course to be adopted. He thought Dr. Cavafy's suggestion to isolate the patient in a separation-ward was the right proceeding. He rather came to the conclusion that his second case was not scarlatina, because the brilliant red eruption had not been followed in nineteen days by desquamation. He had nothing to say against the view that scarlet fever and typhoid were frequently concurrent, as Dr. Broadbent held.—*Medical Times and Gazette*, April 21, 1883.

The Pythogenic Micrococcus of Erysipelas.

The direct proof of the pythogenic nature of the micrococci of erysipelas has been given by FEHLEISEN, who has not only found them present in all cases of erysipelas (13 cases) which he examined during life, but also cultivated them, and with equal success inoculated the cultivated organisms in animals and in man (*Die Aetiologie des Erysipels*, Berlin, 1883). In small portions of skin excised from the diseased part in patients suffering from erysipelas, Fehleisen found in all cases numerous micrococci arranged in chains. They were especially abundant in the most recently affected part; and here they were found most markedly in the superficial layer of the corium and in the subcutaneous adipose tissue, filling the lymphatics and the lymph-spaces, whilst the rest of the tissue showed cell-infiltration. Contrary to the older observers, they were never found in the blood-vessels. To prove that their presence was not merely accidental, Fehleisen cultivated some small excised pieces of skin on gelatine, after having carefully disinfected the affected part, and succeeded, in the course of two months, in producing fourteen generations. The cultivated micrococci formed a whitish film, easily detached from the surface of the gelatine, and consisted entirely of the specific micrococcus. Nine rabbits were now inoculated on the ear with the pure and cultivated micro-organisms. In one the effect was merely a slight elevation of temperature; in all the others, after thirty-six to forty-eight hours, the temperature rose, and a characteristic erysipelatous rash appeared, and gradually extended to the root of the ear, and thence spread to the head and neck. In the course of six to eight days the disease had run its course, and the animal recovered; not one of the animals died. The light red colour of the affected part, the absence of œdema or suppuration, and the presence of the micrococci in the lymphatics of the affected part (seen in one case, where the ear was amputated during the height of the disease), showed that the affection produced in the rabbit was true erysipelas, and not septicæmia.

More valuable still to show the etiological importance of the micrococci in erysipelas are Feldeisen's inoculations on man. Such a proceeding was perfectly justifiable when we consider that many of the older and distinguished surgeons (Ricord, Desprès, Hebra, Busch, etc.), have quoted cases showing the therapeutic and beneficial effect of erysipelas when occurring in cases of lupus, cancer, and other malignant tumours. Fehleisen inoculated the pure and cultivated micrococci in seven cases. Of these, the first was a case of multipla fibro-sarcomata; the second a case of cancer of the mamma, which had already been operated on three times, and showed now several large tumours, adherent to the skin; the third, a case of intraorbital sarcoma, which had reappeared and grew rapidly after enucleation of the eyeball for a primary intra-ocular sarcoma; of the remaining four, two were cases of cancer of the mamma, and two cases of extensive lupus of the face. Six out of the seven cases showed, after a period of incubation varying from fifteen to sixty hours, typical erysipelas, setting in with rigors, high temperature, and running the characteristic course. In some the symptoms were very severe; in the first there was threatening collapse, and the second was complicated with pleurisy, which, however, soon subsided. As

regards the therapeutic effect, the inoculations are of some interest: one case of lupus was almost completely cured (in the second case of lupus the inoculation did not produce any erysipelas); in the second case the cancerous tumours completely disappeared, and there has been no recurrence so far; in the case of the orbital sarcoma, and in the other two cases of cancer there was no marked effect produced; whilst in the first case the fibro-sarcomatous tumours at first diminished, but afterwards grew again in size.

As Fehleisen succeeded in successfully inoculating several cases twice after a period of a few months, it appears that, if there be an immunity against a second attack of erysipelas, that immunity is, in most cases, only of short duration.

Fehleisen also tried the effect of antiseptics on the vitality of the micrococci. This portion of the researches might well bear extension, for only two substances were experimented with, carbolic acid and corrosive sublimate; a 3 per cent. solution of the former stopped the growth of the micrococci after a contact of forty-five seconds, whilst the same effect was produced in fifteen seconds with a 1 per cent. solution of the corrosive sublimate. From an etiological and pathological point of view, Fehleisen's researches are of great importance, and the list of diseases due to a specific micro-organism is thus enriched by one. As for the practical outcome, further researches in different directions are needed; and it is with the hope of inducing some English observers to take up this subject that we have given to Fehleisen's observations the prominence which they justly deserve.—*British Medical Journal*, March 24, 1888.

The Differential Diagnosis of Uræmic Coma from the Coma of Cerebral Hemorrhage.

Dr. T. A. McBride, in an article in the *American Journal of Neurology and Psychiatry*, gives the differential diagnosis between uræmic coma and coma due to cerebral hemorrhage. This is important, as statistics show that cerebral hemorrhage is a very common accident in the course of chronic Bright's disease, and also that the hemorrhage is usually of large extent, and the accompanying coma very pronounced. From a therapeutic point of view the distinction is very important.

1. The temperature should always be taken in the rectum, with a self-registering thermometer. In chronic Bright's, and in the aged the temperature in the axilla is often a degree or more lower than in the rectum. Charcot called attention to the fact that in cerebral hemorrhage at its beginning there was a fall of cerebral temperature below 99°. This might be present from one to ten hours or more, and until death in the fulminating form. This period of depression may be followed by a continued and uninterrupted rise of temperature to 105° or 108°. A high temperature occurring shortly after the advent of coma, should have weight in ascribing the coma to uræmia.

2. Evidence of interference with the functions of the brain from some gross lesion, *i. e.* cerebral hemorrhage producing hemiplegia. Hemiplegia is common in cerebral hemorrhages of large extent, and the hemorrhages of chronic Bright's are, as a rule, large. The signs indicating the presence of hemiplegia due to lesion of one of the hemispheres are: (*a*) Conjugate deviation of the eyes and rotation of the head away from the paralyzed side and toward the hemisphere which is the seat of disease, usually occurs as a temporary symptom in all cases of cerebral hemorrhage. (*b*) Facial paralysis (cerebral). This may not be detected unless the coma be not great, and passing off. (*c*) The limp condition of the upper and lower extremities, but this sign is uncertain and not to be depended on. (*d*) Exaggerations of the deep or tendon-reflexes on the hemiplegic side. (*e*) Abo-