J. L. ZESIGER.

SCREEN DOOR CATCH.

APPLICATION FILED NOV. 27, 1908.

965,791. **Patented July 26, 1910.**

Fig. 1.

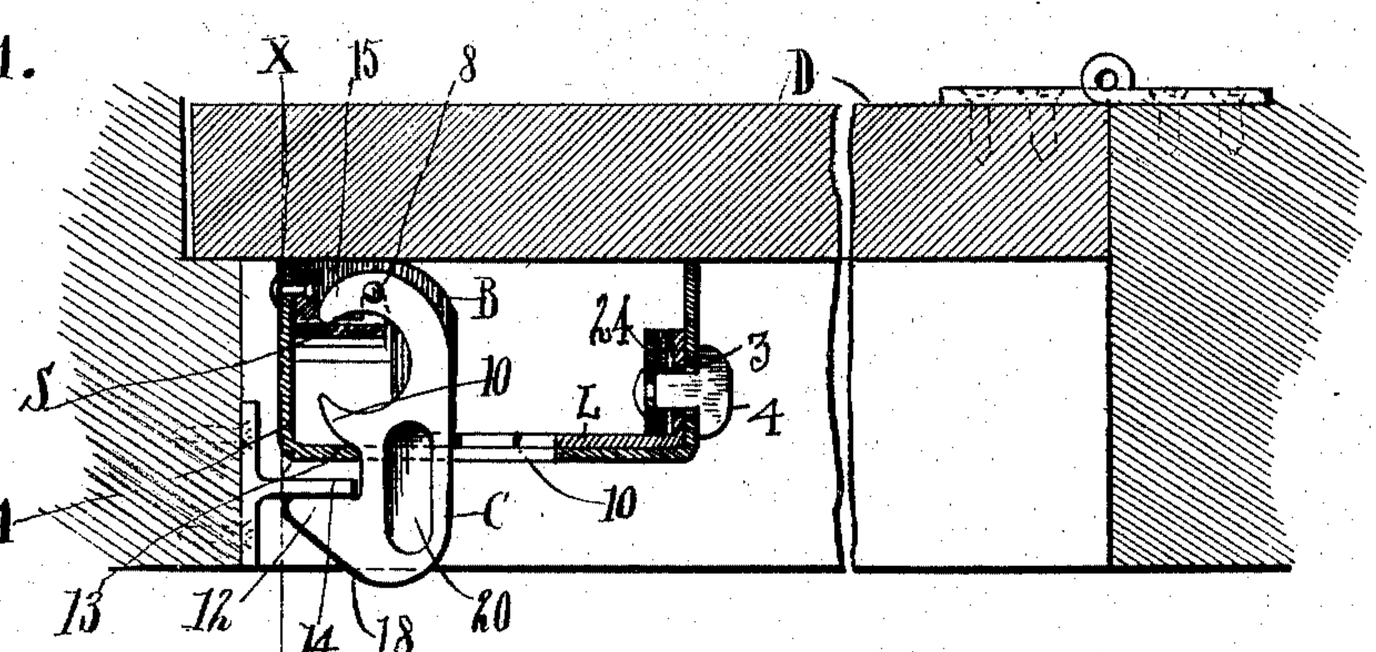


Fig. 2.

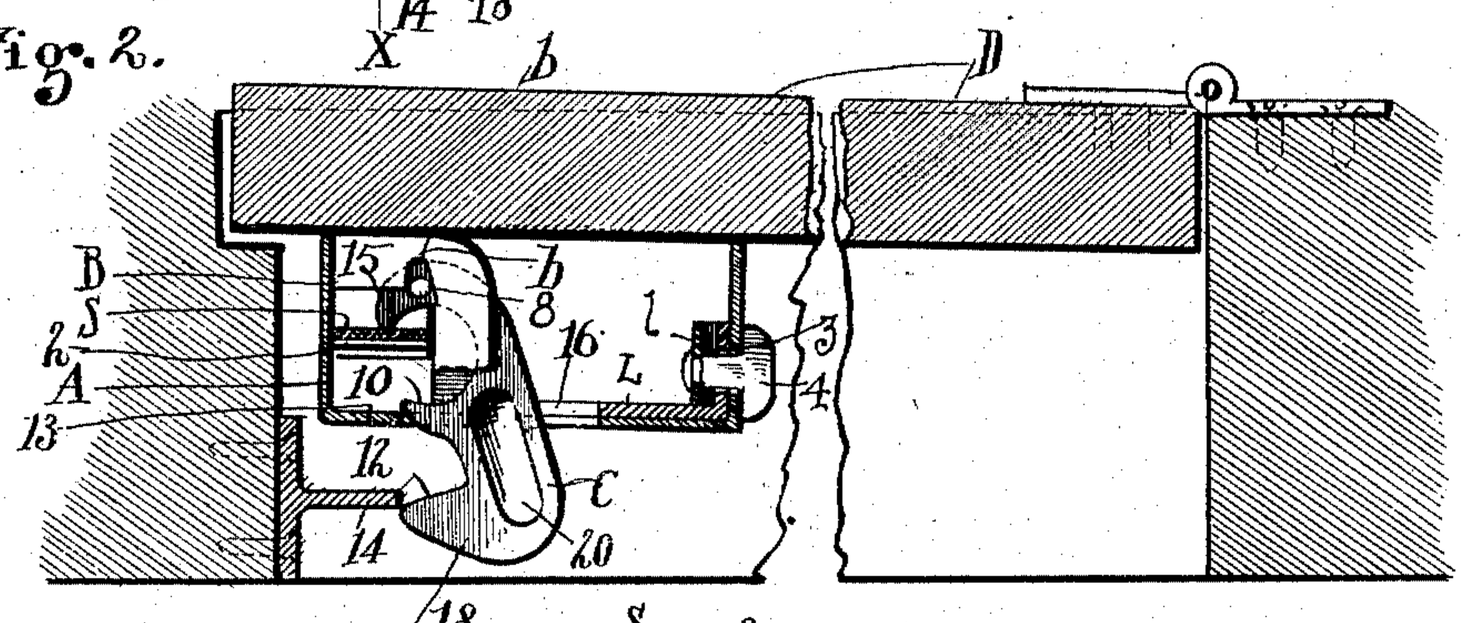


Fig. 3.

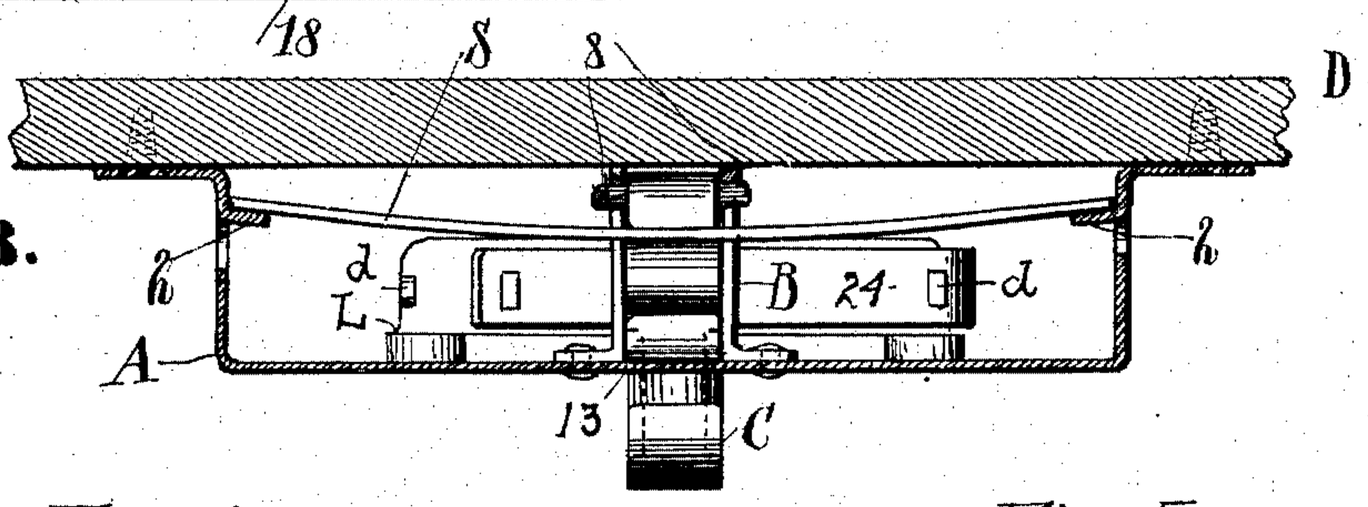


Fig. 4.

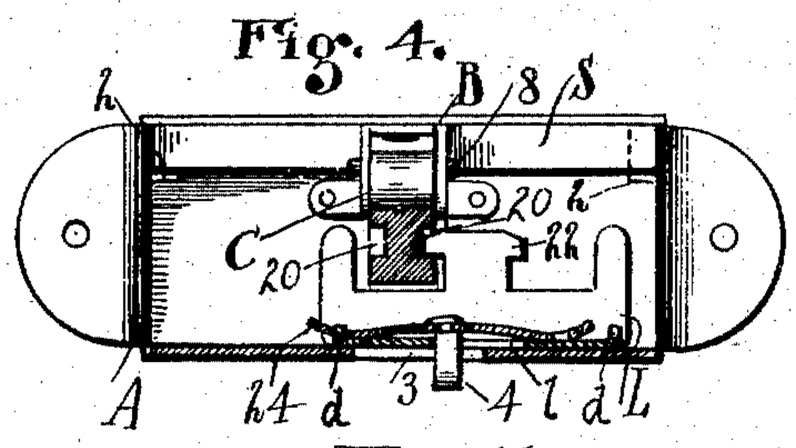


Fig. 5

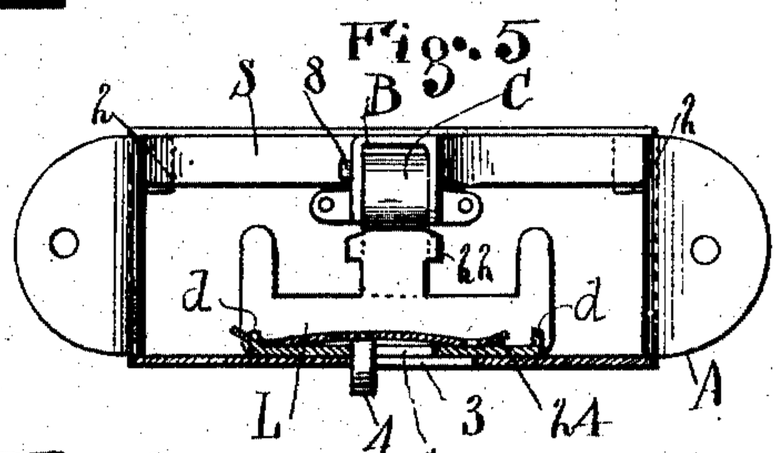


Fig. 7.

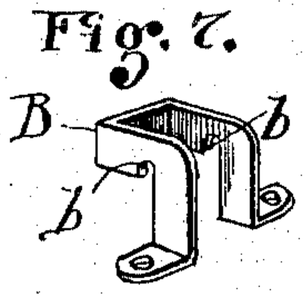
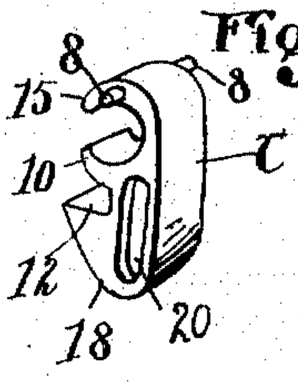


Fig. 6.



ATTEST

E. M. Fisher

J. C. Museum.

INVENTOR.

John L. Zesiger.

BY Fisher & Moser ATTYS.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN L. ZESIGER, OF CLEVELAND, OHIO.

SCREEN-DOOR CATCH.

965,791. Specification of Letters Patent. Patented July 26, 1910.

Application filed November 27, 1908. Serial No. 464,717.

To all whom it may concern:

Be it known that I, JOHN L. ZESIGER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Screen-Door Catches, and do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to screen door catches, all substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of the catch mounted on a door and in engaging position, and Fig. 2 is a side elevation thereof showing the catch in disengaged position, the door and door casing being shown in section in both views. Fig. 3 is a sectional elevation lengthwise corresponding to line *x*—*x*, Fig. 1, the narrow side of the casing being removed to disclose inner parts. Figs. 4 and 5 are views looking in from the bottom of the device and showing the lock for the catch proper in two different positions as hereinafter described. Fig. 6 is a perspective detail of the catch, and Fig. 7 is a perspective view of the bracket supporting the same in the casing.

The invention as thus shown is simple in both construction and operation and is designed to provide a catch for screen doors particularly, though it may be used for other doors as well, because it is desirable to have a screen door respond to a direct pull or push so as to open as if it were not mechanically engaged in any way and without using the hand to release a catch, and the present catch answers this purpose while at the same time it is also essentially a catch for the door which can be locked, as will hereinafter more fully appear. Thus, A represents the casing containing the catch C and other parts and adapted to be affixed to a door, gate or the like by screws as usual in like devices, and having certain novel details of construction including lugs 2 struck inward from its ends adapted as rests for spring S, and a slot —3— in its inner side through which the finger piece 4 of lock L for the catch projects.

The essential novelty of the invention is found more especially in catch C, and the peculiarity and originality of said catch as compared with all others with which I am familiar involves a construction adapting the same to both swing and slide within limits on a single set of side projections or pivots 8. Incident to these pivots is the curved projection 10 on the engaging edge of the catch substantially midway between its ends and adapted to throw the catch back out of engagement with the latch 14 on the door casing when a push or pull is made upon the door to open it and thus automatically release the catch from said latch 14.

It will be understood that engagement occurs between the catch and latch when the door is shut, but when any one passes in or out a pull or a push on the door springs the catch back, the action being first a direct pull on the catch and then instantly following a swing backward thereof by reason of curved projection 10 striking the end edge 13 of the slot in the side of the casing through which the catch projects. Normally said projection lies just inside against said edge as in Fig. 1, and when the door is opened a pull on the catch forces it back with a swinging movement till the lip 12 of the catch is disengaged from latch 14 substantially as in Fig. 1, when the door opens. The catch is supported by a bracket B which has open bearings or slots *b* in its angle adapted to receive the pivot projections 8 on the catch, the catch lying between the sides of said bracket. The spring S bears constantly against the inner end of the catch which has an eccentric portion or projection 15 on which the catch turns when swung from engaging to disengaging position, Fig. 1 to Fig. 2, and which lifts the pivots 8 in slots *b* correspondingly. When pressure is brought against the door so as to exert pull on the catch such pull is first against spring S. As this occurs the curved projection 10 strikes the end edge 13 of the slot 16 as above described and forcibly throws the catch back from engagement with projection 14, Fig. 1, to releasing position, Fig. 2. Then the instant that the door is opened spring S asserts its control of the catch and throws the parts back to normal position. The catch closes automatically by striking its curved back 18 against projection 14 and springing into engagement therewith on the other side and holding the door closed. The play of catch C, is, therefore, automatic in both opening and closing the door D, and its

positions are the same relatively in both opening and closing, the only difference being the point of operation.

Further details as to catch C are its depressions or recesses 20 in the sides thereof in which sliding lock L is adapted to engage by one of the side arms of its substantially T shaped projection 22 when the catch is to be locked back out of possible engaging position, Fig. 4. The said projection 22 is also adapted to be placed at middle and edge directly against the catch when it is to lock the catch in engaging position with the latch by bearing directly against the same as in Fig. 5. Operation of said lock is from the inside of the door by projection 4 thereon and a spring 24 frictionally holds the said lock in adjusted position. The said lock, furthermore, is adjustable to engage either side of the catch in its recess 20 according to the position the catch occupies on a door. Suppose it be set vertically lengthwise. It is desirable in that case to have the projection 22 set to work from below so that the lock will have to be lifted to locking position and will not be in position to gravitate or work to such position by jarring of the door. Practically it is better to have it where it will work open rather than closed. Hence I have made the said lock adjustable so as to always have it below whichever end of the device is set above. Such adjustment is effected through the spring 24 which carries finger projection 4 and which projection is adapted to slide in the slot *l* in lock L as spring 24 is adjusted endwise to change from one position to another and engaged in such case with the corresponding lug *d* on the respective ends of said lock. A hole is made in each end of spring 24 adapted to slide over and engage on said lug, as seen in Figs. 4 and 5. Friction between said lock L and the casing on the inside and by finger projection 4 on the outside induced by spring 24 holds the lock in any position to which it may be moved.

What I claim is:—

1. In door catches, a casing and a catch therein having a single pair of pivots at its inner end and a spring bearing against said end, a bracket in said casing provided with open slots for said pivots, and said catch having a curved projection adapted to engage the said casing and cause the catch to swing on said pivots and slide in said slots.

2. In door catches, a casing and a substantially right angled bracket therein having open slots in its angle, in combination with a catch engaged in said slots and having a curved inner extremity behind said pivots and a reversely curved projection at its middle adapted to engage the said casing, and a spring bearing against said curved inner extremity of the catch.

3. A door catch and a casing having a slot through which said catch projects, a bracket fixed in said casing having the said catch slidably and pivotally mounted therein upon a single pair of projections, a spring engaging the inner end of said catch and said catch having a curved projection between its ends adapted to engage the said casing next to said slot and cause the catch to swing on its pivot projections.

In testimony whereof I sign this specification in the presence of two witnesses.

JOHN L. ZESIGER.

Witnesses:
H. T. FISHER,
E. M. FISHER.