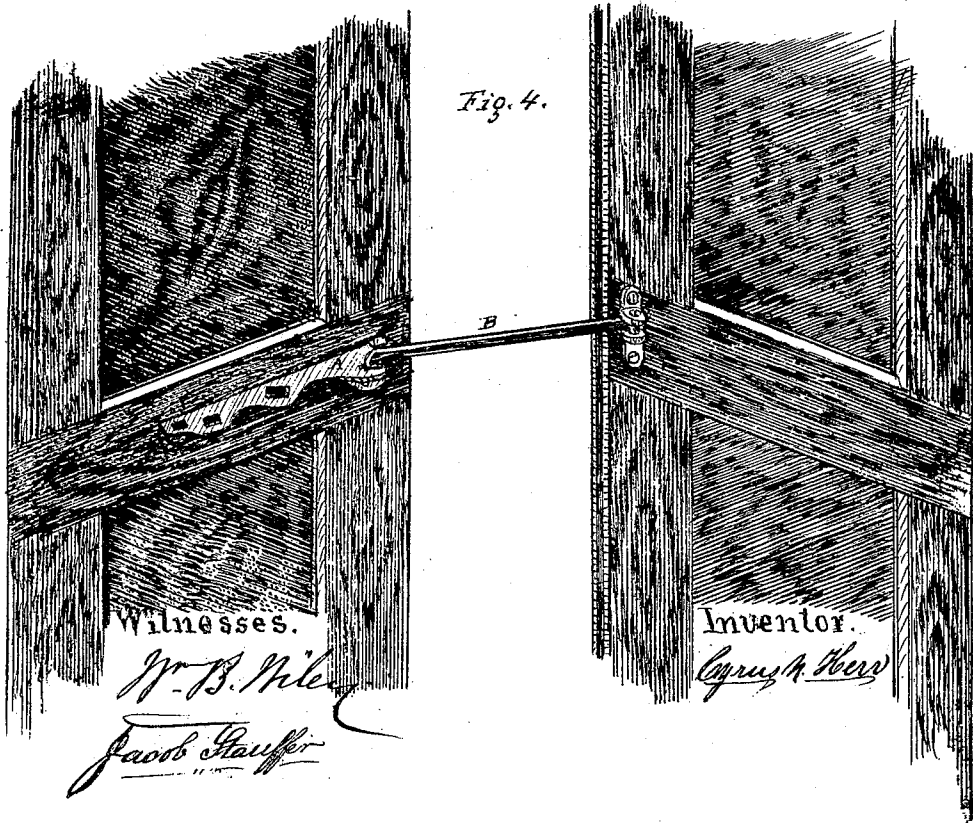
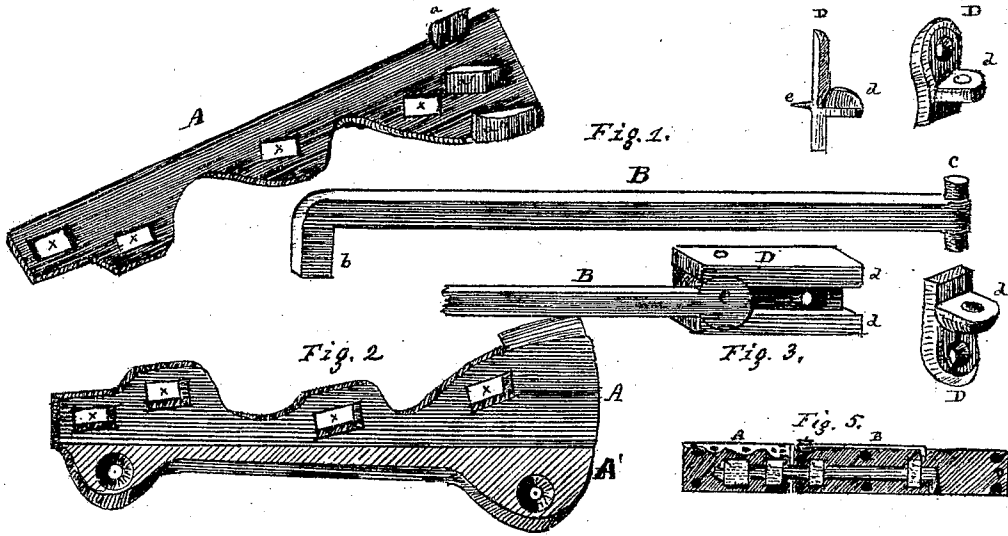


C. N. Herr,

Shutter-Bower.

No. 102,817.

Patented May 10, 1870



# United States Patent Office.

CYRUS N. HERR, OF LAMPETER, PENNSYLVANIA.

Letters Patent No. 102,817, dated May 10, 1870.

## IMPROVEMENT IN ADJUSTABLE SHUTTER-HOLDERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, CYRUS N. HERR, of West Lampeter, in the county of Lancaster, and State of Pennsylvania, have invented a certain Device, or hinged bolt and slotted plate, for Holding Shutters Apart, commonly called "Bowling," of which the following is a specification.

The nature of my invention consists in providing a plate, to be attached to one of the shutters, so constructed that a hook-bolt, held or hinged on the other shutter, so as to fold back and forward, shall hook into either one of a series of slots made in the plate, and hold the shutters apart the desired distance, more or less open.

The drawings annexed show the construction and application of said invention.

Figure 1, A shows the horizontal or upper surface of the plate.

*a a'* are lugs, between which the hook-bolt B is retained, when the hook-end *b* is inserted into any one of the openings or slots *x* in the plate A; the adjustment made determines the position of the hook-bolt B with respect to the lugs or spaces between *a a'* and *a' a'*.

Figure 2 shows the under side of A with the bracket part A', by which it is secured by means of screws, being vertical or at a right angle to the slotted horizontal surface.

Figure 3 shows a modification in the manner of hinging the bolt or pivoting.

Figure 4 shows the application of a pair of shutters held open to the full extent of the adjustment.

Figure 5 shows the application of said device to the top of an ordinary shutter-bolt.

It is very desirable to open shutters partially, for which object bolts have been constructed, which either allow the wind to play or chafe and loosen the connection, or prove otherwise defective.

I am not aware of any device that will admit of a series of adjustments, and, when adjustments are made, firmly unite and hold the shutters in position, as a bolt hooked into a slot adapted to it, and further held in place by the elevated lugs, as shown.

The pivot or hinge C of the bolt requires to have just play enough between the bearings D to allow it to accommodate itself to the several positions it may assume in the adjustments to be made, which is so trifling as not to affect its utility.

The bolt B, when laid back against the shutter between its pivot bearings, may be secured by a small spring-catch, if desirable.

Various methods of hinging the bolt may be used, some of which are shown in the drawings.

What I claim as my invention is—

The arrangement and construction of the bracket-plate A A', with its slots *x x x x* and stay-lugs *a a'*, in combination with a hinged or folding hook-bolt, substantially in the manner and for the purpose specified.

Witnesses:

WM. B. WILEY,  
JACOB STAUFFER.

CYRUS N. HERR.