Dec. 24, 1929. P. VIGNOS 1,740,672

LATCH FOR LOCKERS

Filed Nov. 10, 1928 2 Sheets-Sheet 1

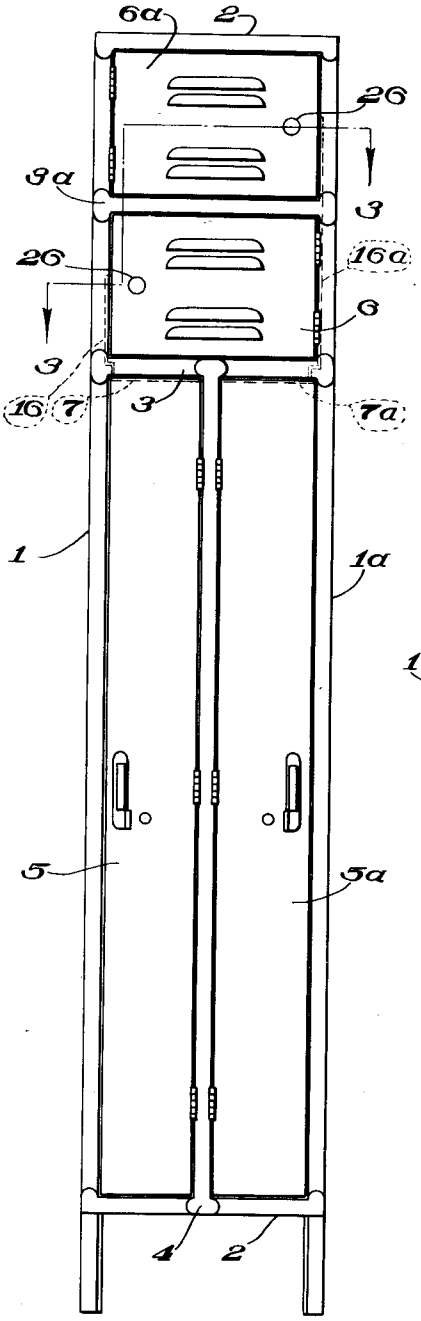


Fig. 1

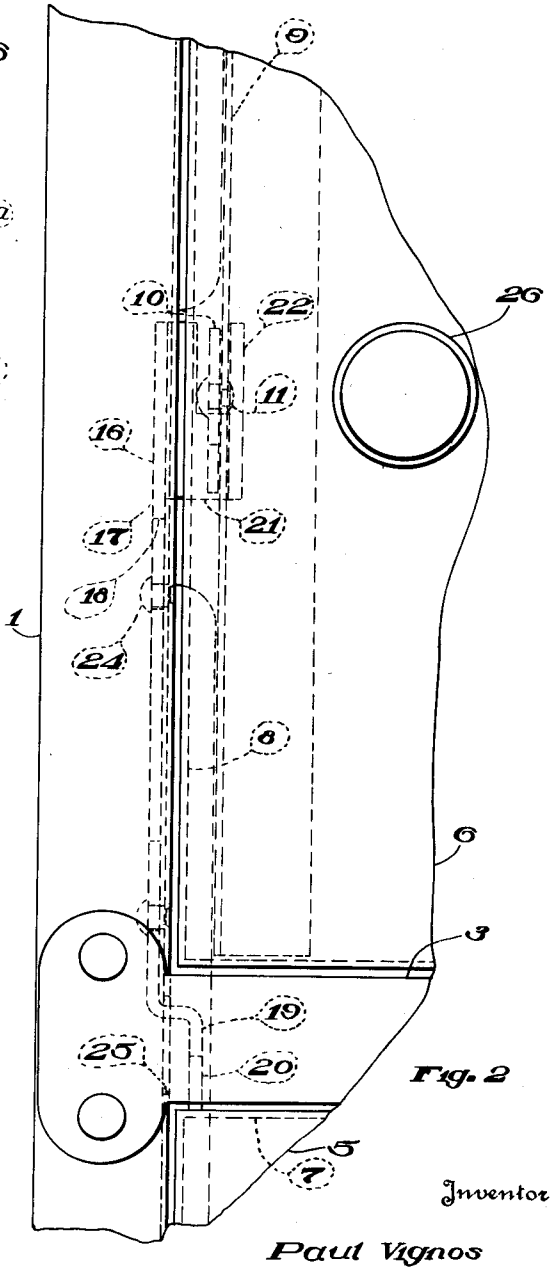


Fig. 2

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LATCH FOR LOCKERS

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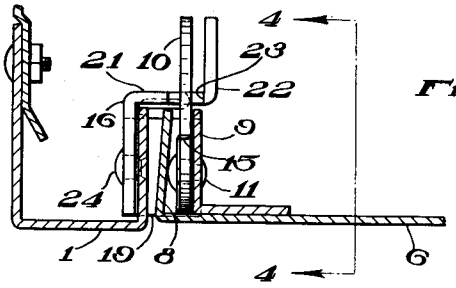
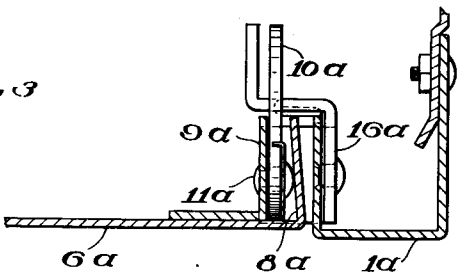


Fig. 3



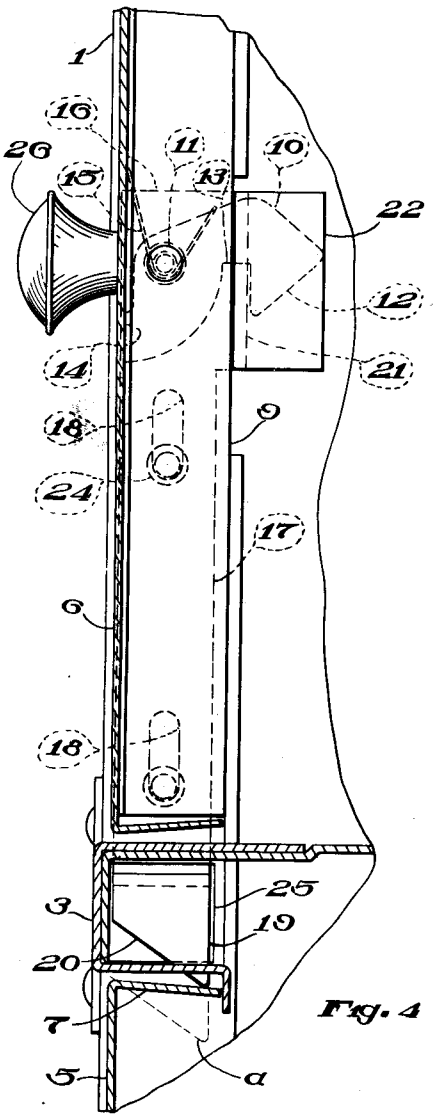


Fig. 4

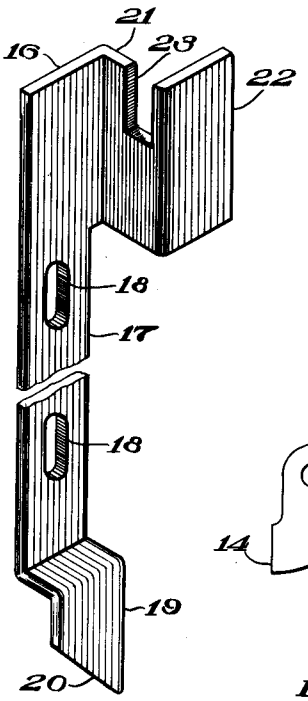


Fig. 5

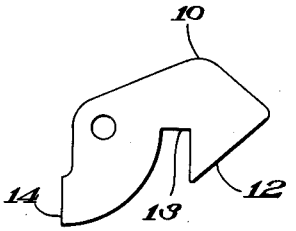


Fig. 6

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LATCH FOR LOCKERS

Application filed November 10, 1928. Serial No. 318,470.

This invention relates in general to lockers and other closures, and more particularly to a novel latching mechanism therefor.

An object of the invention is the provision of latching mechanism for lockers and other closures, which consists of a minimum number of easily manufactured parts, which will be simple in operation, and of rugged, economical construction.

Another object of the invention is the provision of latching mechanism which is capable of being used generally in multi-compartment lockers and other closures, but which is particularly adapted to be used for so-called "two-person lockers," that is, lockers provided with locked compartments which are used by two persons, neither of whom has access to the compartments of the other. Such lockers usually consist of two comparatively long and narrow compartments, arranged side by side, and two smaller compartments, arranged one above the other, at the upper end of the locker, each of such compartments being of a width equal to the aggregate width of the two narrow compartments.

Another object of the invention is to provide latching mechanism for a two-person locker of the above described type, in which the opening of one of the lower compartment doors will serve to unlock the door of one of the upper compartments.

These and other objects of the invention will become more readily apparent in the course of the following description of a preferred embodiment of the invention, taken in connection with the accompanying drawings, wherein—

Fig. 1 is a front elevation of a two-person locker in which is embodied the novel latching mechanism of the present invention;

Fig. 2 is an enlarged front elevation of the locker, showing the novel latching mechanism in dotted lines;

Fig. 3 is a fragmentary cross-section through the locker, taken on the line 3—3 of Fig. 1;

Fig. 4 is a fragmentary cross-section through the locker, taken on the line 4—4 of Fig. 3;

Fig. 5 is a perspective view of the latching bar for one of the upper compartment doors of the locker; and

Fig. 6 is a side elevation of the latching hook for one of the upper compartment doors of the locker.

Referring more particularly to the drawings wherein like parts are designated by like reference characters, the locker includes side frames 1 and 1^a, to which are secured, as by rivets, cross frames 2, and center frames 3 and 3^a. Secured at its ends, as by rivets, to lower cross frame 2 and center frame 3 is a partition frame 4. Doors 5 and 5^a are hinged at one side to partition frame 4. A door 6 is hinged to side frame 1^a and a door 6^a is hinged to side frame 1. The doors are adapted to close compartments, which are made inaccessible, one from the other, by means of suitable partitions, not shown, but readily understood by those skilled in the art.

The doors 5 and 5^a are provided at their top edges with flanges 7 and 7^a respectively, and at the edges opposite their hinges with suitable latching mechanism, such for example as described in the patent to Sturm et al., No. 1,671,328.

The doors 6 and 6^a are formed with flanges 8 and 8^a at their respective edges, and are further provided near these edges with vertically disposed angles 9 and 9^a, secured as by spot welding to the inner faces of the doors. These angles extend from the top to the bottom edges of each door, and serve, not only to reinforce the edges of the doors, but also as bearings for hooks 10 and 10^a, mounted for pivotal movement intermediate the ends of the angles on shoulder rivets 11 and 11^a, as shown in Figs. 3 and 4. These hooks are identical and therefore only one will be described, namely, hook 10. This hook includes a sloping edge 12, a seat 13 and a stop 14. A wire spring 15 serves to urge the hook 10 into the position shown in Fig. 4, further downward movement of the hook being prevented by the abutment of stop 14 against the inner face of the door.

The latching mechanism further includes latching bars 16 and 16^a, but since these bars are similar to each other, differing only in length and relative position of the elements

thereof, only bar 16 will be described in detail. This bar includes a body portion 17, having longitudinally extending slots 18. The body portion 17 terminates at its lower end in an offset finger 19, having a rearwardly and downwardly sloping edge 20, and is provided at its upper end with a laterally extending flange 21, terminating in a rearwardly extending flange 22 parallel with the body portion 17 of the latching bar. The flange 21 has a notch 23 in its upper edge. Latching bar 16 is mounted for limited vertical movement on shoulder rivets 24 secured to the side frame 1, and extending through the slots 18, an aperture 25 being provided in the side frame 1 to permit the insertion and vertical movement of finger 19.

While only one of the latching bars has been described in detail, it will be readily understood that the operation of both latching mechanisms is the same, and for purposes of brevity, the operation of only one of these mechanisms will be described:

When the door 5 is closed, the finger 19 of the latching bar 16 rests upon the flange 7 of the door 5, and the latching bar occupies the position shown in Fig. 4. In this position, the lateral flange 21 of the latching bar will be in locking engagement with the hook 10.

When the individual to whom the compartments having doors 5 and 6 are assigned, desires access to the upper compartment, he first unlocks and opens the lower door 5. The opening of the door 5 withdraws the flange 7 from beneath the finger 19 of the latching bar 16, and the latching bar drops by gravity to the position indicated in dotted lines at *a* in Fig. 4, the lateral flange 21 assuming a position clear of the seat 13 of the hook 10. The door 6 may then be opened by means of a knob 26, secured in any suitable manner to the door.

If the door 6 is in closed position, and it is desired to lock both doors 5 and 6, it is only necessary to close and lock the door 5. In closing the door 5 the upper flange 7 of the door bears against the sloping edge 20 of the finger 19, and raises the latching bar 16 to its uppermost position. The upward movement of the latching bar brings the lower edge of the slot 23 up into the seat 13 of the hook 10, thus locking the door 6.

The door 6 may be left open until the door 5 has been closed and locked, and in such cases, it may be locked by merely closing it. In such closing movement, the edge 12 of the hook 10 rides up over the lower edge of the notch 23 against the pressure of the spring 15, until the seat 13 of the hook is directly over the notch. At this point, the hook is forced downwardly by the spring 15 into interlocking engagement with the latching bar 16, as shown in Fig. 4.

The individual to whom the compartments having doors 5^a and 6^a have been assigned, may, in like manner, have access to such compartments.

It will be readily understood that various changes may be made in the latching mechanism, per se, or in the arrangement of the various parts, without departing from the invention, the scope of which is defined in the appended claims.

Claims:

1. In a locker having a plurality of compartments and doors therefor, one of said doors being provided with a hook, means operable by the closing of one of the other doors to engage said hook.

2. In a locker having two superposed compartments and doors therefor, one of said doors being provided with a hook, means operable by the closing of the other door to engage said hook.

3. A structure as defined in claim 1 in which said hook is resiliently mounted on the door.

4. A structure as defined in claim 2 in which said hook is resiliently mounted on the door.

5. In a locker having a plurality of compartments and doors therefor, one of said doors being provided with a hook, and slidable means operable by the closing of one of the other doors to engage said hook.

6. A structure as defined in claim 5 in which said hook is resiliently mounted on the door.

7. In a locker having a plurality of compartments and doors therefor, one of said doors being provided with a hook, and vertically slidable means operable by the closing of one of the other doors to engage said hook.

8. A structure as defined in claim 7 in which said hook is resiliently mounted on the door.

9. In a locker having two superposed compartments and doors therefor, one of said doors being provided with a hook, and slidable means operable by the closing of the other door to engage said hook.

10. A structure as defined in claim 9 in which said hook is resiliently mounted on the door.

11. In a locker having two superposed compartments and doors therefor, one of said doors being provided with a hook, and vertically slidable means operable by the closing of the other door to engage said hook.

12. A structure as defined in claim 11 in which said hook is resiliently mounted on the door.

13. In a locker having two superposed compartments and doors therefor, said upper door being provided with a hook, and means operable by the closing of the lower door to engage said hook, said means being released

from engagement with said hook upon opening of the lower door.

14. A structure as defined in claim 13 in which said hook is resiliently mounted on the upper door.

15. In a locker having two superposed compartments and doors therefor, said upper door being provided with a hook, and slidable means operable by the closing of the lower door to engage said hook, said means being released from engagement with said hook upon opening of the lower door.

16. A structure as defined in claim 15 in which said hook is resiliently mounted on the upper door.

17. In a locker having two superposed compartments and doors therefor, said upper door being provided with a hook, and vertically slidable means operable by the closing of the power door to engage said hook, said means being released from engagement with said hook upon opening of the lower door.

18. A structure as defined in claim 17 in which said hook is resiliently mounted on the upper door.

In testimony whereof I affix my signature.

PAUL VIGNOS.