SEPT. 6, 1902]

## Medical Matters.

MICROBES AFRAID OF LIGHT.



One idea the Tuberculosis Congress and its indefatigable supporters did succeed in implanting in the soil of the popular intelligence, and it was that light and air are good for the tuberculosis patient and bad for the tuberculosis bacillus. Gener-

ally speaking, one might say that all disease microbes are constitutionally afraid of light, which may be one reason why they flourish better in winter, when the hours of sunlight, especially in towns, are few. Dr. Gaffky, of Berlin, points out that influenza epidemics have never occurred in Germany except when the weather has been long cloudy. The vitality of the germs is also directly proportional to the size of the particle of dust or moisture which supports it. The germ dies more rapidly the finer the particles. Dr. Gaffky conducted his experiments among the disease germs that human beings set afloat in the air when they cough or sneeze, even-according to one investigator-when they speak at public meetings. In these tests he found that the typhoid bacillus would retain its vitality for only twenty-four hours of daylight; the diphtheria bacillus, which lived from one to two days in daylight, could, however, live five days in a cellar. The tubercle bacillus withstood the light for five days, but lived twenty-two days in the dark; while the anthrax spores, apparently the most hardy of all disease germs, since they have been known to resist extremes of temperature ranging over more than 400 deg., lived ten weeks in daylight, but three months at least in the cellar. The greatest contrast was supplied by the "staphylococcus pyogenes aureus," which lived ten hours only in daylight but thirty-five days in darkness.

## THE GENESIS OF SPINA BIFIDA.

In the Archiv. Générales de Médecine for March, 1901, Dr. Rabaud pointed out the fact that there are two varieties of spina bifida, one with a more or less voluminous pouch, and one characterised by complete amyelia and an open spinal fissure. The first is the one of interest to the surgeon. The pouch is nothing more than an objective dilatation of the canal of the ependyma, its cavity being directly continuous with the canal. To open this pouch is simply to open the canal of the ependyma and allow the spinal fluid to escape. To inject a caustic into the pouch is to inject it into the central nervous system. Neither method should be adopted.

POST-DIPHTHERITIC PARALYSIS,

Dr. E. E. Laslett (Victoria University M.D. Thesis) as the result of a careful study into the pathology of post-diphtheritic paralysis concludes:—

1. That in the paralytic stage of diphtheria the only important change discoverable is situated in the peripheral nerves.

2. That if there are any changes in the cells during the preparalytic stage, they do not stand in a causal relation to the parenchymatous degeneration in the nerves.

3. That therefore parenchymatous degeneration of the nerve fibres must be regarded as the primary lesion.

## BERI-BERI.

The time-honoured blame which has been thrown on rice—fermented or mouldy—as the medium by which Beri-beri is introduced into the human body stands in a fair way of being overthrown. Recent investigations would seem to prove that neither food nor drinking-water have anything to do with the disease. No blood germ has been found in Beri-beri, and there are some arguments in favour of the specific agent of Beri-beri being a toxin.

## NOTES ON A MILK EPIDEMIC OF TYPHOID.

In the Australian Medical Gazette of April 21st Dr. James Jamieson remarks on the persistence of Eberth's bacillus in convalescents from enteric, recalling Dr. Horton Smith's observations, which showed that the urine might contain the bacilli in enormous numbers at least as late as the seventieth day of the disease, and that the urine of such a person is more likely to be a source of infection than the fieces. He quotes a series of cases occurring among the customers of a dairy, who apparently were infected by the keeper some time after his return from the hospital, fully convalescent. During his absence the trade was carried on without any further infection; he returned home on January 15th, and on March 11th occurred a series of six cases in rapid succession among his customers, the last occurring on March 21st. All the cases occurred in those households who objected to have their milk scalded before delivery, a precaution which was taken by consent of his other customers.



