

of the proverb that 'Cleanliness is next to Godliness.' "

In the case of each farm examined for the Dairy Supply Association, an inquiry based on the lines of the papers was instituted, and by this means the education of the dairy farmer is proceeding all over the country. Each farmer was advised as to the best methods of cleanliness in his own particular case, and where alterations

were necessary, and could be executed with little cost, they were carried out.

There is in Canada a broad field for cultivation in regard to milk supply—as to legislation, municipal oversight by local boards of health, and above all, education of farmers and dairymen. The proposed Dairy Schools in connection with the Agricultural Department here may be made of great service in this respect.

#### WHAT IS CLEANLINESS?—ASEPTIC AND ANTISEPTIC "METHODS."

CLEANLINESS in a popular sense is somewhat relative or comparative.

A dwelling which one housekeeper would pronounce clean and satisfactory another would proclaim filthy and intolerable. In like manner it is with city streets, so that it may be said, there is cleanliness and cleanliness. That cleanliness which is a part of godliness, and which was recognized and practiced by the Essenes and other ancient Jews, is at least the utmost possible freedom from every trace or spec, in any way perceivable to the senses, of dead, used-up, waste organic matter from whatever source, animal or vegetable, and more especially from the human body,—the skin, lungs, etc.—the most complicated of all waste, and hence the most prone to decomposition and putrefaction. Modern scientific surgery now goes further than this. Why should we not in general ordinary habits of life? Soap and water, especially in the present rather dirty age, are not sufficient. Antiseptic surgery is largely superceding simple aseptic surgery. The simple absence of perceivable dirt is not enough, something is demanded to destroy—to break up into simple harmless elements the microscopic or infinitesimal waste particles, upon which germs and microbes feed and live. These are called antiseptics. When they are powerful enough to destroy living germs or infections they are termed disinfectants. Most perfumes are antiseptic, so also are coffee, the turpentine, and many other well-known substances. Over fifteen years ago we gave in this JOURNAL a lengthy paper by an eminent Australian physician, Dr. John Day, in which was shown the value of these sub-

stances, not only in hospitals and sick rooms, but in every day rooms and every day life, for the preservation of health. As Dr. Day then stated, the value of eau de Cologne, of the turpentine, encalyptus, gasoline, &c., is due to the peroxide of hydrogen, "nature's disinfectant," given off by these substances. Peroxide of hydrogen, it appears, contains a larger proportion of oxygen than any other known substance, and a part of its oxygen is but loosely held, and so is ready to combine with any organic oxidizable matter with which it comes in contact. It is in short the most powerful oxidizing agent known. A year or so later, in another paper published in this JOURNAL, Dr. Day reported on 115 cases of scarlet fever which he had treated, and in which the chief remedy was inunction three times a day all over the body with a preparation of an ethereal solution of peroxide of hydrogen and lard. There were only six deaths in all, but the most marked value of the remedy was in preventing the spread of the disease. The 115 cases occurred in 88 different houses, and in only seven houses was there any extension of the disease after this treatment was commenced. Dr. Day said that he recommended all his patients and friends to use the peroxide freely. Absolute purity requires something more than soap and water. The ancients practiced inunctions with perfumed oils, doubtless with the view herein indicated. Palm oil gives off peroxide of hydrogen. This preparation is now being much used and is highly recommended in surgical practice. It is a most valuable antiseptic in every-day life, and promotive of absolute cleanliness.