

diphtheria again broke out in the family, and one of the daughters died. In another instance the carpet was put out of doors for a few days, and then rolled up and kept in an out-building for a year. When it was brought in at the end of that time diphtheria broke out again. In still another instance a young man had diphtheria, and on his recovery his room was simply papered over the old paper. The family then left the house, and the next family turned this room into a kitchen. It remained in the same condition for two years, when a girl took the paper off, and within a few days she had diphtheria. Now these cases go to show that either a remarkable coincidence occurred in each case, or else the germ lived respectively one, two and three years, and retained its virulence. I am inclined to believe the latter, and on this account friends should not be too hasty to visit those who have been sick, even after the usual means of disinfection, fuming, etc., have been gone through.

Sulphur is frequently burned in rooms where there is no moisture, and even if moisture be present, the amount necessary (about three lbs. to 1000 cubic feet) as shown by Sternberg's experiments, to thoroughly disinfect the place is not used. All contaminated articles should be exposed for twelve hours to sulphur fumes with plenty of moisture. Articles of clothing boiled or exposed to dry heat when possible, and walls, floors, and ceilings washed with hot solution of mercuric chloride (1 in 500). The main thing is not to miss anything, and make sure everything has had sufficient exposure to the action of a good disinfectant, and for a time longer than laboratory experiments require to destroy the germ. All mattresses, feather beds and pillows should be opened to ensure thorough exposure, and articles of little value are better burned.

BACTERIOLOGICAL NOTES.

COMPILED BY E. B. SHUTTLEWORTH.

Bacterium Coli Commune.—This bacillus is just now exciting considerable attention on account of the assertions of some bacterologists that it is similar to, or identical with forms which are attributed with producing more serious results. Rodet and Roux (*Arch. de Med. Ex.*), state their opinion,

based on many experiments, that this bacillus and that of typhoid fever are, as has been previously asserted, one and the same organism, modified only by the existence of different pathological conditions. Inoculations with both bacilli produced the same variations in temperature, the same lesions, and the same experimental disease. Two other experimenters, Lesage and Macaigne, found that inoculations with *B. coli commune*, taken from a healthy intestine, were not pathogenic to man, except when very large quantities were used, but, under certain conditions, as when the intestines were irritated with tartar emetic, and diarrhoea was thus produced, the germs acquired activity, and became pathogenic. Again we have the statement, repeated in *Merck's Bulletin*, Oct., that the bacillus observed by Drs. Gilbert and Girode, in several cases of cholera, alleged to be *nostras*, were, in the opinion of many practitioners, no other than *B. coli commune*. The subject is, certainly, at present, in a rather confused condition. We have, in the first place, the assertion that the apparently harmless bacillus is identical with that of typhoid; then that the organism may pass from a non-pathogenic to a harmful form, and, lastly, that it may produce the symptoms and effects of cholera.

No doubt the subject will soon be cleared up, as a good many workers seem to be engaged upon it. In the meantime a little information in regard to the known history and characters of the bacillus may not be unacceptable. It was discovered by Escherich, in 1885, in the faeces of children fed exclusively on their mothers' milk, and has since been found to be constantly present in the alimentary tube of man and many animals. It is in the form of slightly curved rods, rather shorter than those of the tubercle bacillus, and about twice as thick. It can be cultivated on gelatine, potatoes, or blood serum, and thrives better at a room temperature than that of the body; it slowly coagulates milk with little or no formation of acid. It is said to require air, but, under certain conditions, may be anærobic, and thus produces carbonic acid gas. It does not liquify gelatine. Inoculation with a cultivation produces in rabbits and guinea pigs an elevation of temperature, violent diarrhoea, and death. Since writing the above we have seen a notice of the report of G. W. Fuller, bacteriologist to the Massachusetts