

brief account of the equilibrium theory, Prof. Darwin's version of Laplace's dynamical solution is laid under contribution.

The last four chapters of the book are devoted to viscous fluids, and include, besides the theorems usually given, the oscillatory motion of a sphere and cylinder, published first by Stokes in 1850, and also a solution, due to the author, of the motion of a sphere under any forces. In this latter, certain integrals suggested by the theory of conduction of heat are used to obtain the equation of motion of the sphere, the solution of which can be obtained by approximation.

Certain miscellaneous theorems find a place in the last chapter, including an article on the effects of viscosity on a vortex sheet, which plainly has an important bearing on the practical determination of the stability of such a sheet.

The very full array of references to original papers adds considerably to the usefulness of this work, which is in all respects one of the most valuable on mathematical subjects that has appeared for some time. The results are accurate, the discussion of each branch is thorough and complete, and the analytical methods are powerful and in touch with the most recent developments.

THE LAND OF MANFRED.

The Land of Manfred, Prince of Tarentum, and King of Sicily: Rambles in Remote Parts of Southern Italy, with Special Reference to their Historical Associations. By Janet Ross. Illustrated by Carlo Orsi. (London: John Murray, 1889.)

THAT part of Italy lying to the south-east, forming the "heel," was once a land full of stirring events, but it has long lapsed into a state of semi-oblivion; to tell of its past glories and its present prospects is the object of this charming little volume by Mrs. Ross.

Italy seems possessed of powers of rejuvenescence, and the time appears approaching for the revival of some of the past glories of this "Land of Manfred." The traveller from Naples can now journey by rail from Naples to Taranto and Brindisi, and thence by the East Coast line north to Bari and Manfredonia; but, to get some idea of the beauty of this fair portion of Italy, one must leave the iron road and wander over flowery meads, climb up the gently sloping hills crowned with many an ancient castle and overlooking the grey olive gardens and out to the blue encircling sea; then in some measure can the land's loveliness be comprehended. This district of Apulia is not only out of the range of the ordinary tourist, but is even to this moment so little known to the inhabitants of Northern Italy that it is regarded by them as not safe to travel in; the newly-made lines of railway, the building of a great harbour for the Italian fleet at Taranto, will no doubt speedily dissipate such notions. These pages of Mrs. Ross's will undoubtedly tempt many of her compatriots to visit this fair unknown land, to its and the travellers' benefit; and they will also show that the perils of Apulia consist solely in bad inns—a peril getting less and less each season.

Many of the towns along the coast were visited by Mrs. Ross, and the leading events connected with their history are very graphically described; such as Manfredonia, Trani, Barletta, Bari, Brindisi, Otranto, and Taranto. Of the more remarkable inland places visited may be mentioned Castel del Monte, Foggia, Lucera, and Benevento.

As the chief events associated with each city or town are recorded, it is difficult to make a selection. At Bari the immense fortress-like priory attracted deserved attention; the crypt is described as formed of pillars, apparently innumerable, with their capitals richly carved in every conceivable design. Under the silver altar were the bones of St. Nicholas. The Cathedral of St. Sabinus was even more ancient than the Priory of St. Nicholas, its crypt being said to have existed in 733.

To tell of all the churches and cathedrals mentioned, and castles and fortresses described, would be but to reprint the volume, so we must content ourselves with transcribing the charming description given of Sir James Lacaita's residence at Leucaspid. The *loggia*, or arcade, running all along the south-west front of Leucaspid, overhangs a garden full of orange trees, wallflowers, stocks, Parma violets, carnations, and roses; beyond, an expanse of brilliant green corn grown under the colossal olive trees, said to be 2000 years old; then a belt of cultivated land, across which now and then the white smoke of a rushing train reminds us that we really are in the nineteenth century; and last a long line of dark pines, which fringe the Gulf of Taranto. On the opposite side of the Bay rise the Basilicata Mountains, tipped with snow, and further to the left, dimly perceptible on a clear day, are the wild and rugged hills of Calabria. The whole country is redolent of rosemary, and in the Gravina or deep ravine of Leucaspid, the myrtle, white and pink gum-cistus, the lentick and wild pears, were in a blaze of bloom. Troops of small black sheep, with eyes like topazes, graze upon thyme and other fragrant herbs among the rocks, while their shepherd dressed in a waistcoat and trousers of goat-skin, all made in one, leans against a tree or a wall, and plays wild and melancholy music on a little pipe made out of a cane.

The clever sketches by Carlo Orsi assist in illustrating a country about which Mrs. Ross tells us much, but about which it seems evident there is much more to be told, and about which we may hope to have from the same pen some still further details.

OUR BOOK SHELF.

The Zoology of the Afghan Delimitation Commission. (Trans. Linn. Soc., Zoology, Vol. V., Part III.) By J. E. T. Aitchison, M.D., C.I.E., F.R.S., &c.

ALTHOUGH this is very far from being a complete account of the fauna of North-Western Afghanistan, there is good reason to congratulate the author on his success in collecting a fairly representative series of the animals inhabiting the frontiers between Afghan and Russian territory. As Dr. Aitchison explains, his special calling is that of a botanist, and he undertook the office of collecting the fauna under considerable difficulties. The specimens obtained, representing 16 mammals, 123 birds, 35 reptiles, 2 batrachians, 7 fishes, about 100 insects, and a few *Arachnida*, *Myriopoda*, and *Crustacea*, were determined, and the new forms described, by the officers of the British