No. 620,434. Patented Feb. 28, 1899.

G. ERMOLD.

CASE FOR HYPODERMIC SYRINGES.

(Application filed Mar. 17, 1898.)

(No Model.)

FIG. 1.

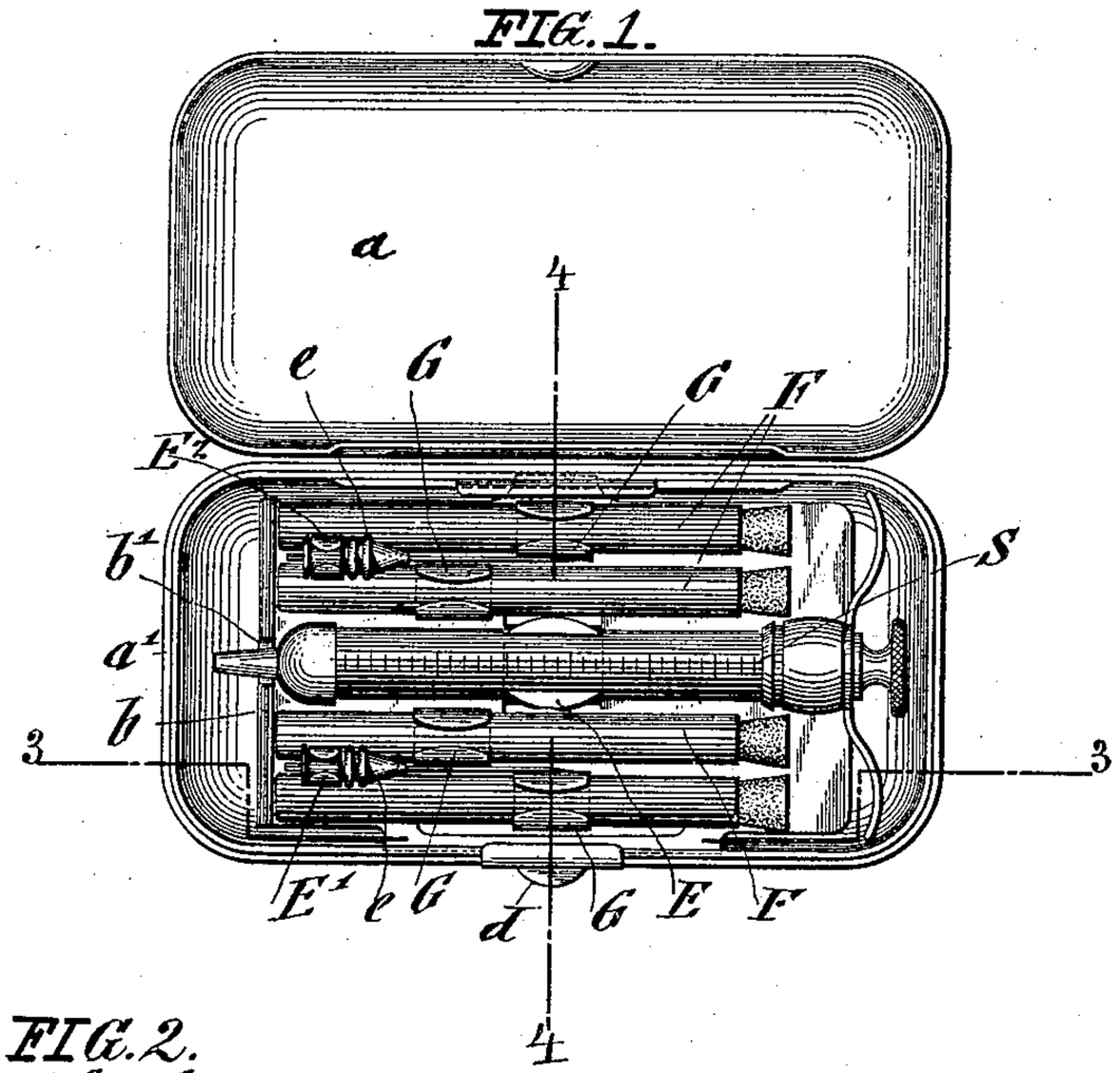


FIG. 2.

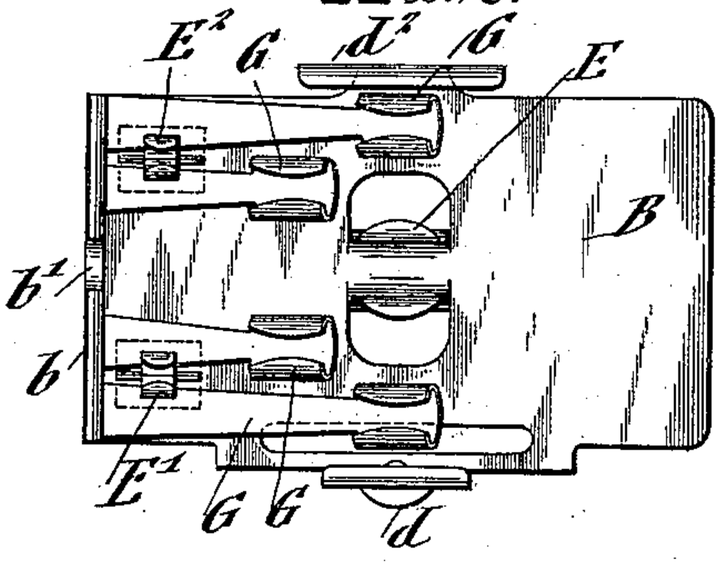


FIG. 3.

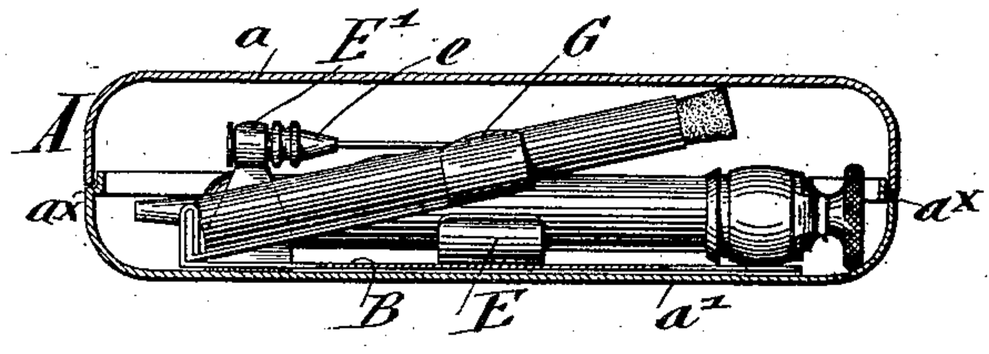


FIG. 4.

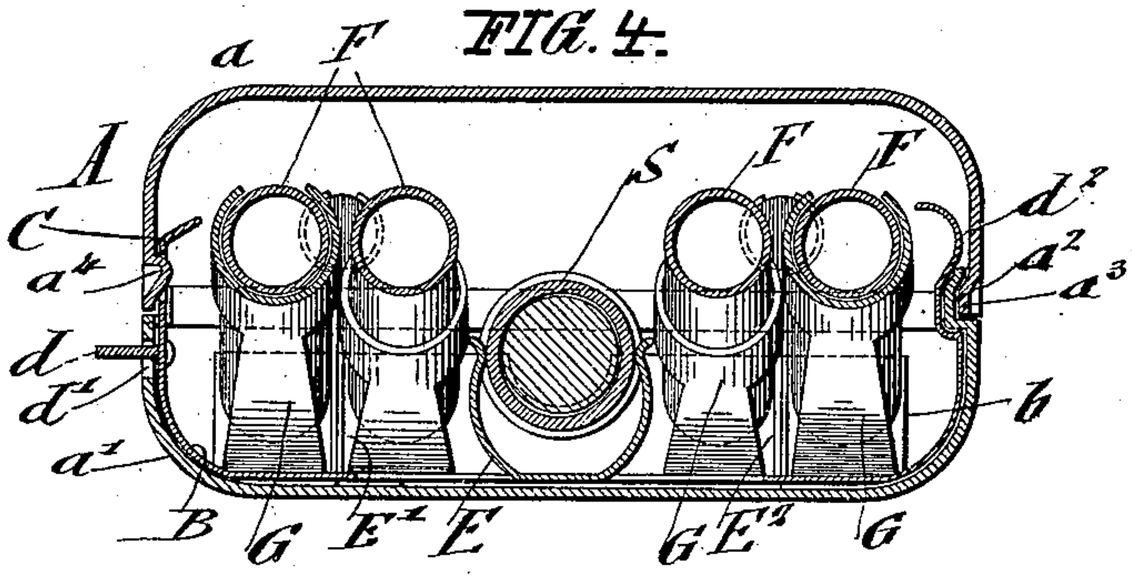
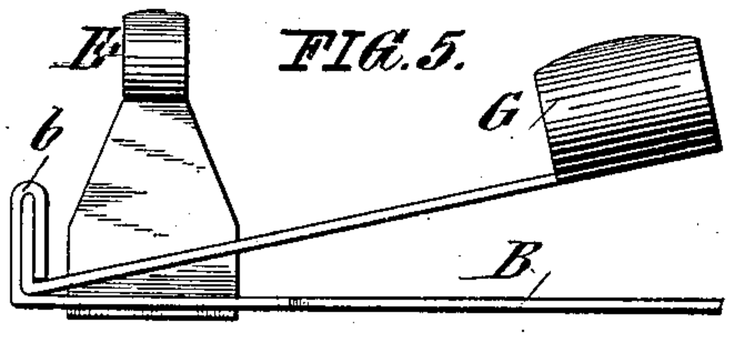


FIG. 5.



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CASE FOR HYPODERMIC SYRINGES.

SPECIFICATION forming part of Letters Patent No. 620,434, dated February 28, 1899.

Application filed March 17, 1898. Serial No. 674,146. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ERMOLD, a citizen of the United States, residing at New York, in the borough of Manhattan and State of New York, have invented certain new and useful Improvements in Cases for Hypodermic Syringes, of which the following is a specification.

This invention relates to an improved case for hypodermic syringes which is so constructed that all the parts can be readily taken apart and cleaned antiseptically and assembled again for being conveniently carried in the pocket; and the invention consists of a case for hypodermic syringes which comprises an exterior case bent up of two shells, one shell being provided with a shouldered seat and with a groove and the other shell having a corresponding rib and a supporting-plate provided with bent-up spring-clasps sprung into the lower part of the shell and provided with retaining devices for the syringe, the tubular points of the same, and the bottles for the various medicinal substances used for injection. The bottles are each supported on independent spring-actuated clasps connected with the supporting-plate, so as to be held in inclined position for convenient removal. The locking device is made integral with the supporting-plate and so arranged as to lock the upper shell to the lower shell when it is desired to close the case.

In the accompanying drawings, Figure 1 represents a top view of my improved case for hypodermic syringes shown in open position. Fig. 2 is a top view of the supporting-plate for the syringes, bottles, &c. Fig. 3 is a vertical longitudinal section on line 3 3, Fig. 1. Fig. 4 is a vertical transverse section on line 4 4, Fig. 1, showing the case in closed position and drawn on a larger scale; and Fig. 5 is a detail section of the supporting-plate with its bottle-supporting clasps drawn on a side elevation on a larger scale.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents my improved case for hypodermic syringes, which is composed of an upper and a lower shell $a\ a'$, respectively, both being preferably stamped up from sheet aluminium of suitable thickness. The lower shell a' is provided with a shoulder $A^{\times}$ at its upper edge, to which the upper shell a is accurately fitted. There is no hinge connection provided between the upper and lower shells for the purpose of making them readily detachable for antiseptic cleaning. The connection is made by a groove a^2 in the rear part of the lower shell a' and the corresponding rise or rib a^3 in the rear portion of the upper shell, as shown clearly in Fig. 1 and in section in Fig. 4. The front part of the upper shell is provided with a lip a^4, which is engaged by a spring-clasp C, arranged as a part of the detachable supporting-plate B, that is sprung into the lower shell and provided with a forwardly-extending push-piece d, that passes through a slot d' in the lower shell, as shown in Fig. 4. The push-piece is riveted to the bottom plate B and first passed through the slot d' of the lower shell. The supporting-plate is then sprung into the shell and retained in the same by a spring-catch d^2, bent up integral therewith, at the rear part of the same, said catch engaging the rear portion of the seat a^2 of the lower shell, as shown at the right-hand side of Fig. 4. Above the catch d is provided the slotted and inwardly-bent clasp portion C, which is likewise made integral with the supporting-plate B and which serves for engaging the lip in the front part of the upper shell, so as to lock thereby the upper shell to the lower shell in connection with the groove and interlocking rib at the rear part of the shells $a\ a'$.

The supporting-plate B is provided with a center spring-clasp E for the hypodermic syringe S, the point of which is also supported in the recess b' of the bent-up flange b of the supporting-plate B. Two separate points e of the syringe are preferably supported in spring-clasps $E'\ E^2$ on the supporting-plate B, the clasp for the syringe being preferably bent up from the supporting-plate itself, while the spring-clasps for the syringe-points are riveted, soldered, or otherwise attached to the supporting-plate. A number of small glass bottles F for containing the medical preparations to be injected by the syringe are supported at a suitable inclination toward the supporting-plate by means of spring-clasps G, which are provided with shanks,

the ends of which are folded into the upwardly-bent and doubled-over flange *b* of the supporting-plate, as shown in detail in Fig. 5. The bottles F are held at an inclination, so as to permit their convenient removal from their clasps when any part of their contents is to be removed. When the supporting-plate B is sprung into position in the lower shell and retained therein by the spring-clasp and the projecting catch or push-piece at the other side, the syringe-points and bottles are placed in position, as shown in Figs. 1 and 3, into the supporting spring-clasps, after which the upper shell or cover is placed over the lower shell by first placing its raised rear rib into the rear groove of the seat of the lower shell and then pressing the lip portion at the front part of the shell into the slot of the spring-catch C, by which the shells are firmly locked together. Whenever it is desired to clean the case and all the parts stored therein, the case is opened and the shells separated from each other, as shown in Fig. 1. The supporting-plate is removed by depressing the spring-catch at its rear part and releasing the projecting catch from the front part of the lower shell. The syringe, bottles, and syringe-points are removed from the clasps of the supporting-plate, after which all the parts can be readily cleaned with antiseptic solution, so that no impurities can lodge in the case, supporting-plate, or other parts of the device.

The facility for permitting the antiseptic cleaning of all of the parts of the syringe is an absolute necessity for the successful introduction of hypodermic syringes and their inclosing cases and is fully met by my construction, which has the advantage of great compactness and lightness, as all the parts are stamped out of sheet aluminium.

The hypodermic syringe and its case is carried for use in a suitable leather case and forms a very neat, light, and easily-cleaned case and syringe for hypodermic injections.

Having thus described my invention, what I claim is—

1. The combination, with a case for hypodermic syringes, the same being composed of two shells and means for locking said shells together, said case having internal projections at opposite sides, of a supporting-plate provided with spring-clasps for the syringe, syringe-points and bottles, said supporting-plate being constructed with recesses at opposite sides adapted to be engaged by said internal projections for holding and supporting the plate in position when sprung into its receiving-shell, substantially as set forth.

2. The combination in a case for hypodermic syringes, of two shells adapted to be attached together, a detachable supporting-plate having upwardly-bent spring portions or catches at opposite sides of its mid-length, and spring-clasps arranged on said supporting-plate for the syringe, syringe-points and bottles, said supporting-plate being adapted to be sprung into its receiving-shell and to be retained therein together with the spring-catches, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GEO. ERMOLD.

Witnesses:
PAUL GOEPEL,
GEO. W. JAEKEL.