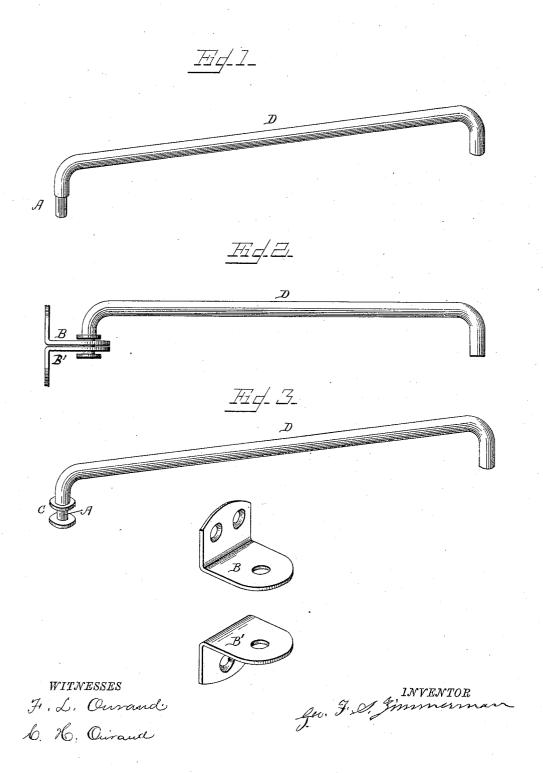
(No Model.)

## G. F. S. ZIMMERMAN.

SHUTTER BOWER.

No. 326,373.

Patented Sept. 15, 1885.



## UNITED STATES PATENT OFFICE.

GEORGE F. S. ZIMMERMAN, OF FREDERICK, MARYLAND, ASSIGNOR OF ONE HALF TO REVERDY R. WALLING, OF SAME PLACE.

## SHUTTER-BOWER.

SPECIFICATION forming part of Letters Patent No. 326,373, dated September 15, 1885.

Application filed February 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, George F. S. ZIMMER-MAN, a citizen of the United States, residing in Frederick, in the county of Frederick and 5 State of Maryland, have invented an Improvement in Shutter-Bowers, of which the following is a specification.

My invention relates to improvements in shutter-bowers, and is designed as an improve-no ment on my former patent, No. 163,621, granted May 25, 1875, in which the end of the brace-piece adapted to enter the bracket was simply bent down at right angles to the main portion thereof. This form of brace has been 15 found objectionable, owing to its liability to drop down in the bracket or catch therein when the forward end was lifted, thereby interfering with the perfect working of the device, as well as rendering the brace likely to 20 become so bent as to be entirely inoperative. This form of brace has also been found objectionable, from the fact that by jarring or other causes the same could be too easily removed from its seat in the bracket.

Another objection to the shutter-bower described in the patent above referred to arose from the bracket being made in one piece, and for that reason the portion forming a seat for the brace-piece was likely to break off, from 30 the strain brought thereon, as said portion of the bracket was entirely unsupported at that

The object, therefore, of my present invention is to remove the objections above enumer-35 ated, and thus produce a simple shutter-bower that will be at all times certain in its operation and not likely to become broken or disarranged. These objects I attain by the construction substantially as shown in the accom-

40 panying drawings, making part of this specification, in which-

Figure 1 is a perspective view of the bracepiece; Fig. 2, a side elevation of brace and bracket forming my improved shutter-bower 45 in operative position. Fig. 3 is a perspective view of the brace-piece and washers and the two sections forming the bracket detached.

Similar letters refer to similar parts throughout the several views.

The brace D has its ends bent at right an-

being tenoned, as shown at A, to form a shoulder, and so adapted to fit and work in a suitable mortise formed in the bracket composed of two sections, B B'. The shoulder formed 55 by the tenoned end A of the brace D prevents the same from dropping down in the mortise of the bracket or catching when the opposite end of said brace is raised, as well as preventing the latter from displacement with 60 relation to the bracket by being lifted too high or by any sudden jar, rattling, or other canses.

To further insure the perfect working of the shutter-bower, as well as to prevent the re- 65 moval of the brace D from its seat in the bracket, I employ two washers upon the ten-oned end A of said brace, one above the bracket and the other below, as illustrated in Figs. 2 and 3. These washers not only serve 70 as secure bearings, but also render the displacement of the operative parts of my improved shutter-bower impossible, while, as shown by Fig. 2, sufficient play is left upon the tenoned end A of the brace D to allow of 75 its ready working under all conditions.

The bracket is composed of two right-angular sections, BB', each being provided with a mortise adapted to register when the two are brought together, in order to form a seat for 80 the tenoned end A of the brace D, and also with suitable screw-holes to admit of their being readily attached to a shutter.

By having the bracket constructed in two sections, as described, each acts as a support 85 to the other when strain is brought thereon, thus preventing that portion of the bracket forming the seat for the brace-piece D from breaking off, and thereby rendering the device inoperative.

By the construction above described I provide a shutter-bower that is entirely free from the objectionable features heretofore experienced, and which cannot get out of order or become inoperative from any of the usual 95

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is-

A shutter-bower consisting of a brace-piece 100 having its ends turned at right angles to the gles to the main portion thereof, the rear end | main portion thereof and the rear end tenoned

Burken Andras Ve

-ខែប្រើខេត្ត។ -មិនកាស ដែកភ

app Ada to will be the con-

State Contract g) - 48 66 Ch 3

63 (British ) - 10 66 (British ) - 10 66 (British ) - 10

57.5

34.1.11 m graph at The State of the Co

संक्रा की है। इ.स.च की 13

1.6 4 4 1 1 m M. 18 1 •037 1 1961

Mark Brook Fr BROWN TO V

oor professorial in edd ei hag as a

to form a shoulder, in combination with a bracket constructed of two independent sections, each provided with a mortise adapted to register and form a seat for the tenoned end 5 of the brace, and washers constructed to fit upon said tenoned end of the brace above and below the seat portion of the bracket, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence 10 of two witnesses.

The second secon

de organistic de la companya de la c

## GEORGE F. S. ZIMMERMAN.

Witnesses:

DANL. T. ORDEMAN, SAMUEL F. GLAZE.

and the control of th

a year is spaint ibn A