

to any decision as to the desirability of continuing these attempts with wire. Two comments may be made on this particular case. The first is with regard to the material used. If I were asked to select the most unsuitable form of wire for this purpose, I should choose piano wire, which possesses the highest degree of elasticity and spring, and introduced into a thin or even a thick sac, is certain to exert dangerous and constant pressure on the interior of the sac wall. It must, as far as I can see, become the reverse of the elastic ligature, exerting a constant pressure from within outward. I confess I should have expected a fatal termination much sooner. The utility of introducing such an enormous quantity of wire may also be doubted. It must take a long time, and the larger the amount of wire which we are obliged to handle, the greater is its liability to become infected, no matter how carefully it has previously been sterilized. In the second case, which Dr. Abbe reports, he first introduced 100 feet of No. 1 catgut. This procedure was followed by a rise in temperature to 102° F., which subsequently subsided. The effect on the tumor was not permanent, and nine days thereafter the reporter introduced 150 feet of fine steel wire, and passed a current through the wire, the other electrode being a copper plate placed on the patient's back, thirty-six cells of battery used, kind not mentioned. The current was continued for an hour, at the end of which time the patient was reported to have suffered not at all from the operation, either from shock or pain. He died on the second day thereafter from rupture of the sac into the trachea. The same criticisms seem to me to apply to this case as to the previous one. Steel wire in such a quantity must have exerted considerable pressure outward on the walls of a very thin sac, and it does not seem to me to make much difference that the tumor is said to have ruptured at a point not in contact with wire. As a matter of fact, so large a quantity of springy wire within this sac must have exerted considerable outward pressure, and naturally the sac would burst at its weakest point, as it did. In speaking of the use of electricity in connection with this coil of wire, I infer that the reporter expects the current to pass through the entire coil, as he speaks of three cases in which electricity was passed through an extensive wire coil, in his résumé of the subject. It is possible that he overlooked the fact that electricity takes the shortest path and that of least resistance between the two electrodes, and that as his coil is not insulated, the current must pass in a straight line across the contiguous coils instead of around the entire coil, and as these points are points of contact there can be no electrolytic action at all. If in the ordinary operation of electrolysis, the poles are made to touch, the current passes from one pole to the other without any influence on the

fluid whatever, and this is what must have happened in both of Dr. Abbe's cases. This is almost absolutely certain in the first, for who can imagine a current from thirty-six cells passing through a fluid medium for one hour without the production of gas within the sac, provided there had been any electrolytic action whatever. Yet Dr. Abbe expressly states that there was nothing of the sort. It seems to me that catgut is not a material which ought to be used in this connection, as however sure we may be that its exterior is sterile, as it is not possible to boil it, we can never be sure of its sterilization within. Moreover, as it is soon absorbed, and as the firm, white clot upon which we rely is deposited slowly, it cannot be depended upon as a basis for this formation.

(To be continued.)

ON THE TREATMENT OF FLATULENCE.

There are probably few disorders of common occurrence which, without being of a serious nature, give rise to so much discomfort as flatulence. The malady is the constant companion of a large number of persons, which takes away from them the full enjoyment of life. I exclude from consideration in the remarks I am about to make, cases of gastrectasis and organic disease of the stomach and intestines; and it is therefore of flatulence in association with functional diseases of the digestive organs, or as the sole or chief complaint, of which I shall speak.

In the class of cases with which we are concerned, flatulence occurs under a variety of conditions. It is most frequently met with in connection with slight degrees of chronic gastritis; it sometimes is one of the symptoms of acid dyspepsia; whilst in many cases neither of these conditions is present, but the patients are sufferers from atonic dyspepsia. The flatulence may be of the stomach, or of the intestines, or of the two combined. The usual story we hear from the patient is as follows:—Soon after a meal, but sometimes quite independent of the ingestion of food, a feeling of fullness at the epigastrium is experienced. The sufferer feels he or she would like, and sometimes is compelled, to loosen all constricting garments round the waist. A horrid sense of oppression is felt, a difficulty of breathing, with sighing respiration, is experienced, and often there is palpitation of the heart. Not infrequently flushing of the face occurs, and sometimes the hands and feet are cold. In extreme cases the patients have a distressing feeling, as if they were about to lose themselves; or actual vertigo occurs. In many cases the symptoms persist for an hour or two, and gradually subside. Or, happier, the cardia relaxes, some upward escape of gas takes