

THE
CANADIAN MAGAZINE.

VOL. I.

JUNE, 1893.

No. 4.

BACTERIA AND THEIR RÔLE IN NATURE.

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Few subjects in the realm of science have awakened so great an interest or advanced so rapidly as bacteriology. A few decades ago and it was hardly recognized as a distinct branch of botany; now it is considered a science in itself. It has its professors and its laboratories, its apparatus and its literature, and a man who would now enter its field must go through a special course of training in order to master the delicate technique which is the key to its mysteries.

Microbes have not only awakened the interest of the public generally, but have even penetrated the realms of fiction, and novelists have used them, believing it a much more striking and original *dénoûment* to "remove" a character by means of a cholera culture than by the historic dirk or vulgar poison bowl.

The reason for this great popular interest in the science lies, of course, in its connection with practical medicine. The lay public follows with intense interest, though afar off, the advances of Medicine, and let us but discover a new cause of disease or a new cure, and the newspapers announce it with double-headed columns and the people read it eagerly. The interest in bacteria lies largely also in the fascination with which people regard the presence all around them of

these invisible enemies, which apparently only await a favorable opportunity to enter their bodies and work havoc there. That this dread of these minute enemies is justified, there is no doubt, but it is equally true that many of them are not only not enemies, but valuable friends and allies which con-

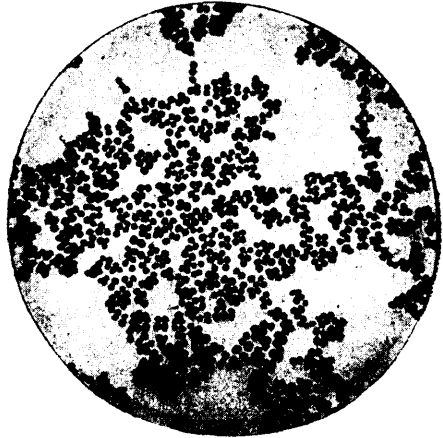


FIG. 1. A LARGE MICROCOCCUS FOUND IN AIR.

tribute very materially to our welfare, in rendering the world habitable, by breaking up all organic filth and bringing it back to such a condition that it may be used for food by the higher plants and thus converted into food for animals. Not only in this most important rôle are they useful, but in many minor ways, so that we find that