

SURGICAL TOOLS OF PAST AND PRESENT

Loan Exhibit of Instruments
Used in Bygone Days
by Surgeons.

THOSE USED TODAY ARE
SHOWN FOR CONTRAST

Remarkable Development of
This Branch of Profession
Forcibly Presented.

When the older members of the medical profession, the men of the one-horse chaise, who have done the greatest good among their patients with the knowledge they have acquired, attend the convention they will be treated to such a sight as they have seldom seen before, in the loan exhibition of old surgical instruments.

This collection, which embraces all kinds of instruments used in surgery, from those of the time of the revolutionary war up to the present, has been collected by a committee of which the head is Dr. J. Collins Warren, and the collection is said to be the most complete in America. It includes not only a great many old instruments, but also a number of modern types, but these have been placed in the exhibit only to show the advance that has been made in surgery and the manufacture of surgical instruments since the earliest times.

For instance, there is an old pair of forceps, and side of it is another pair which shows some improvement over the one that was first made, and there is a series of instruments arranged according to their age, so that the surgeon may see what was and what is. For the old practitioner who does not have the privilege of coming into the hospitals often, the new instruments will be an education in themselves, and he will go back to his patients with new ideas for their benefit.

The loan exhibition will be in the anatomical building of the new school, and Dr. Townsend W. Thorndike, Dr. Charles G. Weld, Dr. Herbert L. Burrell and others who have worked to make this collection complete are finishing their labors on one of the upper floors of the old medical school on Boylston street.

Oldest Set of Instruments.

All of the instruments are mounted on large boards, and are so placed and labelled that they can easily be seen. The oldest set of amputation instruments in the collection is that which was originally used by Dr. John Warren, the brother of Gen. Joseph Warren, who was killed at the battle of Bunker Hill.

These instruments seem like the coarse and blundering tools of a carpenter to the modern surgeon, in comparison with the instruments used today. They are in a mahogany box with an old-fashioned brass handle on the back, by which it was carried. The instruments are set into sockets in the inside of the box, these sockets being covered with plush which is now a dull snuff color.

The large knife in this set is one of the most curious instruments, as it has a blade shaped like a scimitar, while the modern knives are almost straight. This set of instruments is one of the most highly prized of all of those that are now in the Harvard medical school collection. They were handed down from Dr. John Warren to Dr. Henry J. Bigelow, who gave them to the medical school museum.

One of the best collections in the exhibition is the collection of obstetrical forceps, which date back as far as 1800. They are made in somewhat the same form as those of today, but there are all kinds of odd variations. For instance, one of them is covered with leather, which was supposed to be a great advantage, although at the present time this improvement has been discarded. Some of these instruments were loaned by the Mutter museum of the University of Pennsylvania, and others came from all corners of the country. Some are rusted, while others have as brilliant a polish as when they were first used.

There is also a very complete collection of forceps for the removal of stones from the bladder, arranged according to the time when they were invented. There are the famous Bigelow tourniquets for the wrist, arm and thigh.

Collection of Stethoscopes.

Another section of the exhibition which is bound to attract the greatest attention is the collection of stetho-

scopes, cupping glasses were used to catch the blood, and a great number of these are shown. There are many old speculums in the exhibit, and, to the credit of one of the old surgeons, it should be said that the Sims speculum, devised by Dr. Sims, still remains one of the best and most serviceable of all those that have ever been used. Dr. Charles A. Powers of Denver has presented the first set of Whitehead instruments that were ever used for remedying the defect of a cleft-palate.

Model of Dr. Morton's Inhaler.

Another of the features of the exhibit is the only model of the inhaler used by Dr. Morton in his famous demonstration of the use of ether as an anaesthetic, which was performed in the dome of the present Massachusetts General Hospital in 1843, and which revolutionized the methods of surgeons.

This model was made from the original, which is now in the possession of the Massachusetts General Hospital as one of its most treasured relics. It consists of a globe of glass, slightly flattened, with two openings. One of these openings is fitted with a brass rim, into which screws the mouthpiece. The other opening is for the admission of air. When ether was administered, a sponge inside the globe was saturated with it, the vent was opened, allowing the admission of air, and the patient, after putting the mouthpiece in his mouth, breathed in the fumes until he was far enough under the influence of the anaesthetic to be unconscious of any pain.

Among the other interesting instruments in this collection is one of the first two pairs of Tarnier's axis traction forceps ever made, contributed by Dr. W. L. Richardson; the first set of trial glasses ever imported into this country for the use of ophthalmologists, old devices used by the Indians to remedy dislocations; a pair of extraordinarily large fibroid hooks, two feet and a half long, contributed by the Carney Hospital, and a great many instruments used by army surgeons in the Mexican, Seminole, civil and Spanish-American wars. There is also the largest trephine ever used, an instrument two inches in diameter, made especially for Dr. Herbert L. Burrell of 22 Newbury street.

There is almost no limit to the variety of instruments that are now in existence, for in these days of advanced surgery many surgeons have instruments made from their own designs. Some of these surgeons are as particular and fussy over the shape and weight of the instruments they use as golf players over the weight and shape of their clubs. Many surgeons have instruments made for individual operations, for they often encounter difficulties which they cannot get rid of by the use of the instruments that are made for general operations.

Changes in the Instruments.

One of the great changes that has taken place in the shape and design of instruments was brought about through the discovery of antiseptic surgery by Lord Lister of the hospitals of Edinburgh, about 40 years ago. In the time when there were wooden-handled instruments, and when knives were not only models of the cutlery craft but also of the art of the steel engraver, a surgical operation without infection of the wound was almost unknown. The percentage of fatal terminations of surgical operations was large indeed, and a surgical operation was the last resort.

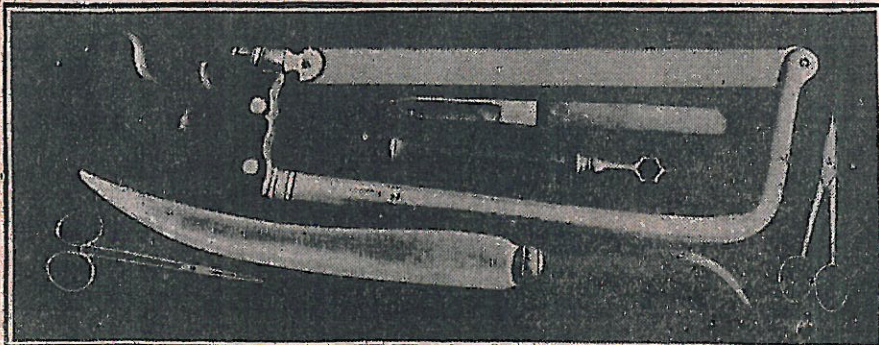
Lord Lister made the discovery that the danger of operations could be easily avoided by great care to have all instruments used cleaned perfectly, to have everything used in the operations as pure as possible. Everything was changed on account of this discovery. The bacillus was fought hard by the surgeons. They threw away their instruments which had wooden handles, capable of concealing many a death-dealing "bug."

All of the elaborate engraving which once adorned the knives and other instruments was tabooed, for in each crevice might be the bacillus which they feared worse than the cause of the operation. There were no crevices, no square corners, no place where a bacillus could lodge, and now instruments are so made that they can be taken all to pieces, the joints in many cases being automatically locked.

In the arrangement of this collection one of the best committees of Boston doctors that could be made up was formed. Dr. Samuel A. Green, an ex-mayor of Boston, is one of the members of it, and has taken an active interest in its work. The cataloguing and the task of systematically arranging all of the surgical instruments has fallen upon Dr. Charles G. Weld, who is one of the most noted authorities in this country on surgical instruments. The obstetrical instruments were catalogued and arranged by Dr. James R. Torbert, the eye instruments by Drs. Jeffries and Derby, and the other exhibit was planned by Dr. Freeman. Then Dr. Homer B. Smith will be the demonstrator of the instruments at the exhibit, and he will show them to those who make inquiries about them.

The complete sub-committee, which has charge of this exhibit is made up of Dr. J. Collins Warren, chairman; Dr. Edward H. Bradford, Dr. Herbert L. Burrell, Dr. David W. Cheever, Dr. Samuel A. Green, Dr. Samuel J. Mixer, Dr. C. B. Porter, Dr. M. H. Richardson, Dr. Homer B. Smith, Dr. Charles G. Weld, Dr. William F. Whitney, Dr. Townsend W. Thorndike, secretary.

DR. JOHN WARREN'S AMPUTATING INSTRUMENTS.



These instruments were used by Dr. Warren of Boston in the revolutionary war. This is the oldest set in America and the first photograph of these instruments ever published.