

C. A. SCHMITZ.
INSTRUMENT CASE.
APPLICATION FILED APR. 30, 1903.

MODEL.

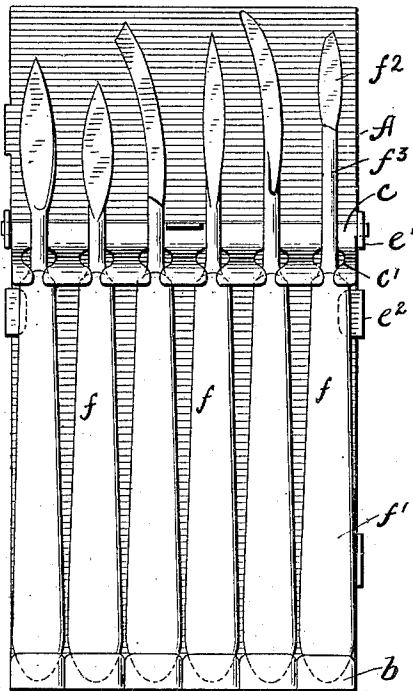


Fig. 1

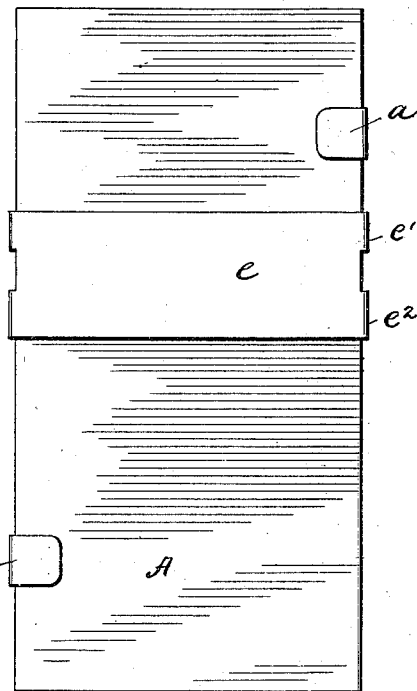


Fig. 2.

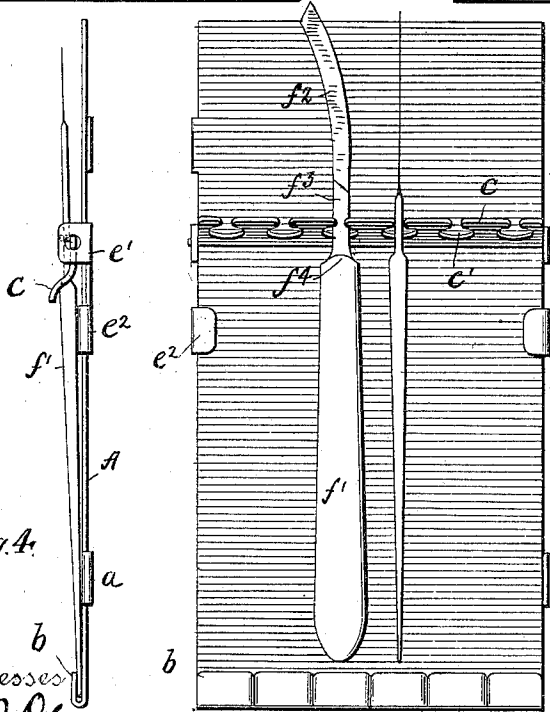


Fig. 4.

Fig. 5.

Witnessed
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Fig. 3. b Inventor
Charles A. Schmitz
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UNITED STATES PATENT OFFICE.

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INSTRUMENT-CASE.

SPECIFICATION forming part of Letters Patent No. 746,999, dated December 15, 1903.

Application filed April 30, 1903. Serial No. 154,916. (Model.)

To all whom it may concern:

Be it known that I, CHARLES A. SCHMITZ, a citizen of the United States, residing at the city of New York, in the borough of Bronx and State of New York, have invented certain new and useful Improvements in Instrument-Cases, of which the following is a full, clear, and exact description.

This invention relates to instrument-cases, and is particularly designed as an improvement in the racks or holders for supporting instruments, such as surgical knives, securely and compactly in place and affording convenience and facility in removing and replacing the same. The common form of rack or holder for such instruments is a series of loops, usually of leather, stitched to a leather or board face and through which the handles of the instruments are passed. These loops hold the instruments flat against the base, so that they are not easily grasped by the fingers to remove them. Furthermore, in slipping the instruments through the loops, of which there are usually two sets, there is danger of being cut or of cutting the case. Again, in order to sterilize instruments that are carried in the ordinary leather case they must be separately removed therefrom and separately placed in the boiling water.

My invention provides a rack consisting of a base-plate having holders for the instruments, which admit of their being easily and conveniently removed and replaced and which can be removed bodily from the case with all the instruments attached thereto and placed in the sterilizing vessel to be sterilized as one article instead of a number of individual articles.

The details of my invention will be explained in connection with the accompanying drawings, in which—

Figure 1 is a face view of the base-plate and rack with the instruments arranged thereon. Fig. 2 is a view of the back of the base-plate. Fig. 3 is another face view of the base-plate, showing the positions of the instruments in removing and replacing them. Fig. 4 is an edge view of the base-plate, and Fig. 5 is a similar view showing the movements of the instrument when being removed or replaced.

A is a metallic base-plate, usually rectan-

gular in shape and adapted to be deposited and confined in a pocket or other instrument-case, for which purpose it is provided with two clips *a*, adapted to engage with loops or flaps in the leather case. The case is not shown, since it forms no part of the invention. The lower edge of the plate is turned up to form a flange or lip *b*, under which the ends of the handles are to be inserted. This flange is scored or set inward along vertical lines to divide the space beneath the flange into a number of pockets for the respective handles. Extending transversely across the face of the base-plate at a point about where the necks of the instruments would lie is a bridge or rack *c*, consisting of a metal plate hinged along one edge near the face of the base-plate and along its opposite or swinging edge provided with a series of notches or seats *c'*, adapted to receive the necks of the instruments. These notches have narrow openings at the entrance which enlarge inwardly, giving them a kind of buttonhole shape. The notched edge of this bridge is offset or bent out of the plane of the opposite edge, so that when the bridge is swung downward toward the sockets *a* the notched edge curves outward slightly, as shown in Fig. 4. This bridge is pivoted to a plate *e*, which lies against the back of the base-plate *A* and has two ears *e'* projecting forward to receive the pivot-pins of the bridge. The plate *e* is held in place by pliable clips *e''*, which embrace the edges of the base-plate and can be clamped thereto by pinching them. By this means of fastening the plate *e*, with the bridge, is adjustable to any distance above the lower edge of the base-plate to suit different lengths of instruments.

The instruments adapted for this device are preferably made entirely of one piece of metal, although not necessarily so. They are indicated by *f*, the handle *f'* being in one piece with the blade *f''*. At the point where the handle joins the blade there is usually a slim elongated neck *f'''*, which leaves a shoulder *f''''* on the handle. Both the handle and the neck are flat, being wider in one direction than in the other, and the dimensions and shape of the notches in the bridge are such that the instrument must be turned on edge in order that the neck shall pass into the opening of

the notch, after which the instrument can be turned in the enlarged part of the notch, and thus assume a flat position against the face of the base-plate. When the instruments are in place, they occupy the position shown in Fig. 1, where it will be seen that the lower ends of the handles are in the sockets at the lower edge of the base-plate, the neck in the enlarged part of the notches of the bridge, and the bridge tilted downward with its outwardly-curved edge resting over the shoulders f^4 of the handles and holding the instruments flat against the face of the base-plate. To remove an instrument, the bridge is tilted upward to a position substantially at right angles to the base-plate, as shown in Figs. 3 and 5. This carries the bridge some distance upward on the necks of the instruments remote from the shoulders f^4 of the handles and at the same time elevates the upper ends of all of the instruments from the base-plate. The selected instrument can now be easily grasped by the handle and moved upward until the lower end of the handle is free of its socket, as shown at the left in Fig. 3. The instrument can then be twisted to the position shown at the right in Fig. 3 and withdrawn through the openings of the notch, as shown in dotted lines in Fig. 5. When the instruments are replaced, the reverse of this operation is followed. The bridge being lifted, the instrument is passed edgewise into the notch and then the lower end of its handle directed into the socket below, after which the bridge is turned down to hold all of the instruments in place. It will be seen that the turning down of the bridge not only lowers the instruments against the face of the base-plate, but locks them against turning in their seats. To handily sterilize the instruments, the base-plate with all the instruments in place thereon is removed from the case by simply slipping the clips a out of engagement with the holding devices in the case and then depositing it in the sterilizing vessel. It will be seen that when the instruments are in their normal position in the case they are very compactly placed and the case itself will not be thick and cumbersome, and when wanted for use

the lifting of the bridge opens them up and makes them readily accessible.

Having described my invention, I claim—

1. In an instrument-holder, the combination of a base-plate provided with a row of sockets for the ends of the instrument-handles and a bridge-plate hinged thereto along one edge and having notches in its opposite edge adapted to receive the instruments, whereby the latter can be raised and lowered, for the purpose set forth.

2. In an instrument-holder, the combination of a base-plate provided with a row of sockets for the ends of the instrument-handles and a bridge-plate hinged along one edge thereof and having notches in its opposite edge which enlarge inwardly and are adapted to receive the respective instruments, whereby the latter can be raised and lowered by swinging the bridge-plate on its axis.

3. The combination of a base-plate provided with a row of sockets for the ends of instrument-handles, a bridge-plate hinged to the base-plate and provided with a row of notches along one edge adapted to receive the necks of the instruments, said notches enlarging as they extend into the plate and a plurality of instruments having flat necks capable of being passed into the notches only when presented edgewise thereto, substantially as described.

4. The combination of a base-plate having a row of sockets along one edge, a hinged bridge-plate arranged parallel to the row of sockets and having notches along one edge corresponding to the respective sockets, the notched edge of said bridge being offset from the opposite edge, and a set of instruments the lower ends of whose handles are adapted to engage the row of sockets while the offset portion of the bridge is adapted to overlie the upper ends of the handles adjoining the necks of the instruments, substantially as described.

In witness whereof I subscribe my signature in presence of two witnesses.

CHAS. A. SCHMITZ.

Witnesses:

FRANK S. OBER,
WALDO M. CHAPIN.