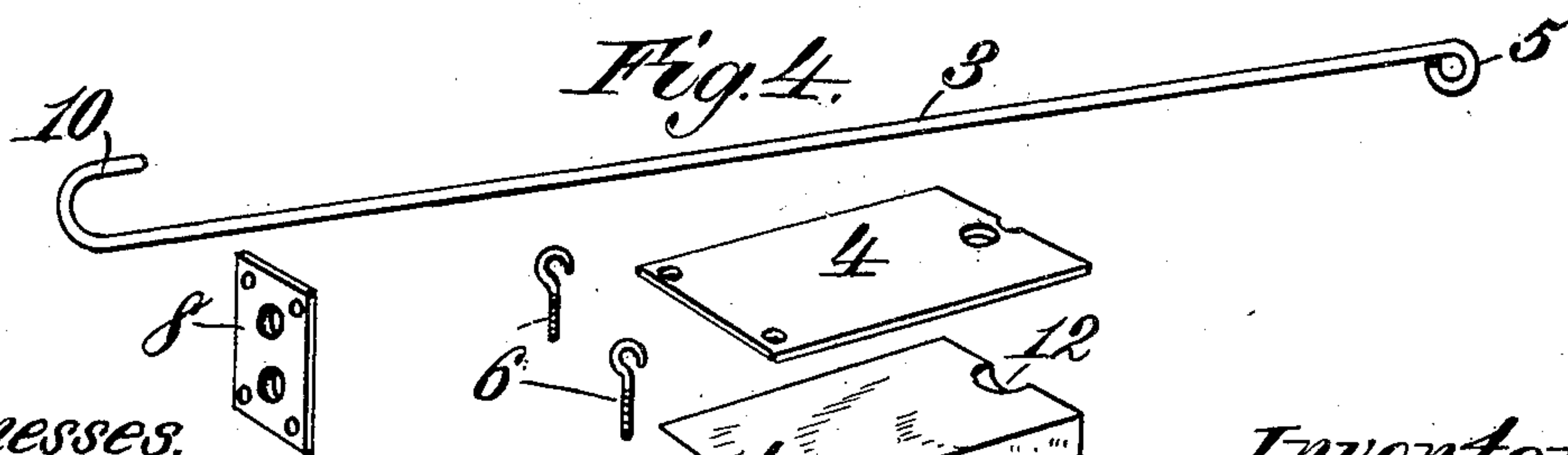
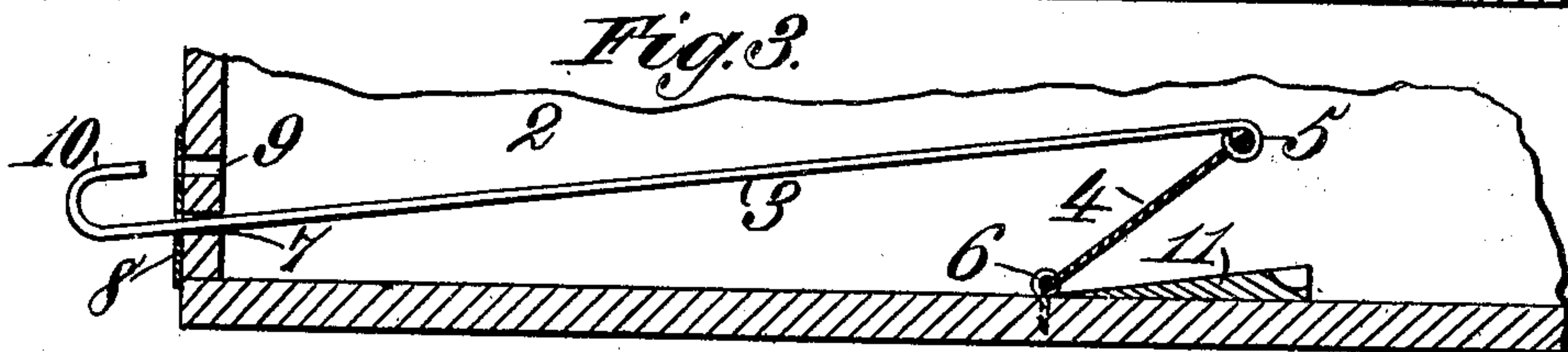
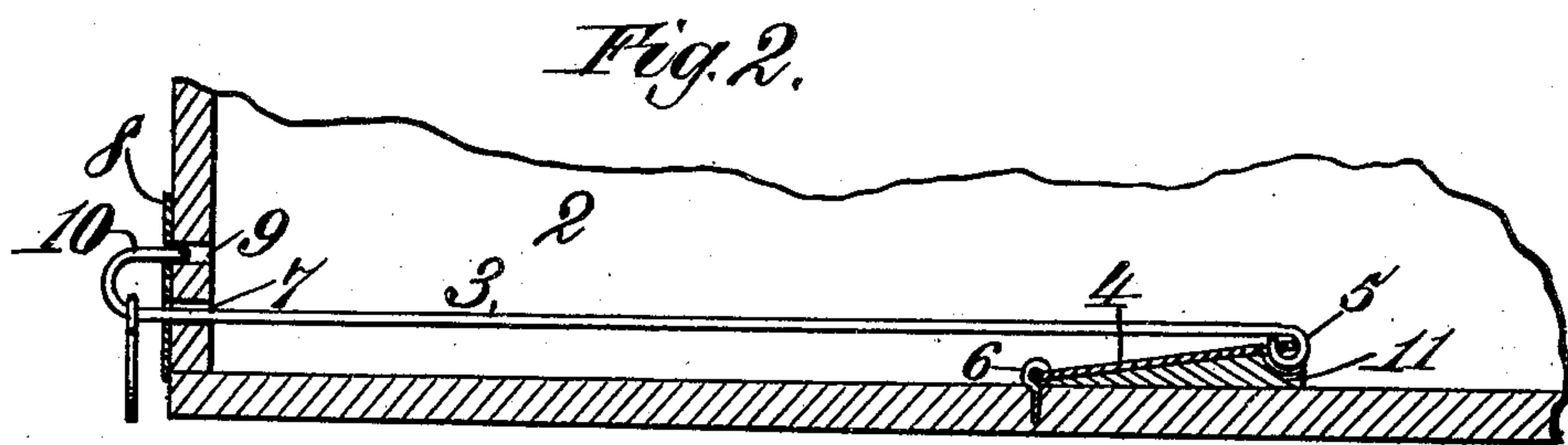
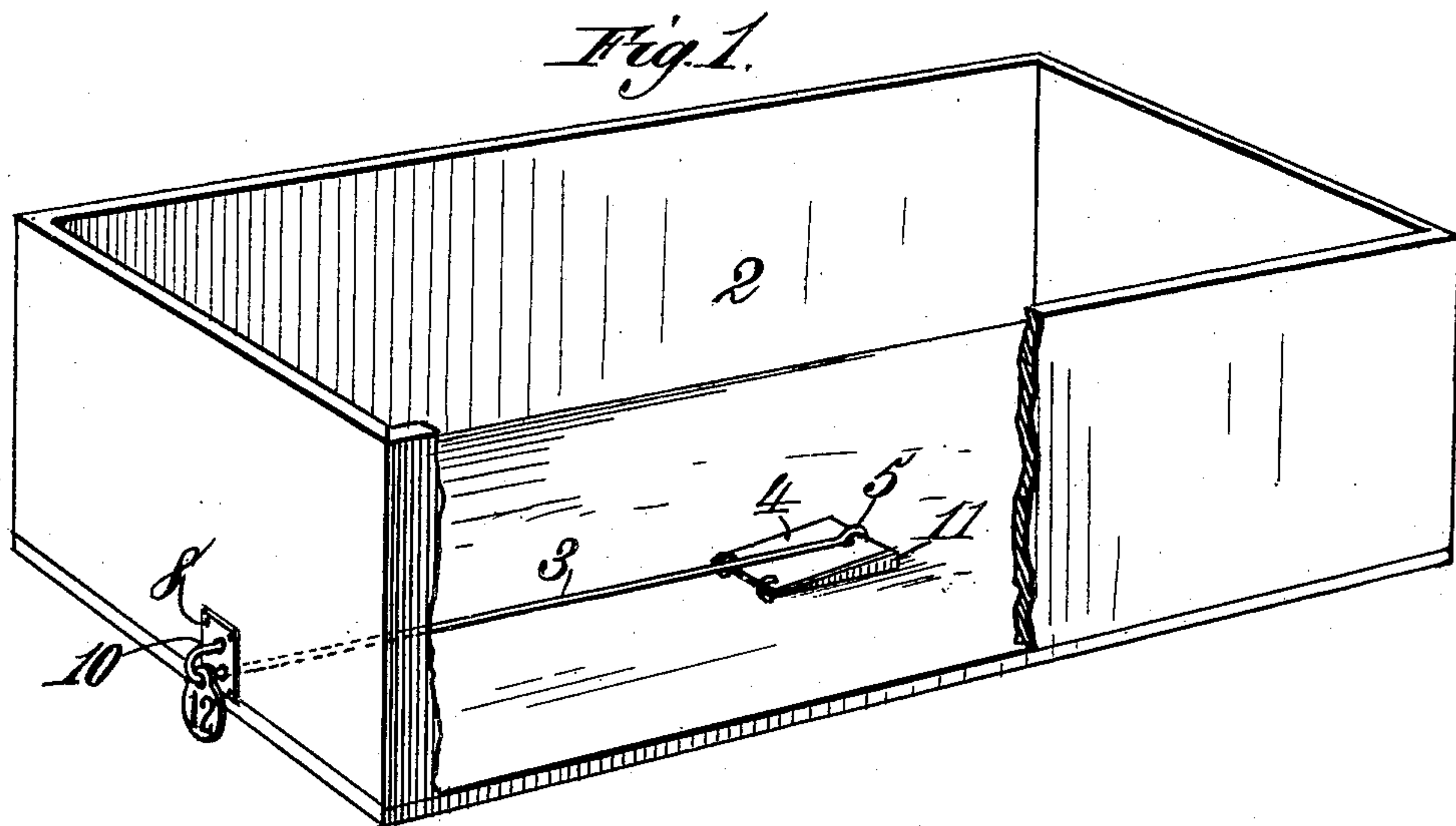


No. 891,149.

PATENTED JUNE 16, 1908.

R. J. COX.  
CHECK FASTENING DEVICE.  
APPLICATION FILED APR. 25, 1907.



Witnesses:  
Robert Cox,  
*[Signature]*

Inventor:  
Robert Julian Cox.

By  
*[Signature]*  
Atty.



# UNITED STATES PATENT OFFICE.

ROBERT JULIAN COX, OF MAYBEURY, WEST VIRGINIA.

## CHECK-FASTENING DEVICE.

No. 891,149.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed April 25, 1907. Serial No. 370,272.

*To all whom it may concern:*

Be it known that I, ROBERT JULIAN COX, a citizen of the United States, residing at Maybeury, in the county of McDowell and State of West Virginia, have invented new and useful Improvements in Check-Fastening Devices, of which the following is a specification.

This invention relates to a check-fastening device, the object of the invention being to provide an article of this character which is simple in construction, effective in operation, and one which can be inexpensively made and easily and quickly applied to cars of existing types without any material change in the same, and said device is of such a nature that the load in the car serves to maintain said device in its operative relation, by virtue of which, when said car is loaded, the check cannot be removed.

In the drawings accompanying and forming a part of this specification I have shown a form of embodiment of the invention hereinafter particularly described, and, on referring to said drawings, Figure 1 is a perspective view of the body of a car with a portion of one of the sides thereof removed and showing in connection therewith a check-fastening device comprising my invention. Figs. 2 and 3 are sectional views of a portion of the car with said fastening device therein and occupying respectively its operative and inoperative positions, one of the parts of the fastening device being in section. Fig. 4 is a perspective view of the parts of the device separated from each other.

Like characters refer to like parts throughout the several figures of the drawings.

In Figs. 1, 2, and 3 I have shown the body of a car and designate the same by 2. The fastening device which is used in connection with said car involves in its make-up an elongated rod as 3 and a plate as 4, the rod being connected at its rear or inner end in a pivotal manner with the upper end of the plate 4 substantially centrally thereof. In the present case the rod is provided at its rear end with an eye as 5 fitting a perforation in the plate. The outer end of the plate is pivotally connected with the bottom of the car body and for this purpose screw-eyes as 6 may be provided, said screw-eyes extending through perforations near the lower corners of the plate 4 and their shanks being screwed into the car body.

The forward portion of the rod 3 extends through a perforation as 7 in the end of the car body and also through a registering perforation in the reinforcing or face plate 8 fastened suitably to the outer face of said end. Said end has a second opening as 9 consisting of a perforation situated above the first mentioned perforation and which is adapted to receive the bill of the hook or return bend 10 located at the extreme forward or outer end of said rod 3 and on which hook or return bend the check is adapted to be suspended, as shown in Figs. 1 and 2. The plate 8 has a perforation through which said bill passes, to permit the latter to enter the opening or perforation 9 when it is desired to move the fastening device to its operative position.

Within the car 2 and suitably rigidly fastened to the bottom thereof is a wedge 11 on which the plate 4 of the fastening device consisting of said plate and the rod 3, is adapted to rest when the fastening device is in its operative relation, whereby the pivotal joint between the plate 4 and the car bottom and the pivotal joint between said plate and the rod 3 are prevented from being brought into horizontal alinement, as, in case they were, it would not be possible to move the rod 3 outwardly longitudinally by a pull on the same. In Fig. 3 the rod is represented as having been pulled forward so that a check can be applied to the hook or bend 10, it being assumed, of course, that at this time the car is empty. When the check is put on the bill of the hook 10 the rod 3 will be moved rearwardly so as to put said bill into the perforation 9 at which time the plate 4 will have found a rest or support upon the wedge 11, as indicated in Fig. 2. The car is then filled with coal or other material which by its downward pressure on the plate 4 prevents an outward pull on the rod 3 for the purpose of effecting the removal of the check on the hook when the car is filled. When, however, the car is emptied, it is a simple matter to effect the removal of the check by a forward pull on said rod, owing to the fact that there is nothing in the car acting downwardly on the plate. When the plate 4 is on the wedge 11 the eye 5 fits in a recess 12 in the high part of the wedge. It will be seen that the connection between the plate 4 and the bottom of the car 2 when the locking device is in its operative relation, is between the eye 5 and the hook 10; in other words, at this time the



rod crosses the plate so as to make a more compact structure. Owing to this relation also it is a very much more difficult matter to pull the rod 3 forward when a mass of coal 5 or other material is resting on the plate than if the rod and plate were at right-angles to each other. In the latter case the rod might be moved in an endwise direction sufficiently to remove the check, especially if the material in the car were not packed tightly. The 10 wedge 11 prevents the straight portion of the rod 3 from being brought into horizontal alinement with the axis of motion of the plate 4 as, if this were to happen, the rod and 15 plate would present a dead locked toggle and it would not be possible to advance the rod exteriorly of the car. By virtue of the relation of the parts the rod 3 can, when the fastening device is in working relation, extend 20 in parallelism with and close to the bottom of the car so that no coal can get under the same and so that the shock put upon the rod is taken up by the car, whereby the rod cannot be permanently flexed.

What I claim is:

The combination of a car, a rod disposed in 25 the car, extending through the same, and terminating in a check receiving hook, the car having an exterior seat to receive the bill of said hook, a plate located below the rod 30 and jointed to the bottom of the car, the rod being jointed at its rear end to the rear end of the plate, the plate and rod constituting a check-fastening device, and a wedge to sup- 35 port the plate when the check-fastening device is in its operative position, the joint between the plate and the car bottom being between said hook and the connection between the rod and the plate when the check- 40 fastening device is in said operative position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT JULIAN COX.

Witnesses

J. B. LUCAS

J. J. HUFF