

By holding and moving the smoking ends of the rags over the face of the bees and blowing the smoke among them, they run helter skelter down amongst the combs far more afraid than hurt. Now he can carry the hive round the garden under his arm without being stung. Whenever the bees are likely to rise they should be dosed again. The bee-keeper will now find he has got the mastery over his bees, and can do what he likes with them. He will be able to drive them out of a hive full of combs into an empty one, and moreover shake them back, or tumble them back, or spoonful them back into the old hive or another, as men take peas from one basket to another. The smoke does not injure the health of the bees, does not stop them from work more than two or three minutes, and the use of it is so simple, easy, and efficacious, that we have no wish to find anything better for stupefying bees."

Hives, their material, size and position; their covers, boards, supers, ekes and nadirs; the times and modes of swarming bees artificially; how to feed them, and how to take the honey; how to combine separate hives, and how best to preserve them during winter, with many other details of bee-management, will be found so fully and clearly described, and with such good reasons for every step, that we think this work may do much to render profitable beekeeping far more common than it seems to be at present.

A. R. WALLACE

*Malacologia del Mar Rosso.* Arturo Issel. 8vo. With five lithographed plates. (Pisa, 1869.)

WE have lately read and heard much about that great undertaking, the Suez Canal, and of its being the means of facilitating the commerce of the human race in Europe and India. Something may also be said as to the interchange of the marine fauna of the Mediterranean and Red Sea, which will probably result from this artificial mode of communication. Geology teaches us that these two seas were once (in the post-tertiary or quaternary period) connected by a natural channel; for several species of shells now inhabiting the Mediterranean, and common there, occur in a fossil state throughout the Isthmus or Desert of Suez. These are:—*Arca Noæ*, *A. lactea*, var. *erythraea*, *Donax trunculus*, *Solecurtus strigilatus*, *Gastrochæna dubia*, *Patella carulea*, *Calyptrea Chinensis*, *Nassa mutabilis*, *N. costulata*, *Murex trunculus*, var., and *Cypræa annulus*. Now it is a remarkable fact that scarcely any species in a living state are common to the Mediterranean and the Red Sea, even after making every allowance for the range of local variation. Dr. R. A. Philippi, indeed, in the second volume of his admirable work on the Mollusca of the Two Sicilies (published in 1844), gave a list of all the marine shells which he had examined in the collection made by Hemprich and Ehrenberg in the Red Sea; and of these he identified no less than 75 species as living both in the Mediterranean and the Red Sea. According to him the number of Red Sea species found by Hemprich and Ehrenberg was 408. But it now appears that these explorers collected at Alexandria also on their way home, and that by some carelessness or mischance many of the labels indicating the localities got intermixed; so that no reliance could be placed on the collection in a geographical point of view when it was examined by Philippi.

The present work gives 574 recent or living species, of which 64 are for the first time described and 34 figured. As might be expected, nearly all are tropical and belong to the Indian Ocean. Besides these, 232 fossil species are enumerated, 25 being described as new to science, and 31 figured. The author collected 191 species on the shore at Suez in the spring of 1865; 141 were collected by the Marquis G. M. Arconati in the Gulf of Akaba, as well as at Suez; public museums and private cabinets at Berlin, Paris, Pisa, Turin, and Genoa furnished additional material; while the catalogues of Ehrenberg, Rüppel, and Vaillant, with the descriptions and plates of Philippi,

Reeve, Sowerby, Kiener, and others, served for comparison and reference. Professor Issel is again gone to Suez for the purpose of continuing this interesting and useful research. His figures are very good, drawn on tinted paper. All general conchologists ought to possess the work.

I may remark that one of the Red Sea species (*Cæcum annulatum*) here stated to inhabit "Aden, Indie occidentali, Irlanda, Inghilterra"—the last two localities being, on the authority of Brown, Forbes and Hanley, and Philip Carpeñter—has been only found in Great Britain among the sand from bath-sponges!

It should be known that Mr. M'Andrew dredged for several months last year in the Gulf of Suez, when he made a very extensive collection of Mollusca, including a great number of then undescribed species. I hope he will soon publish his discoveries. No one is more competent to do so.

J. GWYN JEFFREYS

### LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his Correspondents. No notice is taken of anonymous communications.]

#### The New Natural History Museum

I AM informed that the plan of fitting a museum with cases sealed on the side facing the public galleries, alluded to in last week's NATURE, was suggested by Dr. Hooker, in an article signed "A Metropolitan Naturalist," in the *Gardener's Chronicle* for 1858, p. 749, which also contains many other good suggestions as to the requirements of the museum.

W. H. FLOWER

#### The "English Cyclopædia"

IN my youth I took in "The Penny Cyclopædia," in my manhood I purchased its progeny, "The English Cyclopædia," and now, in comparative old age, I have acquired two supplementary volumes to the latter; and I have never had reason to complain of any of these books, until the supplement to the Natural History division appeared a month or two ago. This supplement embraces a period of sixteen years, from 1854 to 1870, during which, probably, more good scientific work has been accomplished than in any preceding half-century. Many subjects on which I expected to find important articles are passed over without a reference, and others are, as I shall endeavour to show, treated of in a most imperfect and unsatisfactory manner.

I looked in vain for articles on (1) *Acclimatisation*, (2) *Ants*, (on which Bates, Lespes, Lincecum, Norton, F. Smith, Sumichrast, and many others have written since 1854), (3) *Axolotl* (whose remarkable metamorphoses have been studied by Dumeril and others), (4) *Cephalopoda* (on which much has been written since the Cyclopædia article appeared, when the *Hectocotylus* had not become a subject of discussion), (5) *Darwinism*, (6) *Deep-sea Dredging*, (7) *Dimorphism in the Animal Kingdom*, (8) *Eophyton*, (9) *Eozoon*, (10) *Euserion* (a fossil insect that from its puzzling form has been compared with the *Archæopteryx*), (11) *Fungous Origin of Diseases*, the cholera-fungus, scarlatina-fungus, ague-fungus, the fungi in skin-diseases, &c., and (12) *Hyaloniema* (on which several articles holding the most opposite views have lately appeared); (13) *Hybridity in animals and plants* (on which Broca, Masters and others have written elaborate works, and on which, as in the case of rabbits and hares, many remarkable experiments have been made), (14) *Mimicry in the Animal Kingdom*, (15) *Monera*, (16) *Ornithoscelida*, (17) *Parthenogenesis* (on which, during the last sixteen years, there have been published Siebold's "True Parthenogenesis in Lepidoptera and Bees," Owen "On Parthenogenesis," Leuckart "On the recognition of Parthenogenesis in Insects," De Quatrefages' "Metamorphoses of Man and the lower Animals," and the contributions of Huxley and Lubbock to Transactions of the Linnean Society and to the Philosophical