ever, in January, 1915, and he is getting along fairly well. Although the wound was not closed, neither Dr. Arrowsmith nor the patient felt like interfering with it. There was a reasonably good air space and the man talked fairly well, but any sudden oedema might prove dangerous.

DISCUSSION.

DR. COFFIN expressed his regret that he could offer no suggestion for relief. It was one of those cases where one could only act as Dr. Arrowsmith had done and feel the way.

DR. KERNAN spoke of a couple of cases he had seen, reported by Castleberry, of Chicago (*Jour. A. M. A.*), in connection with chronic infection of the sinuses of the nose. They were reported as chronic lymphoid inflammations, and were treated with vaccines with gratifying results. Under comparatively large doses of vaccine, the swelling disappeared rapidly from the larynx. He expressed the possibility that Dr. Arrowsmith's case might be of a similar nature.

DR. ARROWSMITH replied that he thought not.

DR. ARROWSMITH, replying to Dr. Kernan, said he did not think the case was of the same nature as those referred to.

DR. LYNAN asked if intubation had been tried. Intubation with a large tube might help the condition.

DR. ARROWSMITH replied that he had considered that and had had a tube made, but that the man could not tolerate it.

DR. LYNAN said that if the tube could be tolerated it would be an easy matter to close the tracheal fistula.

DR. ARROWSMITH responded that the case might be more tolerant now and that it might be worth while to try it again.

DR. LYNAN said that in some of his cases of chronic stenosis of the larynx with polypoid tissue supraglottic, the pressure of the large head of the intubation tube was not only beneficial, but would bring about permanent cure.

Demonstration of Suction Apparatus for Treating the Sinuses HARMON SMITH, M. D.

Suction Apparatus.

In the presentation of this instrument I wish to preface the description by stating that in cases of acute and sub-acute sinusitis it has been my practice to employ the negative pressure for the evacuation of the sinuses, followed by hot saline irrigation to evacuate the purulent matter drawn out into the nasal cavity. I continue the suction, followed by the irrigation, until there is no more evidence of pus in the washings. After this

I insert the nose-piece of the instrument and connect the exit with the Bier's suction pump. The patient is then instructed to say "k," "k," "k," which act forces the palate against the post-pharyngeal wall and with the opposite nostril closed one is able to obtain a vacuum in both nasal chambers and in the sinuses emptying into the nasal fossae. When a complete vacuum, or, at least, a sufficient vacuum, is obtained, the stop-cock to the Bier's suction is shut off, the stop-cock to the medicine chamber is turned on, and by means of a needle valve at the distal extremity of the chamber, a bubble of air is admitted, permitting the liquid to be drawn into the nostril to fill the vacuum spaces produced by the suction. I have obtained the greatest success in the employment of the lactic acid solution or the bacillus Bulgaris, and while I do not feel that this is the only medication by which beneficial results may be obtained, I, nevertheless, am prepared to state that the sinus cases in which I have employed this preparation have recovered in less time than from the use of any other medicaments, such as argyrol, etc. I do not believe that the medication is the most important factor of this form of treatment, as the hyperaemia induced by the suction is unquestionably of great value.

Demonstration of an Apparatus for Applying Either a Negative or Positive Pressure to the Nose and Its Accessory Cavities. DR. LEWIS H. COFFIN.

By way of demonstrating his instrument Doctor Coffin treated two (2) patients. The negative pressure having been applied to the nose, by the turn of a switch he is able to immediately produce a positive pressure in the nose. This pressure current having passed through a nebulizing bottle containing oil, an oil nebula is at the same time carried into the nose. This nebula can be medicated in various ways. Dr. Coffin's claim is that, as nature abhors a vacuum, some of this medicated nebula must find its way into the various accessory cavities of the nose. The process may be repeated as often as one chooses. Doctor Coffin said he had used oil containing various amounts of iodine and also an oil loaded with the Bulgarian Bacillus.

DISCUSSION.

DR. ARROWSMITH said that the methods seemed to promise very valuable adjuncts to our equipment.

DR. SMITH said that it seemed to him that a certain value of Dr. Coffin's instrument would be lost, as the mucous membranes would not be entirely cleared of the pus and mucous brought to the surface by suction and to get the full value of the medicated spray it would be necessary to irrigate the nasal chambers before applying the medication. In the employment of his own instrument he first used the suction and then irrigation, until all of the mucous surfaces were entirely cleansed, then when the fluid rushed back to fill the vacuum it came in contact with a perfectly clean area. In his experience some patients were not able to hold a vacuum sufficiently long for all the fluid to gain entrance and that in such cases, spraying with an oil spray would have no more effect than ordinary spraying without the employment of the suction apparatus. He did not understand from Dr. Coffin's remark whether he claimed the vacuum was held for the entire time the suction was employed or not.