

will prove yet more effective. I have tried myself, one alone, or both together, nay, with a single hand only, in bygone years, I am sure, hundreds of times. There is no occasion for fuss or bustle. The body, taken as a whole, is actually lighter than water, bulk for bulk, and a very moderate amount of paddling with feet and hands will be found perfectly adequate to sustain and guide its movements. In fact, so long as the individual paddles, as I here direct, he cannot sink. A horse, or dog, or cow, or cat, or swine, when immersed in water, begins instantly to paddle, and that without any prior instruction or exercise whatever. Now a man, or woman, or child has only to do as the inferior animal does, and he, or she, or it will float necessarily and inevitably. The place being otherwise safe and boats at hand, boats' and ships' crews, a regiment of soldiers, schools and the like might jump into deep water and paddle themselves into security without risk of failure. In this, as in many other things, man is too often unaware of his own immense capacities.

Animals not habituated to the water will often take to it spontaneously, or if cast into it, sustain themselves for indefinite periods. Dogs often gain the shore when ships and their crews have been lost. Some years ago a dog landed at the Cape of Good Hope with a letter in his mouth. The vessel to which he belonged had gone down with all hands; but if the men had paddled as the dog had paddled, all their lives might have been preserved. Indeed, I know for certain that formerly it was the practice at the Cape for men to paddle out, it was termed "treading water," and

bear communications to and from vessels in the offing, where no boat could live. It was, and I believe is still, the case at Madras, similarly. Natives at the island of Ioanna, in the Mozambique Channel, treading water, come out, bearing fruit on their heads to the vessels, miles distant. The young people in the islands of the Pacific breast the gigantic breakers out of mere sport. The Indians of the Upper Missouri traverse the impetuous current, invariably paddling and treading water.

Short instructions for paddling and treading water ought to be posted up in all schools, barracks, and bathing places; wherever, in short, people have to do with the sea or masses of water. It should be shown how easy it is, with a little well-directed effort, to preserve life, and how the yearly and calamitous destruction which besets our shores might now, and happily for all time to come, be effectively stayed.

One precaution is necessary for a person who is paddling and treading water, to avoid strangling; when cold water is suddenly dashed into the face, an automatic or involuntary inspiratory effort or "catching the breath" is caused, and if the face at the instant is covered with water, strangulation from drawing water into the lungs is the result. When waves are dashing in his face, the person must guard himself against this spasmodic inspiration by holding his breath at such times, or he may even grasp his nose and close his mouth with one hand and thus prevent the possibility of strangulation, if such effort can be made without sinking the body too low in the water.

HEALTH CONTRACTS—UNDERTAKING TO ATTAIN CERTAIN SANITARY RESULTS.

THE time, it would appear, is probably not far distant when contractors may, with safety and profit, undertake for a certain sum of money to reduce the mortality in a city to a given rate, and so to prolong the lives of the people to a fixed average age. In an address Sir Edwin Chadwick, K. C. B., &c., before

the Association of Sanitary Inspectors of Great Britain, in March last, said: Various experiences in this country have established with certainty that a contractor may contract with safety for the attainment of sanitary results, and by them the general death-rate may yet be reduced by ten in a thousand. He stated the