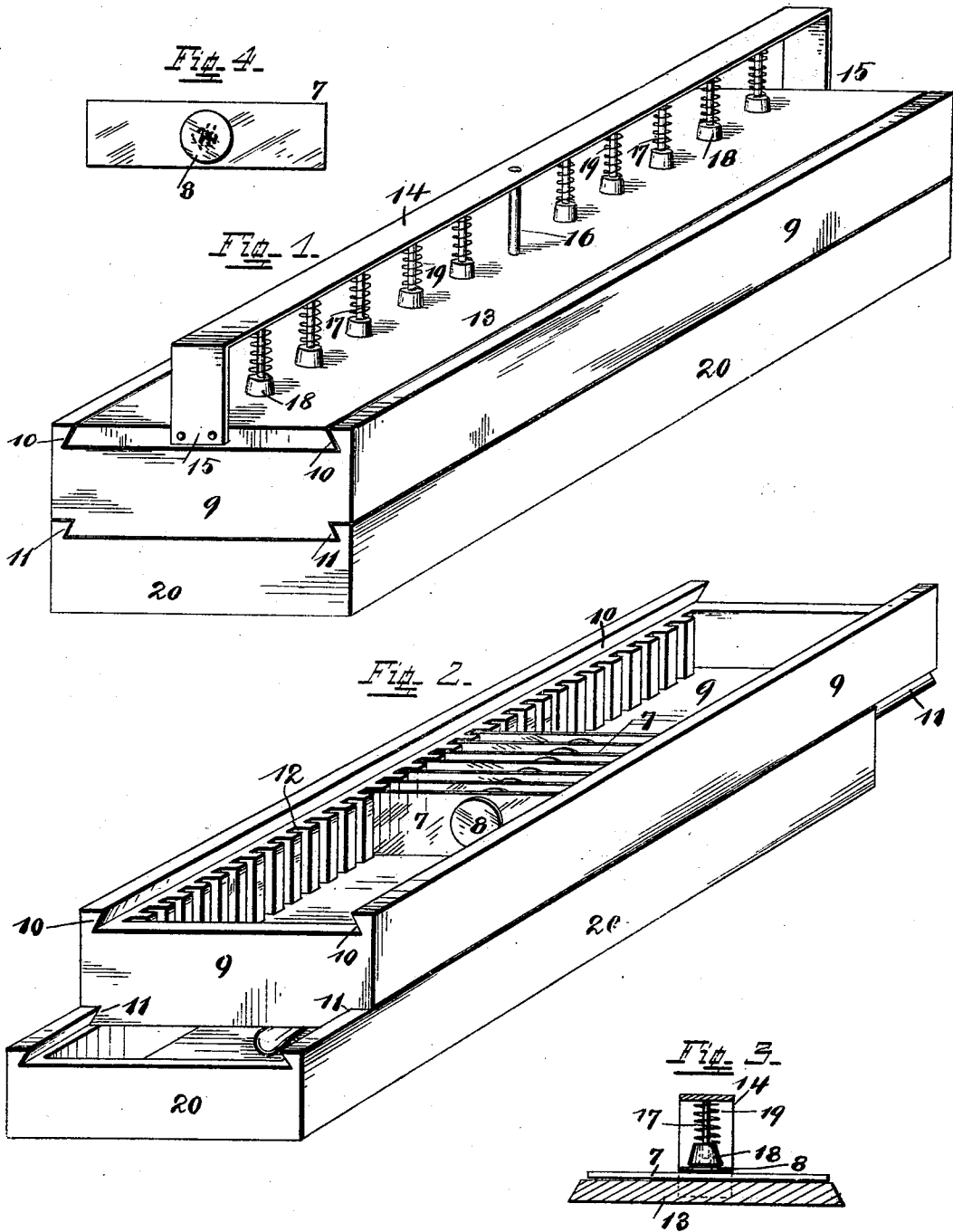


(No Model.)

W. AUTENRIETH.
HISTOLOGICAL CASE.

No. 512,496.

Patented Jan. 9, 1894



Attest
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UNITED STATES PATENT OFFICE.

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HISTOLOGICAL CASE.

SPECIFICATION forming part of Letters Patent No. 512,496, dated January 9, 1894.

Application filed October 22, 1892. Serial No. 449,724. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM AUTENRIETH, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Histological Case; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to implements used by medical students, physicians, scientists, &c., for preparation, inspection and preservation of microscopical specimens.

It consists substantially of means which aid in the preparation of such specimens, and storage cases and a case for the tools and instruments needed in such proceedings combined therewith, parts of these cases also forming parts of the construction of the means first mentioned. The storage cases are interchangeable, so that when one is filled it may be replaced by an empty one for immediate use, while the filled one is put away for future reference.

My invention is more fully explained in the following specification and pointed out in the claims thereof as well as illustrated in the accompanying drawings, in which—

Figure 1, is a perspective view of the case complete. Fig. 2, is a perspective view showing upper lid removed and lower box partly open. Fig. 3, is a vertical cross-section through the upper lid and Fig. 4, is a view of one of the specimens as they are usually prepared between glasses.

Specimens for microscopical investigation or study of the kind used as above mentioned are generally put on rectangular glass-plates 7, on which they are held by circular and thinner glass-disks 8, which cover them and are secured to the glass-plates by a suitable adhesive substance, generally wax. In this manner the specimens are preserved and protected in an air tight inclosure and at the same time are visible from either side. The glass-plates so charged are stored for future

reference in cases and in a manner which protects the glass-disks, covering the specimens, and prevents them from coming in contact with other objects or adjacent plates whereby they might be displaced.

9, is one of the storage cases consisting substantially of an open, rectangular box, provided with dove-tails 10, and 11, the former at the inside of the upper edges of the sides of the box, the latter at the outside of the lower corners. The sides are provided with notches 12, which receive the prepared specimens, the parts between the notches preventing said specimens from rubbing against each other.

13, is a lid fitting into dovetails 10, of box 9, and provided with a handle or bail 14, by which the whole case may be conveniently carried. This bail is secured to the ends of lid 13, at 15, 15, and between the ends at 16. From the under side of it depend a number of stationary pins 17, of a length which leaves some space between their lower ends and lid 13.

18, are circular blocks or followers, which have central perforations into which the lower ends of pins 17, reach, the height of these blocks being such, that when they rest on lid 13, pins 17, still retain their engagement with them by means of their central perforation. Encircling pins 17, and confined between the top of blocks 18, and this bail 14, are coil-springs 19, which hold the blocks 18, constantly against lid 13.

When a specimen is to be prepared, it is placed on one of the glass-plates 7, and covered by a disk 8, secured by an adhesive substance, after which one of blocks 18 is lifted and the two glasses put under in such a manner that disk 8, comes under the block whereby it is held immovably in position until the substance, connecting the glasses, has hardened. After such hardening the specimens are ready for manipulation or for storage in box 9.

20, is another box, dovetailed at its top in a manner similar to box 9, and fits onto the dove-tails at the bottom of the latter. It serves as a receptacle for the tools and instruments used in the preparation of such specimens. Its lid is formed by the bottom of box 9, while the latter is covered by lid 13.

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Especially for students at medical colleges this case is very useful, combining as it does everything needed for such studies and experiments, while bail 14, forms a convenient means whereby the whole is carried.

Lid 13, with its attachments and box 20 are permanent parts of the case while box 9, is interchangeable whereby the whole case is kept in constant working order and always ready for use.

Having described my invention, I claim as new—

1. A device to hold the glass-plates used for the preservation of microscopical specimens in position while the substance connecting them is hardening, consisting substantially of a base 13, a member or bridge 14, secured thereto, a series of stationary pins connecting to this latter and projecting to within a fixed

distance toward base 13, and spring-actuated perforated blocks or followers 18, adjustably held on these pins.

2. The combination with a histological storage case for microscopical specimens, of the means required to prepare such specimens, such combination consisting of the lid 13 and bail 14, of the storage case, of a series of stationary pins secured to the bail and projecting to within a fixed distance toward lid 13, and spring-actuated blocks or followers 18, adjustably held on these pins.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM AUTENRIETH.

Witnesses:

C. SPENGLER,

W. H. DICKS.