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THE EFFICIENT PARASITE¹

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THE paper I was supposed to read, but did not, in Section V of this congress bore the title, "The Efficient Parasite." I am going to tell you of a highly efficient parasite I came across in the bush-country of Dutch Guiana. But before coming to that, let me first explain to you what I understand by the word "parasite." Once I have made that clear, the other word, "efficient," will need no explanation.

Now, I beg of you, keep this in mind, that I am not going to tell you what a parasite is, but only what I understand this word to signify. It is simply a matter of definition. Many, or all, of you may have an entirely different definition in mind. So all I ask of you is to accept my definition just for argument's sake and for a period of forty minutes. By the end of that time you may reject it without giving it another thought.

¹ Address delivered before the General Sessions of the Third International Congress for Microbiology, New York, September 2-9, 1939.

Well, then, by parasite I understand an organism wholly dependent on another living organism for its food, its shelter and its reproduction. That other living organism, which provides the parasite with board and lodging, including sufficient shelter to carry on its love affairs without awkward disturbances of any kind, is usually called "the host." If the host is to be of any use to the parasite, it ought to be a living host; a dead host is no good. Now, please, keep that in mind: a dead host is not a host any longer. When the host dies, the whole brood of parasites inside or on his body dies with him. I need not give you any examples; you all have them at your fingers' ends.

Now I ought to admit at once that this statement is not always true. A very striking example is offered by the anthrax bacillus. That is an organism which actually thrives on the death of its host. In fact, it could not continue its existence without that death. It

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