

(No Model.)

2 Sheets—Sheet 1.

G. W. MESERVE.
BLIND HINGE.

No. 585,826.

Patented July 6, 1897.

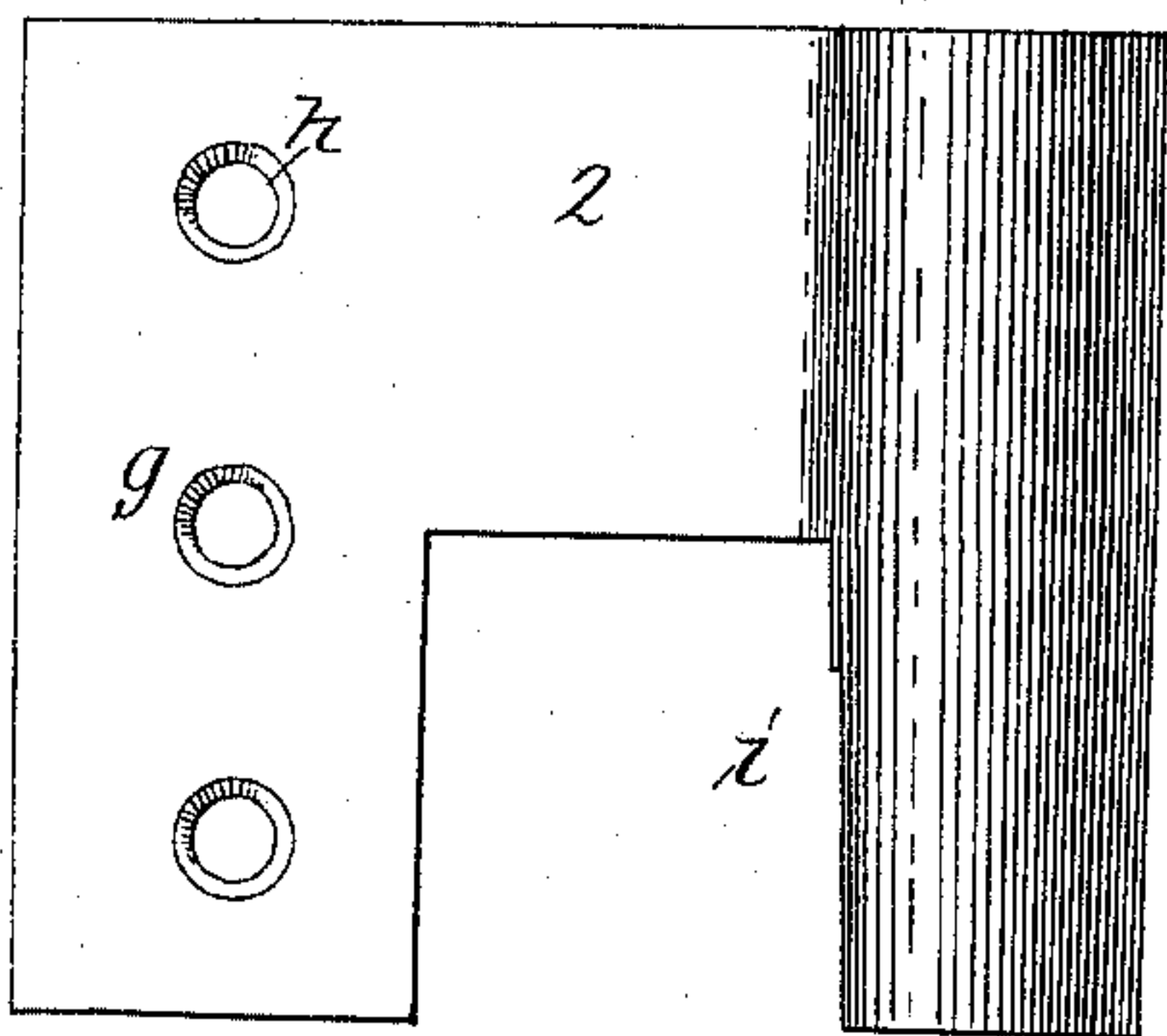
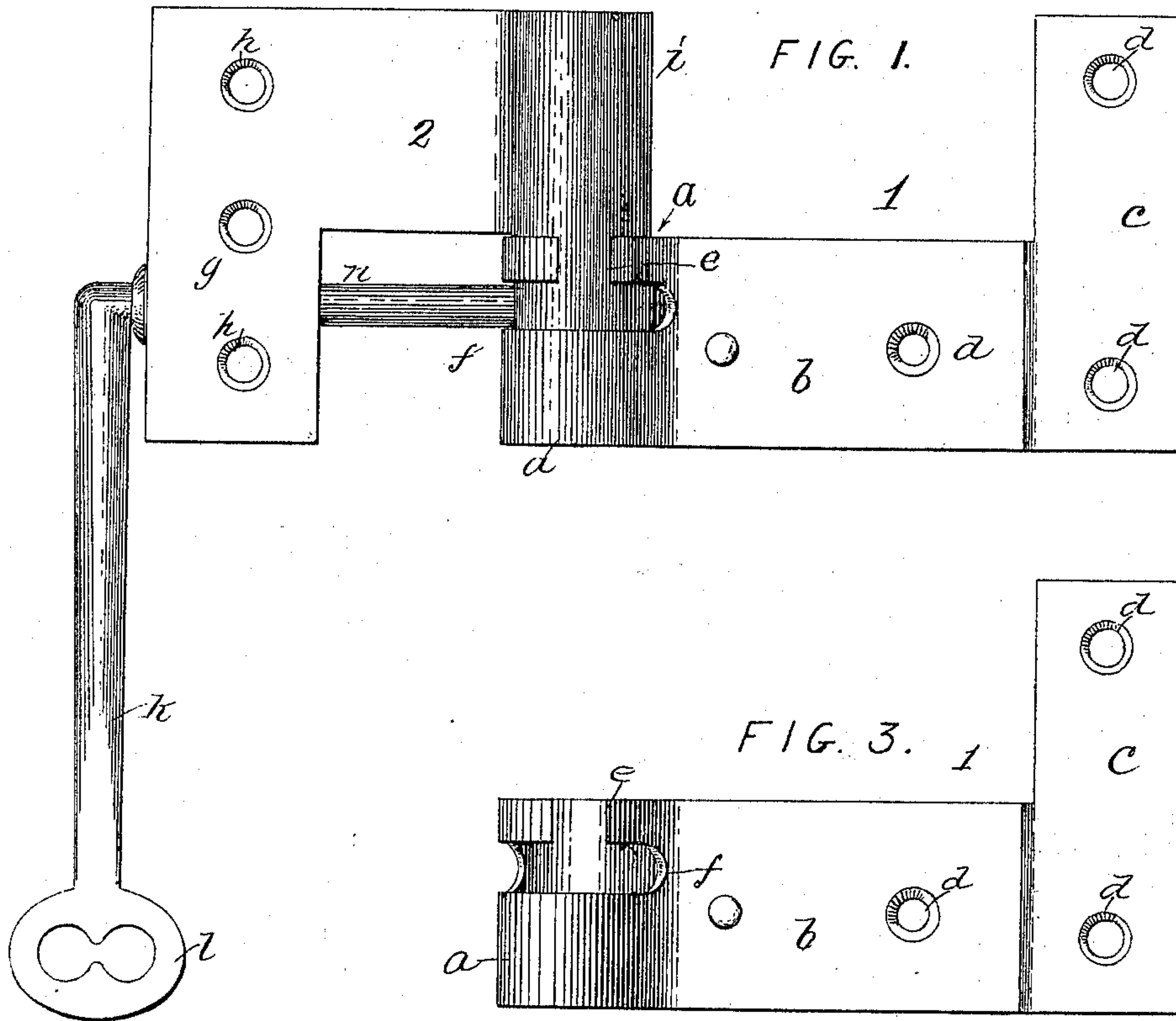


FIG. 2.

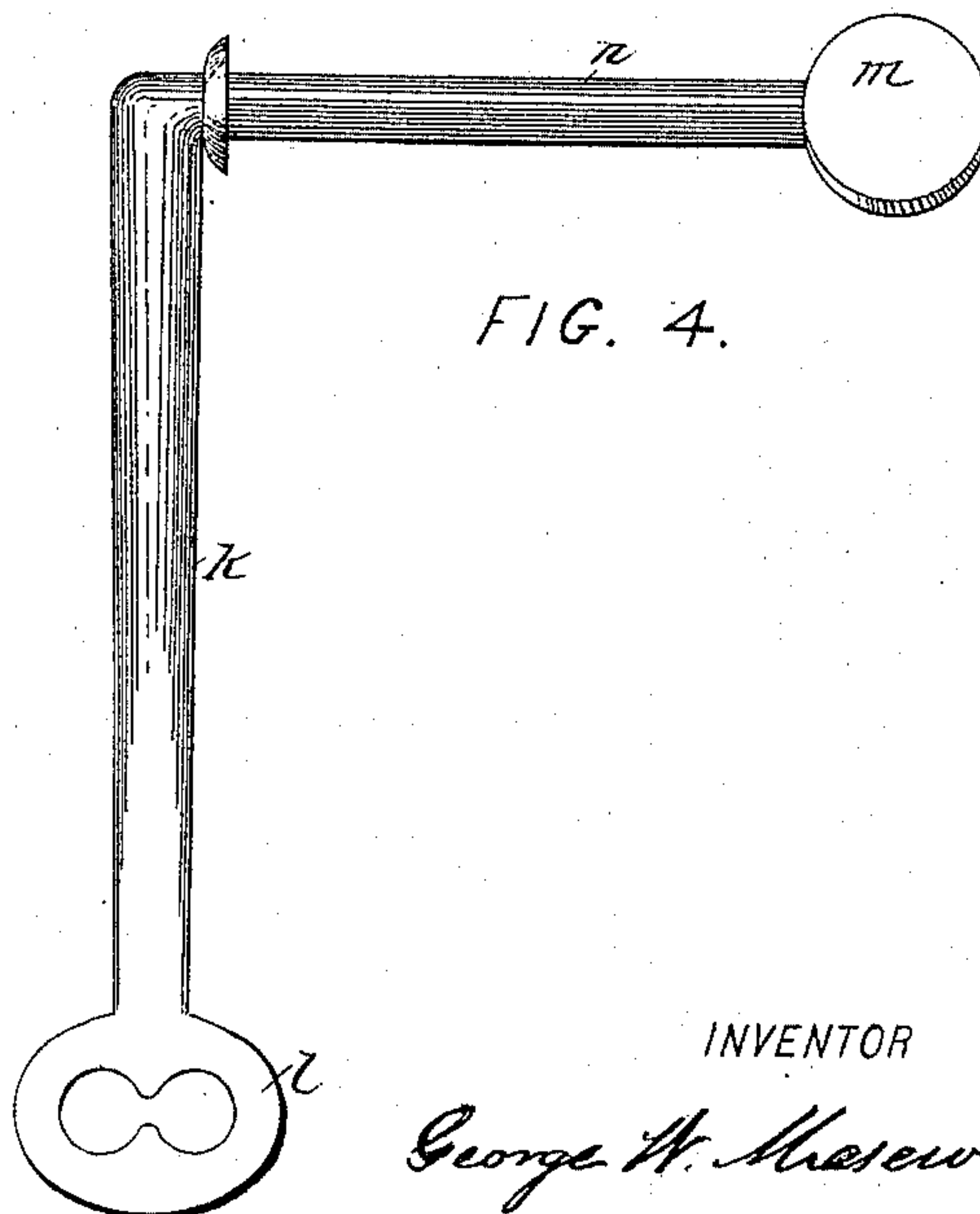


FIG. 4.

WITNESSES:

David A. Kinckle

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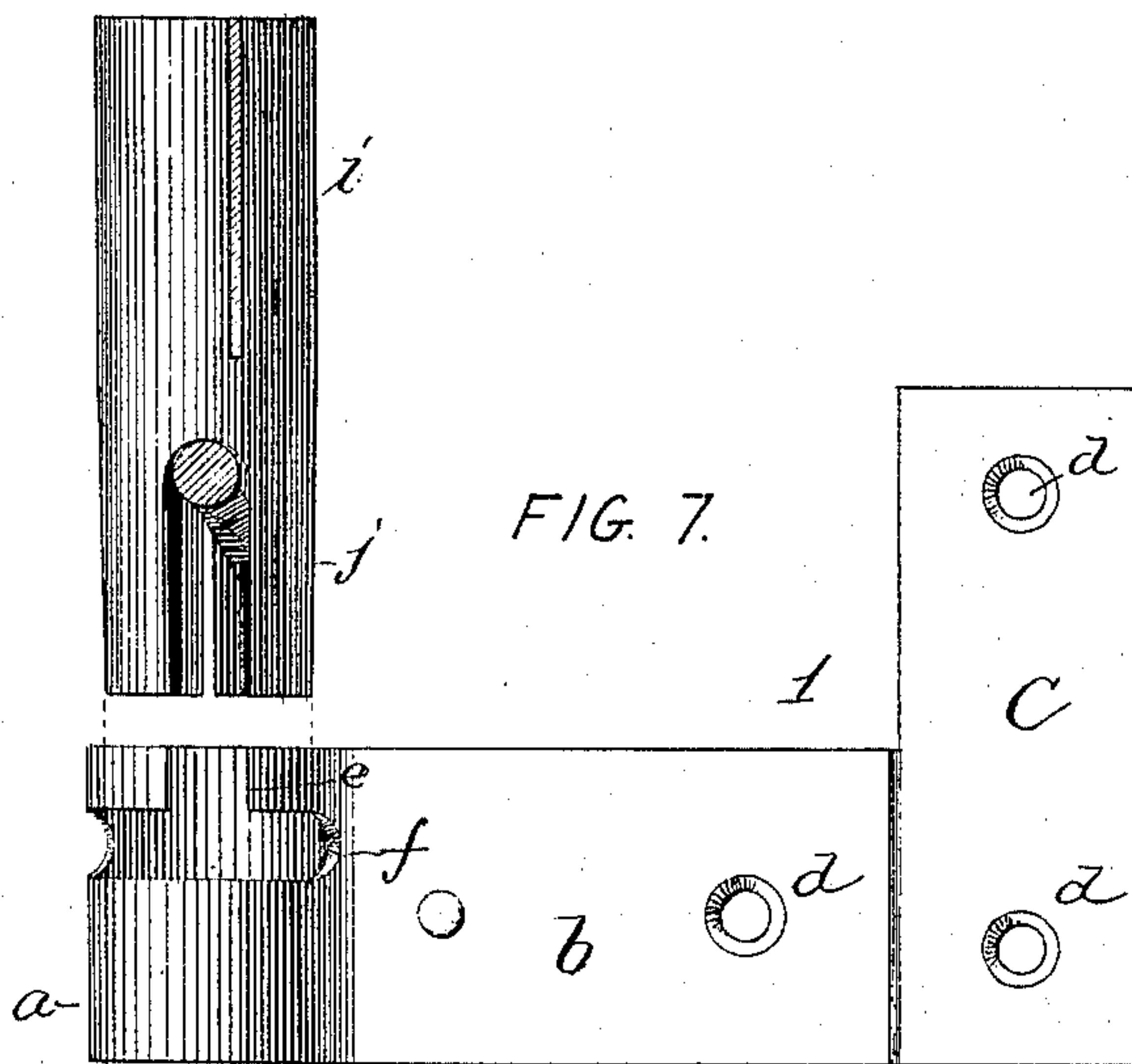
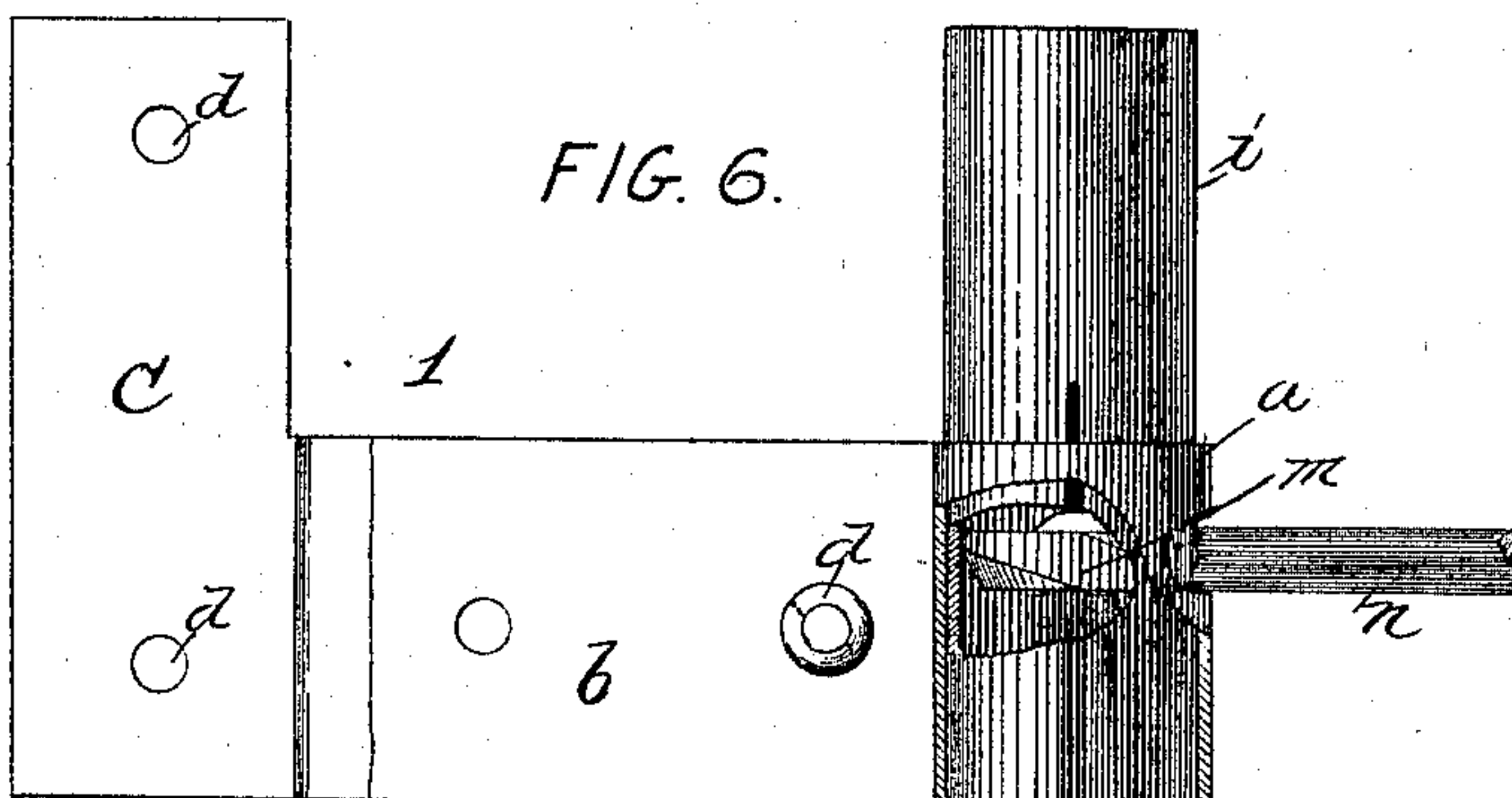
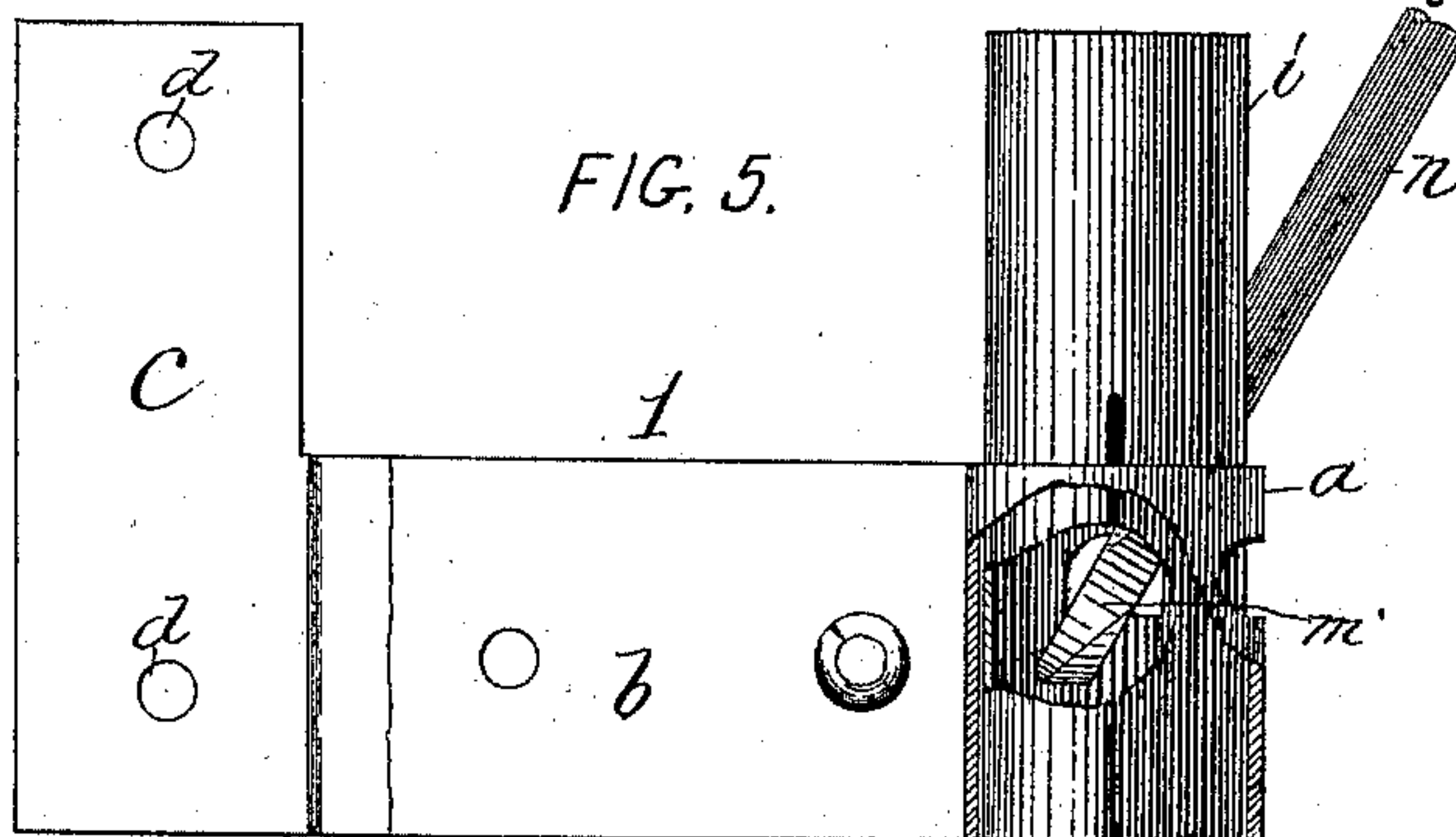
(No Model.)

2 Sheets—Sheet 2.

G. W. MESERVE.
BLIND HINGE.

No. 585,826.

Patented July 6, 1897.



WITNESSES:

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George W. Meserve INVENTOR

UNITED STATES PATENT OFFICE.

GEORGE W. MESERVE, OF BOSTON, MASSACHUSETTS.

BLIND-HINGE.

SPECIFICATION forming part of Letters Patent No. 585,826, dated July 6, 1897.

Application filed March 22, 1895. Serial No. 542,832. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MESERVE, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Hinge, of which the following is a description and specification.

The invention has relation to that class of blind-hinges which are constructed so as to lock or hold the blind in any position to which it may be swung and so as to prevent the blind from being possibly unhinged excepting when it is swung to one particular position.

It is the object of the invention to provide improvements in blind-hinges of the kind mentioned whereby in making the hinge serviceable in the highest degree it is rendered simple in and economical and light of construction.

It is also the object of the invention to provide a hinge of the character mentioned which shall be ready of application and use and which may be attached to a building and blind without marring or defacing the same and which may not detract in the slightest degree from the sightliness of the structure.

To these ends my invention consists of the following-noted improvements: first, of a hinge composed of two members, each of which is struck from a single piece of sheet-steel or other sheet metal, so as to render the parts strong and light in weight and smooth and easy of turning when in use; second, of an improvement consisting of an expansible pintle and means for expanding the same in its socket, so as to frictionally lock the hinge and blind in any position in which they may be placed; third, of improvements incidental to the foregoing, of greater or less importance, all as I will now proceed to describe in detail, and then point out in the appended claims.

Reference is to be had to the annexed drawings, and to the letters and figures marked thereon, forming a part of this specification, the same letters and figures designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a front view of the invention complete, the two members or parts being shown as assembled as they will be when the invention is in use. Fig. 2 represents a front view of one part or member of the hinge detached. Fig. 3 is a view similar to Fig. 2, showing the other part or member of the hinge detached. Fig. 4 is a view of the lever or key employed in expanding the hinge-pintle, the said key being shown detached. Fig. 5 represents the invention with the walls of a socket and pintle broken away, so as to expose the inner parts and show the mode of operation of the inner end of the key in expanding the pintle. This view represents the hinge in its unlocked position. Fig. 6 is a view similar to Fig. 5, showing the parts as they will be when the hinge is in locked position. Fig. 7 is a view of the invention, showing the two members connected and as in the only position in which they can be placed so as to disconnect the two members or lift the blind off its hinges.

In the drawings, 1 designates that part or member of the hinge which, as I have chosen to show it herein, is adapted to be attached to the building or window-casing, and 2 designates the other coöperating member, which is adapted to be secured to the blind. Both of the said members may be composed of sheet-steel or other suitable sheet metal.

I prefer to construct or form the member 1 from a piece of sheet metal of proper form to constitute the attaching wing and socket, the latter being constructed by rolling or bending a portion of the sheet or piece of metal into tubular form, so as to constitute a substantially cylindrical socket *a*, as represented in the drawings. In most instances I prefer to have the sheet or piece of metal of such form that in constructing the socket *a* I may also double a portion of the metal back upon itself, so as to double the angular part *b* of the wing portion of the member 1, and I may also have the portion *c* of said wing constructed of a doubled part of the metal, or in some instances where the weight of the blind or the strain upon the hinge will

not be very great the entire wing may be composed of a single piece or sheet of metal.

d designates holes formed in the wing of the member *a* for the reception of screws by which to attach the wing or member 1 to the window casing or frame, and it is obvious that the portions *b* and *c* of the said wing may be bent to any form that may be desired or required in order to fit the wing upon the part of the frame or casing to which it is attached.

The socket *a* is formed with a vertical slot *e*, extending from its upper edge downward a short distance, where it intersects a horizontal slot *f*, formed in the walls of the socket, all for a purpose to be presently explained.

The member 2 is formed substantially like the member 1 in its general construction—that is to say, it is made from a piece or sheet of metal constructed so as to possess an attaching-wing *g*, which may be secured to the blind by means of the screws passing through the screw-holes *h* and is rolled or bent at its opposite end into cylindrical form, so as to constitute a pintle *i* of such size and form as to adapt it to be passed into the socket *a* of the member 1. The pintle *i* is slotted vertically from its lower edge upwardly to a desired extent, the slot corresponding in size substantially to the vertical and horizontal slots *e* and *f* in the member 1, and in addition to this the lower end of the pintle is cloven on opposite sides or on a side opposite that in which the slot *j* is formed therein, so as to render the said pintle expansible.

k designates a key or lever constructed of a length of wire or rod bent into angular form and having the free end *l* formed so as to permit it to be readily acted upon by the thumb and fingers of the hand of the user and having the other or inner end *m* made into cam shape, so as to allow the cam-shaped end when in one position in the pintle *i* to be free on the sides of the said pintle and when forced into another position at right angles to the first-mentioned position to act upon the inner sides of the cloven portion of the pintle and expand the same or press the divided parts of the same outward.

With this construction and arrangement the part or member 1 may be attached to the casing in proper position and the member 2 in like manner attached to the blind, so that when the pintle *i* is set in the socket *a* the blind will be properly hung and may be swung to and fro upon the hinge, as will be readily understood. Before assembling the two members as described the inner end of the key will be placed in the pintle by passing the shank of the key upward through the slot *j* of the pintle and downward through the slot *e* of the socket, allowing the said shank when the blind is hung to rest on the bottom wall of the horizontal slot *f* of the socket and so afford additional bearing for the blind and member 2 of

the hinge. When the blind is to be swung on its hinges freely, the inner or cam-shaped end *m* of the key will be turned to such position as not to act upon the cloven portion of the pintle to expand the same, but when it is desired to lock the blind in position the lever by acting upon the free end *l* of the key may turn the cam-shaped end *m* in the pintle around to such position as to expand the pintle in the socket *a* and bind it therein and frictionally hold the blind against movement upon its hinges.

It will thus be seen that the blind may be locked in any position to which it may be moved, from its extreme open position to its entirely-closed place. It will furthermore be noted that it will be impossible to lift the blind off its hinges or disconnect the two members of the hinge unless the blind is moved to a particular angle, that angle being such as will bring the shank of the key into vertical alinement with the vertical slot *e* of the socket. While this construction and arrangement of parts permits of a ready lifting of the blind from its hinges when it is wanted to do this work, it also provides against accidental dislodgment of the blind when it is in any other position than the one mentioned, so that all liability of unintentional displacement of the blind is avoided.

It is to be observed that the pintle might be formed upon the member 1 and the member 2 provided with the socket for the reception of the pintle by reversing the position of the parts, but this construction under many circumstances, it is believed, would not be so convenient as that herein shown and described.

Other changes in the form and construction of the device within the range of the skill of a mechanic may also be made without departing from the nature or spirit of the invention, the important feature of which is a hinge provided with an expansible pintle and a key or equivalent means operating in or upon the pintle so as to expand it in its socket and lock or hold it in position frictionally to prevent the blind from being moved.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

1. A hinge comprising in its construction the member 1 composed of sheet metal and having a portion bent to form a socket *a*, and the member 2 also formed of sheet metal and bent to form a hollow pintle split or cloven, as described, and means for expanding the pintle in the socket.

2. A hinge comprising in its construction the member 1 composed of sheet metal and having a portion bent to form a socket *a*, and the member 2 also formed of sheet metal and

bent to form a hollow pintle split or cloven, as described, and a key having its inner end cam-shaped and adapted to operate in the pintle to expand the same.

- 5 3. A hinge composed of the member 1 having the socket *a* provided with the slots *e f*; the member 2 having the hollow cloven pintle *i*; and the key provided on its inner end

with a cam-shaped end or bit adapted to operate in the pintle to expand the same with its shank adapted to move in the slots *e f*, as set forth.

GEORGE W. MESERVE.

Witnesses:

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