(No Model.)

B. PICKERING.

DETACHABLE SUSPENSION CATCH.

No. 475,516. Patented May 24, 1892.

Fig. I

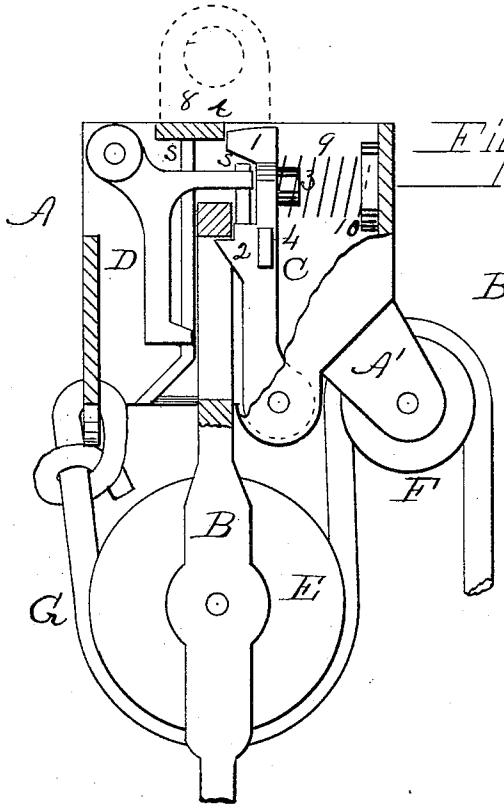


Fig. II

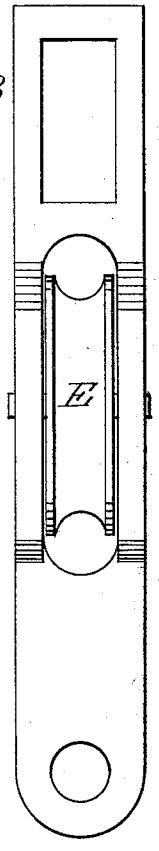
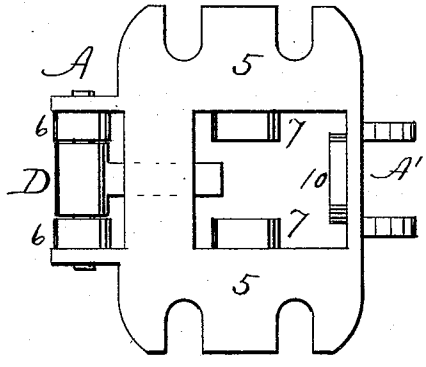


Fig. III



Witnesses
S. H. Lehman
Calvin Fawcett

Inventor
Barton Pickering

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BARTON PICKERING, OF DAYTON, OHIO.

DETACHABLE SUSPENSION-CATCH.

SPECIFICATION forming part of Letters Patent No. 475,516, dated May 24, 1892.

Application filed September 19, 1891. Serial No. 406,175. (No model.)

To all whom it may concern:

Be it known that I, BARTON PICKERING, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Detachable Suspension-Catches; and I do hereby 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in detachable suspension-catches, the features of which will be fully hereinafter described and claimed.

The object of my invention is the suspension of an object attached to a hanger, the same being elevated by a rope and suspended on a spring-actuated catch, said rope serving to detach said object that the same may be taken down when desirable.

The object is accomplished by the mechanism illustrated in the accompanying drawings, in which—

Figure I is a side view of the device with most all of the rear wall of the case cut away and also portions of the hanger. Fig. II is is a side view of the banger. Fig. III is a top view of the case with only the disengaging-arm attached.

Like letters and numerals designate like parts throughout the several views.

The cast-iron case A comprises an orifice for the attachment of a rope at the lower left corner, lugs 6 6, between which is held the disengaging-arm D, the arresting-plate *t* at the top, the recess 10 for the spiral spring 9, the ears A′ to support the grooved pulley F, the guides *s s* to guide the head of the hanger B, and the lugs 7 7, within which is pivoted the supporting-catch. The disengaging-arm D is pivoted to the upper left corner of the case and comprises a horizontal leg, which extends over the top of the hanger and near to the vertical part of the supporting-catch and beneath its inclined surface and the vertical part or leg, with a forward projection to enter the slot of the hanger when the catch is forced back. The supporting catch C is pivoted near the lower edge of the case to the right of the center and comprises an angular part 2 to enter the slot of the hanger, the lugs 4 to nearly fill laterally the space within the case, the lug 3 for the spiral spring, and the top 1, which engages the arresting-plate with its front face, and an inclined surface which is engaged by the disengaging-arm. The spiral spring 9 holds the top of the catch against the plate *t* when the hanger is without the case; but when the same is within the case the shoulder above the angular projection bears against the side of the hanger-head. The hanger B is comprised of an oblong square slot in the upper end, a circular orifice in the lower end, and a central orifice, in which is pivoted the grooved pulley E. The angular projection of the catch enters the hanger-slot to support said hanger, and the vertical leg of the detaching-arm enters the same while the catch is held back to disengage the hanger. The rope G is tied to the case, is passed under the grooved pulley E and over the pulley F, and is grasped by the hands to operate the catch. The operation is thus: Tie to or otherwise attach the object to be raised to the end of the hanger. Pull on the rope, and this will carry the head of the hanger by the angular projection of the catch, and the object will be thus suspended. Now by pulling hard enough on the rope the disengaging-arm presses the catch back out of engagement with the hanger and the object may be lowered, and as the head of the hanger descends the under leg is thrown back, thus releasing the catch, so that it is in position to re-engage the hanger when it is again raised within the case. For the attachment of the device overhead screws may be passed through the flanges 5 5 of the case; or the eye 8, as indicated by dotted lines, Fig. I, may be used to hang the same on a hook.

While the object is to operate the hanger by the hoisting-rope, yet the same may be attached and detached by hand, and for some purposes it may be desirable to so use the device. The hanger-head may be T-shaped. Then the catch would have double projections and inclines and the legs of the disengaging-arm would require to be doubled.

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

1. In a detachable suspension-catch operated by a single hoisting-rope, the combination of the case, the spring-actuated pivotal supporting-catch with angular engaging projection and incline at the top, the detaching-bar to carry back and hold said catch out of engagement and to release the same, and the open-ended hanger with pulley pivoted thereto, substantially as set forth.

2. In a detachable suspension-catch, the combination of the case A, provided with the inner guides *s s*, arresting-plate *t* and lugs A′ for the pulley F, the spring-actuated supporting-catch C, pivoted in said case and provided with an engaging projection and an incline at the top, the two-legged detaching-arm D, and the hanger B, with an opening in the top and holding the pulley E, and the hoisting-rope G to attach and detach said hanger by the raising and lowering of the same, substantially as set forth.

3. In combination with the supporting-catch C and the open-ended hanger B, the detachable arm D, pivoted to the case, said arm comprising two legs, the horizontal leg to engage the incline of the said catch and to carry the same back against the yielding spring, and the projection of the vertical leg to engage the inner surface of the head of the said hanger to release said catch, substantially as set forth.

4. The case A, the catch C, and the disengaging-arm D, in combination with the hanger provided with an oblong square orifice in its top end, the upper surface to carry up said arm and thereby force back said catch, and the under surface to release said catch, that it may resume its normal position, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

BARTON PICKERING.

Witnesses:
B. F. HENHEY,
CHARLES W. DALE.