

evidenced by their costumes, appearance and conversation. Many of them had their limbs bandaged and their arms in slings. Several Russians were there who had been bitten by mad wolves. M. Pasteur was to be seen walking around among the patients and conversing with them freely. He dresses very plainly, and wears a smoking cap; he is below medium height, and appears about 65 years of age; he is partially paralyzed on one side and walks with a limp. His demeanor is humble and unassuming, but in his countenance is seen intense earnestness, together with an anxious expression, and all his thoughts seem concentrated, and at all times, on the great problems in connection with *disease germs*, or *bacteria*, and at the present time more especially with those of diphtheria and hydrophobia.

"Each patient has a number, and they are called into the operating room in rotation. The inoculation is made with a hypodermic needle in the side. The virus is prepared by mingling with broth a portion of the spinal cord of a rabbit which has died of hydrophobia, and from a half to one cubic centimetre is injected beneath the skin, according to the age of the patient. Each of the eight assistants has his separate duty in the various processes. The injections are made by Dr. Crancher. The operation in most of the cases did not seem to produce any pain, although some of the children cried lustily.

"Each patient is inoculated once daily for ten days. If they are too severely injured to come to the operating room they are placed in the hospital, and the inoculation given there.

"The next day we visited the laboratory on Rue d'Ulin. Shortly after entering the gate, near the porter's lodge, we met the eminent scientist coming from the Ecole Normale, where I received an introduction. On the way to the laboratory he made inquiries regarding the recent smallpox epidemic in Montreal, wondering at the great mortality. When informed that the deaths occurred almost altogether among those who had opposed or neglected vaccination, he was astounded that such opposition could exist, and exclaimed, *Est il possible? c'est terrible!*' Recognizing the fact that to oppose vaccination meant ignorance of the absolute protection afforded by it, he seemed indignant that the anti-vaccinationists should be allowed thus to influence the people, and suggested that they be more fully instructed as to its benefit.

"Coming to the laboratory we observed a notice at the door, stating that visitors to obtain admission must present letters from the consuls of their respective countries. M. Pasteur brought us up to the portions of the laboratory where his assistants were working, and they gave us full explanation of the methods of preparing the material for inoculation. We saw there physicians from all parts of the world, studying Pasteur's methods.

"The virus of hydrophobia resides chiefly in the brain, spinal cord and nerves. And it was found by M. Pasteur that animals inoculated direct in the brain developed the disease in a shorter time than if inoculated beneath the skin. He found, also, that by successively inoculating monkeys one from the other, that the power of the virus decreased, and if rabbits were used it increased in virulence, and the period of inoculation became in a corresponding degree shorter, until after a great number of transfers, extending over several years, it was reduced to seven days. It was ascertained, also, that by drying the virus it became gradually attenuated, or at least produced a milder affection (he believes the result to be due rather to a lessening of the amount of the active principle than to diminished virulence) so that, at will, inoculation material of different degrees of virulence could be prepared.

"Four rabbits are inoculated daily in the vascular surface of the brain. They are secured to a board and chloroform given, the top of the head is shaved and a slit made in the scalp, a circular portion of the cranium, about $\frac{1}{2}$ inch in diameter is removed by a trephine, which is worked by a crank, with cogged wheels, it is so graduated that when pressed firmly down upon the skull it cuts through the bony part only leaving the membranes intact. The piece is lifted out with a tenaculum. The inoculating material is injected beneath the dura mater by means of a hypodermic syringe with a needle bent at right angles. The wound is then cleansed with a solution of carbolic acid applied with antiseptic blotting paper, and the scalp wound closed with sutures. They are then placed in cages, long rows of which may be seen on tables in the lowest flat of the laboratory. They invariably die on or about the tenth day, and in the cages one can observe at any one time the different stages of the disease as it affects rabbits. The wound heals in a couple of days and the rabbit appears well until from the 4th to the 6th day when paralysis gradually set in.