

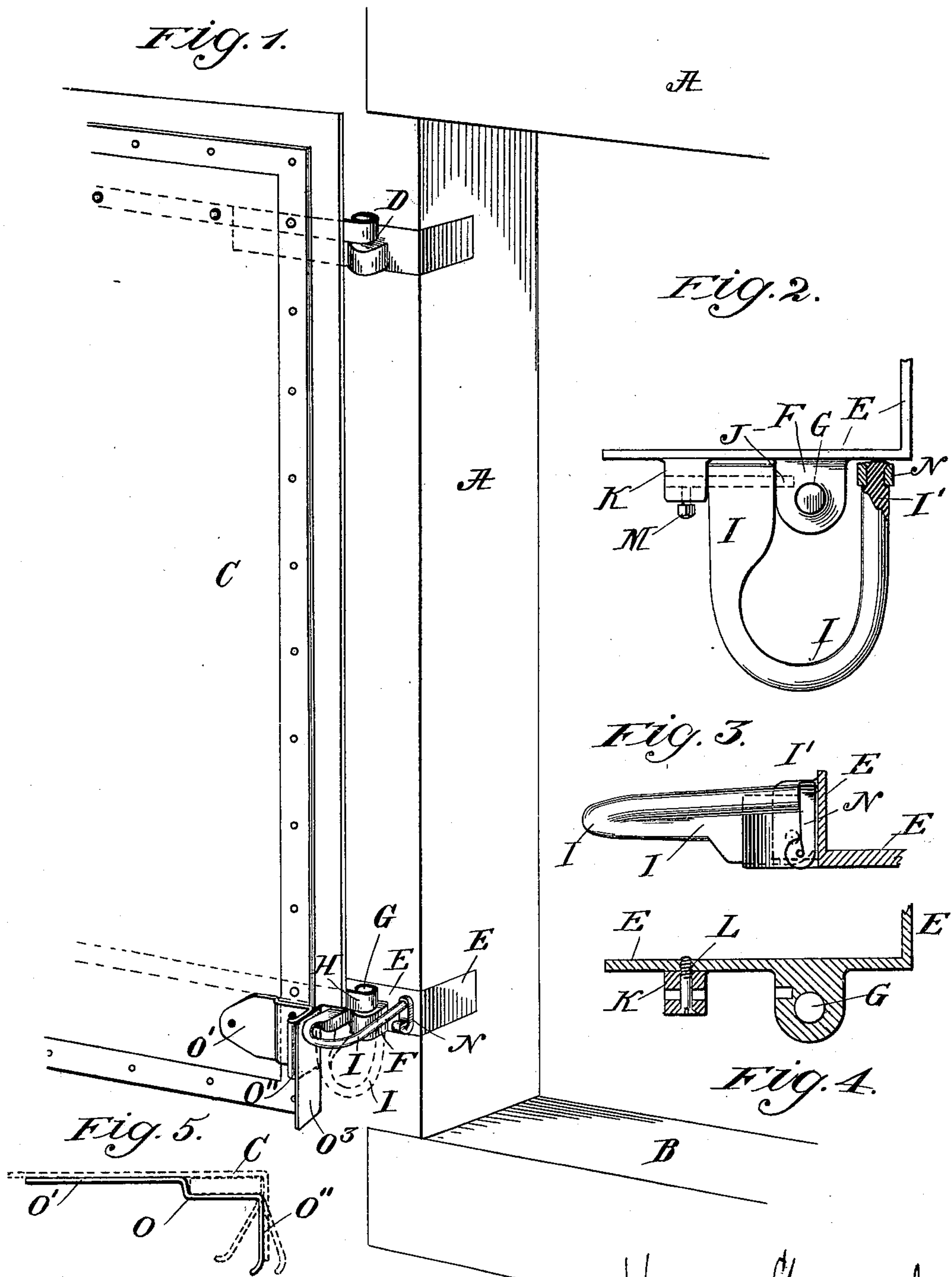
No. 621,588.

Patented Mar. 21, 1899.

H. SPENCER, JR.
BLIND FASTENING DEVICE.

(Application filed Jan. 3, 1898.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

HARVEY SPENCER, JR., OF NEW YORK, N. Y., ASSIGNOR TO MARY LIVINGSTON SPENCER.

BLIND-FASTENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 621,588, dated March 21, 1899.

Application filed January 3, 1898. Serial No. 665,333. (No model.)

To all whom it may concern:

Be it known that I, HARVEY SPENCER, JR., a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Blind-Fastening Devices, of which the following is a specification.

My invention relates to a new and useful device for fastening heavy shutters or blinds whether made of metal or other material, and it is adapted to be attached to or made part of the ordinary and most approved form of hinges for such structures—to wit, those having a bracket-like stationary part comprising a base-plate and an outwardly-extending part or bracket with which the swinging member of the hinge, fastened to the shutter or blind, engages by means of a pivot-pin, the bracket of the stationary member of the hinge being in one horizontal plane and the swinging member, which is attached to the shutter or blind, being in a different horizontal plane located above that of the stationary part.

By my invention I avoid the necessity of having any appliances attached to the side of the house or any defacement of the sill of the window. I also obviate the danger incident to leaning far out of the window to fasten and unfasten the blinds or shutters, and I so construct the parts that the fastener has great control over the shutter or blind and holds it rigidly and firmly when opened, so that high winds, even on high buildings, will not derange or fracture any of the parts.

This invention is in line with that heretofore patented to me in and by United States Letters Patent No. 590,711, dated September 28, 1897. That invention has proven of great value in the class of blinds and shutters to which it is adapted; but in practice it has been found not strong enough to properly control the heavy and frequently large shutters used upon the exceedingly-high buildings now prevailing in large cities. The pressure of the wind impinging upon the extended sides of such buildings and getting behind these shutters of large area creates so great a pressure upon them that the devices of my former patent are sometimes insufficient to properly control them, because in that patent

the lever, which braces against the rear edge of the blind and controls its position, is supported principally by the bracket of the hinge, and the rigidity of that bracket is practically all there is to withstand the strains to which the device is subjected. The lever of that patent has sometimes been bent by the excessive pressure upon the shutter, and sometimes the bracket of the hinge has been bent or pulled out from the base-plate.

Under my present invention, as will be hereinafter explained, the construction of the shutter-controlling lever or arm has been materially changed both in form and in method of operation. It is now made as a U-shaped arm, so that one prong or end of it may be fulcrumed to the bracket or to an auxiliary lug on the base-plate, or to both, as preferred, and the other arm or end when the device is in operative position takes a bearing upon the base-plate in such manner as to largely relieve the bracket and lug of strain. The U shape of the arm and the fact that its free end braces against the base-plate when in operative position enables it to resist any strain to which it may be subjected. This present form of shutter-fastening device has been subjected by me to very severe tests and has been found completely satisfactory.

Referring to the drawings hereof, Figure 1 illustrates a perspective of one form of my invention, it being that which I ordinarily employ in conjunction with iron shutters. Fig. 2 illustrates a plan view, partly in section, of the fastener proper. Fig. 3 illustrates an elevation of that which is shown in Fig. 2. Fig. 4 illustrates a sectional view in plan of the stationary member of the hinge. Fig. 5 illustrates an edgewise or plan view of that which I call my "angle-plate brace."

A is the window-casing; B, the window-sill; C, an ordinary metallic shutter; D, the upper hinge; E, the base-plate of the lower hinge; F, the bracket thereof; G, the hole for the pivot-pin; H, the strap or movable part of the lower hinge.

I is the swinging U-shaped arm, which constitutes the essential feature of the lock. It is pivoted to a cross-bar or axis J, which when my invention is applied to shutters already set may be entered in a hole or socket bored

in the bracket F at one side, as shown, and passes through a lug K, or, if preferred, may be part of the lug, which may be fastened by screws L to the base-plate E, or the axis J may be part of the arm I itself. In the manufacture of my improved fasteners, however, in complete condition for application I preferably cast the parts G and K integral with the base-plate E, provision being made therein for seating the cross-bar or axis J in any preferred manner. The arm I is made in the general form of the letter "U," as seen in Fig. 2, its free end being brought around, as shown at I', (see Figs. 2 and 3,) and when in operative position abuts against the base-plate E, and on this end is pivoted a swinging latch N, which turns loosely upon the end of the arm, so that when the arm is swung outwardly into its horizontal or operative position the latch N will drop by gravity or may be moved into the position shown in Figs. 1 and 3, in which it will, by its engagement with the face of the base-plate E, hold the arm I in its elevated or substantially horizontal position, and when in this position the arm impinges against a portion of the shutter O³, which is preferably formed at a suitable angle to the plane of the shutter and may be braced by the rectangular part O² of the angle-plate O. This brace-plate O (see Figs. 1 and 5) embodies a flat portion O' and the angular portion O², which may be set at such an angle as to permit the necessary pressure to be exerted upon it by the locking-arm irrespective of the angle at which the shutter may lie relative to the side of the building. Several angles are illustrated in full and dotted lines in Fig. 5. This "angle-plate," as I call it, is made of such conformation as requisite to adapt it to be fastened upon the iron shutter and is preferably riveted thereto, so as to make a firm solid support. I wish it understood, however, that the arm I may simply rest against the rear edge of the shutter without the employment of either the angle-plate O or a bent-up portion of the shutter. In many instances the results will be satisfactory without either of these features.

The operation of the device is obvious and does not require extended explanations excepting to say that the shutter or blind being thrown open the arm is swung from its depending or vertical position into its operative or substantially horizontal position, and in so doing crowds against the angle-plate O² or bent part of the shutter or its rear edge, as the case may be, and that the arm is held in such operative position by the latch N and is firmly supported against the strains that may come upon the shutter by reason of its being held at one end by the pivot-pin or axis, its other end abutting against the base-plate of the hinge.

It will be obvious to those who are familiar with this art that modifications may be made

in the details of construction of the parts of the device without departing from the essentials thereof.

I claim—

1. The combination of a shutter or blind, a hinge therefor, a substantially U-shaped arm, one end whereof is pivoted to the base-plate of the hinge at one side of the bracket, whereby it may be swung into operative position, the other end being upon the opposite side of the bracket and arranged to rest against the base-plate of the hinge when the arm is in such operative position, and means to maintain the arm in said position, for the purposes set forth.

2. The combination of a shutter or blind, a hinge therefor, a substantially U-shaped arm, one end whereof is pivoted to the base-plate of the hinge and the other adapted to rest against said base-plate when the arm is in operative position, and a swinging latch permanently attached to said last-named end and arranged to engage with the base-plate, whereby the arm as a whole is supported when in operative position, for the purposes set forth.

3. The combination of a shutter or blind, a hinge therefor, an arm comprising in its construction two rigidly-connected parts, one of which is adapted to be pivoted to the base-plate of the hinge, whereby the arm as a whole may be swung into operative position and the other end or part adapted to rest against the base-plate of the hinge when the arm is in operative position; means to hold the arm in said position, and an angular brace-plate on the shutter or blind, against which the arm presses when in operative position, for the purposes set forth.

4. The combination with a hinge for shutters or blinds, embodying a base-plate and a bracket fastened to the base-plate, of a lug on the base-plate adjacent to the bracket, a pivot-pin or axis supported wholly or partially by the lug, an arm pivoted upon said pivot-pin so that it may be swung into operative position, a part of said arm being arranged to engage with the base-plate on the opposite side of the bracket when the arm is in operative position; and means for sustaining the arm in said position, for the purposes set forth.

5. A striker-plate for blind or shutter fastening devices, comprising a base portion adapted to be attached to the blind or shutter, and a plate or flange thereon adapted to be arranged at any desired angle relative thereto, for the purposes set forth.

Signed at New York, in the county of New York and State of New York, this 30th day of December, A. D. 1897.

HARVEY SPENCER, JR.

Witnesses:

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E. SIMPSON.