No. 747,570. PATENTED DEC. 22, 1903.

G. B. PICKOP.

STOP FOR DETACHABLE SPRING HINGES.

APPLICATION FILED AUG. 5, 1903.

NO MODEL.

Fig. 1.

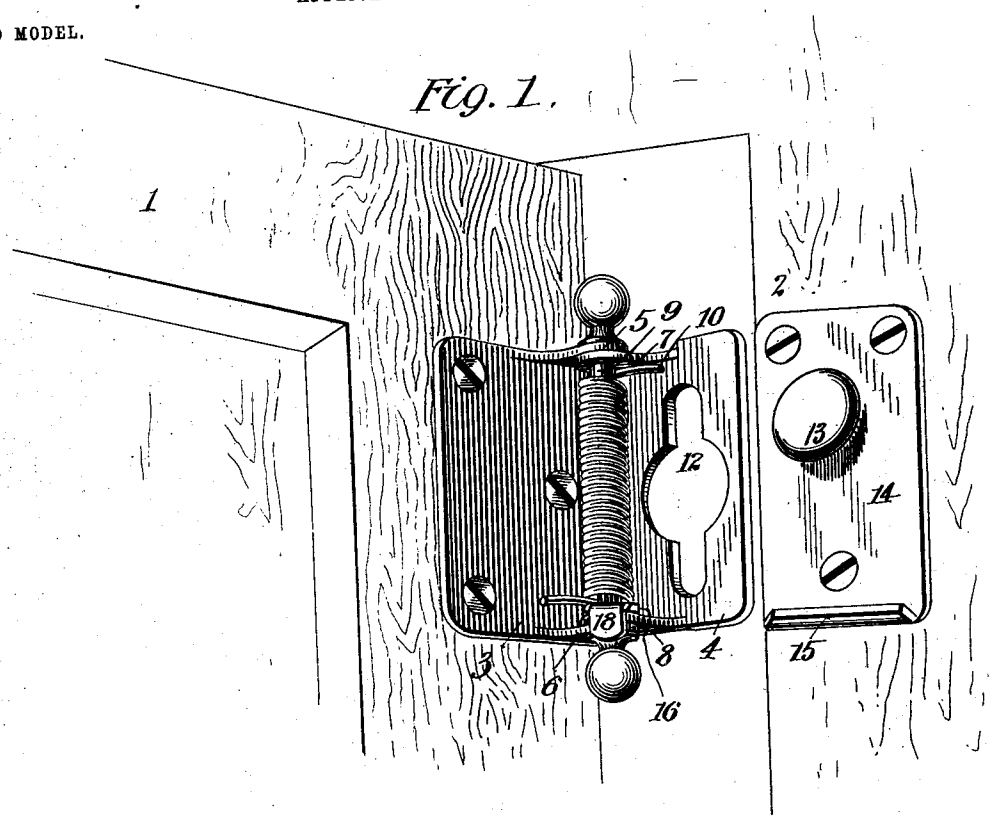


Fig. 3.

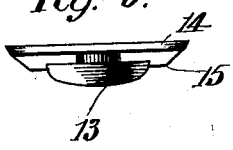


Fig. 2.

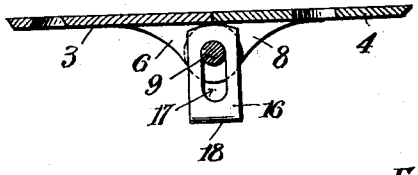


Fig. 4.

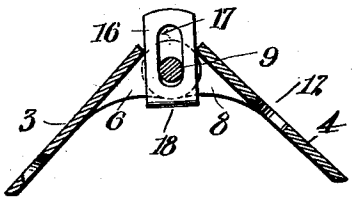
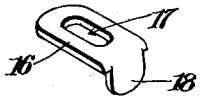


Fig. 5.



Witnesses
Frank A. Obert
[illegible]

Inventor;-
George. B. Pickop.
By his Attorney
Rennichee.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 747,570. Patented December 22, 1903.

UNITED STATES PATENT OFFICE.

GEORGE B. PICKOP, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO P. & F. CORBIN, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

STOP FOR DETACHABLE SPRING-HINGES.

SPECIFICATION forming part of Letters Patent No. 747,570, dated December 22, 1903.

Application filed August 5, 1903. Serial No. 168,258. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. PICKOP, a citizen of the United States, residing at New Britain, in the county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Stops for Detachable Spring-Hinges, of which the following is a full, clear, and exact description.

My invention relates to hinges, and particularly to detachable spring-hinges having great utility when used in connection with screen-doors, storm-windows, and the like. In the use of screen-doors, storm-windows, and the like it becomes necessary from time to time to remove the same. The purpose of this invention is to provide a simple and effective means to facilitate that end.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a door and door-casing and hinge, the parts appearing as they do just after the door has been detached. Fig. 2 is a horizontal section of the hinge when the leaves are spread open. Fig. 3 is a plan view of the keeper-plate. Fig. 4 is a horizontal sectional view of the hinge when the leaves are turned out of the same plane and at an angle to each other and held in said position. Fig. 5 is a perspective view of a detail of construction detached.

I will describe only briefly the general construction and operation of the hinge proper, since that is fully set forth and described in my United States Letters Patent, No. 722,624, dated March 10, 1903.

1 may represent a portion of a door; 2, a portion of the door-casing.

3 4 are hinge-leaves having ears 5, 6, 7, and 8, through which ears passes a pivot-pin 9, upon which the hinge-leaves turn.

10 is a spring coiled around the pin 9, the ends of the spring bearing one against one leaf and the other against the other leaf and exerting an opening tendency.

12 is a slot in one of the hinge-leaves 4, a portion of the slot being enlarged to pass over a stud-head 13, the end or ends of the slot being of less width and adapted to slide down over the shank of the stud, as best seen in Fig. 3.

14 is a keeper-plate carrying the stud 13.

15 is a shoulder or supporting-ledge at the lower edge of the plate 14.

16 is a stop or holder, which is provided with an elongated slot 17, through which passes the pin 9. The stop 16 may have an operating-handle 18. Aside from the stop 16 the construction is substantially such as described in my former patent.

In operation it is merely necessary to attach one of the leaves—for example, 3—to the door and to attach the keeper-plate 14 to the door-casing, or vice versa. The other member 4 may then be detachably secured to the keeper-plate.

The object of this invention is to provide a simple and effective means for facilitating the attachment or detachment of the door. Since it is necessary in most cases to open the door before the hinge can be detached and since to open the door is to put the spring 9 under high tension, the detachment is not as easily effected in the absence of my improved stop as it is when said stop is present. It may be assumed that the normal position of the stop is substantially such as shown in Fig. 2, in which position it remains idly in place, performing no function. When, however, it is desired to remove the door, the same is opened, so that the hinge-leaves assume approximately the position indicated in Fig. 4, whereupon the operator has but to push the stop 16 into the position indicated therein, wherein it stands between the edges of the hinge-leaves 3 and 4 and prevents the closing of the same and takes the tension or power of the spring. When in this position, the leaf 4 is not jammed on the keeper-plate 14 by the action of the spring, and the door may be readily removed. So, also, when the door is to be attached the user has but to swing the free hinge-leaf into the position indicated in Fig. 4 and slide the stop 16 into the position before described, whereupon the hinge-leaf may be readily connected to the keeper-plate, which is in reality a part of the hinge.

Obviously this invention is applicable to spring-hinges of this type whether they are

of the same construction or not, the invention residing in the provision of the stop, whereby the strain of the spring is rendered temporarily ineffective.

When the door is attached or removed, the slide 16 may be withdrawn from between the hinge-leaves, whereupon the spring may throw them both back to the approximately flat or open position.

It should be understood that when I speak of the hinge as "open" I mean when the hinge-leaves are thrown back away from each other and approximately to the position indicated in Fig. 2. To "close" the hinge means to bring the hinge-leaves toward each other. Obviously the door or window is closed under ordinary conditions when the leaves are in the position indicated in Fig. 2 and open when the leaves are in the position indicated in Fig. 4.

What I claim is—

1. In a hinge, two leaves, means of connection between the same, a spring arranged to spread said leaves, a stop carried by the hinge and arranged to be projected into the space between the back edges of the leaves when the same are moved at an angle to each other.

2. In a hinge, two leaves, a pivot therefor, a spring arranged to spread said leaves, a slotted stop embracing the pivot and arranged to be projected between said leaves to hold them at an angle to each other and against the power of the spring.

Signed at New Britain, Connecticut, this 31st day of July, 1903.

GEORGE B. PICKOP.

Witnesses:
G. E. ROOT,
L. M. BRAMAN.