

that the nipple is constricted, and the milk cannot flow at all after the first two or three exhaustions of the instrument.

The essential requisite for an efficient breast-pump is a large bell-shaped extremity, so that the nipple is not at all constricted by the narrow diameter which is applied over it.

The pump which meets the indications most satisfactorily, and which has come to my notice, is what is called Mattson's breast-pump, and it is a most excellent instrument.

With regard to treatment of the sore nipples, the following are the rules which chiefly govern me in the management of these cases: If the nipple is inflamed, apply a poultice until the inflammation is subdued, and then apply a solution of nitrate of lead in glycerine, ten grains to the ounce. This is also the most complete and perfect prophylactic against the occurrence of sore nipple that I know of. This solution should be applied immediately after nursing, having first washed the nipple perfectly clean.

The application must also be washed off every time before the child nurses. It is almost a specific, when properly used, against excoriations and ulcerations. If the tendency is quite strong to sore nipples, the solution may be used of the strength of 15 grains to the ounce, or even $\mathfrak{z}\text{i}$; but as a rule the 10 gr. solution is sufficient. Next, where the cuticle is denuded, and we have a raw surface, or it becomes so irritated that there is a tendency to an abrasion, the indication is to form an artificial cuticle, which will entirely protect the parts, and yet permit the milk to pass through it.

For this purpose collodion has been extensively used. The objection to the collodion is this, that it contracts as it dries, and thus itself becomes a source of superficial irritation and discomfort, and does not readily permit the flow of the milk. I have used for this purpose, and with the most satisfactory results, the compound tinc. of benzoin. Wipe the nipple dry after the child has nursed, and with a camel's-hair brush apply four or five coats of this tincture.

The first application may produce some burning, but when once applied this will be entirely overlooked, and the woman will desire its reapplication. This forms a most excellent artificial cuticle, and at the same time permits the flow of milk without obstruction. Cicatrization will take place under this coating, and the patient will thank you for the benefit received. When the fissure is at the base of the nipple, very small it may be, but accompanied by the most severe and agonizing pain, the most satisfactory method of management is to touch the fissure with a fine point of nitrate of silver, and apply over this the comp. tinc. of benzoin as before.

When the inflammation and ulceration have gone on to such an extent as to destroy the surface of the nipple, and there is danger of the inflammation extending back to the mammary gland, do not allow your patient to torture herself by allowing the child to nurse. Remove the child entirely, and empty the breasts by the breast-pump or by rubbing.

I then use as an application in these cases the following:

R. Rose Ointment .	$\mathfrak{z}\text{i}$.
Carb. Magnesia .	$\mathfrak{D}\text{i}$.
Calomel, grs. .	xxx.
M.	

These ingredients should be rubbed together very carefully, and it should be freshly prepared, perhaps every twenty-four or thirty-six hours. If the child is permitted to nurse at all, it should be done entirely through an artificial shield, and the best shield is one made of the cow's teat. The objection to the india-rubber shield is, that there is an offensive odor emitted from them, and they are very apt to make the child's mouth sore.

If, however, it becomes necessary to use the shields which are in the market, in selecting them get a broad base, what is called the L-shaped glass, in the same manner as in the selection of the breast-pump. The ordinary nipple-shields seen in the stores are simply abominable.

The next subject which is immediately connected with the one just under consideration, is a very troublesome complaint, viz., mammary abscess. This woman who is now before you has been confined about one month, yet it is only three days ago that she began to complain of her breast, and since that time suppuration has taken place.

This is an important point, and one which is often overlooked in the books. It will be seen that the whole surface of the gland about the nipple is inflamed, the woman had a chill, has a fever, &c., &c. This is probably one of those cases which is the effect of the peculiar poison which develops puerperal fever in some cases, puerperal peritonitis in others, and mammary abscess in others. There are three different forms of mammary abscess. First, inflammation of the cellular tissue surrounding the nipple and external to the breast; second, inflammation of the substance of the gland itself; third, inflammation of the areolar tissue between the gland and the thorax. The first form may result from irritation, and is nothing more than a pure simple phlegmon, requiring the same treatment. It usually terminates rapidly, is not attended with the constitutional shock which accompanies glandular inflammation, and is to be treated the same as phlegmonous inflammation elsewhere. As soon as fluctuation is detected, the question may arise whether the escape of the pus should be permitted to take place spontaneously, or whether the breast should be opened by the surgeon. The amount of constitutional disturbance is to decide that, and if it is decided to open it, the incision should not to be made within the areola, because the retraction which is incident to cicatrization will spoil the nipple for future use. The sooner this discharge takes place, the sooner the healing process will be completed, and the breast restored to a healthy condition.

In case the gland itself becomes inflamed, it is attended with more constitutional disturbance. There is headache, chills, fever, full pulse, high temperature, etc., and yet even greater constitutional dis-