## April 13, 1901] The Mursing Record & Bospital World.

all blunt instruments for 30 minutes, the sharp ones being added the last 10 minutes, as they become dull by two long sterilization; remove, and place in an instrument tray made of porcelaine, glass or agate-ware, containing cold sterile water; protect the tray with a sterile towel until called for by the surgeon. Some surgeons prefer the instruments to be dry, as in operations in the mouth. In these cases place them between the folds of dry sterile towels.

2.—Boil in r per cent. Soda Sol. under cover for 20 minutes, treating the sharp ones as in the previous method, and remove as before mentioned. This is the most reliable way of sterilizing instruments.

3.—Sterilize needles and sharp instruments by placing them in pure carbolic acid for 5 minutes, rinse well in sterile water; this method can also be used with blunt instruments.

4.—Place in 95 per cent. alcohol under cover for 20 minutes, especially in sterilization of delicate instruments, as such used in operation on the eyes, etc.; dry them well on sterile cotton or soft gauze before use.

5.—Run dull instruments through the flame for a few minutes. Avoid this method in sterilization of the sharp ones, as they become very dull.

6.—Dry heat is used in sterilization, and sterilizers made for that purpose can be obtained. However, this method is not frequently practised, as moist heat has proven to be the most valuable.

A nurse should handle the instruments as little as possible, and when placing them in order on their respective trays, should never use her fingers, but a pair of forceps sterilized for that purpose. She should adopt a system, arranging each kind by themselves, and all sharp instruments at a proper distance from the blunt ones, as this will prevent the sharp edges from rubbing against anything that might be injurious to them.

Sterilization of Operating-room Clothing.—No one should be, allowed in the operating-room's amphitheatre during an operation, without being dressed in gowns or suits made for the purpose. The surgeon and his assistants generally change all clothing, and dress in sterile suits. The underclothing should be made of cotton, and the coats and pants of linen or duck. In some hospitals, after entering the amphitheatre, an additional gown is added, also a cap and a strap for the forehead to collect perspiration; this is especially done in abdominal sections.

The operating-room suits for nurses consist of perfectly clean underclothing, uniforms, and a gown and cap like the surgeon's.

The suits and gowns are sterilized by steam heat in a reliable sterilizer made for that purpose.

Under no circumstances should a nurse bake clothing in an ordinary oven, and consider it sterilized; it is better to use clean clothing direct from the laundry than to work under a false impression, as the knowledge of wearing nonsterilized clothing will prevent the surgeon and his attendants from touching the same with their sterile hands or instruments.

Towels and Sheets, two very necessary articles for an operation, are sterilized in various ways. Towels should either be made from cotton or linen, whichever the institution can afford. The most commonly used are cotton towels, as the stained and dark ones can more easily be replaced, as far as the price is concerned. They should be made perfectly plain, avoiding fringe, or ravelling edges.

Before placing them in the sterilizer they should be wrapped in a towel, one dozen in each bundle, and the ends carefully folded and pinned. They are sterilized in the same manner as the gowns and suits.

Bichloride Towels.—After the towels are well cleansed, they are placed in a 1-500 Bichloride Sol., well covered, and allowed to remain over night; then well wrung with antiseptic hands, and placed in jars with covers until ready for use. They should never be prepared for any length of time, as they are apt to become mouldy. This method is also used in preparing carbolized towels, when 5 per cent. Carbolic Acid Sol. is used instead of the Bichloride Sol.

Borated Towels.—Take towels well cleansed, and put them in a boiling Sol. of Boric Acid, 3 xvi, oj water. Allow them to boil under cover for 20 minutes, then set aside to cool; wring them out well with aseptic hands, and store like the Bichloride towels, or allow them to dry between the folds of a sterile sheet, then store in dry sterile jars under covers.

Towels can also be sterilized by boiling in either plain sterile water, or normal Salt Sol. (sterile) for 20 minutes under cover. These towels are of great value in abdominal sections.

Sheets are sterilized in the same manner as towels.

Blankets used in the operating-room should be made of cotton, and sterilized by steam, folded in towels in the same manner as towels and sheets.

Gloves.—Many surgeons prefer to operate in gloves, especially in cases of suppuration, cancer, syphilis, and rectal diseases. They are made either of rubber or cotton, and are best sterilized by boiling for 30 minutes in normal Salt Sol. under cover.

Cotton Gloves can be sterilized also in the steam sterilizer, like towels.

Rubber Gloves are best preserved, and prevented from sticking together if they are well



