

(No Model.)

H. W. STEINER.

SHUTTER BOWER.

No. 385,732.

Patented July 10, 1888.

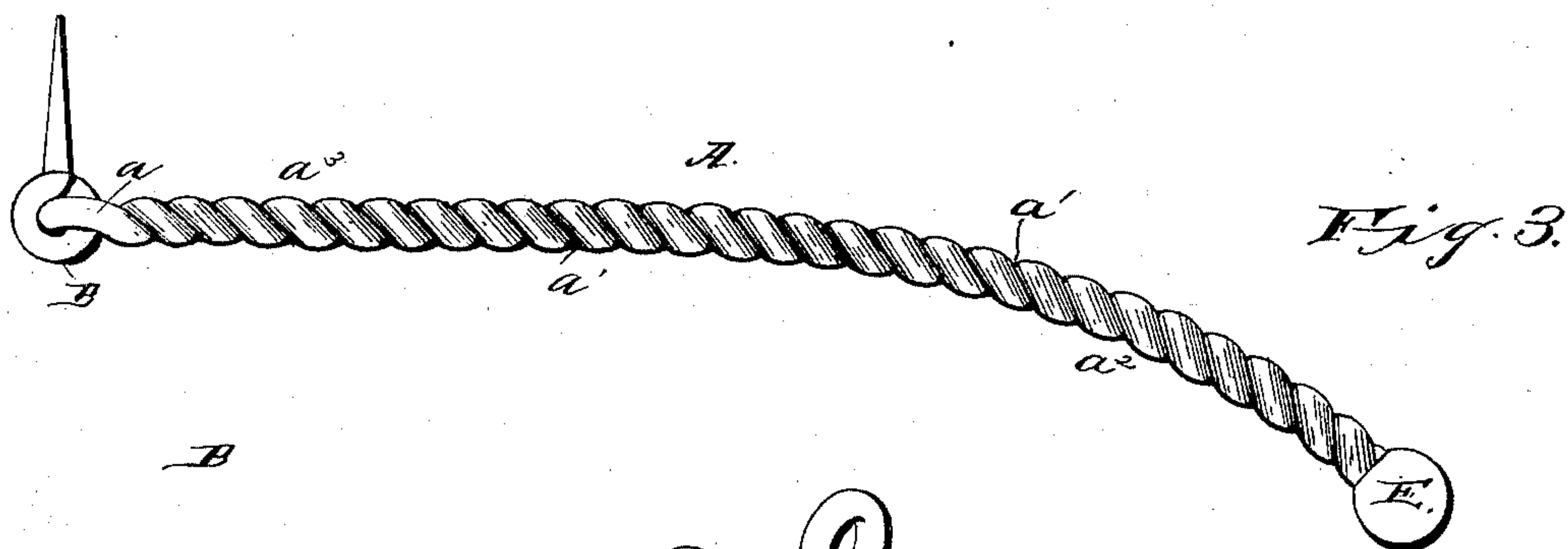
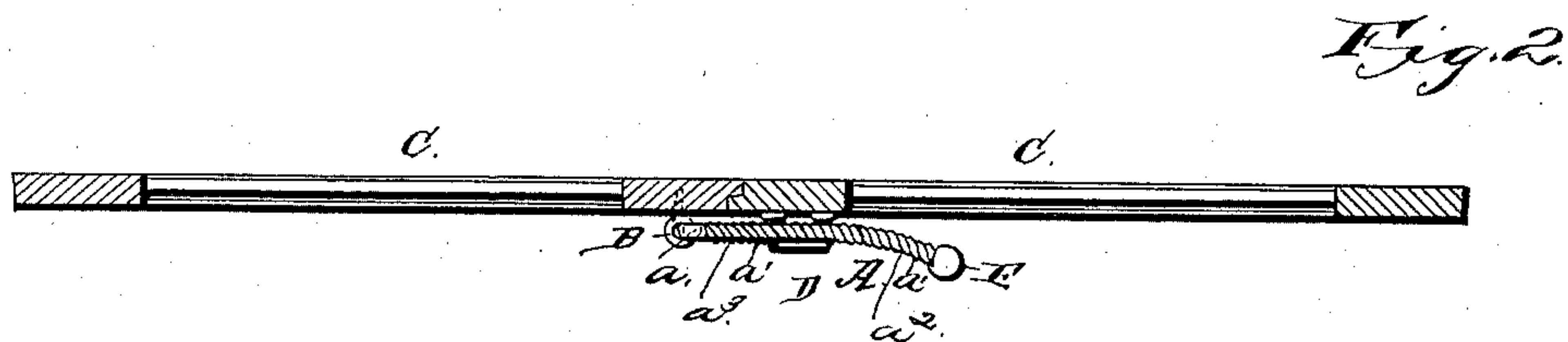
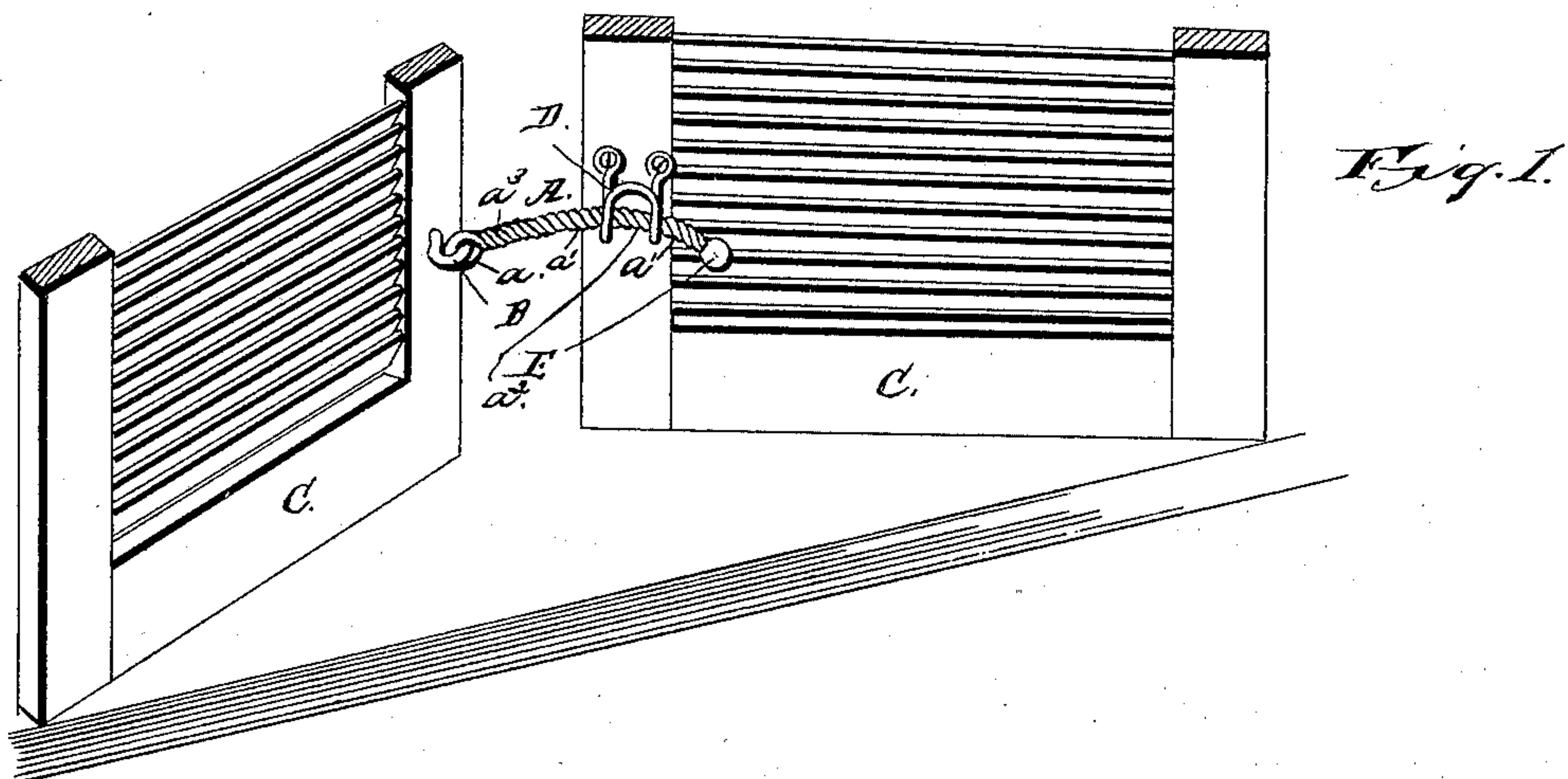


Fig. 5.

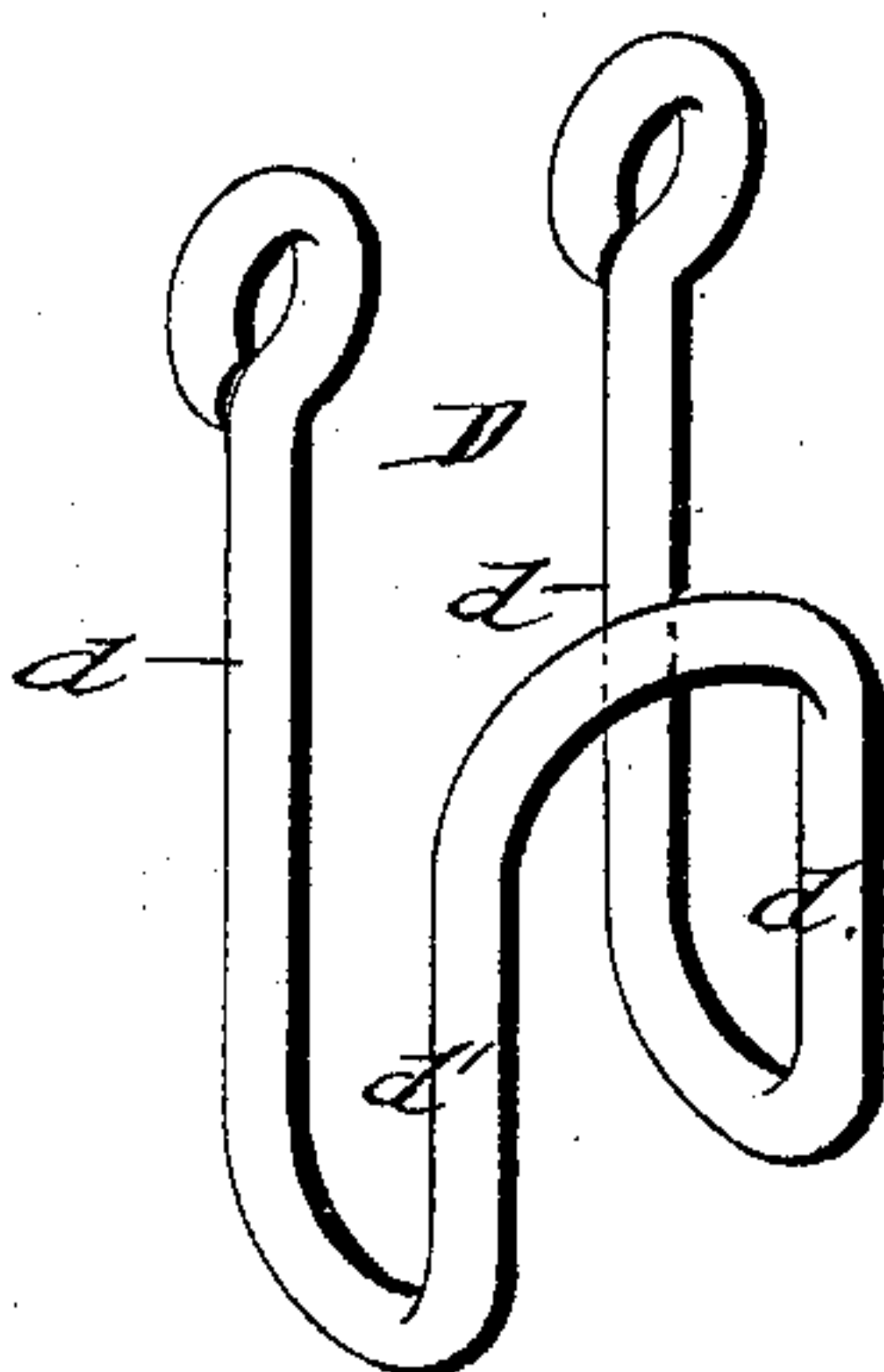
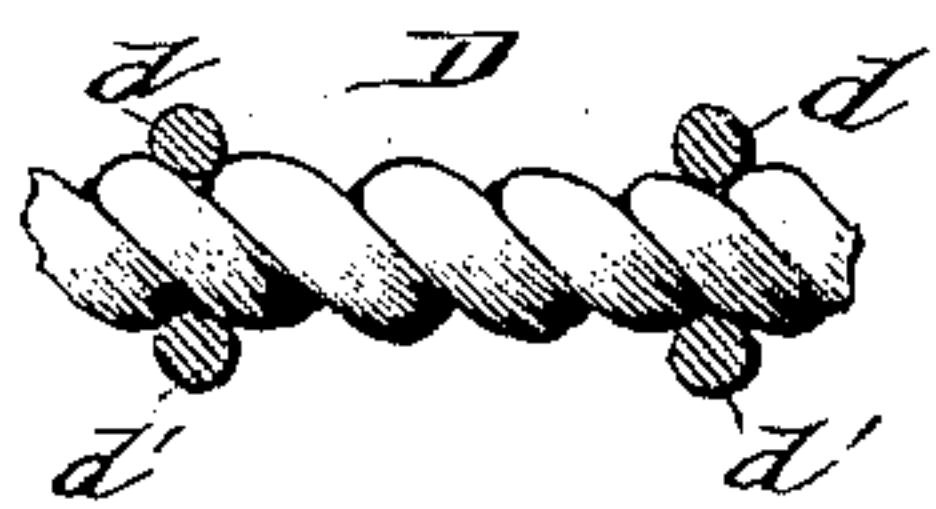


Fig. 4.

WITNESSES,

Geo. Brown.  
H. F. Kirby.

INVENTOR.

Henry W. Steiner.  
by C. Howley  
Attorney s;



# UNITED STATES PATENT OFFICE.

HENRY WILLIAM STEINER, OF EASTON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO HENRY W. MERRILL, OF SAME PLACE.

## SHUTTER-BOWER.

SPECIFICATION forming part of Letters Patent No. 385,732, dated July 10, 1888.

Application filed March 24, 1888. Serial No. 268,424. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY WILLIAM STEINER, a citizen of the United States, residing at Easton, in the county of Northampton and State of Pennsylvania, have invented a new and useful Improvement in Combined Shutter Bowers and Fasteners, of which the following is a specification.

My invention relates to improvements in shutter-bowers; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, forming part of this specification, and in which like letters of reference designate corresponding parts, Figure 1 is a perspective view of the combined shutter bower and fastener attached to the shutters and holding them in a bowed position. Fig. 2 illustrates in plan view the position of the parts when the shutters are closed and securely fastened by the improved device. Fig. 3 is a plan view of the curved bar, and Fig. 4 is a perspective view of the wire catch. Fig. 5 is a horizontal section taken through the catch and showing the bar in position.

Referring to the accompanying drawings, A designates a curved bar constructed of wire, and of any desired kind and size, possessing sufficient strength to successfully withstand the strains incident to an attempt made to pull the shutters open when they are fastened by the device. The bar A is composed of a single piece of wire bent in the middle to form a loop,  $a$ , adapted for the reception of an eye-screw, hook, or similar device, B, by which the curved bar A is attached to the shutters C. The bar A is then twisted along its length, whereby a series of depressions and notches,  $a'$ , is formed, into which fit the sides of a wire catch, D. In order to prevent the wire from becoming untwisted and the device becoming useless or inoperative, the end of the bar A is provided with a cap, E, of metal, which is suitably secured to the end.

The bar A is provided with a curved portion,  $a^2$ , and a straight portion,  $a^3$ , the depressions along the latter portion being employed to engage the wire catch D when the shutters are closed, whereby a closer and a more secure adjustment of the parts is ob-

tained than could be if a curved portion were used for the same purpose.

The eye-screw B or similar device that secures the bar A to one of the shutters, may either be attached to the bar A before or after twisting the wire. After the wire has been bent in the middle to form a loop, the screw-eye may be slipped down the wire into the loop, after which the wire may be twisted; or after the wire has been twisted and the bar A is complete the eye may be opened and inserted in the loop and then bent down upon the screw.

The wire catch D, adapted to engage the bar A and securely hold it, is constructed of a single piece of wire of the desired strength. The wire is first bent into U shape, and the ends  $d$   $d$  are then bent up and each side  $d'$  formed into approximately U shape. Each of the ends  $d$  is bent upon itself to construct an eye, through which pass screws, whereby the wire catch D is secured to the shutters.

The bar A is fastened on the front edge of one of the shutters, and the catch D is secured to the front edge of the other shutter; and when it is desired to fasten the shutters the bar A is inserted in the catch D, the sides  $d'$  of which enter the depressions or notches of the bar A, and the shutters are securely fastened together and retained in that condition until the bar A is released from engagement with the catch D.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will readily be understood.

It will be obvious that a combined shutter fastener and bower constructed in accordance with this invention is exceedingly cheap and simple in its construction, positive and reliable in its operation, and may be attached with great ease and convenience to any of the forms of shutters in common use.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A combined shutter bower and fastener, comprising a bar capable of being attached to one of a pair of shutters, and consisting of a single piece of wire bent in the middle to form

a loop and twisted to form depressions or notches along its entire length, a cap adapted to fit over the end of the bar and prevent the wire from becoming untwisted, and a flexible  
5 wire catch designed to be attached to the other shutter and to receive the bar, substantially as described.

2. A shutter-bower comprising a bar adapted to be attached to one of a pair of shutters, and  
10 a catch adapted to be attached to the other shutter and engaging the bar, the said catch

consisting of a flexible wire bent into a U shape, and having its ends secured to the shutter, as set forth.

In testimony that I claim the foregoing as my  
own I have hereto affixed my signature in pres- 15  
ence of two witnesses.

HENRY WILLIAM STEINER.

Witnesses:

JNO. STOTZER,  
H. O. SAYLOR.