

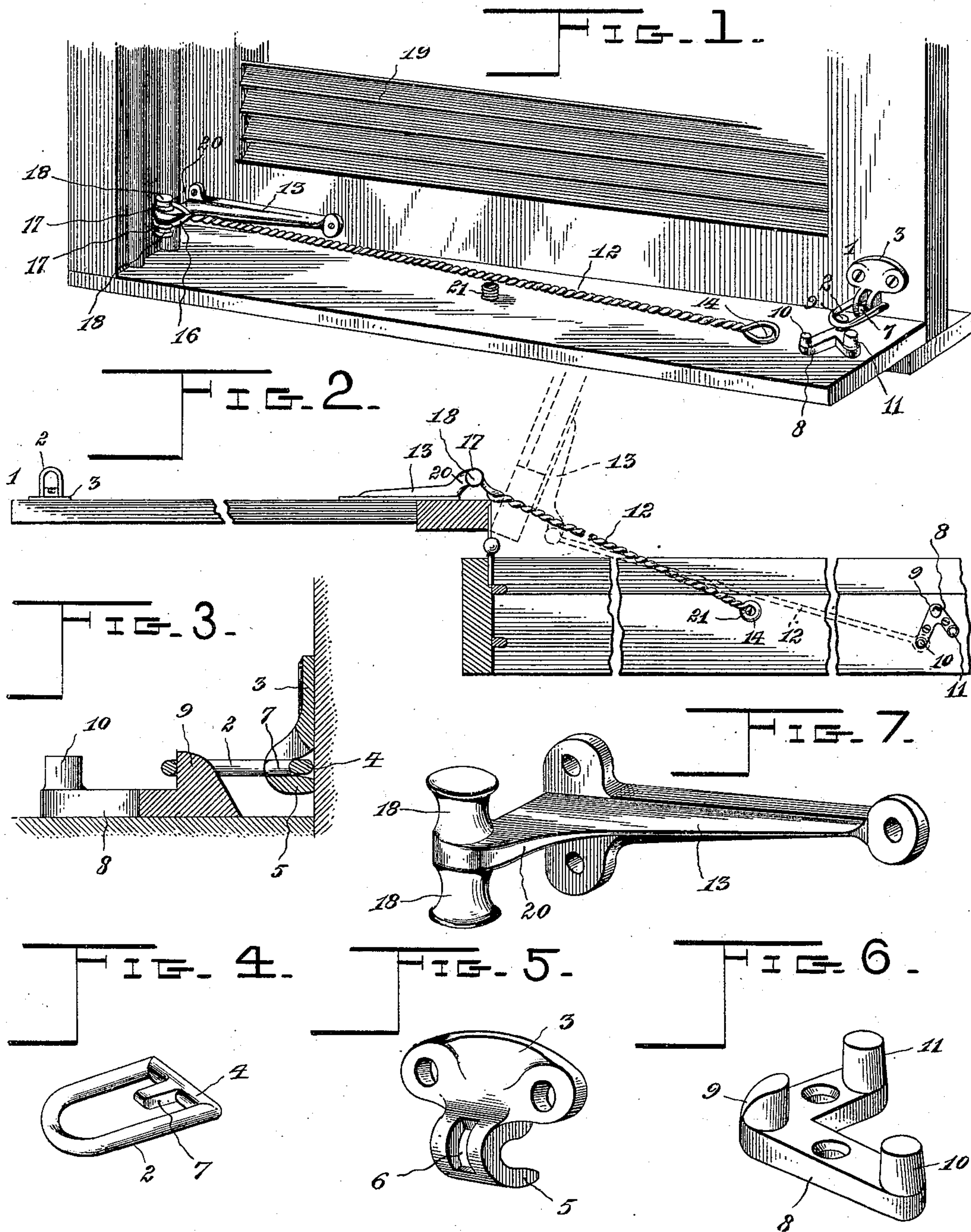
No. 618,701.

Patented Jan. 31, 1899.

R. N. MARTZ.  
SHUTTER BOWER AND FASTENER.

(Application filed July 26, 1898.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

RANDOLPH N. MARTZ, OF FREDERICK, MARYLAND, ASSIGNOR TO SAMUEL D. THOMAS, MARSHALL FOUT, AND LESLIE CROMER, OF SAME PLACE.

## SHUTTER BOWER AND FASTENER.

SPECIFICATION forming part of Letters Patent No. 618,701, dated January 31, 1899.

Application filed July 26, 1898. Serial No. 686,943. (No model.)

*To all whom it may concern:*

Be it known that I, RANDOLPH N. MARTZ, a citizen of the United States, residing at Frederick, in the county of Frederick and State of Maryland, have invented a new and useful Shutter Bower and Fastener, of which the following is a specification.

The invention relates to improvements in shutter bowers and fasteners.

The object of the present invention is to improve the construction of shutter bowers and fasteners and to provide a simple, inexpensive, and efficient device adapted to lock a shutter in its closed position and capable of holding it open and of retaining it partially open and at the desired adjustment to afford a sunshade and at the same time permit ventilation.

A further object of the invention is to provide a device of the class described which should a shutter be accidentally closed by a current of air will be capable of clearing the subsill of the window and automatically lock itself.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a shutter bower and fastener constructed in accordance with this invention and shown applied to a window, the shutter being closed. Fig. 2 is a horizontal sectional view of the window, the shutter bower and fastener being shown in plan view and the shutter being shown open in full lines and at an intermediate point in dotted lines. Fig. 3 is a detail sectional view taken vertically through the shutter-fastener. Fig. 4 is a detail perspective view of the loop of the shutter-fastener. Fig. 5 is a similar view of the attachment-plate of the same. Fig. 6 is a detail perspective view of the sill-plate or keeper. Fig. 7 is a detail perspective view of the hinge-bracket.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a shutter fastener or catch, consisting of a hinged loop 2 and an attachment-

plate 3, which is fastened by screws or other suitable fastening devices to the inner face of the shutter at the free edge thereof. The loop, which is composed of two sides and transverse connecting end portions, has its outer engaging portion rounded, as shown, and its inner transverse portion 4 is straight and forms a pintle. The attachment-plate is provided at its lower portion with a depending hook or bearing 5, which receives and forms an eye for the pintle 4 of the loop, and the hook or open bearing 5 is provided with a vertical slot 6, in which is arranged a tongue 7 of the loop or swinging member of the catch or fastener 1. The tongue 7, which is formed integral with the pintle 4, limits the swing of the loop and normally rests upon the attachment-plate at the bottom of the slot, whereby the loop is supported in a horizontal position to guide it into engagement with a keeper or sill-plate 8, whereby the shutter is fastened when closed. The sill-plate or keeper 8, which is V-shaped, has its apex disposed opposite the shutter, and it is provided at its apex and at the terminals of its sides with vertical studs 9, 10, and 11, arranged in the form of a triangle and adapted to be engaged by a rod or brace to hold the shutter partially open. The stud 9, which is engaged by the catch of the shutter, is beveled at its outer face to permit the loop or swinging member of the catch to engage it automatically when the shutter closes. The plate or keeper 8 is provided at points between the studs with perforations for the reception of screws or other suitable fastening devices for securing it to a window-sill.

The rod or brace 12, which is hinged at one end to the shutter adjacent to the hinged edge thereof by a hinged bracket 13, is preferably constructed of a single piece of stout wire or other suitable material doubled between its ends to form an eye 14 and twisted to provide a stout body portion. The terminals of the wire are spaced apart to provide a fork 16 and are coiled to form eyes 17, which receive pintle projections 18 of the hinge-bracket.

The hinge-bracket 13, which is constructed of suitable metal, is provided with perforated ears for the reception of screws or other suitable fastening devices for securing it to the



inner face of the shutter 19, and it is provided at its inner end with an arm 20, extending over the sill when the shutter is closed and carrying the pintle studs or projections 18 at its outer end. The pintle studs or projections, which are arranged at the upper and lower faces of the arm 20, have annular depressions or grooves to receive the eyes of the rod or brace. The fork of the rod or brace straddles the arm 20, and the grooves or depressions of the pintle studs or projections may be formed by heads or flanges arranged at the ends thereof.

The eye 14 of the rod or brace is adapted to engage any one of the studs of the keeper or sill plate. The stud 10 is adapted to hold a shutter close to the sill, and the studs 9 and 11 increase the space or opening of the window in the order named, the stud 11 being arranged to hold the shutter farther open than either of the other studs. An additional stud is provided on the window-sill at a point between the keeper and the hinged bracket, and this stud 21, which may be constructed in any suitable manner, preferably consists of a screw and a coil of wire arranged on the same, as illustrated in the accompanying drawings.

The invention has the following advantages: The shutter bower and fastener, which is exceedingly simple and inexpensive in construction, is adapted to be readily applied to a window and it is capable of holding a shutter securely in its closed position and of locking it at any desired adjustment, either entirely open or partially so, to form a sunshade and provide an opening for the purpose of ventilation. The parts are so arranged that the shutter is adapted to lock itself automatically should it be accidentally closed by a current of air when the rod or brace is not in engagement with one of the studs.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a device of the class described, the combination with a keeper, of a catch comprising an attachment-plate provided with a hook or open bearing having a vertical slot, and a loop adapted to engage the keeper and pro-

vided with a transverse pintle portion arranged in the hook or open bearing and having a tongue operating in the said slot, and adapted to support the loop in position for engaging the keeper automatically, substantially as described.

2. In a device of the class described, the combination with a catch designed to be mounted on a shutter, and a rod adapted to be connected with said shutter, of a substantially V-shaped keeper provided at its apex and at the terminals of its sides with lugs or studs arranged to be engaged by the rod and the catch, the stud or lug at the apex of the keeper being beveled, substantially as described.

3. In a device of the class described, the combination with a catch designed to be arranged on a shutter at the outer edge thereof, and a rod designed to be connected with the same at the inner edge thereof, of a keeper designed to be mounted on the sill of a window and provided with studs arranged in the form of a triangle and adapted to be engaged by the catch and the rod, said studs being arranged to permit an adjustment of the shutter, substantially as described.

4. In a device of the class described, the combination with a stud designed to be arranged on a window-sill, and a bracket adapted to be secured to a shutter, of a rod or brace constructed of a single piece of wire doubled between its ends to form an eye for engaging the stud and twisted to provide a stout body portion, the terminals of the wire being forked and coiled to form eyes to receive a pintle of the bracket, substantially as described.

5. A device of the class described comprising a bracket designed to be secured to a shutter, and having an arm provided with upper and lower pintle-studs, and a rod or brace provided with a fork to straddle the arm and having eyes at the sides of the fork receiving the pintle-studs, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

RANDOLPH N. MARTZ.

Witnesses:

J. MARSHALL MILLER,  
EDWIN C. MARKELL.