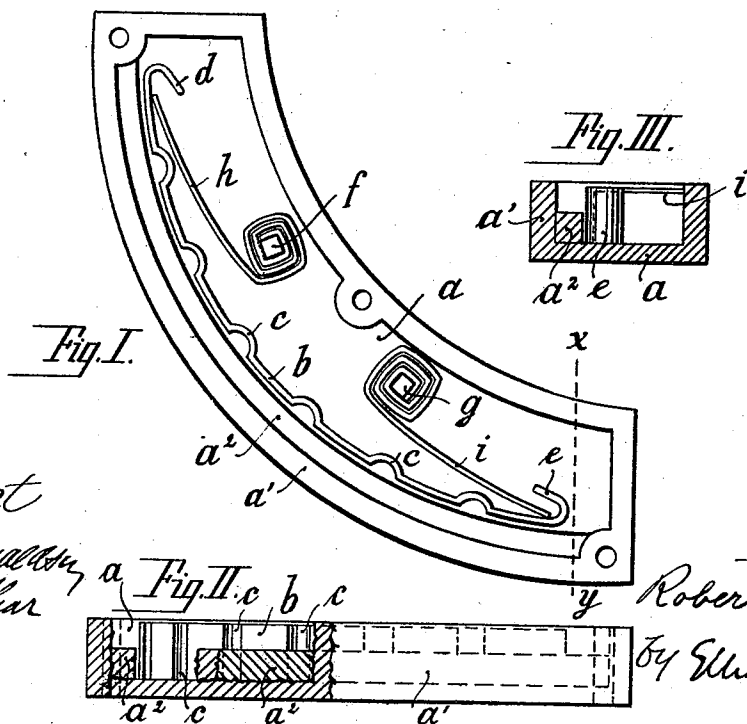
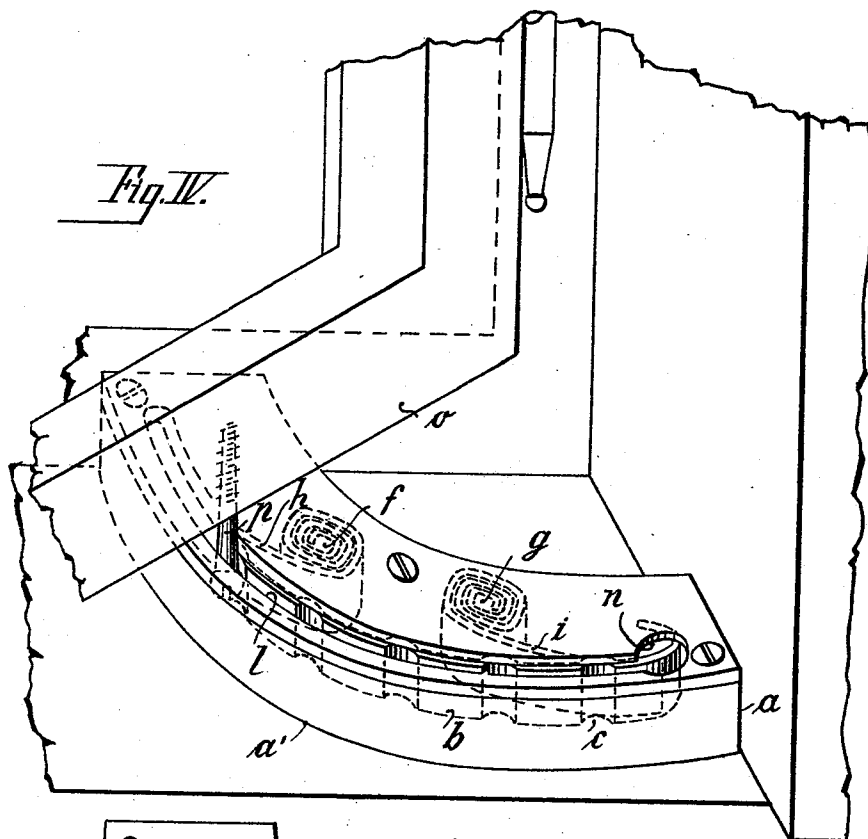


(No Model.)

R. ZOLL.
SHUTTER BOWER.

No. 516,148.

Patented Mar. 6, 1894.



Attest
James M. Spear

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ATTY.

UNITED STATES PATENT OFFICE.

ROBERT ZOLL, OF BERLIN, GERMANY.

SHUTTER-BOWER.

SPECIFICATION forming part of Letters Patent No. 516,148, dated March 6, 1894.

Application filed October 21, 1893. Serial No. 488,809. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ZOLL, a subject of the King of Prussia, and a resident of Berlin, in the Kingdom of Prussia and Empire of Germany, have invented certain new and useful Improvements in Shutter-Bowers; and I hereby declare the following to be a full, clear, and exact description of the same.

The object of the invention is to effect the automatic fastening of open wings of hinged doors and windows and also an automatic loosening of the catch when it is desired to close them. The fastening moreover is to be made possible at as many degrees of opening as desired whereby the window or door may be held at any angle. The fastening apparatus is represented in the accompanying drawings, in which—

Figure 1, is a top view of the same with the cover of the case removed. Fig. 2, is a front view of the fastening apparatus with the wall of the case partially broken away. Fig. 3, is a section following the line $x-y$ of Fig. 1; Fig. 4, a detailed view of the fastening apparatus arranged in a window (partially broken away).

The case a of the fastening apparatus has a front wall a' forming a segment of a circle on which is a ledge a^2 projecting toward the inside. In the case is a spring b in like manner forming a segment of a circle, in which are bent as many depressions c as desired. The free ends of the spring b are formed into hooks d e .

Behind the spring b in the case a are the two pegs g , f , about which the springs h i are wound the free ends of which lie against the inner surface of the spring b and press the latter firmly against the wall of the case. The cover of the case k is provided with a circular slit l , see Fig. 4, which broadens at one end to an opening n .

In the under ledge o of the frame of the

window or like part is put a round headed screw p , which can enter the case a through the opening n and permanently rests against the spring b . When the window is closed the round headed screw p touches the spring b near the hook d . But when one opens the wing, the round headed screw glides gradually along the spring under the tension of the same and, on reaching a certain angle of revolution is engaged by the first depression c of the spring b and is held fast in the same and hereby fixes at the same time the position of the window wing. If one moves the window wing for example fifteen degrees farther open, the screw p leaves the depression c , glides along on the spring b under tension of the same, until it is engaged by the succeeding depression c and again holds the wing fast. If one moves the wing back into the closed position, the round headed screw p passes from the depression c and glides along on the spring b , so as to rest again near the hook d of the spring when the wing is shut. The spring b then moves back into its normal position.

Having thus described my invention, what I claim is—

A holding device for hinged doors, windows, and the like comprising a casing having a curved wall, a curved spring having a series of notches and pressed normally against said wall, and a projection carried by the hinged portion traveling between said wall and spring and engaging the notches, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ROBERT ZOLL.

Witnesses:

GEORG NEUMANN,
CARL NEUMANN.