chloroform inhalation, together with inhibition of the heart by electricial irritation of the vagus carried on simultaneously. In one of these experiments (117), chloroform was pushed for seven minutes; and during continued irritation of the vagus the animal repeatedly came round without artificial respiration. The danger really begins when the irritation is discontinued or fails to inhibit the heart, and thus enables the chloroform in the lungs to be rapidly absorbed and thrown into the system. The danger is certainly increased by deliberately pumping the chloroform into the lungs by means of artificial respiration, for animals in which this was done, although they showed a tendency to recover when the chloroform and irritation of the vagus were discontinued, afterwards died rapidly.—*Lancet.*

To be continued.

THE VALUE OF THE NEW ANTISEPTIC ARTIFICIAL MEMBRANA TYMPANI.

The following remarks are intended as a reply to the short criticism which appeared in this journal for November last.

During the past twelve months I have extensively employed in my aural practice the new antiseptic artificial membrane, with excellent results.

In many cases of chronic middle-ear disease marked improvement has followed its insertion into the meatus, but the most striking successes have always occurred in patients laboring under perforation of the membrana tympani. I have tested the value of my artificial drumhead in 130 cases of this disease, and, with only five or six exceptions, the results were extremely satisfactory. I have found it sometimes useful in cases of accommodative loss from alterations in the contents of the tympanum, in which the Eustachian tube was unobstructed and the naso-pharynx fairly healthy.

The immediate improvement in the hearing-power is often a matter of much satisfaction. The intensity of the sonorous vibration is at once increased, and sounds can be clearly defined which before appeared to be only confusion. The sensibility of the organ is magnified, and the sense of hearing is so much changed that the patient does not appear deaf during ordinary conversation. The hearing distance is remarkably increased, and, in place of earnest looks and strained attention, the countenance expresses both pleasure and repose. Several patients have informed me that, with the assistance of the artificial membrane, sounds had been rendered audible which they had lost for many years. Others laboring under perforation, but without serious deafness, have used them as ear protectors with great comfort. In such cases the artificial drum-head forms a screen between the middle ear and external meatus, and acts as an efficient shield during exposure.

Sometimes good results can be obtained by simply adjusting the artificial membrane and replacing it as often as necessary. But, in a large majority of cases, perforation of the tympanic membrane is associated with chronic suppurative disease of the middle ear, so that other important remedial measures must be diligently practised, and the ear must always be thoroughly deodorized before the introduction of the artificial drumhead. I always tell my patients that they may hope for progressive improvement, but that they must not expect to realize the full amount of relief until they have regularly carried out the local treatment and worn the membrane for two or three months.

During the last half-century a large number of artificial drum-heads have been introduced by different surgeons, and probably all of them have been found more or less useful in suitable cases; but not one of these devices has obtained a wide and general adoption. The ordinary cotton pellet has been extensively recommended by aurists, but it is my experience that few patients can be induced to persevere with it, because it is so liable to get out of position, and requires so much dexterity in putting it in and taking it out of the meatus.

On the other hand, the new antiseptic artificial membrane presents many practical advantages.

1. It decidedly improves the hearing-power for distance and conversation, and this appears to be due, at least in some measure, to its peculiar shape.

2. It is especially adapted for self-application, and can be easily placed in the right position and readily removed.

3. It is extremely light, and causes no sensation or irritation in the meatus by its presence.

4. It is serviceable as an efficient ear-protector, and acts as a screen for maintaining the moisture of the exposed tympanic cavity.

5. It is manufactured in different sizes, to suit the varying capacity of the external ear, and when once placed in position it is not liable to displacement.

6. It is obtainable at a trifling cost, so that a new artificial membrane can be used as often as necessary.

The following table exhibits twelve cases of perforation of the membrana tympani treated with the new artificial membrane: