which the disease is blamed. We can get the very same symptoms from the administration of mercury that are caused by syphilis.

DR. JAMES E. POWER, Providence, R. I.: To me it seems unnecessary to make an incision such as described by the essayist. As I understand the operation, the doctor draws the flap across the opening at the top, within the oral cavity, and then makes an incision below and on the external surface for drainage. I do not think that one is justified in making an external incision on the face, and surely not in a case like the one described. I do not quite see any disadvantage in proper drainage through the mouth, even in view of the fact that there may be bacteria present which are capable of causing trouble in the alimentary canal. With the external incision, even if he gets union within the oral cavity by first intention, some days will elapse before he gets a sufficiently strong union to prevent back drainage. I believe that the term syphilis is getting to be used in the medical profession about the same as neuralgia in the dental profession. It seems that about every condition which is beyond the diagnostic capabilities of the practitioner is pronounced syphilis. I am conscious of the prevalence of syphilis, but I believe that many mistakes are made. From my experience I would not care to accept the statement in the matter as final, that over one-half the cases of necrosis of the superior maxilla were due to syphilitic conditions. A good many times the argument for the diagnosis of syphilis is simply that the condition improved under potassium iodid. We all know that many conditions will improve under potassium iodid. Without a good history the only true test is the Wassermann reaction, and that is very seldom resorted to by the general practitioner because it is a complex process and requires the skill of a laboratory expert. Dr. Fisher says that he believes that many of the cases of para-syphilitic conditions are due to the drugs. I believe, however, that all conditions that come from treated syphilis are from the disease and not from the drug. We might get a profuse flow of saliva from too much mercury, but I do not believe that we get necrosis of bone, gummata and other pathologic manifestations which are associated with syphilis and which are erroneously attributed to the use of the drug. I believe 100 of the para-syphilitic conditions are due to the disease where but one is due to mercury. My authority for this statement is Dr. Charles M. Whitney of Boston. I am speaking of cases properly treated. Of course, if a practitioner continues to use mercury after symptoms show that the drug should be suspended he is likely to be confronted with serious conditions. Salivation was used as the indicator in the early days of the treatment of this disease, but that day has passed. They are treating syphilis more scientifically to-day. It is seldom if ever that a syphilologist will permit a patient to reach the stage of profuse salivation.

DR. EUGENE TALBOT, Chicago: I have failed to see in any work the proper pathology of alveolar abscess. While I may not be correct, I have an idea of the process taking place and I may be able to add some point which has not yet been recorded, and I have made a number of drawings on the board to give a general idea of what I intend to present. Most individuals who have alveolar abscesses are run down. In case of syphilis, mercurial, or any other drug poisonings, there is a want of tonic of the nervous system, in all cases, we may say, due to irritation. When irritation takes place the peri-dental membrane becomes involved and inflammation is set up, which causes pressure pain around the root of the tooth. With this pressure, inflammation is set up in the arteries of the bone, the Haversian canals and in the vessels of von Ebner. That inflammation causes absorption of the bone proper, leaving the fibrous tissue (trabeculae) as you see it in the diagram on the board. This might be likened to the plastering on the side of a building. If it were not for the lathing the plastering would not stick. If the lathing (trabeculae) be removed, then the alveolar tissue or bone cannot be restored. The extent of formation of this abscess depends entirely on the amount of irritation and also on the weakened condition of the patient. It may go on, extending down into the bone tissue through these canals,

and the bone proper (that is, the bone-cells which are held together by fibrous tissue) is absorbed, leaving the fibrous tissue intact. This fibrous tissue becomes organized and forms the sac of the abscess. The inflammation extends through these Haversian canals and produces absorption outward, just as when pebbles are thrown into a small lake, the waves enlarge and spread outward, and if you throw several pebbles into the lake at different localities these waves extend until they coalesce. The principle of bone absorption is the same. Absorption goes on around each Haversian canal until the entire area is involved, and we not only have absorption going on in the Haversian canals, but the vessels of von Ebner become involved. These are not so large as the Haversian canals, so the process of absorption takes longer, but the principle is the same. It burrows right through the bone.

DR. FREDERICK NOYES, Chicago: The absorption of bone under the conditions just stated may be considered as a response to a mechanical condition of pressure, which is the result of the exudate which comes from the inflammation, and the absorption occurs in all the spaces of the bone in the neighborhood of the inflammation.

DR. C. W. HARNED, Iowa City, Iowa: There is just one word I would like to say as to closing of these wounds. I think anyone who has made a practice of closing wounds to prevent secretions of the mouth getting into them will never give it up. I never fail to close up a cavity if possible, after removing all necrotic tissue. I think such wounds will seal in 36 hours, so that no saliva will get into the wound. Pus is rarely present after all the necrotic tissue has been removed. I want to commend the essayist for making this point in the matter of drainage.

DR. JAMES E. POWER, Providence, R. I.: The last speaker states that in his antral diseases he cleans the antrum and then closes the opening through which he operated. In all the antral cases which I have treated I have been obliged to follow the curettage treatment with irrigation. I would like to know how he irrigates if he closes the opening, or what procedure he follows.

DR. C. W. HARNED, Iowa City, Iowa: I prefer going in above the bicuspid, when I think disease involves the antrum. Thorough ventilation as well as drainage through the nose on that side is important. I make an opening through the internal wall of the antral cavity into the meatus, after the antrum is cleansed. Close up the mucous membrane on the outside after you have packed. Remove packing the next day through the nostril. Always close mucous membrane on the outside immediately, and irrigate as little as possible. I find that when I irrigate the least the patients get along the best. If all the pus and necrotic tissue is removed, and the cavity sterilized, very little irrigation will be found necessary.

AN IMPROVED METHOD OF GENERAL ANESTHESIA IN HEAD-SURGERY BY MEANS OF GLASS NASAL TUBES *

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Anesthesia for head-surgery certainly presents difficulties for the anesthetist. In order to insure greater safety to the patient and less interference of the anesthetist with the surgeon during an operation on the head, many inhalers have been produced. Nasal tubes for such purposes of anesthesia were introduced in 1908 by Dr. Edwin Pynchon of Chicago and Dr. Stuart B. Blakely of New York independently. Since one of these instruments allows the entrance of too much air

* Demonstrated before the Harlem Medical Association, May 14, 1910, and the Valentine Mott Medical Society, May 24, 1910.

and the other does not provide sufficient air, I have devised an instrument which experience has proved to be more practical than any other on the market.

My apparatus consists of two glass tubes (Fig. 1, A and B) so bent that each will properly fit a nostril. These tips are connected with the mechanism which supplies the anesthetic vapor by means of two soft rubber tubes (Fig. 1, C), joined together at the supply end by a glass Y, which also connects them with the supply tube (C) itself. They are furnished in three different sizes in order to make the apparatus adapted to nostrils of different shapes.

Furthermore, the apparatus which I use for continuing the anesthesia is different from that employed by either Dr. Pynchon or Dr. Blakely. I induce anesthesia in the usual way and then introduce the glass

Fig. 1.—Glass nasal tubes for general anesthesia in head-surgery (A and B); connected with supply tube (C).

nasal tips into the nose. For convenience these may be held in position by means of a small piece of adhesive plaster placed across them transversely on the forehead (Fig. 2). The anesthesia is then continued by supplying the vapor in one of four ways: first, by the Crile method, that is, by the use of a funnel and tube (Fig. 1, C), on the stretched gauze of which ether is dropped; second, by the one-bottle Junker apparatus, as used so commonly in England for head-surgery; third, by the two-bottle modification of the Junker apparatus, as used by Dr. T. W. Brophy of Chicago for work on cleft palates; fourth, by the Gwathmey three-bottle modification of the Junker apparatus. By each of the Junker methods anesthesia vapor is pumped into the nostrils by means of suitable bulbs.

I much prefer the Gwathmey apparatus, as it allows the use of both ether and chloroform, either singly or combined in any proportion, with the greatest safety and ease.

The following are some of the advantages of the glass nasal tips over the long rubber tubes which have been in common use:

1. They are more safely and easily introduced into the nose.
2. They allow the anesthetic vapor on its way to the lungs to become warmed by the nose.
3. Successful use of the instrument is in no way interfered with by a deformed nasal septum or exostosis.
4. They do not cause nasal hemorrhage.
5. They cannot become obstructed with blood and mucus.
6. They remain in position much better than rubber tubes.
7. They are easier to clean and sterilize.

A method very similar to mine has been successfully employed at Roosevelt Hospital in New York City,

Fig. 2.—Glass nasal tubes for anesthesia in use.

where it is now entirely used for head-surgery in place of rectal anesthesia.

The glass nasal tips, as above illustrated, are certainly a most excellent means of producing a safe and continuous anesthesia in head-surgery, not interfering with the surgeon.

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REPORT OF A CASE OF MIDDLE MENINGEAL HEMORRHAGE ACCOMPANIED BY ACTUAL HEMIPLEGIA: OPERATION, RECOVERY

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The occurrence of middle meningeal hemorrhage, unless accompanied with severe depressed and compound fractures of the skull, is not so frequent but that the following case may be of interest:

History.—About midnight of April 4, 1909, I was called to see a workman who, I was told, was suffering from a