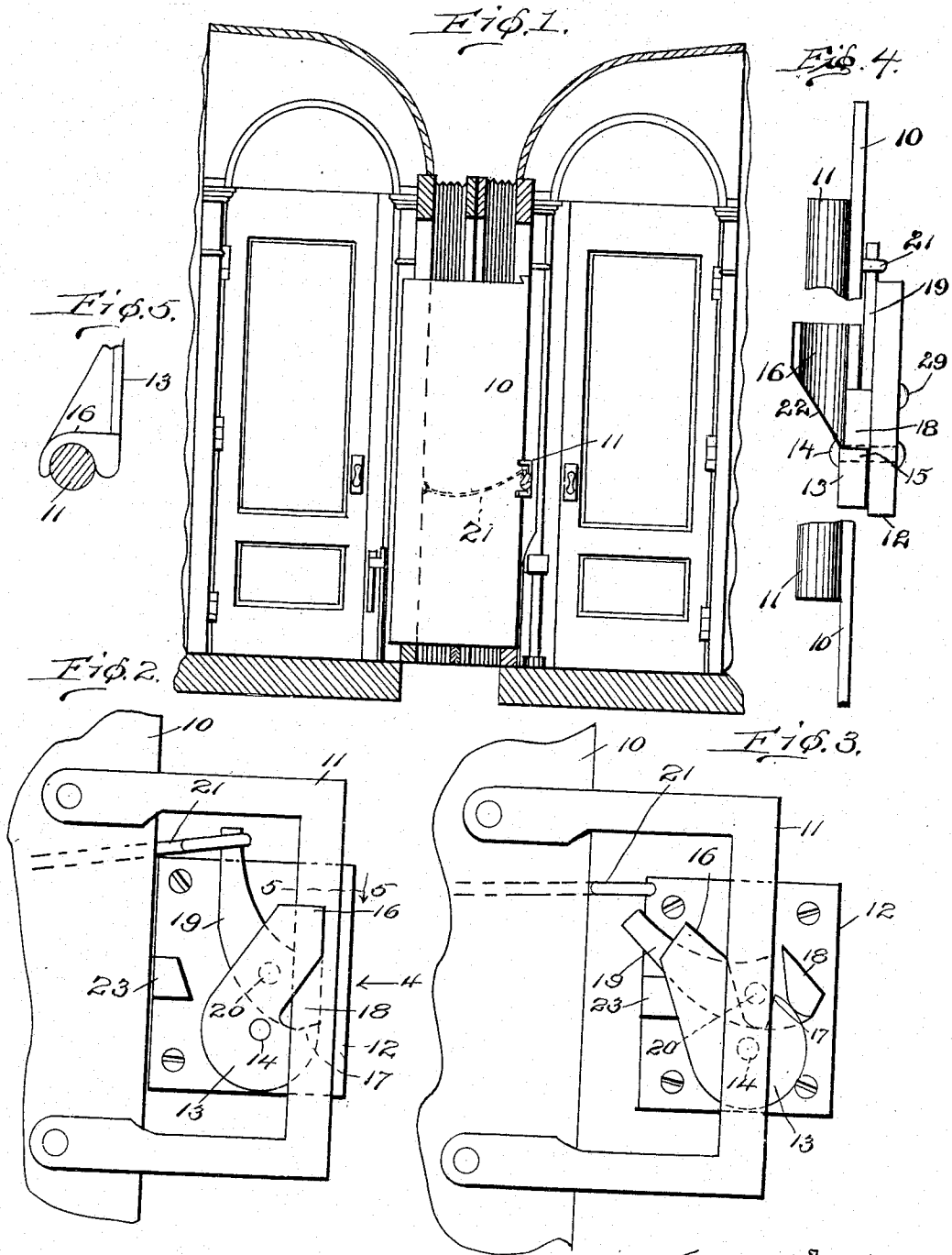


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CURTAIN HOOK.
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UNITED STATES PATENT OFFICE.

OSCAR F. McCALL AND CHARLES L. TAFT, OF TACOMA, WASHINGTON.

CURTAIN-HOOK.

939,064.

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To all whom it may concern:

Be it known that we, OSCAR F. McCALL and CHARLES L. TAFT, citizens of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Curtain-Hooks; 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 means for securing in position curtains used upon vestibule cars, and has for an object to provide means whereby when the cars are separated without the curtains being first released that an automatic release for such curtain is provided to prevent fracture.

An object of the invention is to provide a hook adapted to engage the loop or handle ordinarily employed upon the curtains of such vestibule doors, and with means for releasing the handles from the hooks automatically when the cars are separated.

With these and other objects in view, the invention comprises certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a conventional view of adjacent ends of vestibule cars showing a vestibule curtain in position and secured by means of the engaging means forming the subject-matter of this application. Fig. 2 is an enlarged detail view of the curtain handle and hooking means showing the curtain secured upon the hook. Fig. 3 is an enlarged detail view of the handle and hooking means showing the hook release and in position to permit the handle to be released therefrom. Fig. 4 is a view in end elevation of the hooking means as indicated by arrow 4 of Fig. 2. Fig. 5 is a detail sectional view of the end of the hook shown in plan and the handle in section as on line 5—5 of Fig. 4.

Like characters of reference designate corresponding parts throughout the several views.

It is well known that in the employment of vestibule cars the engaging diaphragm frames and folds form a rough unsightly appearance, which is ordinarily covered and concealed by the employment of a curtain as shown at 10 mounted upon any sort of a spring roller adapted to retract such cur-

tain when released and provided with a handle 11 by which the curtain is drawn to position and ordinarily employed for securing to a hook or similar fastening means to maintain such curtain in open or concealing position. Ordinarily the hook is rigidly secured to the car opposite that carrying the curtain and it is intentional to release such handle from such hook when the cars are about to be separated. It occasionally happens, however, that the operator in charge of such means neglects to disengage the hook when the cars are about to be separated resulting in a fracture of the curtain as the cars are parted. To obviate such destruction the present invention embodies a plate 12 adapted to be secured to the post of the car opposite that to which the curtain is rolled and in the position ordinarily employed by the stationary hook above described.

Upon the plate 12 a hook member 13 is pivoted as by means of the pivot 14 and preferably spaced from the plate 12 by a collar or other means shown at 15. The hook member 13 is provided at its upper end with an integral curved portion 16 forming a groove or furrow proportioned and positioned to receive the handle 11. The member 13 is also provided with a shoulder 17 adapted to be engaged by a pawl 18 carried by a lever 19 which said lever 19 is also pivoted to the plate 12 as at 20.

When the hook member 13 and the lever member 19 are disposed relatively to each other as in Fig. 1 it is evident that the pawl 18 carried by such hook is in engagement with the shoulder 17 and thereby maintains the hook member 13 in such hooked position and with the hooked portion 16 in position to engage and hold the handle 11 in position.

The strain of the curtain 10 through the handle 11 upon the hook 16 only serves to draw the hook member 13 more tightly and with greater force against the pawl 18 which resists the movement of such hook member and the release of the handle 11 therefrom.

To the post of the car carrying the curtain 10 a cord, chain, cable or other flexible coupling 21 is secured having a loop adapted to engage over the upper end of the lever 19 and being shorter than the extreme length of the curtain 10 so that when the cars are parted and the handle 11 not released from the hook member 13 the strain is first upon the flexible coupling 21 which by

reason of its attachment to the other car draws the lever 19 to the position shown at Fig. 3. The drawing of the lever 19 disengages the pawl 18 from the shoulder 17 whereby the hook member 13 is released and the strain of the curtain 10 upon such hook member moves such hook member to the position also shown in Fig. 3. The hook 16 is provided with an inclined edge 22 which, when the hook member is inclined as shown at Fig. 3, permits the handle 11 to ride up such incline and to be disengaged from such hook. A stop 23 is also carried by the plate 12 adapted to limit movement of the hook member and lever 19. It will also be obvious that the inclination of the hook 19 will permit the flexible coupling 21 to be disengaged from the end of such lever.

It will be obvious that after the parts have been positioned as shown on Fig. 3 by the release of the curtain therefrom, it is only necessary to return the hook member 13 to the position shown in Fig. 1, whereupon the lever member 19 will likewise be returned to the position shown at Fig. 1, when the pawl 18 will again engage the shoulder 17 to secure the hook 16 in operative position.

What we claim is:—

1. The combination with a car having a roll curtain, of another car having a hook member pivotally secured thereto, a lever pivoted adjacent said hook member, said lever provided with a pawl adapted to engage said hook member, and independent flexible means carried by the car having the curtain engaging said lever for releasing the same from engagement with said hook member.
2. The combination with a car having a curtain, of another car having a hook member pivotally secured thereto, a lever pivoted adjacent said hook member and adapted to engage the said hook member, and flexible means connecting said lever with the adjacent car whereby when one car is separated

from the other the said lever will automatically disengage with said hook member to release the said curtain.

3. The combination with a car having a curtain, of another car having a hook member pivotally secured thereto, said hook member provided with a shoulder, a lever pivotally mounted adjacent said hook member, said lever having one end thereof designed to engage said shoulder of said hook member, and means connected with the other end of said lever whereby when one car is separated from the other the said lever is made to release said hook member.

4. The combination with two cars, one of which carries a curtain, a pivoted hook member carried by the other car and adapted to engage with the curtain, the said hook member being provided with a shoulder, a lever pivotally mounted adjacent said hook member and engaging said shoulder, and means connected with said lever for operating the same to release the said hook member, and a stop member for limiting the movement of said hook member and said lever.

5. As an article of manufacture, a hook, a pawl adapted to hold the hook in hooking position, a lever carrying the pawl, and means carried by the hook adapted to discharge an engaged member when the lever is operated.

6. As an article of manufacture, a pivoted hook member provided with a curved hook, a lever member pivoted adjacent the hook member and provided with a pawl engaging within a notch of the hook member, and means engaging the lever adapted to release such lever from engagement with the hook.

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

OSCAR F. McCALL.
CHARLES L. TAFT.

Witnesses:

EMIL N. STENBERG,
RUTH MEAD.