

can be readily overcome. There is no reason why in New Zealand such mechanical methods and machinery should not be adopted.

#### SEA-FISH ANGLING.

Few sportsmen have realized that New Zealand offers the finest sea-fishing such as is greatly sought after in other countries, especially California, Florida, and Cape Breton, where the tunny or tuna, the albacore, the bonito, and other large members of the mackerel tribe occur and can be fished for with baited line or even with spoon and rod and line. The kingfish, especially in the Bay of Plenty and Hauraki Gulf, are becoming famous; and the pretty town of Russell is resorted to each season by kingfish-anglers, who obtain splendid sport. But a still more exciting form of angling can be obtained there, as well as on other parts of the coast, in the shape of shark-fishing. For example, last season a visitor, an elderly gentleman, while enjoying fishing for kingfish, reports that he was playing one of these fish for three-quarters of an hour when suddenly his line slackened. He reeled up, to find that his line was taut, and it seemed as if he had caught foul on a sunken rock. Soon he felt a very heavy pull, and was afraid he had hooked a kingfish, to use his own words, "as big as New Zealand." After three hours' exciting play he was at last able to reel in his fish, and found that he had hooked a fine "moko" shark,  $9\frac{1}{2}$  ft. long, weighing 200 lb. The captor was completely exhausted with his four hours' exciting fishing. He was interested to find out how the shark had been hooked. It appeared the fish had at first bitten off the head of the kingfish and left the rest of the fish. Then it returned and swallowed the remaining part of the fish, with the hook, the latter passing right through the chamber of the stomach, while the head of the kingfish was pushed half a yard up the snood, but as the snood was of piano-wire the shark could not sever it. Such royal sport can be obtained in the Bay of Plenty and other New Zealand waters, and needs only to be known to attract anglers from all parts of the world.

#### FRESH-WATER GAME FISH.

New Zealand has long had a high reputation for its magnificent trout-angling. The wonderful growth of its trout, especially brown and rainbow trout, has made the lakes and rivers of the Dominion an anglers' paradise. Yet there are two or three considerations which are worth noting in respect to angling: (1.) Excessively large fish, 20 lb. to 30 lb. in weight, are less desirable than the smaller fish, because they destroy a proportionately large amount of smaller trout. (2.) These overgrown giants, while affording good sport, are often stupid and heavy, and on the whole are not game fish proportionate to their size, nor do they provide as excellent food for the table as smaller fish. (3.) Their excessive size and probably resulting scarcity of food reduce their condition and they become favourable prey for parasites. (4.) Smaller less overgrown trout are more desirable as making less demand upon the food-supply and as affording a considerably larger amount of sport.

The brown trout, it is well known, has proved most successful in the southern rivers and lakes, while the rainbow trout has shown the greatest success in the waters of the North Island. In both Islands each species has reached a size and weight far in excess of that reached in its own native waters. But it is probable that there is a cycle in these matters, and that the trout, which have attained an enormous size since their introduction, will now become more reduced in dimensions and assume their normal weight and reduced size. As pointed out, this is not to be deplored. Similarly, the epidemic disease which has affected the trout so seriously in the Rotorua and Taupo waters has probably reached its maximum, and there are signs already that it is on the decline. As I point out elsewhere, measures should not be relaxed for getting rid of the conditions under which this disease spreads. That the trouble is on the decline I had evidence; and a similar decline in the fungus trouble has been observed in Lake Wakatipu, as seven or eight years ago the fish in that lake, I am informed, fell off very seriously in quality and a great number were affected by fungus, but during the last six years they had improved.

There should be a more systematic announcement of the splendid fishing New Zealand affords in such papers as the English *Field* and American sporting journals, in order to encourage the best class of anglers to come to New Zealand. I am of opinion that some of the anglers who have come in past years were somewhat of the nature of pothunters, whose ambition was to see how many tons of trout they could boast of capturing in a few weeks' stay. Some of these so-called sportsmen stated that they had captured some 7 or 8 tons of trout in a stay of twelve weeks - that is, over a ton and a half a week, or, say, thirty fish per day for five days in the week. Such men are not desirable; and the true sportsmen should be encouraged. Canada has been fortunate in attracting large numbers of the best class of sportsmen, and yet has had no giant trout to offer visitors. What is really wanted is an improvement in the food-supply in many of the lakes and rivers, and a far more extensive planting of fry than has been possible hitherto. In another part of this report I recommend a very largely extended system of fish-culture under Dominion arrangement.

#### DECLINE OF FISH IN LAKES, ETC.

The decline in the quantity of fish in some localities which has been reported to me I do not regard as very serious, and with a system of crayfish-culture, or the introduction of some non-predaceous food fish of small size, such as the American smelt, the supply of trout could be maintained without difficulty. All salmon and trout waters are subject to fluctuations, and ten or twelve years ago it was a matter of common knowledge that the salmon rivers in the British Isles had shown a marked decline, and in rivers which had not been netted at all this decline had been as marked as in rivers in which netting had been carried on. This decline continued for seven or eight years, and formed the subject of a Viceregal Commission in Ireland and similar Commissions in England and Scotland;