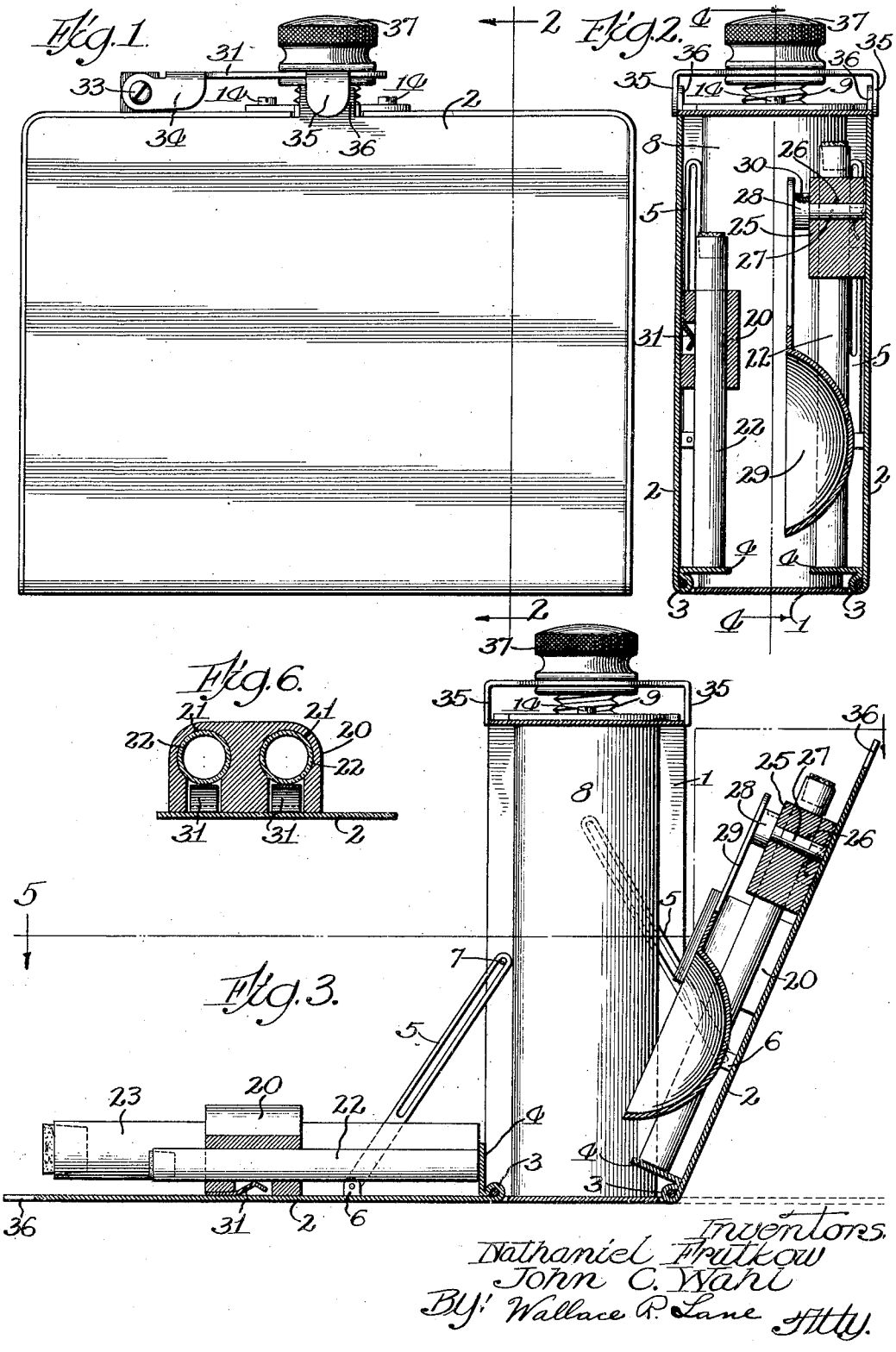
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HYPODERMIC KIT AND THE LIKE

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Fig. 4

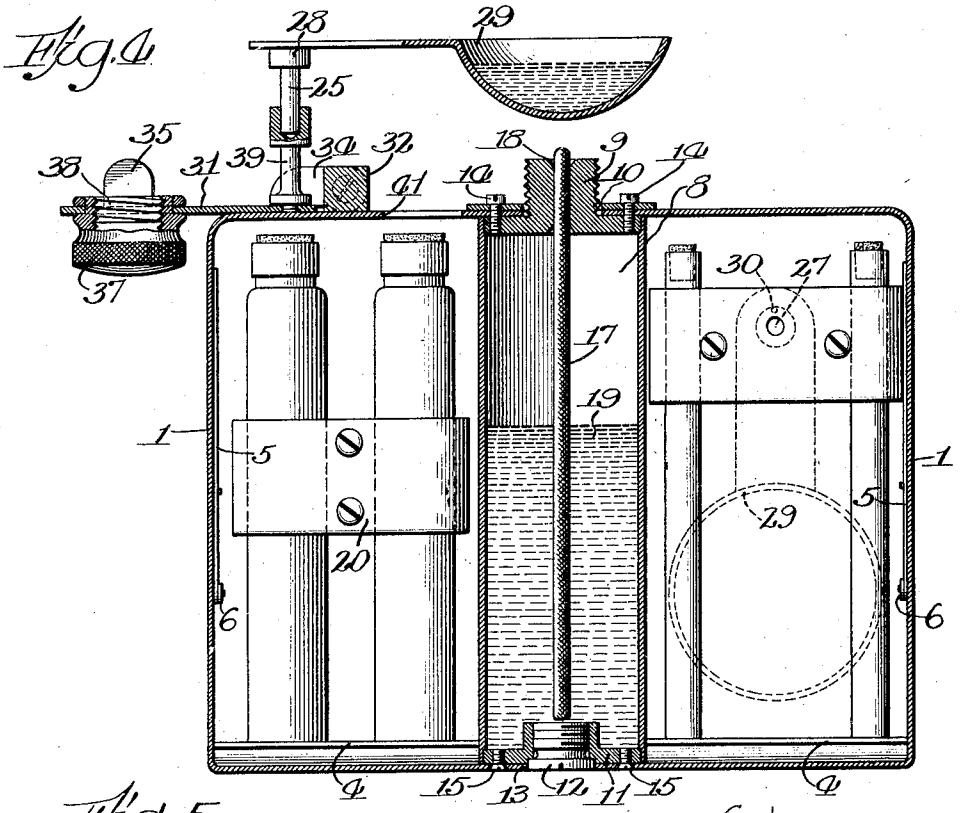
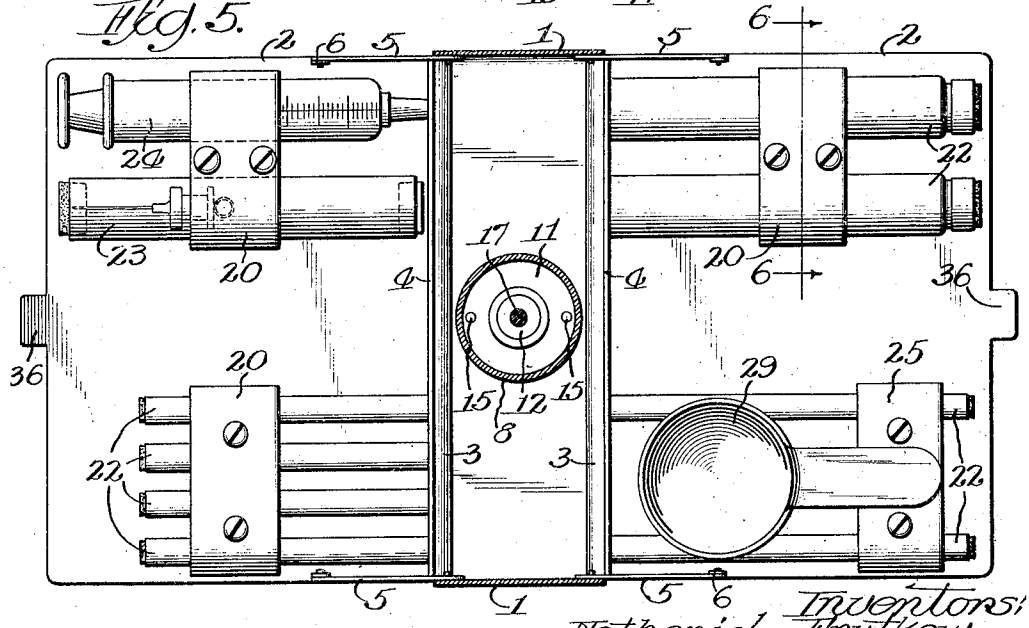


Fig. 5.



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Patented Sept. 6, 1932 1,876,493

UNITED STATES PATENT OFFICE

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HYPODERMIC KIT AND THE LIKE

Application filed January 9, 1930. Serial No. 419,512.

The present invention relates to kits, such as those used by physicians, doctors and nurses.

Among the objects of the invention is to provide a novel kit, such as those used by doctors, physicians, nurses, and the like, for medications, such as hypodermic injections and the like, which is compact, self-contained, convenient in use and readily portable, as also firmly holding medicine containers, vials, ampulles, hypodermic syringes and other like, similar articles, in place so as to be safe and free from breakage, when the device is carried about or even accidentally knocked about.

In a specific illustrative embodiment of the invention, the kit comprises a case having hinged side walls adapted to open flat and to give ready and convenient access to the instruments, medicament holders and like objects carried by the casing, the side walls having attached thereto holding means for holding medicine or medicament containers or holders, such as vials, bottles, tubes ampulles, sterilized hypodermic needle holders, hypodermic syringes, spoons and other like and similar articles. The case also carries a heat exchange means, such as an alcohol lamp or the like or even a similar device adapted to produce cold instead of heat.

Provision is also made for heat exchange treatment of any of the medicaments to be used, such as having a spoon normally stored in the kit on a holder on a side of the case but capable of being mounted on a suitable holder therefor for associating the spoon and its contents with the alcohol lamp, and also capable of being moved into and out of the heat exchange region, such as the flame of the lamp.

The kit also includes means for maintaining the device closed or in locked position, when being carried about or not in use. In the specific device referred to, it comprises a clasping means engageable with projections on the swinging sides of the case, and a cap adapted to be screwed to the top end of the lamp, the cap acting as a snuffer for the flame of the lamp. This combined means also carries the support for the spoon when located for cooperation with the lamp.

Means is further provided for firmly and stably holding the medicament containers and other articles in place, and for preventing the objects or articles moving out of place. Resilient elements may be provided so as to engage the articles and to normally hold them from movement but yieldable to permit the moving of the articles from or into place as desired by the user. To prevent the articles from being inserted too far and to provide for their always being properly located in place, suitable stop or abutment means may be used, such means in the specific embodiment used to illustrate this invention, being in the form of extensions or ledges or shelves carried by the swinging sides of the case and against which the bottoms of the medicine containers and the like will contact and rest. Likewise, to prevent the spoon from swinging about in its stored position, the holder for the spoon and the spoon itself may have cooperating lock elements, as a pin and recess means.

Other objects, advantages, capabilities and features are comprehended by the invention as will later appear and as are inherently possessed thereby.

Referring to the drawings:

Fig. 1 is a view in side elevation of a hypodermic case or kit constructed in accordance with the invention and shown in a closed position.

Fig. 2 is a vertical cross sectional view taken in a plane represented by line 2—2 of Fig. 1.

Fig. 3 is a vertical cross sectional view through the device for showing the sides of the case in open positions.

Fig. 4 is a longitudinal vertical cross sectional view taken in a plane represented by line 4—4 of Fig. 2 with a part of the closing mechanism thrown back from its normal position and disclosing a holding means for holding a holder in association with a heating means in the case.

Fig. 5 is a plan view taken in a plane represented by line 5—5 of Fig. 3, and with both sides fully open.

Fig. 6 is a cross sectional view taken

through a holding means on the sides of the case, and in a plane represented by line 6—6 of Fig. 5.

Referring now more in detail to the drawings, the embodiment selected to illustrate the invention is shown in connection with a hypodermic kit comprising a case having a body portion 1 of suitable size to retain medicament containers and instruments of the kit, and useful for the administration of medications or hypodermic injections. The kit is compact and easily carried from place to place.

The case 1 is provided with the sides 2 whose lower edges are rolled to form a hinge element 3 for connection to the body portion 1. The part 3 has an extension to form a bracket 4 normal to its face of each side 2. Link elements 5 are pivotally connected to lugs 6 on the sides 2 and are slidably connected by means of the pin 7 to the body portion 1, these link elements 5 holding the sides in a horizontal position when the case or kit is in open condition.

A container 8 is provided at its upper end with a threaded nipple 9 projecting through an opening 10 provided in a top part or wall of the body 1. The lower end of the container 8 is closed by the member 11 having a threaded opening to admit a stud or plug member 12 by means of which the container is emptied or refilled with a heat exchange fluid. Access to the plug 12 is provided through an opening 13 in the bottom of the body portion 1. The container 8 may be connected to the body portion by any suitable means, as by the screws 14 and 15 at the top and bottom of the case. In the embodiment selected to illustrate the invention, a wick 17 is provided which passes up through an opening 18 in the nipple 9, the lower end of the wick being immersed in a combustible fluid 19 in the container 8. The invention however, comprehends the use of any heat exchange means whether or not employing a wick as shown, for preparing the medicaments for use. Such a heat exchange means may be either an exothermic or endothermic material or fluid.

Holders 20 are suitably connected to the sides 2 and are provided with a plurality of openings 21 for the insertion of medicament holders 22 or surgical instrument holders 23, or a syringe 24. A like holder 25 is provided with a plurality of openings for the insertion of medicament holders 22 and also a hole or socket 26 adapted to receive and hold a stem 27 having a shouldered part 28 attached to a spoon or holder 29. A pin 30 projecting from the holder 25 engages in a recess formed in the side of the shouldered part 28 of the spoon or holder 29, to prevent the same from rotating and becoming disengaged from the holder 25 when the case is carried about.

The holders 22, 23, and 24 are inserted into the openings 21 and are supported or rest upon the extended portions or brackets 4 of the sides 2, and are further held in position by resilient or spring members 31 which press against the holders to prevent their sliding out of the holders 20 or 25 if the case were turned over or assumed other than an upright position. These medicament holders and instruments are retained by the holding means in a substantially rigid position and are not subject to be thrown about within the case when the same is being carried or moved about. It is to be observed that the holders are positioned on the sides 2 so that when the case is in a closed position, the holders will fit compactly into the chambers formed between the container 8 and the ends of the body 1.

A clasp 31, pivotally mounted to a block 32 secured on the casing 1 by any suitable means, as screws 33, through legs 34, is provided with ears 35 on opposite sides of the case. These ears are adapted to engage projections 36 of the sides 2 when they are in their closed position and the clasp is in the position shown in Figs. 1 and 2. The ears 35 on the clasp 31 are held in their engaging position by the knurled button 37 rotatably carried by the clasp 31, when the button, which is provided with internal threads 38 for engagement with the threaded member 9, is screwed on said member 9, as shown in Figs. 1 and 2. In this position, the button will act as a snuffer for the flame of the wick 17.

A standard 39 is connected to the clasp 31 and is provided with a socket member 40 for the insertion, when the clasp is swung to one side, of the stem or pin 27 of the spoon or holder 29. The pin 27 of the spoon or holder 29, when inserted into this socket member 40, permits the rotation of the spoon 29 either into or out of association with the heat exchange means, such as into or out of the flame of the wick 17. When the clasp 31 is swung over into its engaging position as shown in Fig. 1, the standard 39 swings into an opening 41 in the top of the body portion 2.

While we have herein described and upon the drawings shown an illustrative embodiment of the invention, it is to be understood that the latter is not limited thereto, but may comprehend other constructions, arrangements of parts, details and features without departing from the spirit thereof.

Having thus disclosed the invention, we claim:

1. A case for a medicament kit comprising a body portion, heat exchange means associated with said body portion, sides for said body portion, holders connected to said sides, medicament holding means carried by said holders, and resilient means for holding said holding means in a substantially firm position.

2. A case for a medicament kit comprising a body, heat exchange means associated with said body portion, sides for said body por-

tion, holders connected to said sides, medicament holding means carried by said holders, and bracket means associated with said sides and holders for abutting said holding means when the same is carried by the holders.

3. A case for a medicament kit, comprising a body portion, closure members for said portion, and medicament holding means carried by said closure members, said members being formed with a hinge element having an extending portion adapted to abut said holding means.

4. A case for a medicament kit, comprising a body portion, closure members for said portion, and medicament holding means carried by said closure members, said members having hinge means provided with a bracket portion adapted to abut said holding means.

5. A case for a medicament kit comprising a body portion, heat exchange means associated with said portion, closure means for said portion, medicament holding means carried by said closure means, and pivotal means for holding said closure means in closed position and for covering said heat exchange means.

6. A case for a medicament kit comprising a body portion, heat exchange means associated with said portion, means for snuffing said heat exchange means, and means on said snuffing means for holding a medicament holding means in association with said heat exchange means.

7. A case for a medicament kit comprising a body portion, heat exchange means associated with said portion, means pivoted to said portion for snuffing said heat exchange means, and means carried by said pivoted means for supporting a medicament holding means in association with said heat exchange means.

8. A case for a medicament kit comprising a body portion, heat exchange means associated with said portion, means pivoted to said portion for snuffing said heat exchange means, and means carried by said pivoted means for swingably supporting a medicament holding means whereby the same can be swung into and out of association with said heat exchange means.

In witness whereof, we hereunto subscribe our names to this specification.

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JOHN C. WAHL.