## DISCUSSION ON VACCINATION BEFORE THE MONTREAL MEDICO-CHIRURGICAL SOCIETY.

THE BACTERIOLOGY OF THE SKIN AND OF THE GLYCERINATED LYMPHS.

## JOHN MCCRAE, B.A., M.B.

As is to be expected, there have been found on the skin bacteria of all sorts, many of them naturally the forms which would be got by exposing plates to the air in which the person lives. Most of these it will be understood are adhering temporarily to the skin, and but three or four varieties are commonly found in the skin layers, or deep in the openings of the sweat glands and hair follicles. The forms which are of surgical importance are staphylococcus epidermidis albus, (which is an attenuated staphylococcus pyogenes albus), bacillus pyocyaneus, B. coli communis ; the first named is the only one of these which has at all a widespread distribution.

Of all sorts and conditions, one observer has found 23 varieties of bacteria on the skin ; the practical bearing of this fact upon our subject is :---

1. What is the importance of these on the vaccinated surface ?

2. How may they be removed or destroyed ?

Most of these bacteria are washed off by the usual soap and water wash, with brushing or even rubbing with a soft cloth ; the perfunctory and momentary application of antiscptic solutions of moderate strength does not generally allow the antiseptic sufficient time to do its work. The average washing leaves the surface presumably sterile, but in the hair follicles and in the mouths of the sweat glands the bacteria have lain unharmed, the more so because in each gland or follicle a little cushion of air has kept the solution from entering it. Next by means of the lancet or the ivory point the sterilized cuticle is scraped off, the mouths of the sweat glands included ; the buried bacteria can now come to light and remain in the serum which bathes the scraped surface. If the skin be sterile and the point not so, the same result is brought about. Most vaccination wounds are to some extent infected in one of these ways ; but the site being a clear, smooth surface, not in a fold of the skin, the injury being comparatively slight, and most important of all, the wound having perfect drainage, the infection is generally of no importance. But where on account of unsound reasoning, a scab is allowed to cover and protect the bacteria, and obstruct drainage of the wound, a considerable loss of