

tainly be in such a plight, for he will find in it the minutest instructions for his guidance, and there seems not a *trait* in the character of this and the other freshwater fishes to be ordinarily met with in India that has not been scamed and studied by its author with the intent of beguiling these fishes to their own destruction.

Of the fish to be caught in Indian waters the best is the Mahseer (*Barbus tor*). It is the best from the sportsman's point of view, as it gives him most to do; for who that is a sportsman cares to haul up a dead pike on a night-line? and who that is a sportsman but must care for a fish that can attack as follows?—

“The Mahseer has a greater means than our salmon of putting on steam, and has the habit of always putting it on at once, energetically and unsparingly. His first rush is a mighty one, no doubt; that once made, his strength is, in comparison with the northern fish, comparatively soon exhausted. Other rushes he will make, but his first is the dangerous one; then it is that the final issue of the campaign is practically decided. Be one too many for him then, and you may be grimly satisfied that all else he can do will not avail him; you may count on making him your own. Then it is that you must wait upon him diligently. If you have not got all free, the connection between you and your new friend will be severed within a moment of your making each other's acquaintance. If you should have carelessly allowed the line to have got a turn around the tip of your rod, or have let any slack near the hand become kinked ever so little, or twisted over the butt or hitched in the reel or a button, then it is that not one moment's law is given you for the readjustment of such little matters. There is one violent tug, and an immediate smash:

“‘The waters wild go o'er your child,
And you are left lamenting.’”

Reader, it takes an eye and a hand, and tact and readiness of mind, as well as a rod and a line and a fly, to catch a salmon; but it takes all these, and something more, to catch a Mahseer.”

Although it is well known that a fisherman does not catch his fish for the pleasure of eating them—this being quite a secondary matter—still it is fair towards the Mahseer to mention that when in good condition they are excellent, so rich that one needs no condiment with them, so well flavoured as in this respect to occupy a rank between a salmon and a trout. The best size for flavour is between six and seven pounds; but they are good eating when from two to ten pounds in weight; under the former size they are too bony, over the latter too oily.

The chapter on the natural history of this fish is one of the most interesting in the volume, and it is scarcely necessary to add that there are minute details of how to “circumvent” him, of how to spin for him, and of how to tempt him with a fly, and of how, when, and where to fish for him. When we add that over one quarter of the volume is taken up with this fish, it will be evident at once that he ranks as a lord among the freshwater fishes of India; but we have full details also of the Carnatic Carp (*Barbus carnaticus*), a nearly allied species to the Mahseer, running to twenty-five pounds in weight, taking a fly, having a fancy for a No. 5 or 6 Limerick, and giving good sport.

There are also excellent chapters on many much smaller fishes than these—fishes for light rods, and giving very enjoyable sport; several, like the Black Spot, being dwellers in ponds.

Some information is also given as to the attempts made to stock ponds in India, and there is a very full list given of fishing localities. The lithographs which accompany the volume are very good, and several of them are coloured. To the sportsmen of India this work will be quite indispensable and quite a boon, and further, to all interested in the resources of an Empire presided over by our Queen, the volume will afford an insight into the importance of its freshwater fishes that they will find, we believe, nowhere else.

OUR BOOK SHELF

Book of the Black Bass: comprising its Complete Scientific and Life History; together with a Practical Treatise on Angling and Fly-Fishing, and a Full Description of Tools, Tackle, and Implements. By James A. Henshall, M.D. Illustrated. (Cincinnati: Robert Clarke and Co., 1881.)

THE author in this volume endeavours, and we think succeeds, in giving to the Black Bass its proper place among the freshwater game fishes of North America; and undoubtedly the reader will find himself taking an interest in this fish as he reads this enthusiastic account about it. No doubt the first and second chapters will be most tedious reading, and yet they are full of interest as showing how tangled may become the scientific nomenclature even of a well-known fish. As the sum and substance of these chapters we find the two species of the genus *Micropterus*, standing, the one as *M. dolomieu*, and the other as *M. salmoides*, and it is of these two respectively—the small-mouthed Black Bass and the large-mouthed Black Bass—that the author writes. Both species are very active, muscular, and voracious, with hard and tough mouths, are very bold in biting, and when hooked exhibit gameness and endurance second to no other fish. Both give off the characteristic musky odour when caught. They generally inhabit the same waters. These Black Bass are wholly unknown in the Old World, except where quite recently introduced. Their original habitat is remarkable for its extent, for with the exception of the New England States and the Atlantic seaboard of the Middle States, it comprises the whole of the United States east of the Rocky Mountains, Ontario, and, last, Mexico. Of late years this distribution has been greatly extended. These fish are very prolific, and rapid growers where food is plentiful. In northern waters six to eight pounds is about the limit of their weight, but in Florida they are sometimes met with up to twelve and fourteen pounds. They have been several times imported into England, and we believe that those brought over in 1879 at the expense of the Marquis of Exeter have succeeded well. The fisherman who reads the latter portion of this volume will find many pleasant anecdotes and stories in connection with the gentle art, and should he happen to frequent those waters where the Black Bass are to be found, he will get many a precious wrinkle which he might have otherwise not known. The author's parting injunction is, “Always kill your fish as soon as taken from the water, and ever be satisfied with a moderate creel. By so doing your angling days will be happy and your sleep undisturbed, and you and I and the fish we may catch can say—

“‘The lines are fallen to us in pleasant places.’”

An Introduction to Determinants, with numerous Examples. By William Thomson, M.A., B.Sc. (Edinburgh: Jas. Thin, 1882.)

THIS text-book is very accurately described by its title. It belongs to a class of which many examples have appeared on the continent for use in the secondary