

formed on the red ulcerated surface with free exudation of serous fluid, followed by complete recovery. It seemed specific treatment; but in three succeeding cases the same mode of treatment rendered no such effective service, although in one for a time there was the greatest promise. Under this new treatment shall we see similar successes and failures? Once more. We shall require to know in what manner the remedy operates. Is it through the nervous system, or is it by some chemical or chemico-vital action which it exerts in contact, in infinitesimal division, with the tuberculous living substance?

**Poisons Produced by Bacteria.**—A few weeks ago we referred editorially to some experimental work of Roussy upon the pathology of fever, in which he demonstrated what appears to be a fever-producing albuminoid, which he termed "pyretogenin." We have now to mention the labors of Brieger and Fränkel (*Berl. Klin. Wochensch., Centralblatt für Physiologie*) upon the toxic substance produced by the diphtheria bacillus of Löffler. Pure cultures of the bacillus were prepared in large quantity in pepton broth with or without the addition of glycerine. Roux and Yersin had previously separated the toxic substance from bouillon cultures and believed that it belonged to the class of enzymes, a conclusion which the writers cannot endorse. They succeeded in obtaining the substance dry, and class it among the albuminoid bodies, the "toxalbumen," as they name them. The cultures were at first passed through a Chamberlain clay filter. The germ free, lemon yellow, clear filtrate proved to be very poisonous to animals, and produced symptoms similar to those caused by inoculation with the bacillus, including the peculiar paralytic phenomena of diphtheria. When heated to 60°C. it lost most of its toxic properties. It resisted acidifying with sulphuric acid, and steaming to 50°C. An examination for ptomaines and volatile bases gave a negative result. It also failed to diffuse through membranes into water or a solution of sodic chloride. It was precipitated by ammoniac sulphate and sodic phosphate as well as absolute alcohol, the latter method being the one usually employed. After dialysis and drying in