

HOW WE DEFEND OURSELVES FROM OUR FOES

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IN a certain sense even now in the midst of his civilized communities, mankind is waging ceaseless warfare against a number of hostile conditions, both animate and inanimate. Serious as this may be now, it must have been much more acute in the earlier times of the race.

Man had to defend himself, as best he could, from the great cosmic exhibitions of energy—the extremes of heat and cold, the tempest, the lightning, the avalanche, the earthquake and the tidal wave. Primitive man, we are assured, must have lived in the midst of alarms of all sorts and in the constant dread of attacks by fierce animals far more powerful than himself. Undoubtedly he sought shelter from wind, rain, snow and frost in those caverns in which his skeleton and the bones of the animals he slew for food and fur are yet to be found.

In many parts of the world he built his wooden hut on piles out from the shore of some lake, so that he had his food supply in the fish under the floor, and was also more secure against the wild animals when his dwelling had to be defended on one side instead of on four.

The latent powers of his nervous system permitted him to develop that speed of running in flight whereby he saved himself from the avalanche, the tidal wave or the beasts of the field. Not alone was speed necessary, but also rapidity of response on the part of his nervous system in order to take warning from the impending danger: that man lived longest who most rapidly reacted to the danger signal, stepped most agilely out of the way of the rolling boulder, skipped most briskly aside from the infuriated lion or bear.

Of course, as we know, he early devised his weapons of offence and fired his flint-tipped arrows at the animals threatening his life or destined to be his store of food for a long time to come. That man thrived best who most accurately threw his stone or javelin, so that quickness of response (short "reaction-time") and accuracy of aim—both powers of the nervous system—were early in the history of our race the means of escape from enemies, or the mode of procuring a sufficiency of food.

The first human line of defence is then nervous or mental; our ancestors established themselves on the earth by means of such powers of the nervous system as speed, accuracy and coordination of move-