

vomiting, rapid and difficult breathing, increased frequency of pulse, and rise of temperature,—these symptoms last about 12 hours, followed by more or less lassitude for a few days. It is asserted that this reaction is sometimes so great in tuberculous individuals as to cause death. But when introduced under the skin of one having no tuberculous bacilli, little or no reaction follows. Hence if their statement should prove correct, we may hope that it will aid in forming our diagnosis in the early stage of tuberculous disease. It is claimed that it does not kill the germs, but acts only upon living tuberculous tissue which it kills, thereby driving the germs from the tissue or starving them. It is asserted by some good authorities that "its power over lupus is almost marvellous and beyond precedent." Virchow on the other hand declares that "there has not been a single case proved of tuberculosis having been cured by the remedy." The doubt regarding its employment in pulmonary tuberculosis is more strongly expressed. In the face of such statements, time and experience alone can decide the question.

Tuberculosis being the most terrible of all diseases, standing second as the cause of mortality, and killing annually one-seventh of the human race, it is not surprising that the hopes and fears of mankind induced the acceptance of Koch's announcement with rapturous applause. It is true that the mortality from phthisis in England declined since 1847, $3\frac{1}{2}$ per cent.—this may, in some measure be attributed to improved sanitary measures, and perhaps assisted by the just belief in its contagion, still 44,284 persons died from it in 1888, and 18,434 from all other tuberculous diseases. Hence if half that is claimed for his "remedy" should be fulfilled, the name of Koch should stand beside that of Jenner. I may also refer to Pasteur's treatment of anthrax, fowl cholera and diseased silk worms, as illustrations of what may be expected from a knowledge of germ causes of disease.

Surgery owes its recent progress largely to anæsthetics and antiseptics. Prior to 1870 the surgery of the brain was confined to external traumatic lesions. It is true the trocar had been occasionally used in hydrocephalus, but the interior of the cranium was a "dark continent" which none dare explore. It is widely different in the present day. Aided in his diagnosis by the sensory and motor phenomena locating the lesion, the surgeon does not hesitate to open the cranium

and remove tumours, matter and extravasated blood. He also taps the mastoid cells for the removal of matter. The same may be said regarding diseases and injuries of the spinal column. The successful operations of Macewen, Horsley, Godlee &c., are examples encouraging us to follow in their line. Ophthalmology has largely advanced. With the aid of cocaine and improved instruments the various operations upon the eye are more easily and more successfully performed. Coming to the throat we have intubation of the œsophagus and intubation of the larynx, as a substitute for tracheotomy and œsophagotomy. The larynx has been successfully removed. Many cases of tuberculosis of the larynx have been cured by the application of lactic acid and curetting. New and improved tracheotomes have much assisted the surgeon in the operation for tracheotomy.

The advance in thoracic surgery has been remarkable. The aspirator has enabled us to remove fluids from the pleural cavity and even to invade the "citadel of life" by penetrating the pericardium with its needle. Portions of necrosed ribs, sternum and lung have been successfully removed, the surgeon irrigating the cavity of the pleura with antiseptic solutions.

When we turn to the surgery of the abdomen, it is there that the greatest success has followed the knife of the modern surgeon. It is true that McDowall in 1809, opened the road to ovariotomy, having operated up to 1830, 13 times with a mortality of 7. But he had few followers until Sir Spencer Wells in 1858 commenced his series of cases, having up to 1884 performed the operation 1000 times, with 231 deaths. It is now practiced in every civilized country in the world, yielding about 75 per cent of recoveries, instead of a mortality of 50 per cent as formerly. The surgeon no longer dreads the effect of his knife upon that delicate membrane, the peritoneum. Indeed he attacks every viscus in the abdomen with it. He opens the gall-bladder for the removal of calculi, and even extirpates that organ. Portions of the liver have been successfully removed. He does not hesitate to open the stomach for digital divulsion of the cardiac, or pyloric orifices for the removal of foreign bodies, to cut open the pylorus for cicatricial stenosis of that passage; or with the aid of Senn's decalcified approximation bone plates, he creates an artificial connecting canal between the jejunum and the stomach. He has successfully removed 22 inches of the colon. He does not hesitate