her *left* side, and in the way I have described to you. When the infant has finished his meal you remove the shield, wipe the nipple perfectly dry, and, if necessary, apply the vaseline, lotion, or whatever may be ordered. The shield must be at once rinsed in warm water that has some borax in it, and *run through* the tubing and teat, then wiped and immersed in the Condy solution you keep for the purpose.

I shall enter into this matter of disinfection in a future paper ; at present we have merely glanced at it.

With respect to the use of the nipple-shield in the case we have been considering, it is only temporary, and must be dispensed with as soon as the nipples are healed. It is but too often the practice to let them get bad first, and protect them afterwards. I do not advise this plan, as it inflicts unnecessary pain upon the mother. To allow the infant to mould the nipple, as it is called, and thereby when they happen to be tender to bruise and excoriate them, seems to me anything but wise. When you first discontinue the shield, you will find that the borax and glycerine B.P., put on with a camel's hair brush before you put the child to the nipple, will prevent the infant's mouth from irritating it, and you may have to use this lotion for some little time after lactation has well set in.

We have now entered into the breast management of a primapara who suckles under normal conditions ; in my next paper we will point out some of the deviations from them, and go on to the breast treatment in multipara.

(To be continued.)

PRACTICAL LESSONS IN ELECTRO-THERAPEUTICS.

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LESSON VI.

Need for Measurement—Measuring Instruments.

THAT accurate measurement of dosage is necessary is a truism recognised by Medical men, Nurses and patients alike, when drugs and old-fashioned medicines are concerned ; but unfortunately electricity is by many regarded as an exception, and the need for its measurement for Medical purposes entirely ignored.

A little consideration, however, will show the need for the accurate measurement of doses of electricity. A continuous current possesses the property of producing various chemical changes in the tissues and fluids of the body (as shown in Lesson IV.), and the extent of these changes depends upon the Cs employed and the length of time during which it passes. If, then, we proceed to pass an unknown Cs for an indefinite time, it is manifest that we may easily either produce far greater changes in the body, or part of it under treatment, than we intend, and so do harm instead of good, or we may produce changes so slight as to be entirely valueless.

Dosage of electricity must be defined in terms which represent definite and distinct measurements expressed in recognised units. The factors of a dose of electricity are Cs and Time. The methods of measuring the latter it is needless to refer to ; suffice it to say that the unit employed is the minute. The measurement of the former is not quite so easy, and we will now proceed to give a short description of the methods employed.

The instruments most commonly used to measure Cs are called galvanometers, or when suitably graduated, am-meters, ampère-meters or milliampère-meters. They depend for their action upon the magnetic influence of the electric current. The fundamental principle is easily shown by what is known as Oerstedt's experiment, illustrated in Fig. 31.
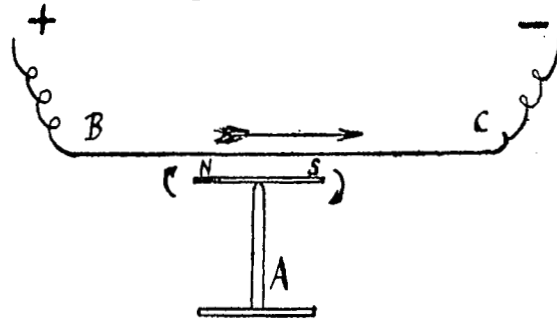

FIG. 31.

A magnetic needle NS is pivoted on the stand A, and a single copper or other conducting wire BC is held just above and parallel to it. If a current of electricity from two or three cells be passed through BC, the needle NS will deflect and tend to set itself at right angles to its previous position. It will remain more or less deflected, according to the strength of the current passing so long as the current continues to pass in the same direction.

If, instead of the single wire of the above experiment, a coil of wire be used, and so arranged that the needle be pivoted or suspended in the