patient go home in three days perfectly healed. The result remained good for I observed him for several weeks.

DR. SEYMOUR OPPENHEIMER, New York: What proportion of cases in which the antrum is left intact require reoperation and in what proportion of cases in which closure has been successful has there been a continuation of discharge from the ear? I think the proposition a very retrograde one. Dr. Lewis says that to open the antrum is not surgical; I think just the opposite. I am quite satisfied that a great many cases that require reoperation are cases in which the mastoid antrum has not been opened sufficiently. The mastoid antrum bears the brunt of the burden and if the proposition were placed before me to open the antrum and not do anything else or to leave the antrum unopened and clean out the rest, I should accept the former proposition.

DR. T. R. CHAMBERS, Jersey City: I second what Dr. Oppenheimer has said and enter a protest against the position taken by Dr. Lewis. I am amazed at Dr. Pierce. He knows that in every mastoid operation you should open the antrum. Many times we find a dry antrum and we do not curet, of course, or do a radical operation.

DR. B. A. RANDALL, Philadelphia: The question must depend, I think, a little on the definition of osteomyelitis. Those of us who have seen cases of genuine temporal-bone osteomyelitis, such as reported in this Section by Dr. C. W. Richardson, will never be in doubt about it. It is not true in a clinical sense that because a little of the contents of the diploetic bone is involved, there must be osteomyelitis. The middle ear involves all the pneumatic cavities. The antrum, which so many speak of as mastoid, is the posterior portion of the tympanum and as such is as well able to take care of itself as the tympanum proper or the eustachian tube. As well say you must curet the eustachian tube as to say that you must always curet the antrum and open all the cells. The pneumatic cells may extend clear to the sella turcica in some instances. We must realize that these operative cases offer an infinite variety and we can lay down for the beginner no rule that will make the matter an easy one, so that he can do it as well as the expert who has had a thousand cases or more. If we are to do good surgery we must first decide whether we are dealing with empyema or caries. I hold that empyema of the mastoid can resolve successfully and safely with no bad results, but I do not advise the younger man to trust that. If you are not sure it is better to operate thoroughly; it is safer, but there are many cases that can clear up just as does many an empyema of the antrum of Highmore. When you have caries to deal with, it is a totally different proposition. Tissue which is no longer viable must be taken away. The expert recognizes this by sense of touch with his curet; the beginner who has this yet to learn must risk overdoing a little rather than slight his work.

DR. E. R. LEWIS, Dubuque: I am afraid I have been misunderstood by some; these men will get my ideas more clearly by reading the paper. One speaker alluded to my not opening the antrum, but I say that the man who opens the antrum without specific reason makes a surgical error; and he who, with or without specific reason for opening the antrum, curets its mucoperiosteum, has, without any justification, destroyed what is of enormous importance to the patient, a lymphatic organ which cannot regenerate. I wanted to bring out particularly that the mucoperiosteum is an important organ, possessing functions of great value to the individual, and that unnecessary surgical destruction of any part of it is an unjustifiable procedure. Dr. Oppenheimer asks for something with which I cannot furnish him. I have not a large clinical practice and corps of clinical assistants to tabulate the results of my work. I have been practicing otology for eleven years in a town of 40,000 and have had my share of mastoid work; all the surgery has been based on the principles here set forth. I have not had one patient with an acute case who has been under my care from the outset develop intracranial complication, chronic suppuration, or internal ear disease; and not one of my cases has terminated fatally.

TONSIL DISSECTOR, TONSIL-GRASPING FORCEPS, TONSIL HEMORRHAGE CLAMP

LEE M. HURD, M.D.
NEW YORK

One end of the dissector (Fig. 1) is a retractor for the anterior pillar while applying forceps, and while inspecting the cavity from which the tonsil was removed. The other end is for dissecting out the tonsil. The edge is neither dull nor sharp, but rather an edge that is produced by the use of a fairly rough oilstone, and will cut when given a quick stroke with some pressure and will act as a dull dissector when used without much force.

The forceps (Fig. 2), from the nature of its action, buries itself deeply in the tonsillar tissue under all rea-

Fig. 1.—Dissector.

Fig. 2.—Forceps.

Fig. 3.—Tonsil clamp.

sonable conditions. The forceps is laid against the tonsil with the jaws open, one jaw at the inferior end of the tonsil, the other jaw crowded up into the supratonsillar fossa, and then the jaws are pushed into the tonsil as the handle is locked.

I have used these two instruments for five years. They have never been recorded; but now that the dealers are importing the dissector by the gross (most of which are incorrect models) I feel compelled to offer the instruments.

The tonsil clamp (Fig. 3) is intended for a double purpose; first, as a method to control hemorrhage while removing the second tonsil if the blood from the first one interferes; for this purpose there is a ring fitted to the outside arm through which the assistant can slip his finger and by having the clamp half open exert pressure in the fossa and still be out of the way; second, as a tonsil hemostat clamp to be placed in position and remain for a reasonable time to check prolonged hemorrhage.

15 East Forty-Eighth Street.