A. LIAN.

VESTIBULE CURTAIN CATCH.

APPLICATION FILED JUNE 10, 1909.

954,866.

Patented Apr. 12, 1910.

Fig. 1.

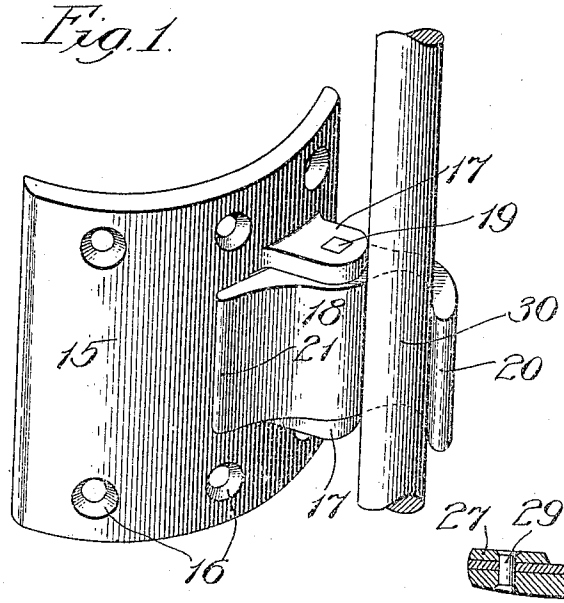


Fig. 4

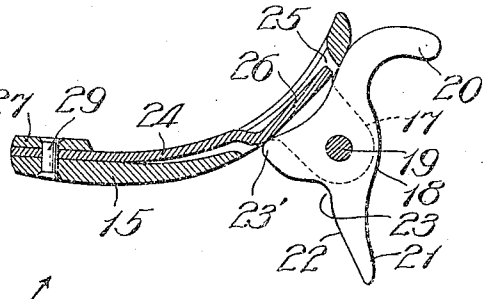


Fig. 2.

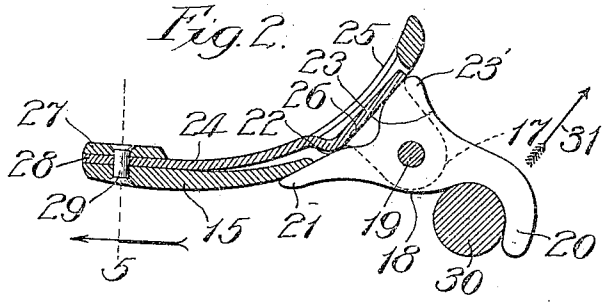


Fig. 5.

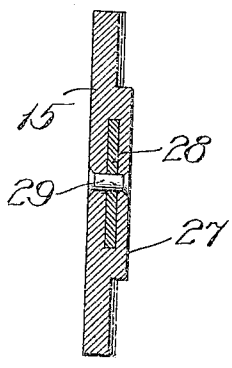
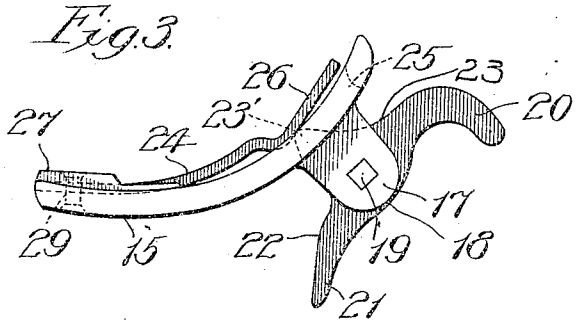


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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VESTIBULE-CURTAIN CATCH.

954,866. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed June 10, 1909. Serial No. 501,375.

To all whom it may concern:

Be it known that I, ANDREW LIAN, a citizen of the United States, residing at Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Vestibule-Curtain Catches, of which the following is a specification.

The object of my invention is to provide a new and improved hook to hold the end of the curtain commonly employed at the side of the vestibule opening between passenger coaches.

Another object of my invention is to provide such a hook that will hold the curtain under normal conditions, but will release the same automatically in case the cars are parted.

A further object of my invention is to provide a simple, inexpensive, durable and efficient hook to hold the end of the vestibule curtain.

Other objects relating to details will also be made apparent in the following specification and claims taken with the accompanying drawings.

With these objects in view, my invention consists of the combination of elements stated in the appended claims.

In order to explain my invention, I have illustrated in the drawings and described in the specification one particular embodiment of my invention which represents the form preferred by me at the present time.

Referring to the drawings,—Figure 1 is a perspective view of my improved device. Figs. 2, 3 and 4 are horizontal sections showing the device in various working positions, and Fig. 5 is a section on the line 5 in Fig. 2.

The curved plate 15 is shaped to fit against one of the curved side posts which bound the vestibule opening of a passenger coach. The plate 15 may be attached to the post by means of screws in the screw holes 16. Lugs 17 project from the plate 15 and a hook 18 is pivotally mounted between them on the pin 19. This hook 18 has a curved extremity 20 adapted to engage the handle 30 on the edge of the vestibule curtain. The opposite end of the hook 18 is in the form of a toe 21 which normally lies against the plate 15, as shown in Fig. 2. Under the toe 21 the hook has a slightly concave surface 22, which normally lies adjacent to the rectangular opening 25 in the plate 15. The hook has another slightly concave surface 23, the two surfaces 22 and 23 bounding the salient portion 23′. The plate 15 is thickened at its end, as indicated by the reference numeral 27, and has a rectangular slot 28 to receive the end of the leaf spring 24; the rivet 29 secures the parts in place. This leaf spring normally lies adjacent to the curved plate 15 on the inside thereof, the extremity 26 being bent aside a little within the rectangular opening 25 and lying against the curved face 22 of the hook 18. Ordinarily, the hook has the position shown in Fig. 2, where the curved extremity 20 engages the handle 30 of the vestibule curtain, the latter extending in the direction indicated by the arrow 31. In case the cars are pulled apart without previously having detached the handle 30, then the curtain will pull forcibly on the handle 30 in the direction of the arrow 31. This will cause the salient part 23′ of the hook 18 to push against the leaf spring 24—26 as indicated in Fig. 3. Finally, the hook will take the position shown in Fig. 4, the leaf spring 24—26 snapping back so that the part 26 presses against the concave face 23. In this position the handle 30 will readily escape from the curved extremity 20 of the hook 18. Thereafter the attendant can reset the hook by pushing the toe 21 toward the plate 15.

In its normal position, the hole 25 is completely covered by the face 22 of the hook 18, and the spring 24 is entirely concealed beneath the plate. This gives the device a neat appearance and reduces the danger that the mechanism will be deranged, or that clothing or other articles will get caught therein.

In the normal position, the spring holds the hook firmly in place, but after the hook is pulled aside a certain distance, then a decreasing force is necessary to pull the hook the rest of the way, and at the last the spring locks the hook in full release position.

It will be seen that the particular form of my invention which I have described is adapted to perform the objects stated, but that modifications thereof might be made falling within the scope of the claims.

I claim:

1. A vestibule curtain catch comprising a plate to be attached to a post, a hook pivotally mounted on said plate, and a leaf

spring having one end fixed to the plate and the other end holding said hook in a definite position.

2. A vestibule curtain catch comprising a plate to be attached to a side post, said plate having an opening therein, a hook pivotally mounted on said plate adjacent to said opening, and a spring on the under side of the plate engaging said hook through said opening.

3. A vestibule curtain catch comprising a plate to be attached to a side post, lugs projecting from the plate, a hook, a pivot pin through said lugs and hook, and a leaf spring having one end riveted to the plate and the other end acting against said hook to hold it in a definite position.

4. A vestibule curtain catch comprising a plate to be attached to a side post, lugs projecting from the plate, a hook, a pivot pin through said lugs and hook, said plate having an opening therethrough adjacent to the hook, and a leaf spring on the underside of the plate, the end thereof pressing through the opening against the hook.

5. A vestibule curtain catch comprising a plate to be attached to a side post, a hook pivotally mounted on said plate near one end thereof, and a leaf spring underneath the plate attached to the same near the opposite end thereof, the extremity of said spring acting against said hook to hold it in a definite position.

6. A vestibule curtain catch comprising a plate to be attached to a side post, a hook pivotally mounted on said plate near one end thereof, said plate having a slot in the opposite end, and a leaf spring having one end riveted in said slot, the spring lying on the underside of the plate, and its free end pressing against the hook.

7. A vestibule curtain catch comprising a plate to be attached to a side post, a hook pivotally mounted on said plate and having a salient part, and a leaf spring pressing against the hook at one side or other of said salient part according to the position of the hook.

8. A vestibule curtain catch comprising a plate to be attached to a side post, a hook pivotally mounted on said plate, and a leaf spring with one end fixed to the plate and the other end pressing against said hook and tending to hold it in normal position against a force pulling on the hook.

In testimony whereof, I have subscribed my name.

ANDREW LIAN.

Witnesses:
ALEXANDER FORSYTH,
FRANK ZELENY.