which did not have the second feeding by the mouth, promptly died in anaphylactic shock. Richet also found that when krepsin is given by the mouth the sensitized animals showed a marked leukocytosis at the second feeding. If the animal survived the anaphylactic shock the late symptoms of poisoning due to the krepsins did not appear, therefore they were rendered immune.

PATHOLOGY AND BACTERIOLOGY

UNDER THE CHARGE OF

JOHN McCRAE, M.D., M.R.C.P.,

LECTURER ON PATHOLOGY AND CLINICAL MEDICINE, MC GILL UNIVERSITY, MONTREAL; SOME TIME
PROFESSOR OF PATHOLOGY IN THE UNIVERSITY OF VERMONT, BURLINGTON, VERMONT;
SENIOR ASSISTANT PHYSICIAN, ROYAL VICTORIA HOSPITAL, MONTREAL.

The Influence of Local Anemia upon the Action of Poisons and upon Infective Processes.—R. BESTELMEYER (*Br. Beitr.*, 1912, Band lxxviii, Heft 2, S. 333) notes, as a result of his experiments, some interesting facts. Although there is no actual killing of virulent bacilli by reason of a locally produced anemia, yet the resorption of injected soluble poisons is so retarded that ordinarily fatal doses may be injected without producing a fatal effect. This was proved by the use of various snake poisons. With the slowing of the capillary current there is a corresponding lowering of the rate of absorption; with a quickened capillary current more poison is absorbed. In infective states, local anemia delays the entrance to the blood stream of bacteria and their toxins. The general and local manifestations appear later, but there is a greater tendency to localized necrosis, although secondary abscesses by way of the lymphatics are less prone to occur. Passive hyperemia, Bestelmeyer points out, is anemia, as far as the arterial blood is concerned.

Vaccination with Sensitized Agents.—BESREDKA (*Bull. d. l'Inst. Pasteur*, June 30, tome x, No. 12) deals anew with the question of vaccination by means of agents, living or dead, that have been attenuated in various ways. In the case of tubercle bacilli, if attenuated, sensitized bacilli are used, they are not only themselves absorbed more quickly than ordinary bacilli, but they in some way hasten the absorption of bacilli injected subsequently to their own entry into the body. The sensitized bacilli (if one may so translate *sensibilisés*) are better borne by the animal than are the non-sensitized, to the extent that with the former, repeated injections do not kill; as to the power as a vaccine, guinea-pigs treated with sensitized bacteria contracted disease from subsequent inoculation with ordinary virus, but after long delay and of light grade of severity. Meyer used the sensitized vaccine on 47 persons; localized tuberculosis, such as abscess or fistula, healed rapidly, while bone and joint lesions were quickly bettered; 40 out of 47 cases showed definite amelioration. Vallée and Guinardre report equally good results in 30 women; all these observers unite in declaring