This is usually inclosed between two thicknesses of cheese cloth, a method found to be very practical.

The pail shown on the left in the illustration is a good, sanitary milk pail. The



height is convenient and as the opening is on the side, there is but little chance for dirt to fall in. The seams are all well flushed out with solder. The objection to this pail, if any, is the difficulty of seeing that all parts are clean.

The right hand pail shows a cup attached for holding the foremilk. There is the same objection to this as the other presents—that is the difficulty of seeing into it to make sure all parts of the interior are clean.

All pails and utensils with which milk comes in contact should be thoroughly washed, rinsed, and steamed or sterilized.

St. Petersburg Water Supply: The largest "water factory," as it has been named, in the world, is now supplying water to the St. Petersburg mains. It takes in Neva water, allows it to stand in tanks, whence it passes through filters, and finally through an apparatus that charges it with ozone, which is claimed to destroy all kinds of pernicious microbes; the purified water is then run into the mains. The installation is the work of a German firm. The electric energy required for the "ozonizing apparatus" is 9,000 volts, and the total cost of the undertaking to the city about \$650,000.

Whether Disinfectants Disinfect: How to tell whether "disinfectants" will disinfect, is the question that is taken up by the Journal of Infectious Diseases in its current issue, the initial statement being: "There is no question but that great fraud is practised in the exploitation of many of the so-called disinfectants that are offered for sale upon the market and are constantly being used by the credulous public." In a general way it would seem as if some of the

articles so advertised bear the same relation to disease germs that the traditional cardamom seed bears to intoxication, the suppression of a minor symptom to the neglect of the major difficulty. The popular idea is to a large extent that the article is doing its work in the war against disease. In the Journal, two articles of two different kinds attack the question of the standardization of disinfectants. One of these, that of Professor Earle B. Phelps, of the Massachusetts Institute of Technology, seeks to establish the quality of the disinfectant by making use of certain laws of physical chemistry; the other by Dr. John G. Anderson and Dr. Thomas B. McClintic, both of the United States Public Health and Marine Hospital Service, seeks to improve existing methods and make them of greater practical use. The first-named paper is theoretical to the present moment, and while based on experiment, requires, still, experimentation in the future to produce results; the second one takes directly certain compounds and seeks to give them their proper place in the scale of efficiency.

The need of a definite standard for disinfectants whereby they can be compared one with another has long been apparent and a step towards the solution of the problem was taken in 1903 by Rideal and Walker, who suggested a way of getting the ratio in strength between the substance to be tested and carbolic acid, or, technically, phenol. Another method has been devised by the London Lancet. A number of elements, the culture media, the organism to be employed in the tests, the temperature and the technique are all of them points of uncertainty, which Dr. Anderson and his fellow worker in the Marine Hospital Service have tried to reduce to put on a standard basis. The authors have worked at a standard temperature of 20 degrees Centigrade and have developed a "Hygienic Laboratory technique" for the determination of the "phenol coefficient," the result of which will be to determine the comparative cost per unit of efficiency of any compound subjected to the tests. As a part of the investigation the authors state that they are now engaged in a study of the various proprietary disinfectants to be found upon the market, and they propose to determine, in this study, the phenol coefficient with and without organic matter and the comparative cost per unit efficiency of each.