

sterilizing chambers, the expense of obtaining them sufficiently strong is so great that in most cases their use is precluded.

The main desiderata for a perfect disinfecting apparatus are that it shall be close to the source of a steam supply ; that there shall be sufficient steam developed to fill it thoroughly and keep up the temperature for some length of time ; that the steam shall be sent in at the top and passed out at the bottom, in order that every crevice of the apparatus may be filled ; and that where it is used in large establishments, it shall be placed between two rooms, into one of which articles to be treated are to be taken, and passed in at one door of the sterilizer, while the other room should be at the other end of the sterilizer, and into it the clothes should be passed, so that they shall not again be brought into contact with unsterilized clothing, etc.

Articles that are to be disinfected should not be allowed to remain too long in contact with steam, and before being steamed they should be thoroughly heated, so that there is no opportunity for the steam to condense on cold surfaces, and in the same way they should be well dried by heat after the steaming process has been concluded. Twenty minutes is long enough to allow most ordinary articles to remain exposed to a moist heat of 100° C., so that they should be left for this length of time after the temperature has once been raised to this point, this being determined by an electrical contact thermometer or a thermometer placed in a tube through which the steam escapes ; some simple manometer should be used to determine the pressure that has been obtained by super-heating the steam. The greatest attention should be paid to this point of time of exposure, for it is the experience of all medical officers of health that nothing deters people from sending their clothes to be sterilized so much as the fact that they are frequently ruined by too long an exposure to the action of the steam.

A certain amount of discrimination must be used in determining what articles

can be safely steamed, and an officer of health who ordered stamped plush, leather, skins, or waterproof material to be exposed to heat would render himself liable to be heartily laughed at by all practical men ; whilst a washwoman would be able to advise him that linen or similar material placed in contact with iron would be absolutely ruined by "iron mould." Grease should always be removed if possible before the articles are put into the sterilizer, otherwise it becomes fluid and is liable to spread to other parts. Blood and pus are, of course, coagulated by the heat at the same time as they are sterilized, and can be afterwards removed by means of chlorine or other chemical solvents.

Musty bedding and old clothes should on no account be put into the sterilizing chamber along with new articles and fine linen, as the fusty smell, which is never destroyed by the heat, is communicated from one to the other, and can only be got rid of by long-continued exposure to a plentiful supply of fresh air. Lastly, Dr. von Esmarch insists that disinfected clothing should not be sent back to infected rooms, and that in all large towns there should be some establishment to which poor people might be taken whilst their houses and clothing are being disinfected. As the British Medical Journal says, "It may be said that these are all truisms, but they are truisms that are constantly being forgotten, especially by men whose experience is not very extensive."

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THE GREATEST OBSTACLE to the correct application of sanitary principles is either the ignorance or carelessness of those likely to be benefited. Men of general intelligence will allow their farm yards, cellars, ponds, drains, &c., to be breeders of disease, which may endanger not only their lives but that of the neighborhood, simply through carelessness, or fear of temporary expense, and through ignorance often of the serious consequences involved. If the masses of the people possessed proper education in sanitary matters the death rate in the rural districts especially would be very much lessened.