

the Comité Consultatin d'Hygiène Publique de France, and adopted by that body (*Rev. d'Hygiène*, Dec. 20th, 1890), argues against the view that the infection of diphtheria is prone to be carried by the air, and contends that in nearly all cases it is conveyed by contaminated clothes or articles of furniture. He believes that there is evidence that the disease may arise spontaneously in children whose health has been depressed, especially by measles. He would explain this by supposing that the non-pathogenic, or non-infectious, pseudo-diphtherial bacillus of Löffler, which is often present in the mouth in health, may, *under conditions favoring its development*, take on pathogenic, or poisonous properties.

Apart from these exceptional events, he shows that the spread of diphtheria may be prevented by ordinary precautions directed to effect disinfection of articles used by the patient. He illustrates this by the experience of one of the wards set apart for diphtheria in Paris; among the 1,741 children admitted, it was subsequently discovered that 153 were not suffering

from diphtheria, yet not one of these 153 children contracted diphtheria.

Experiment has shown that the Klebs-Löffler bacillus is killed at a temperature of 60° C. in a moist atmosphere, but in a dry stove it will survive a temperature of 93° C.

Grancher has found it possible to prevent the spread of diphtheria in children's wards by simple antiseptic precautions. The bed is surrounded by a metal screen; all articles used by the patients, such as spoons, forks, napkins, etc., are immediately disinfected by being placed in boiling water containing carbonate of soda in the proportion of 50g. to a litre of water. All linen, clothes, etc., are disinfected by heat, and the floor, bed, and walls are washed with corrosive sublimate solution. Finally, the medical attendants and nurses are required to wear over their clothes blouses which are stoved daily, and are recommended to wash their hands with minute care in acid corrosive sublimate solution or in carbolic acid 5 per cent. The report is strongly in favour of special wards for cases in which the diagnosis is doubtful.

MISCELLANEOUS NOTES AND EXTRACTS.

ON BACTERIA AND VENTILATION.

Researches and experiments published by Stern (in *Zeitsch. f. Hygiene*) give the following results; Bacteria-bearing dust particles in a room settle on the floor when the air is absolutely quiet; within one-half hour the air is almost free from germs. The floor then being washed with some antiseptic fluid and the furniture wiped with a moist cloth, the room may be considered fairly disinfected. Ventilation alone—which produces about a fourfold renovation of the quantity of air contained in the room in the course of an hour, has no considerable influence on the removal of germs. Only a strong draught, causing the air of the room to be changed at least seven times in an hour, has the power of expelling the germs rapidly and completely. Experiments undertaken with a view of precipitating the germs more rapidly by the means of aqueous vapor, fail to give favorable results. Germs attached to the floor, furniture and paper-

hanging are not removed even by strong currents of air; they are to be removed by special means, as disinfection.

PARASITIC AND SAPROPHYTIC BACTERIA.

At the last meeting of the Epidemiological Society of London (Feb. 18, 1891) Dr. Louis Parkes read a paper on "The Relations of Saprophytic to Parasitic Micro-organisms." Saprophytes, he said, were those bacilli, micrococci, etc., which, living on dead organic matter only, swarmed everywhere in the air, earth and water, and to which, in conjunction with moulds and yeast fungi, all fermentative and putrefactive processes were due. The parasitic micro-organisms, on the other hand, preyed on living matter only, or equally with dead. The power of attacking non-living matter, which was evidence of a certain degree of saprophytism, enabled us to cultivate many pathogenic organisms in artificial media. These,