

physician's duty and he should be especially happy when he can relieve the pain by permanently removing the cause. What a noble and humane sentiment is that of Herzen—may it not well be the animating sentiment of every physician?—*Tout être qui souffre est également près de mon cœur.*

**PHAGOCYTOSIS AND IMMUNITY.**—The fact that one attack of a contagious malady, such as small-pox or scarlet fever, renders an individual immune against a second attack has never received adequate explanation. It is even more difficult to explain satisfactorily the immunity conferred on an animal by inoculating it with the attenuated virus of a disease which in its ordinary form is often, and in a few cases invariably, fatal, such, for instance, as protective inoculation for anthrax, chicken cholera, and the older method of vaccination to protect from or modify an attack of small-pox (*The British Medical Journal*). In a lecture recently delivered by Dr. Metschnikoff at the Pasteur Institute, an attempt is made to prove that the defending powers exercised by the amœboid cells of the organism are in a large measure concerned in conferring this immunity. The aggressive characters of these amœboid cells has earned for them the name of "phagocytes," and Metschnikoff points out that they are of different kinds, and originate in various ways. In connection with the subject of immunity, it is important to remember that these phagocytes can include and destroy micro-organisms; but the more malignant the micro-organism the more rarely is it found within the phagocyte, and this is especially true of such diseases as chicken cholera, hog cholera given to pigeons and rabbits, and anthrax of mice. All these diseases have the character of general acute septicæmia and cause death within twenty or thirty-six hours. According to the views expressed in this lecture, we are to believe that when the micro-organisms are attacked by the phagocytes, an animal may recover from the disease. In the malignant forms, where the phagocytes do not intervene—that is, phagocytosis or amœbic warfare is not established—then the bacteria overrun the organism, and induce death. This partiality of the phagocytes is attributed to their sensitiveness to external influences, and especially to the chemical composition of their environment. These cells are powerfully attracted by many micro-organisms, and repelled by others. This attraction and repulsion are expressed by the terms "positive chemiotaxis" and "negative chemiotaxis." Now the basis of the theory appears to be that the chemiotaxis of the phagocytes of a given animal is mutable, and that cells may be gradually attracted to substances in a mild form from which they shrink when presented to them in a concentrated

form. Hence by inoculating an animal with an attenuated virus the chemiotaxis, previously negative, will acquire positive characters, and at last be induced to attack the micro-organism of a malignant disease should occasion arise. Any attempt to explain immunity from infectious diseases on a rational basis will be very welcome. The theory propounded by Metschnikoff is, like all the previous communications made by him on the subject of intra-cellular digestion, the outcome of patient and industrious observation, and must command our attention. His views, formulated for the first time in a consecutive manner in this lecture, promise to revolutionize opinions as to inflammation and fever, and this attempt to explain the power of the cells to confer immunity from infectious diseases is sure to be hotly contested, for every important contribution to this confessedly obscure subject must necessarily be in a large measure hypothetical.—*Med. Rec.*

**TREATMENT OF OBSTRUCTION OF THE BOWELS BY LARGE DOSES OF OLIVE OIL.**—Dr. E. W. Mitchell, of Cincinnati, reports two cases of successful treatment of obstruction by means of olive oil, this method of treatment being the result of a suggestion of Prof. Langdon. One of the patients, a man fifty-three years old, had had an operation for strangulated inguinal hernia on the left side, twenty months previously. When seen for his present trouble he had not been well for a day, there had been severe colicky pains and vomiting after each attempt to take food. Enemata were given on this and the following day with little result. Morphine was given, and large enemata through a rectal tube, introduced as far as possible, produced no effect. Almost two quarts of dirty fluid was withdrawn through a stomach tube. Two ounces of sweet oil were ordered to be taken every hour. Tympanites during the afternoon and early evening had rapidly increased. There was much prostration, no nourishment having been retained. During the night, half a pint of oil was taken. In the morning there was less prostration; there had been a small fluid passage. An enema, now administered through a rectal tube (English gum catheter, No. 16) returned slightly discolored, and containing a trace of oil. There was a recurrence of vomiting, but the oil was continued. About noon the bowels began to move, and several fluid stools were passed during the following night. On the next day the stools became formed and contained pus in small quantities. The case was probably one of fecal impaction—there were no evidences of typhlitis or perityphlitis.

The second was that of a young man twenty-two years old. The bowels had not moved for forty-eight hours, and he had been suffering from tormina and vomiting. Large doses of cathartics had already been taken. Thorough examination