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CLASS X ADDITIONAL ENGLISH CHAPTER 3 - THE CONQUEST OF MALARIA T.C. BRIDGES AND H.H.TILTMAN

NOTES

SUMMARY

The Conquest of Malaria is an extract from "Masterminds of Modern Science" (Harrap) co-authored by T.C. Bridges and H.H. Tiltman. The extract describes Sir Ronald Ross' epoch-making discovery of the spread of malaria. It tells us how Manson and Ross defeated the tiny flying insect which was the most dreaded enemy of the British Empire until the beginning of the twentieth century.

Malaria is the most common of all the tropical diseases and about one-third of the entire population in many hot countries suffer from it every year. It has been officially estimated that in India alone about **1,300,000** deaths are caused by it annually. Scientists and doctors sought the secret of its spread. Some declared it to be caused by night air while some others were of the opinion that it came from infected water. For years, malaria had remained a plague over a vast part of the earth's surface as people did not know how it spread.

In 1894, *Major Ronald Ross* of the *Indian Medical Service* while on leave met *Sir Patrick Manson* in *London*. *Sir Manson* who had worked as a doctor in a *Chinese Hospital* in *Formosa* discovered that mosquitoes were the carrier of the germs that caused *elephantiasis*. *Ross* had for long been interested in the study of malaria and other tropical diseases. *Manson* explained his theories to him and the hour for the final onslaught had struck. *Ross* resolved to begin his experiments upon his return to *India* which led to such triumphant results.



Thus, began the famous partnerships in the history of research, one in *London* and one in *India* who laboured for four years.

Back in *India*, *Major Ross* set to work in earnest and did many experiments but without any success. He had wasted valuable time in testing *Manson's* original theory that malaria spread due to infected water.

At last, he came upon *dappled-winged brown* mosquito specimens which he had not worked on before. He made the mosquitoes suck blood from the infected patients and when he dissected the stomach of the insects he found the pigments of the parasites of malaria there. But *Ross* was so tired in mind and body that he did not even realized immediately the value of the observation. The next day, when he dissected the last survivor of the same batch of mosquitoes, it was conclusive that he had made one of the greatest medical discoveries.

Thus, *Ross* discovered two unknown quantities simultaneously the kind of mosquito which carries the parasite and the form and position of the parasite within it. The mosquito was *Anopheles* and the parasite lives in or on its gastric wall and can be recognized at once by its characteristic pigment.

This extract tells us how **Ross**, undeterred by criticism and unspoiled by praised, worked earnestly for years and led to his brilliant discovery. With his discovery, **Ross** contributed greatly to the world of medical science and helped in saving millions of lives world-wide.