

the water or of substances dissolved in, or diffused through it, similar to our sense of smell.

With regard to hearing, it is very difficult to arrive at any conclusion, for what may be attributed in them to the sense of hearing is, in most cases, if not all, attributable to vibration. A sudden slam of the door, a clap of thunder, or a stamping on the floor will start into violent movement a fish lying perfectly still. I remember as a boy, standing by a fish pond, belonging to my father, (at which, by the way, before the days of aquaria, I picked up a good deal of knowledge on the habits of fish,) watching a shoal of roach sunning themselves on the surface. A dark cloud was speedily approaching, from which suddenly burst out a bright flash of lightning without in the least disconcerting the fish, but the instant the thunder sounded, they disappeared with a dive downwards, scattering in all directions, and I am very much inclined to the opinion that it is vibration or percussion alone that supplies to them what with us we attribute to hearing. Those who had the pleasure of listening to Dr. Powell's recent lecture on "Sound", will remember that his explanation of hearing was, that it is to a great extent, based on sound vibrations conveyed through our organs of hearing, to the brain.

The vision of Fish is peculiarly acute. This is known to all fishermen, who, on a sunshiny day carefully avoid letting their shadow, or even the shadow of their rod fall upon the water. I have seen trout dart from cover to seize a bait floating midway down the stream and before they had reached it suddenly turn back, deterred from their object, either by a shadow cast on the water, or by a sight of a man on the bank. When a strange fish is put into an aquarium, he at first avoids showing himself in the open when an observer is by, but when he becomes accustomed to frequent visits he seems to have no objection to a stranger and swims about unconcernedly.

Fish exhibit an inquisitive turn of mind. If a new pebble is dropped into an aquarium they watch it from a distance, evidently with great curiosity. After a while they will swim around it at a respectable distance, till one of them, bolder than the others, makes a dash at it, immediately rejoining his fellows. Then one or two will swim round and round it, gradually approaching nearer to it, till finally they come in contact with it and, when satisfied that it is an object of no harm,