

that most of the infectious diseases to which races of the lower animals, such as cattle, sheep, or dogs are subject do not attack human beings. When the most virulent pestilences have been raging through large communities, as a rule none of the domestic animals have shown any sign of being affected. Neither scarlet fever nor measles has been known to invade any of the animals which come in contact with man. When in 1897 the rinderpest was killing thousands of cattle in South Africa, not a single human being showed at any time the slightest trace of an attack of the malady. In those regions of Africa where the tsetse fly disease attacks all horses except those which are "salted," that is, those which have already had an attack of the disease, man is not affected. The rule that human beings and animals are not attacked by the same infectious disease is by no means absolute, and as an instance it may be mentioned that rats suffer greatly during an epidemic of plague.

"This freedom from liability to catch a disease is called 'immunity,' and it is of two kinds. The form of immunity with which a person is born is called 'inherited immunity,' and it is that form which is possessed by all the members of a race.

"There is, in addition, another form of immunity. When a man has had an attack of scarlet fever, there is no real risk that he will take it again, however much he may be exposed to infection. . . . This freedom from liability to contract a disease, possessed by those who have suffered from it, is called 'acquired immunity.' This fact that an attack of most of the acute infectious diseases affords protection against a second attack has been recognized everywhere for many centuries, and attempts have been made to utilize it. Inasmuch as many of these diseases attack more easily those who are weak and out

of health, it was thought that if the disease could be given when the patient was in good health the attack would in all probability be milder, and less likely to prove fatal. This method was used for smallpox, and it was called 'inoculation,' though it fulfilled the expectation of those employing it, in that it caused a comparatively mild attack of the disease, yet the contagion was not lessened."

The chapters on malaria, including "The Political Importance of Malaria," deserve careful study, as also do those on "The Role of Insects in Disease" and "The Fight against Malaria."

In regard to political importance, we read, "The supremacy of a nation, strong, wise, and healthy, may be destroyed by the appearance of an endemic disease which saps the life-blood of the people, and there is much foundation for the assertion that the downfall of Greece was really due, not so much to the superiority of its enemies as to the introduction of malaria into the country. . . .

It is a little difficult to imagine that the Greeks in the height of their intellectual supremacy could have been a people saturated with malaria. Can it be that a

nation degraded physically and mentally by malaria should be capable of creating the masterpieces of the Golden Age of Greece? If, then, we have to confess that it is unlikely that the Greeks in their prime were malarious, we have to solve the question: When was malaria introduced, and is its introduction into Greece to be held responsible for the degradation of its people?"

Mr. W. H. S. Jones, who has studied the matter from the historical side, suggests that its appearance coincided with the Greek expedition to Egypt in 456 B.C., and that this may be the channel through which the disease entered Greece, the returning soldiers bringing the disease with them.

Again we read:—"Should it be possible to eradicate malaria and other kindred diseases from the



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