beetle buried a mole forty times its own bulk and weight in two days.

THE MIRAGE.

The Rev. T. H. Horne observes:—To be thirsty in a desert, without water, exposed to the burning sun without shelter, and no hopes of finding either, is the most terrible situation a man can be placed in, and one of the greatest sufferings that a human being can sustain: the eyes grow inflamed, the tongue and lips swell; a hollow sound is heard in the ears, which brings on deafness, and the brains appear to grow thick and inflamed. All these feelings arise from the want of a little water. In the midst of all this misery, the deceitful morasses appear before the traveller at no great distance, something like a lake or river of clear fresh water.

If perchance a traveller is not undeceived, he hastens his pace to reach it sooner: the more he advances towards it, the more it recedes from him, till at last it vanishes entirely, and the deluded passenger often asks, where the water is he saw at no great distance? He can scarcely believe that he was so deceived; he protests that he saw the waves running before the wind, and the reflection of the high rocks in the water.

The phenomenon, here described, is produced by a diminution of the density of the lower stratum of the atmosphere, which is caused by the increase of heat, arising from that communicated by the rays of the sun to the sand with which this stratum is in immediate contact.

This phenomenon existed in the great desert of Judea, and is expressly alluded to by the sublime and elegant Isaiah, chap. xxxv. 7, who, when predicting the blessings of the Messiah's spiritual kingdom, says, "The glowing sand shall become a pool, and the thirsty soil bubbling springs."—*Bp. Lowth's Translation.* And it is not improbable, that Jeremiah refers to the serab or mirage, when, in pouring forth his complaint to God for mercies deferred, he says, "Wilt thou be altogether unto me as waters that be not sure?" (marginal reading of Jeremiah, chap. xv. 18.) that is, which have no reality.

Professor Paxton observes:—Often as the thirsty traveller pursues his journey, a broad expanse of water, clear as crystal, seems to open to his view; and, faint and weary under the fierce sunbeam, he gazes

on the unexpected relief with ineffable delight, and fondly anticipates a speedy termination to his present distress. He sees the foremost camels enter the lake, and the water dashed about by their feet. He quickens his pace, and hastens to the spot; but to his utter disappointment the vision disappears, and nothing remains but the dry and thirsty wilderness.

Rae Wilson remarks:—

About three o'clock I perceived the turrets and sycamore trees of Rosetta, at which time I found myself greatly exhausted from oppressive heat and fatigue; and, like other travellers, was deceived by the mists and apparitional lake* so celebrated under the name of the mirage or *alscrab*, the illusory lake of the desert, which, even at a very short distance, had the most perfect resemblance to a vast sheet of water, with trees planted in it at certain distances, and reflecting every surrounding object as a mirror. We fancied this watery wilderness to be an insurmountable barrier to our reaching Rosetta, and that our guide had mistaken the proper track through the desert; but as we advanced, the supposed lake and its objects vanished: so powerful was the optical delusion. This prospect is at first sight cheering, but ultimately is most delusive. The traveller quickens his steps to reach the place where he hopes to quench his thirst, and feels the bitterness of disappointment; in truth, an *ignis fatuus* is not more tantalizing. Even swallows in great numbers swim over these imaginary pools. This singular phenomenon is in all probability that which is alluded to by the Prophets and psalmist; and it may serve to point out how false are the objects pursued by men of the world, and how like these streams of the desert.

THE SMOKY CHIMNEY.

Abel Graves was a hard working man, and his wife was a decent woman, and each was disposed to add to the comfort of the other; but though they did all they could, they had a sad enemy to their peace, which often disturbed them. This was none other than a smoky chimney, which so continually annoyed them, that they were frequently as peevish as though they had a delight in provoking each other. When Abel came home at night and would have enjoyed his meal in a clean house, and by a bright fire, he had to listen a full hour, to the complaints of his wife, who declared to sit in such a smoke as she did, all day long, was unbearable. Abel thought it bad enough to endure the smoky chimney, but to bear at the same time a scolding from his wife, for what he knew not how to avoid, troubled him sadly, and many a