

tuberculosis germs which affect human beings. One variety is what is known as the human tuberculosis germ proper. The other is found chiefly in cattle and is therefore called the cattle tuberculosis germ (the bovine tuberculosis germ), and this name is given to this variety even when it is found in the human, as it sometimes is.

#### HUMAN TUBERCULOSIS

A most important difference that the germs of human tuberculosis, of diphtheria, and of typhoid fever show amongst themselves is not a difference in size, shape, etc., but in the parts of the body each selects. Thus the diphtheria germ flourishes chiefly in the nose and throat, and the typhoid germ flourishes chiefly in the intestine and perhaps the blood; while the human tuberculosis germ will flourish almost anywhere in the body, glands, bones, joints, intestine, kidney, brain, lungs. This selection is no mere accident, although we do not know how it comes about. All three germs enter the body chiefly by the mouth, conveyed thereto chiefly by the *hands*, but also more or less through food and milk, and, in the case of typhoid fever, through water and flies. On entering the mouth, all three germs, which are of course far too small to taste or feel, are swallowed in the food, milk, etc., in which they happen to be present, or merely in the saliva, if, as is most usual, they reach the mouth directly or indirectly from the fingers. Once swallowed, all three pass into the stomach, where many are killed by the acid there present, the survivors, if any, passing on into the intestine. On the journey from mouth to intestine, some are left, of course, by the wayside, stranded on the tonsils, throat, gullet, etc. Here at once is