

and so-called school influence here came into operation.

Professor Klein has reported the discovery of two distinct kinds of microbes in diphtheritic membranes, one of which is much more virulent than the other. He calls attention to the further fact that in human diphtheria the microbe that causes the disease is present only in the membrane that forms in the throat, and is not found in the blood nor in the diseased visceral organs. The case is the same with cats and guinea-pigs inoculated with artificial cultures. The bacillus multiplies at the seat of inoculation, its growth there producing the chemical poison which so seriously affects the whole organism. In the cow, however, the bacillus passes from the seat of inoculation into the system, and makes its appearance in the milk; an eruption appearing on the cow's teats, as has been mentioned in this JOURNAL. This is most important, as giving a clue to the dissemination of the disease in cases that puzzle the sanitarian. A relation has been found to exist between a disease in cats and human diphtheria. When children have nursed a cat affected with this disease, they have sickened afterwards with well-marked diphtheria. On the other hand, when children have been ill with diphtheria, their cats have been found to die of a similar disease and a post-mortem examination of the cats, and of others that died from diphtheria produced by inoculations, appear to have demonstrated the identity of the cause of death in the two cases. The conclusion seems to be inevitable that in many instances children contract this dangerous disease from their feline pets. But from what source does the cat derive it? Professor Klein suggests that in many cases it is from drinking the milk of cows that are suffering from diphtheria. He gives an instance of an epidemic of diphtheria affecting sixteen cats, thus produced:—An attendant at the experimental station, contrary to orders, gave to two cats some of the milk from a cow ill with diphtheria, induced by inoculation with the human diphtheria bacillus. From these two, the

disease was communicated to the others, and some died of it. Had they been free to wander about the neighborhood the disobedience of the attendant might have caused the death of a number of children, and been the starting-point of a wide-spreading pestilence.

On measures for the prevention of diphtheria, Dr. F. Löffler says: The bacillus found in excretions of diseased mucous membranes is the cause of diphtheria. Bacilli are disseminated by excretions deposited on articles within reach of patient. Viable bacilli remain several days after disappearance of membrane. Patients should be strictly isolated as long as bacilli remain in excretions. Children should remain from school at least four weeks. Bacilli are viable in fragments of dried membrane for four or five months. Every article in the room should therefore be either boiled in water, or subjected to a current of steam 212° F.; floors should be scrubbed repeatedly with 1. to 1000 bichloride solution; and walls and furniture rubbed down with bread. Damp rooms should be thoroughly dried, and a flood of light admitted before they are used again. Bacilli still grow at 68° F.; they grow readily in milk. The sale of milk from dairies in which diphtheria abounds should be prohibited.

Dr. A. Chaille says: In the present state of our knowledge the possibility of preventing diphtheritic sepsis cannot be denied. As one of the means of securing this end, the daily inspection of school children is necessary. The municipal control of diphtheria in large cities is inadequate, and methods of personal prophylaxis are more apt to prevent infection. A daily prolonged washing of the naso-pharynx by means of weak antiseptic solutions is a trustworthy method of prevention, in the absence of filthy carious teeth and enlarged and inflamed tonsils. The naso-pharyngeal bath is indicated for all those who are exposed to diphtheritic infection, and also as routine treatment in every case of chronic naso-pharyngeal catarrh, pertussis, scarlatina, and measles.

Dr. Grancher, in a report presented to