

No. 665,662.

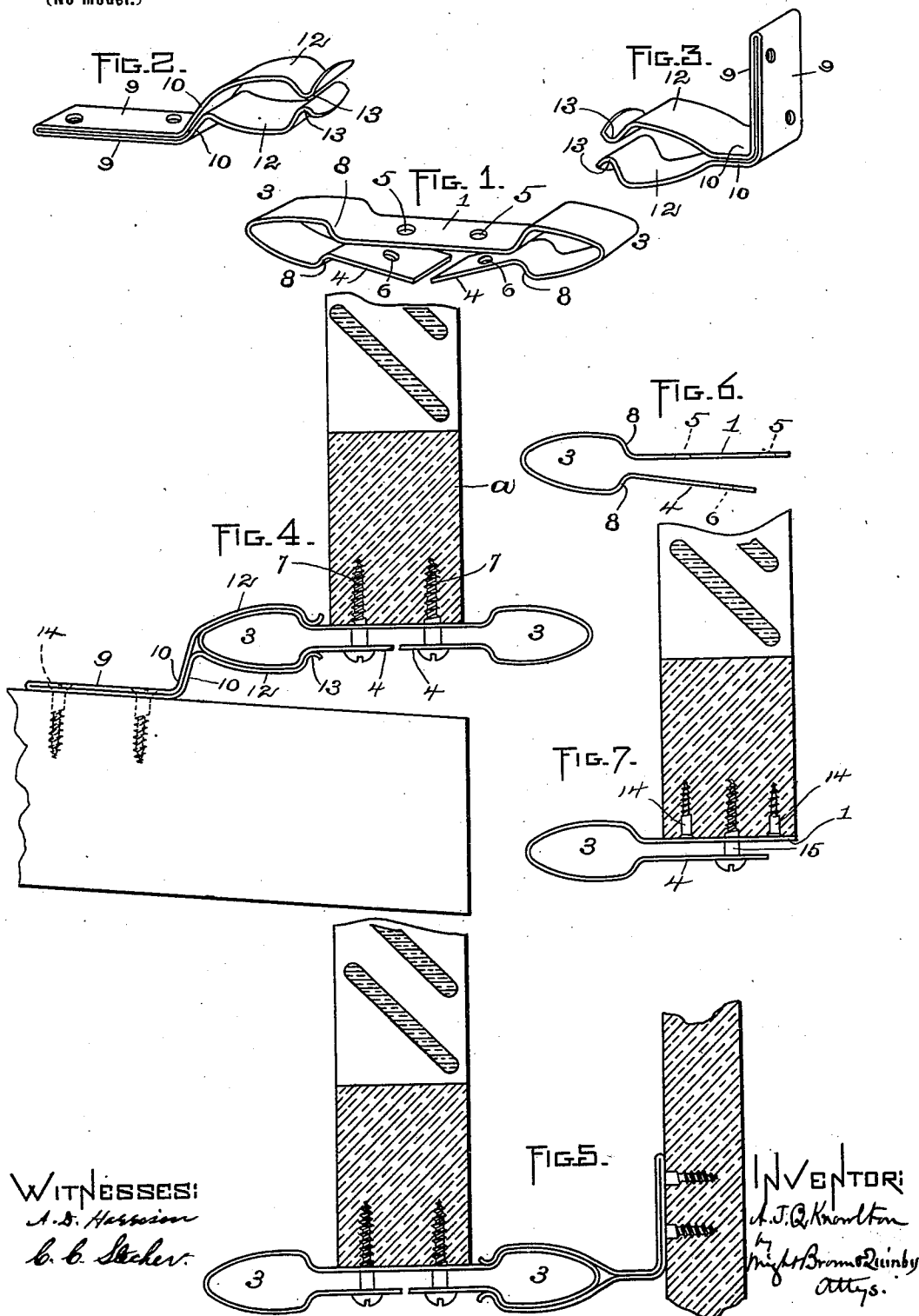
Patented Jan. 8, 1901.

A. J. Q. KNOWLTON.

BLIND FASTENER.

(Application filed June 4, 1900.)

(No Model.)



WITNESSES:

A. S. Harrison

C. C. Stecher

FIG. 5.

INVENTOR:

A. J. Q. Knowlton

by Night Brown & Quincy

Attys.

UNITED STATES PATENT OFFICE.

ALONZO J. Q. KNOWLTON, OF CAMDEN, MAINE.

BLIND-FASTENER.

SPECIFICATION forming part of Letters Patent No. 665,662, dated January 8, 1901.

Application filed June 4, 1900. Serial No. 18,988. (No model.)

To all whom it may concern:

Be it known that I, ALONZO J. Q. KNOWLTON, of Camden, in the county of Knox and State of Maine, have invented certain new and useful Improvements in Blind-Fasteners, of which the following is a specification.

This invention has for its object to provide a simple and effective device for holding blinds, doors, &c., in different positions, as when opened and when closed, and to enable the momentum of the blind or door in moving to either position to cause its retention in the position to which it is moved.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of the stud member of a fastening device embodying my invention. Fig. 2 represents a perspective view of a socket member adapted to cooperate with the stud member shown in Fig. 1. Fig. 3 represents a perspective view showing a different form of socket member. Fig. 4 represents a sectional view showing the stud member affixed to a blind and engaged with a stud member of the form shown in Fig. 2. Fig. 5 represents a view similar to Fig. 4, showing the stud member engaged with a socket member of the form shown in Fig. 3. Figs. 6 and 7 represent modifications hereinafter referred to.

The same reference characters indicate the same parts in all the figures.

The improved stud member embodying my invention (shown in Figs. 1, 4, and 5) is double-ended—that is to say, it presents two stud members, one projecting from the inner side and the other from the outer side of a blind *a*, to which the stud member is affixed. I will first describe the said double-ended stud member and will afterward describe the single-ended stud member shown in Figs. 6 and 7, each form of stud member embodying my invention. The said stud member is composed of a strip of resilient sheet metal, which may be steel, brass, or any other suitable material. The said strip is bent to form a shank 1, two loop-shaped shouldered heads 3 3, the upper sides of which form continuations of the shank, and two arms 4 4, forming continuations of the under sides of the loop-shaped heads 3.

The under sides of the heads 3 and the arms 4 project under the upper sides of the heads and under the shank 1, and the resilience of the strip is such that the arms 4 and the under sides of the heads normally spring away and are separated from the shank 1 and the upper sides of the heads, as shown in Fig. 1. The shank 1 is provided with screw-holes 5 5, and the arms 4 4 are provided with screw-holes 6 6, which coincide with the screw-holes 5 5.

7 7 are attaching-screws which are passed through the holes 5 and 6 and driven into the lower cross-bar of the blind, as shown in Figs. 4 and 5. The arms 4 4 press yieldingly downward upon the heads of the screws, and the distance between said arms and the shank 1 is determined by the adjustment of the screws. Hence the screws determine the maximum expansion of the heads 3 3, or, in other words, the distance between the shouldered portions of their upper and lower sides, said sides having shoulders 8 8, adapted to engage corresponding shoulders on the socket members hereinafter described.

In Figs. 2 and 3 I show socket members formed to cooperate with the heads 3 in holding the blind either open or closed. Each of said socket members comprises a strip of metal doubled upon itself at the center of its length to form two shank layers 9 9, the strip being bent to form resilient arms 10 10, which are extensions of the shank layers, and socket sides 12 12, which are extensions of the arms 10 10, said socket sides having shoulders 13 13 at their outer ends, which contract the mouth of the socket and are adapted to engage the shoulders 8 8 on the heads 3 3, as shown in Figs. 4 and 5. The socket member shown in Figs. 2 and 4 is adapted for attachment to a window-sill and holds the blind in its closed position. The socket member shown in Figs. 3 and 5 is adapted to be attached to the side of a building and to hold the blind in its open position.

The shank layers 9 9 may be caused by the resilience of the strip to diverge from each other, as shown in Fig. 2, so that the normal distance between the shoulders 13 13 of the socket sides may be varied by adjusting the attaching-screws 14 14, which hold the socket member in place.

In Fig. 6 I show a stud member having but

one head 3, the arm 4 on said head having a screw-hole 6, arranged to coincide with one of the screw-holes 5 in the shank 1.

In Fig. 7 I show a stud member having but one head 3 and having its shank 1 attached to the blind by independent screws 14 14, the arm 4 on the head 3 being secured by an independent adjusting-screw 15.

I claim—

1. A fastening member of the character specified, comprising a resilient strip having a shank, a shouldered compressible loop-shaped head, one side of which constitutes an extension of said shank, an arm constituting an extension of the other side of said head and projecting under the shank and a stop to limit the movement of the arm in one direction, the said arm and the side of the head from which it extends being normally held by the resiliency of the strip with the head in its position of maximum expansion.

2. A fastening member of the character specified, comprising a resilient strip having a shank, a shouldered compressible loop-shaped head, one side of which constitutes an extension of said shank, and an arm constituting an extension of the other side of said head and projecting under the shank, the said arm and the side of the head from which it extends being normally held by the resiliency of the strip with the head in its position of maximum expansion, and means for adjusting said arm and the side of the head from which it extends, relatively to the shank and the other side of the head.

3. A fastening member of the character specified, comprising a resilient strip having a shank, a shouldered compressible loop-shaped head, one side of which constitutes an extension of said shank, and an arm constituting an extension of the other side of said head and projecting under the shank, the said arm and the side of the head from which it extends being normally held by the resiliency of the strip with the head in its position of maximum expansion, the said arm having a screw-hole adapted to receive an adjusting-screw.

4. A fastening member of the character specified, comprising a resilient strip having a shank, a shouldered compressible loop-shaped

head, one side of which constitutes an extension of said shank, and an arm constituting an extension of the other side of said head and projecting under the shank, the said arm and the side of the head from which it extends being normally held by the resiliency of the strip with the head in its position of maximum expansion, the said shank and arm having coinciding screw-holes.

5. A fastening member of the character specified, comprising a resilient strip the central portion of which constitutes a shank adapted for attachment to a blind, shouldered compressible loop-shaped heads the upper sides of which constitute oppositely-projecting extensions of said shank, and arms constituting oppositely-projecting extensions of the under sides of the heads, said arms projecting under the shank.

6. A fastening member of the character specified, comprising a resilient strip the central portion of which constitutes a shank adapted for attachment to a blind, shouldered compressible loop-shaped heads the upper sides of which constitute oppositely-projecting extensions of said shank, and arms constituting oppositely-projecting extensions of the under sides of the heads, said arms projecting under the shank, the shank and arms being provided with coinciding screw-holes.

7. In a fastening device of the character specified, a socket member composed of a strip of metal bent upon itself at the middle of its length to form two shank layers which are adapted for attachment to a support and are normally caused to diverge from each other by the resilience of the strip, resilient arms forming continuations of the shank layers, and socket sides forming continuations of the resilient arms, the shank layers being provided with coinciding orifices to receive adjusting-screws, whereby the normal separation of the socket sides may be varied.

In testimony whereof I have affixed my signature in presence of two witnesses.

ALONZO J. Q. KNOWLTON.

Witnesses:

M. T. CRAWFORD,

G. H. TALBOT.