

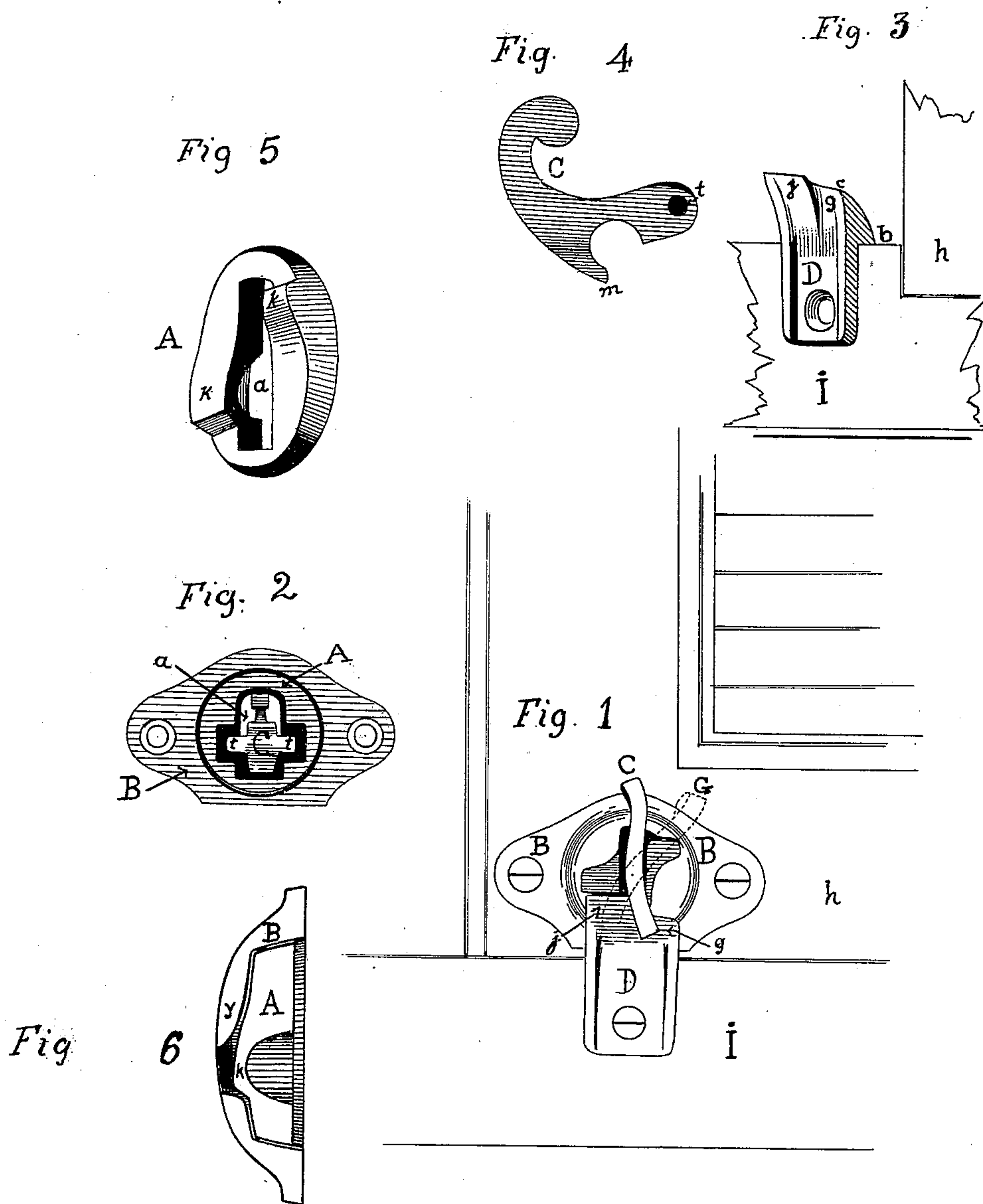
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Patented Nov. 4, 1902.

W. M. F. KELLY.
DOUBLE WINDOW AND BLIND FASTENER.

(Application filed Nov. 18, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM M. F. KELLY, OF MONTREAL, CANADA.

DOUBLE WINDOW AND BLIND FASTENER.

SPECIFICATION forming part of Letters Patent No. 712,684, dated November 4, 1902.

Application filed November 18, 1901. Serial No. 82,763. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MICHAEL FREDERICK KELLY, joiner, a subject of the King of Great Britain and Ireland, residing at No. 116^a Montcalm street, in the city of Montreal, in the Province of Quebec, Dominion of Canada, have invented new and useful Improvements in Double Window and Blind Fasteners, of which the following is a specification.

The object of my invention is, first, to provide for an easy and sure hooking; second, to bring the sash or blind in a perfectly close contact with its frame; third, to afford facilities for the adjustment of the keeper to the frame proper.

My invention consists in the novel construction and arrangement of the parts which will be hereinafter fully described and claimed.

I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of a window sash and frame provided with my double window and blind fastener. It shows the plate B, the hook C, the keeper D, the sash *h*, and the frame I. Fig. 2 is the back view of the plate B. It shows the concentric ring A, with the trunnions *t t* of hook C, and the sockets to receive the said trunnions. Fig. 3 is a perspective of the keeper D. It shows also the sash *h* and the frame I. Fig. 4 is a side view of the hook C, showing tooth *m* and trunnion *t*. Fig. 5 is a detailed view in perspective of the ring A, with two cams *k k* and slot *a*. Fig. 6 is a detailed section of the plate B and the ring A.

Similar letters refer to similar parts throughout the several views.

A is a ring, of malleable iron or suitable material, with a slot along one of its diameters for the passage of the hook C. It has two cams *k k*, resting in the cut-away places of plate B and shoulders on said cams holding said ring within its bound, thereby preventing ring A, which also controls the rotating movement of hook C, to go beyond certain limits when turning to the left, with two opposite sockets to receive the trunnions *t t* of the hook C.

B is a plate, also of malleable iron or any

suitable material. It screws on the sash of double windows or of blinds close to the bottom thereof. It keeps in place the hook C and the ring A. It has also along its vertical diameter a slot for the hook C to locate and on each side of said slot cut-away places for the cams *k k* to rest in. The inner part of the said plate is inversibly sloped to allow the cams *k k* on ring A to gradually slide on toward the flat surface of the inner rim of said plate, and thereby cause the ring A to move inward and exert a pressure of hook C against the keeper D. Said pressure, combined with the simultaneous pressure which the peculiar form of keeper D and of hook C offers, is what locks said double windows or blind.

C is a hook of the same material as the above. It has a tooth *m*, made to glide along the curved face of the keeper D, and when at the top thereof its own weight causes it to drop over the edge *g* and holds loosely until moved to *j*. Said hook is curved in the form of an inverted S, so as to act in concert with the action of the cams *k k* of ring A when turned toward the edge *j*. It is made narrow to enter the vertical slot of plate B, and its head is made in such a shape as to add to its weight and allow an easy handling for the turning of the ring A into the plate B. Its only motion in ring A is in a vertical plane, though it can turn with the said ring, being held in position in said ring by its trunnions *t t*.

D is a keeper of same material. One half thereof, *g*, is slightly lower than the other half *j*, so that the hook C, gliding along its curved face *c*, falls first on this lower half *g*, forced thereto by the oblique guide on curved face *c* between the said two halves, and when it is desired the hook C may be turned to the right, so that the tooth *m* is brought toward the half *j*, thereby sliding against the edge farther from the trunnions *t t*, causing also the cams *k k* to slide against the slopes of the inner part of plate B, increasing the pressure of the hook C against its keeper D.

a is a slot along one of the diameters of the ring A to allow the passage of the hook *c*.

b is a shoulder on keeper D, resting on top of the lower rail of the frame I, holding the said keeper in its proper position and making it perfectly solid.

c is the inclined edge of the lower half *g* of the keeper D.

g is the lower half of the keeper D. It is separated from the higher half *j* of the said plate by an oblique ledge.

h is the sash of the window or blind.

I is the frame of the window or blind.

j is the higher half of the keeper D.

k k are the cams on the inner face of ring A.
 10 *m* is the tooth of the hook C to catch over edges C and *j* of the keeper D.

t t are the two trunnions of hook C, resting in the notches of the ring A.

y is one of the slopes of the inner part of
 15 B to allow the cams *k k* to slide against its surface and press the ring A toward the sash of the window.

To use my invention, the hook C being adjusted in the ring A, so that its trunnions fall
 20 into the sockets made to receive them and the two are placed in the plate B, then the said plate B is screwed to the lower part of the sash of double windows or of blinds. Then the keeper D is screwed to the frame at such
 25 place as the hook may reach when the window or blind is closed, and my invention is ready for use. When it is desired to close the double windows or blinds, they are simply pulled in their frame, when the hook C glides along the
 30 curved surface of the keeper D until it falls over the edge *c* of the lower half *g* of the keeper. Then by turning the hook C toward the right the tooth *m* is forced over the higher half *j* of the keeper D. While this rotary
 35 movement causes the cams *k k* to leave their cut away place to slide against the sloping inner part of the plate B, thereby causing said ring which holds the hook to move in inversion, to which the higher part of the keeper
 40 draws the hook, the additional strain caused by the peculiar form of said hook on the keeper, the whole working simultaneously, brings said double windows or blinds to a perfectly close and tight contact to its frame.

45 Changes within the scope of the appended claims may be made in the form and proportions of some of the parts, while the essential features are retained and the spirit of the in-

vention is embodied. Hence I do not desire to be limited to the precise form of all the 50 parts as shown, reserving the right to vary therefrom.

I will not claim as my invention window frames or sashes; but

What I claim as my invention, and desire 55 to secure by Letters Patent, is—

1. In a window and blind fastener; a plate of metal, the inner part thereof hollowed to receive a ring, said hollow having portions inversibly sloped to allow the cams of a ring 60 to slide thereon; said plate having a slot along its vertical diameter and a cut-away place on each side of the said slot for the said cams to rest in, with a ring of metal having a slot in the center for the passage of a hook; 65 having also two sockets on the outer part thereof to receive the trunnions of a hook; also two cams inversibly inclined to act on the slopes of the plate, in connection with a hook and a keeper as described. 70

2. In a window and blind fastener, a metal keeper having a screw-hole to fasten it to the inner face of the frame with a shoulder to rest on the top of the lower rail of frame, said keeper having one half of its edge slightly 75 lower than the other and sloping outward and a curved face divided by an oblique guide to force the hook on the lower edge in connection with a metal plate, a concentric ring and a hook for the purpose herein described. 80

3. In a window and blind fastener; a rotating hook of metal with a tooth to hook on a keeper, having also two trunnions to fit in the sockets of a ring, also having a head to increase its weight, and shaped to allow it to 85 enter freely in both slots of a ring and of a plate in the one time; said hook having the shape of an inverted S on its vertical face so as to offer a tighter hold on its keeper; in connection with a plate, a ring and a keeper for 90 the purpose and in the manner hereabove described.

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Witnesses:

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