

No. 682,522.

Patented Sept. 10, 1901.

W. & J. BOEKEL.
STERILIZER CASE.

(Application filed May 27, 1901.)

(No Model.)

Fig. 1.

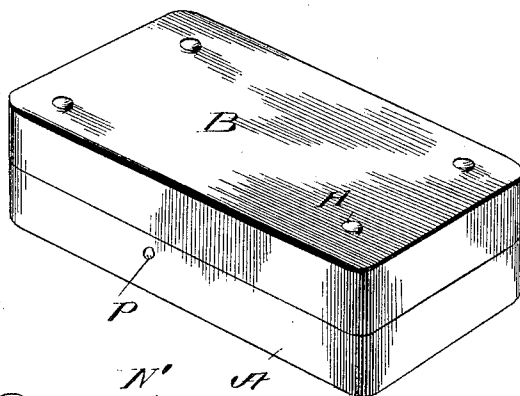


Fig. 2.

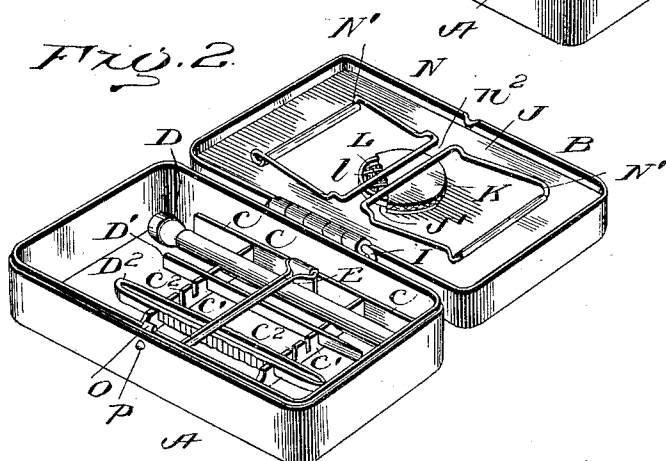


Fig. 3.

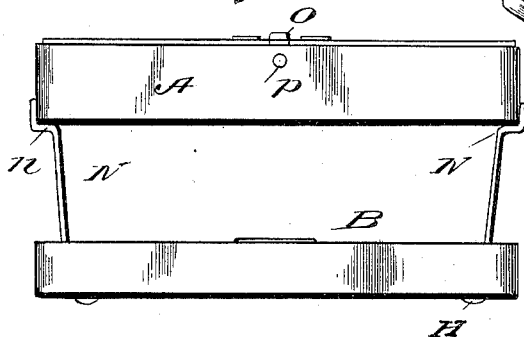
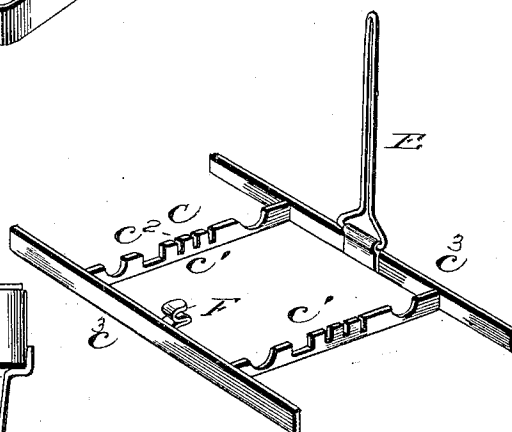


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM BOEKEL AND JULIUS BOEKEL, OF PHILADELPHIA,
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STERILIZER-CASE.

SPECIFICATION forming part of Letters Patent No. 682,522, dated September 10, 1901.

Application filed May 27, 1901. Serial No. 62,109. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM BOEKEL and JULIUS BOEKEL, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sterilizer-Cases; and we do hereby 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.

This invention relates to sterilizer-cases for surgical instruments; and it consists in the construction and combination of parts hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 represents a perspective view of the closed case. Fig. 2 represents a similar view of the same when open. Fig. 3 represents a side elevation of the case arranged for sterilizing, the sections being separated and superposed; and Fig. 4 represents a detail view of the rack, the implements having been removed and the spring-catch turned back.

The lower section A of the case receives within it a tightly-fitting removable frame C, consisting of side bars C³ and cross-bars c', the latter being provided with notches or recesses c² of varying sizes for holding a set of surgical or other implements which are to be sterilized. In the present instance the frame is adapted to hold a vaccination set of instruments and appurtenances, (marked D' D' D²;) several additional notches and recesses being, however, provided in case other instruments should be substituted. As shown in Fig. 2, these instruments are held to the frame by a spring-catch E, consisting of a resilient tongue hinged or pivoted to one of the side bars C' and engaging at its tip a rigid lug or hook F, raised on the other side bar of said frame, such engagement being effected by depressing the said tongue or catch upon the said instruments with the said tip slightly bent laterally, so as to occupy a position at the side of said lug, and then slipping it under the same, when its resiliency will hold the said tip upward against the said lug, free from any serious risk of accidental dislodgment in ordinary circumstances. The frame and its contents are easily re-

moved together from the case as one piece and similarly replaced therein. When any of the instruments or articles are to be removed, the catch E is turned back into the position shown in Fig. 4 after being disengaged from the said lug or hook, or it is at least raised sufficiently to permit such removal. In this way of course the entire set of instruments may be removed and a new set substituted in the frame.

The upper section B of the case is hinged to the lower section on one side by a removable pintle I. It is also provided on its top with bosses H, which serve as feet or supports when the said top becomes the bottom in the sterilizing position of the device illustrated by Fig. 3. This section is also provided with a plate J, parallel to said top and converting the greater part of the interior of said section B into an alcohol-tank. This plate J has a central screw-neck J', receiving a screw-cap K, which prevents the escape of the alcohol when the case is not in use for sterilizing. A wire grating L extends across the opening of this screw-neck, holding in place a round wick or pad l, of asbestos fiber or other suitable capillary material, adapting this section B to be used as a small alcohol-stove when in the separated and inverted position shown by Fig. 3. The screw-cap being removed, wire supports N of convenient form are attached to the said plate J near its ends, being hinged to fold down upon the said screw-cap and bent to rest thereon, as shown in Fig. 2, with as little extension as possible of any part below the plane of the same, when section B is folded on section A to complete the closing of the case in order that these folded supports N may not get in the way of the frame or its contents. For the same reason the terminal cross-bars n of the supports are not in contact with each other, but leave a space n² between them for the reception of the tongue or catch E in this folded position of the case. These supports N have elbows N', which bear against the plate J when the said supports are turned upward, as shown in Fig. 3, said elbows preventing these supports from turning too far outward and acting as bases or braces therefor. The detached section A of the case containing the frame C and the in-

struments fastened therein rests upon the rods or bars *n* of said supports during the operation of sterilizing.

Any suitable sterilizing solution is poured
 5 into section A, the wick *l* of section B is lighted, the heat caused thereby vaporizes the said solution, and this is continued until the instruments are certainly sterilized. The wick
 10 is then blown out, the casing A removed from the supports N, the screw-cap replaced, and the supports folded down. If the instruments are needed at once, they are simply removed from the frame one by one or all together, either while the frame is still in section
 15 A or after withdrawing it therefrom, according to convenience. The sections are placed side by side and the removable pintle aforesaid replaced in the hinge connecting them. They are then folded together, and a
 20 spring-catch *o*, attached to the inside of the front of section A, engages the lip of section B, fastening the two sections detachably together in front, and thus completing the closure of the case. This device is easily transformed at will, as above indicated, from an
 25 instrument-case to a sterilizing stove and tray, and vice versa. Its material is preferably aluminium or other metal not easily oxidized. It is compact, light, neat, and strong,
 30 easily and cheaply made, readily repaired, efficient, and durable. The catch *o* aforesaid is provided with the usual pressure-stud *p*, extending out through the front of section A, for opening the case.

35 Having thus described our invention, what

we claim as new, and desire to secure by Letters Patent, is—

1. A sterilizing-case consisting of two sections one of which is adapted to be used as a stove and the other as a tray, these two sections being detachably connected together substantially as set forth.

2. A sterilizing-case consisting of two sections hinged together by a removable pintle, the section A being adapted to be used as a tray and the section B having an alcohol-tank formed therein and being provided with folding supports for section A and an opening and wick, in order that the device may be transformed at will from an instrument-holding case to a sterilizing stove and tray substantially as set forth.

3. The section B provided with an internal plate J having a screw-neck and a wick formed therein and folding supports N raised thereon which are provided with elbows N' serving as braces therefor, in combination with section A adapted to rest on said supports and serve as a tray, and a detachable connection between the sections, allowing them to be folded together, when connected, to close the case, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

WM. BOEKEL.
 JULIUS BOEKEL.

Witnesses:

CHAS. M. STEINMULLER,
 JOHN H. SCHERER.