

the pier belonging to the Scripps Institution at La Jolla. This point is about 1,000 feet from shore and the water is near thirty feet deep.

While taking my plankton collection at about 7:25 a. m., April 14, 1923, I heard a splash near by. Turning, I saw about one hundred feet distant a swirl in the water like that made by a California sea lion. A moment later a long, slender, compressed tail (about three feet long) flashed above the surface and lashed about like a coach whip. It evidently belonged to some shark-like creature with which I was not acquainted. This exhibit was quickly repeated once. The body was not visible at all.

At about 7:45, while draining some water through my filtration net I saw about fifty feet from the pier what appeared at first to be a "soup fin shark" (*Galus zyopterus*). It was coming diagonally toward the surface and swimming rapidly. Almost immediately I noticed a small fish (possibly California smelt, *Atherinopsis californicus*, about ten inches long) frantically swimming just in front. A moment later the pursuer, a six-foot thresher shark, passed partly ahead of the victim (probably half its own length) when it turned quickly and gave the coach-whip lash with the tail which I had seen before. The victim was much confused, if not actually injured by the whiplike movement, which seemed to be very accurately aimed. The whip stroke was instantly repeated with very confusing speed, and it then became evident that the victim was seriously injured. It was, however, almost under the drip from my net, at which the shark was apparently frightened. The shark darted away and was not seen again. The victim sank, swimming feebly, then came to the surface and lay on its side awhile. Then it struggled feebly with head at surface, gasping. Finally it sank again until out of sight and was not seen again.

I was much impressed with the speed and skill with which the shark worked and with the accuracy shown in its strokes at a single flying target.

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· ASYMMETRICAL ORATORY

In the work of supervising class-room teachers during many years and in visiting class rooms in different parts of the country, I have frequently noted phenomena analogous to those described by Dr. W. Gilman Thompson (*SCIENCE*, March 16, 1923) as "right- and left-handedness in speakers."

Many teachers, especially when the class is large, focus their service upon a limited portion of the room to the almost complete neglect of the pupils in the marginal fringe. Whenever I brought this fact to the attention of teachers, I found that they were themselves unaware of it. On the other hand, I have

met teachers who were aware of this tendency in themselves, and who attempted to counteract it by means of some mechanical device, such as seating plan or roll book, etc., to insure an equitable distribution of attention to all individuals.

The use of the right or left hand and arm to release the emotional strain for which the voice alone is not an adequate outlet may account for the asymmetrical presentation in the case of public speakers and orators. From my observation in schools I am inclined to attribute the limitation to some irregularity of vision. In many cases it is possible to detect deficient vision on the part of pupils by their posture and address.

This matter deserves more intensive and systematic study, both for the improvement of school-room technique and for the art of public speaking.

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QUOTATIONS

MEDICAL PROGRESS

"EMOTIONAL tension," Sir Almroth Wright declared in a recent lecture on vaccination, "is intolerant of any intellectual *impasse*." He was describing in outline the steps by which modern medicine has progressed towards a clearer knowledge of disease and of the mechanism of the body's protection against disease. Hypotheses are always tentative; of the best of them it may be said that, in a sense, they are made to be broken. Thus it was "the pain in the mind," which is felt when one is appealed to and is powerless," to quote Sir Almroth again, which led Pasteur to revise his first theory of vaccination and so to achieve his great triumph over hydrophobia. Last week, at St. Mary's Hospital, Professor Dreyer, of Oxford, offered yet another extension of knowledge which is the outcome of revised opinions and changed ideas. His new treatment of tuberculosis, whether ultimately it stands or falls, is the last link in a chain extending back to Jenner. The chain is continuous, but its links are not, if the metaphor may be extended, of the same shape nor even of the same metal. In a series of monographs, of which we present some account to-day, Sir Almroth Wright has recently outlined his own revised opinions on the subject of vaccination against disease. These differ in many important respects from the views this pioneer held when he set himself to perfect the method of preventive inoculation against typhoid fever, which stood the world in so great stead during the years of the war. Sir Almroth no longer believes that our bodies elaborate a special and specific antidote against each germ which attacks them. Rather he takes the view that there is stored up in the white cells of the blood