No. 734,702. PATENTED JULY 28, 1903.

H. W. HALE.

AWNING HINGE.

APPLICATION FILED NOV. 11, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

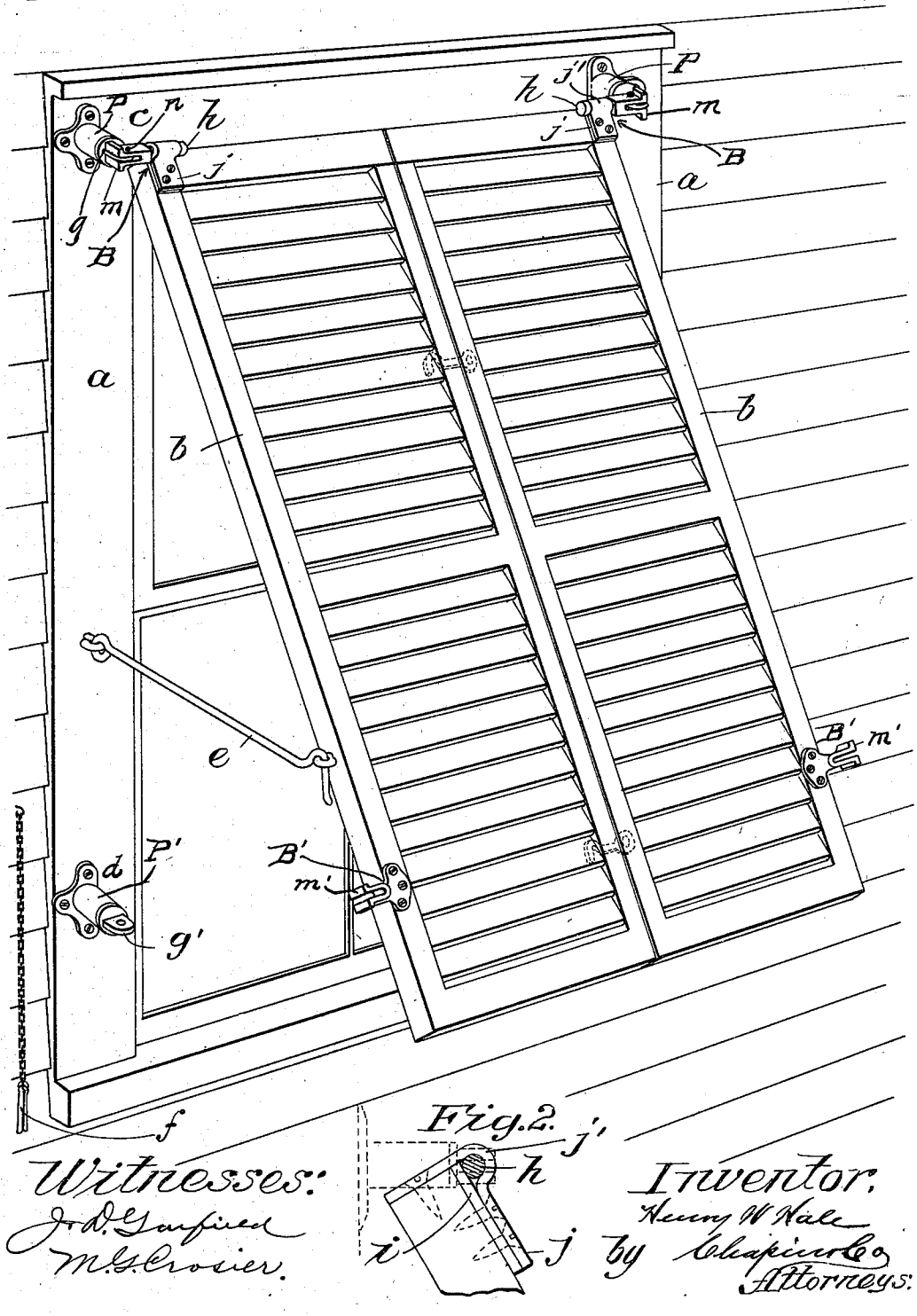



Fig. 2.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

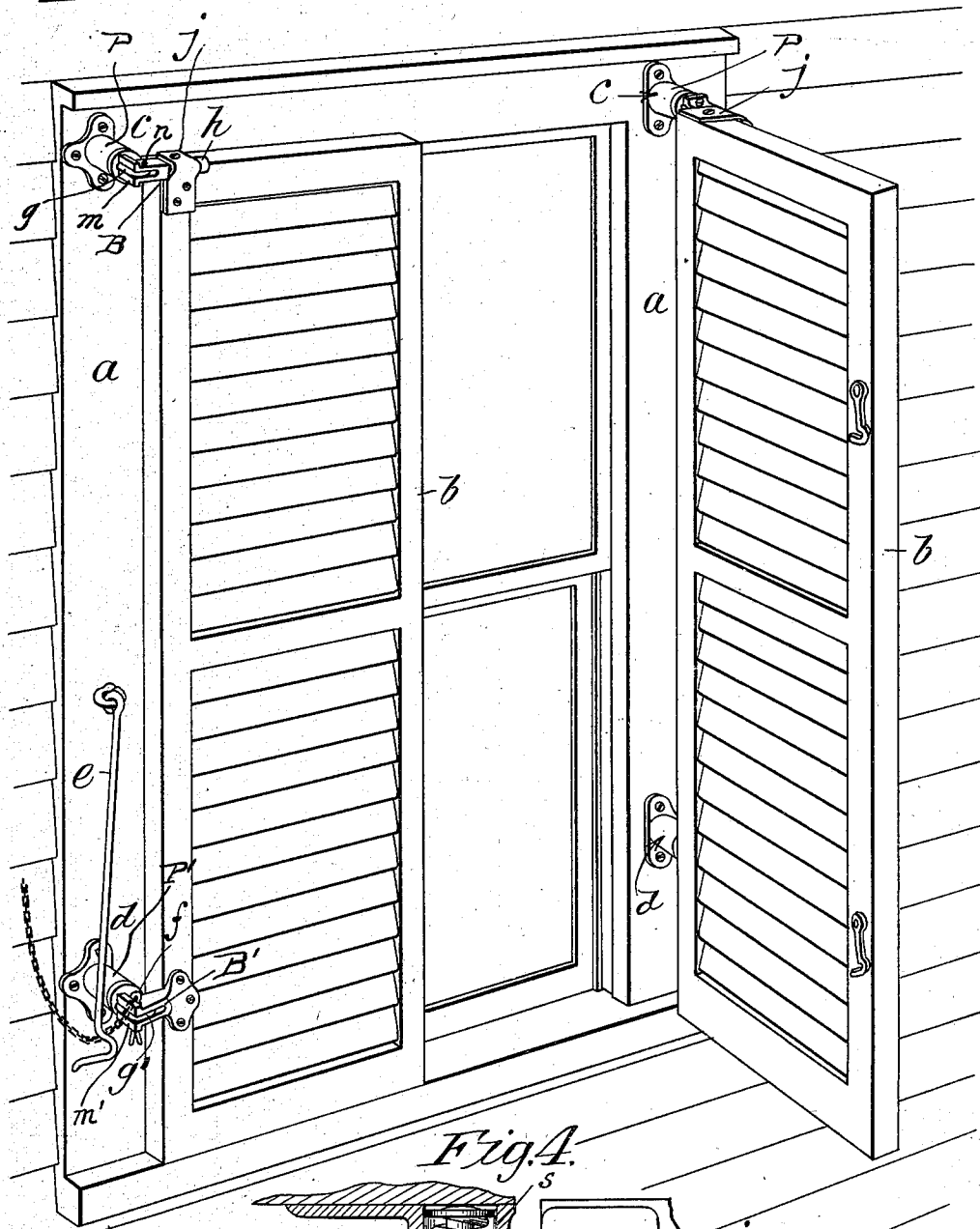
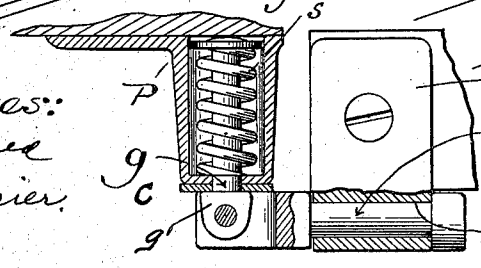



Fig. 4.




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# UNITED STATES PATENT OFFICE.

HENRY W. HALE, OF GREENFIELD, MASSACHUSETTS.

## AWNING-HINGE.

SPECIFICATION forming part of Letters Patent No. 734,702, dated July 28, 1903.

Application filed November 11, 1902. Serial No. 130,900. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY W. HALE, a citizen of the United States of America, residing at Greenfield, in the county of Franklin and State of Massachusetts, have invented new and useful Improvements in Awning-Hinges, of which the following is a specification.

This invention relates to the construction of hinges and to their application to a window in combination with the ordinary wooden blinds or shutters, whereby the blinds may be swung open away from the window on a vertical axis or whereby the two blinds usually applied to the window may be secured together in a closed position to permit the lower end thereof to be swung away from the window to constitute an awning-blind; and the invention consists in the construction and arrangement of the hinges and blinds supported thereon, all as fully described in the following specification, and more particularly pointed out in the claim.

In the drawings forming part of this application, Figure 1 is a perspective view of a window, showing blinds applied thereto in the shape of an awning and hung on hinges forming part of this invention. Fig. 2 is a side view of the upper end of one of the blinds, showing the manner of forming the socket thereon to receive the hinge-pintle. Fig. 3 is a perspective view of a window, showing the blinds supported on the window-casing to swing in a vertical plane instead of outwardly, as in Fig. 1. Fig. 4 is a sectional view of one of the upper hinges shown in Figs. 1 and 3.

The hinges are shown relatively much enlarged for the sake of more clearly illustrating their construction.

Referring now to the drawings, *a* may indicate the window-casing, and *b b* two blinds, which are provided with hinges *c* at their upper ends and with the hinges *d* at their lower ends, these hinges differing in construction. Preferably the hinges used are of the spring type shown in Fig. 4 of the drawings, although this is not essential.

Both the hinges *c* and *d* are so constructed that the blinds may swing on a vertical axis, as shown in Fig. 3, if desired, the hinges *c*, however, being so constructed that if the leaf of the lower hinges be disconnected from the spring-plunger on which they pivot the two blinds, secured together as one, may swing on said upper hinges *c* on a horizontal axis and the lower end of the blind swung out away from the window and secured in the inclined position shown in Fig. 1 by a brace-rod or hook *e*, extending from the side of the window out to and engaging the blinds. Of course this brace-rod or hook may be placed in any position other than that shown in Fig. 1, if desired.

The hinges *d* are of a well-known construction and are adapted to be used in connection with this invention. The pintles *f* thereof are made readily removable to permit the separation of the leaf of the hinge from the plunger *g* thereof. The pintles for convenience sake may be hung on a chain or cord near the hinge. The construction of the hinge *c*, however, differs from that of the hinge *d* in that the leaf portion of the hinge instead of being screwed to the blind is made in the form of a short horizontal pintle-post *h*, pivotally connected to the spring-plunger *g* in the same manner as the leaf is connected thereto on the hinges *d*. This post *h* swings in a horizontal plane the same as the leaf of the hinges *d*, and on the upper corner of each of the blinds a bearing-socket is formed to receive it. This may be made in any one of a variety of ways. A desirable way, however, is shown in Fig. 2 particularly, which consists in applying to the blind first a small metal plate *i*, one end of which is flush with the top of the blind, and then bending a strap *j* to substantially an L-shaped form, as shown in said Fig. 2, in which there is formed a groove for the reception of the post *h*. This strap *j* being secured by screws to the upper and front sides of the blind makes a very secure fastening, and the plate *i* being interposed between the post and the blind makes a good bearing on which the blind may swing and prevents the wearing away of the wood, which would take place if the post bore thereon on one side.

By means of the construction herein described the blinds *b* may be used as such blinds usually are—that is to say, each blind swinging on a vertical axis (the pintles *f*) to the right and left—and at the same time there is provided a construction for converting a

blind into an awning, whereby the window may be shaded without admitting the direct rays of the sun.

When the blinds are to be used as an awning-blind, the two meeting edges thereof are secured together, and this may be done in any convenient manner—as, for example, by means of a hook or hooks. (Shown in the drawings.)

From the foregoing explanation the detail construction of each of the hinges will be readily understood. As clearly shown in the drawings, the upper hinge (designated in its entirety by the reference-letter *c*) essentially consists of a plunger member P and a blind member B. The plunger member P of the upper hinge *c* consists of a barrel containing the spring *s*, connected with the plunger *g*, the outer end of which plunger is formed with a flattened ear *g'*, fitting in the bifurcated head *m* at one end of the blind member B, and through which bifurcated head and plunger end passes a vertical pivot *n* for permanently connecting the two members of the hinge to permit the blind swinging on a vertical axis. The blind member B of the upper hinge, in addition to the bifurcated head *m*, is provided with the horizontal pivot-post *h*, which engages in the bearing-socket *j'*, formed by the bent plate *j*, previously described, and which constitutes a part of the blind member which is fastened directly to the blinds.

The lower hinge (designated in its entirety by the reference-letter *d*) also consists of a plunger member P' and a blind member B'. The plunger member P' is of the same construction as the plunger member P of the upper hinge and embodies the same elements, and the outer flattened end of the plunger *g* is adapted to fit in the bifurcated head *m'* of the blind member B', which latter member is rigidly secured to the edge of the blind. The bifurcated head *m'* and the flattened end of the plunger *g* of the plunger member P' are detachably connected by means of the detachable pin *f*, which constitutes a vertical axis for the blinds to turn upon when used in the ordinary manner.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The combination with the awning-blind, of the upper and lower hinges each comprising separate plunger and blind members supported respectively by the casing and the blind, and the latter members being provided with bifurcated heads receiving the plunger members and pivotally united thereto by vertical pivots, the pivot for the lower blind and plunger members being in the form of a detachable pin to permit of separation of such members, said blind member of the lower hinge being rigidly fitted to the blind, and the corresponding member of the upper hinge including a horizontally-disposed pintle-post carried with the bifurcated head portion, and a rounded bearing-socket receiving said post and fitted to the top edge of the blind, whereby the blind is mounted to swing vertically on the said pintle-post.

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Witnesses:
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