

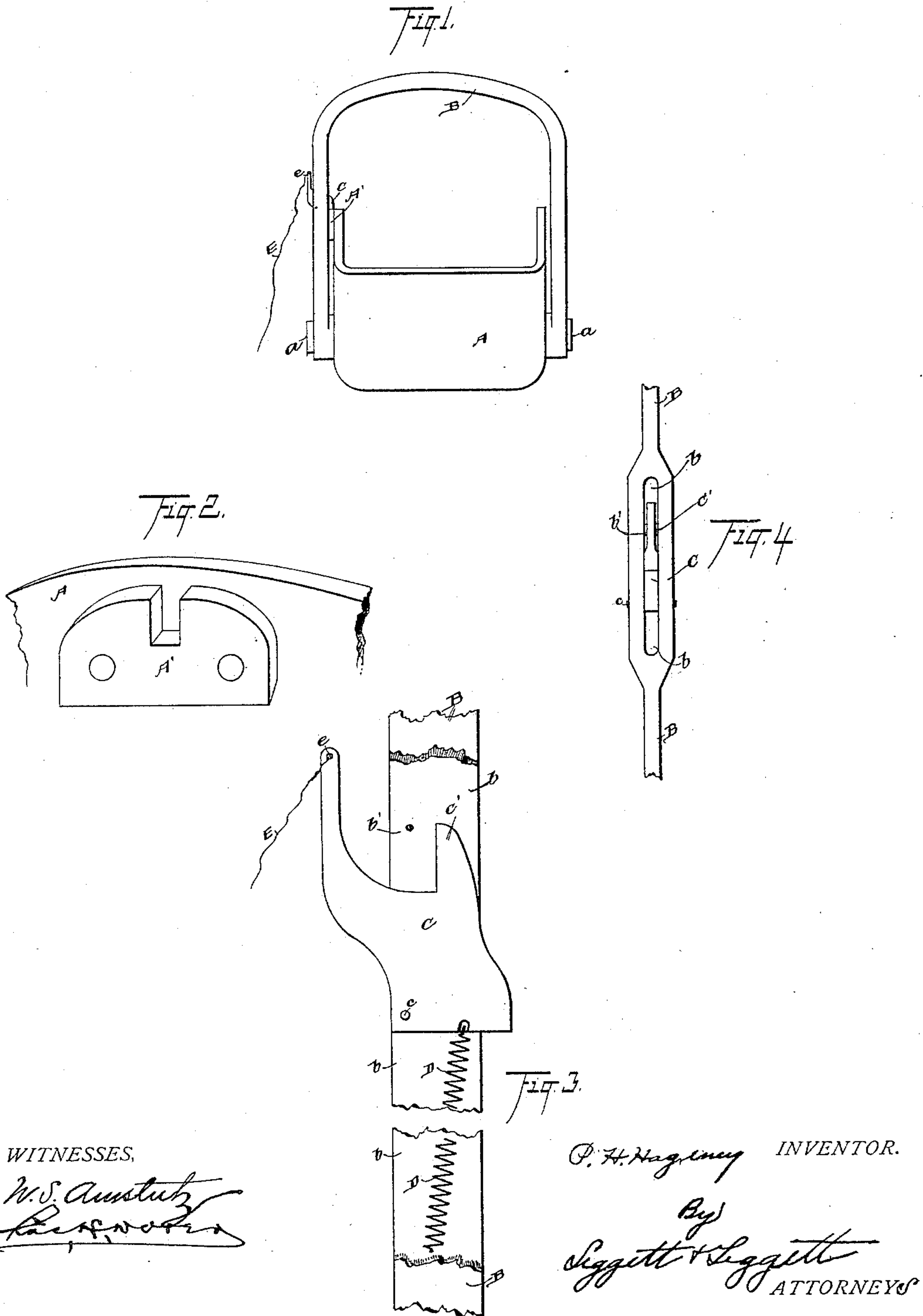
(No Model.)

2 Sheets—Sheet 1.

P. H. HAGENEY.
HOISTING BUCKET.

No. 442,432.

Patented Dec. 9, 1890.



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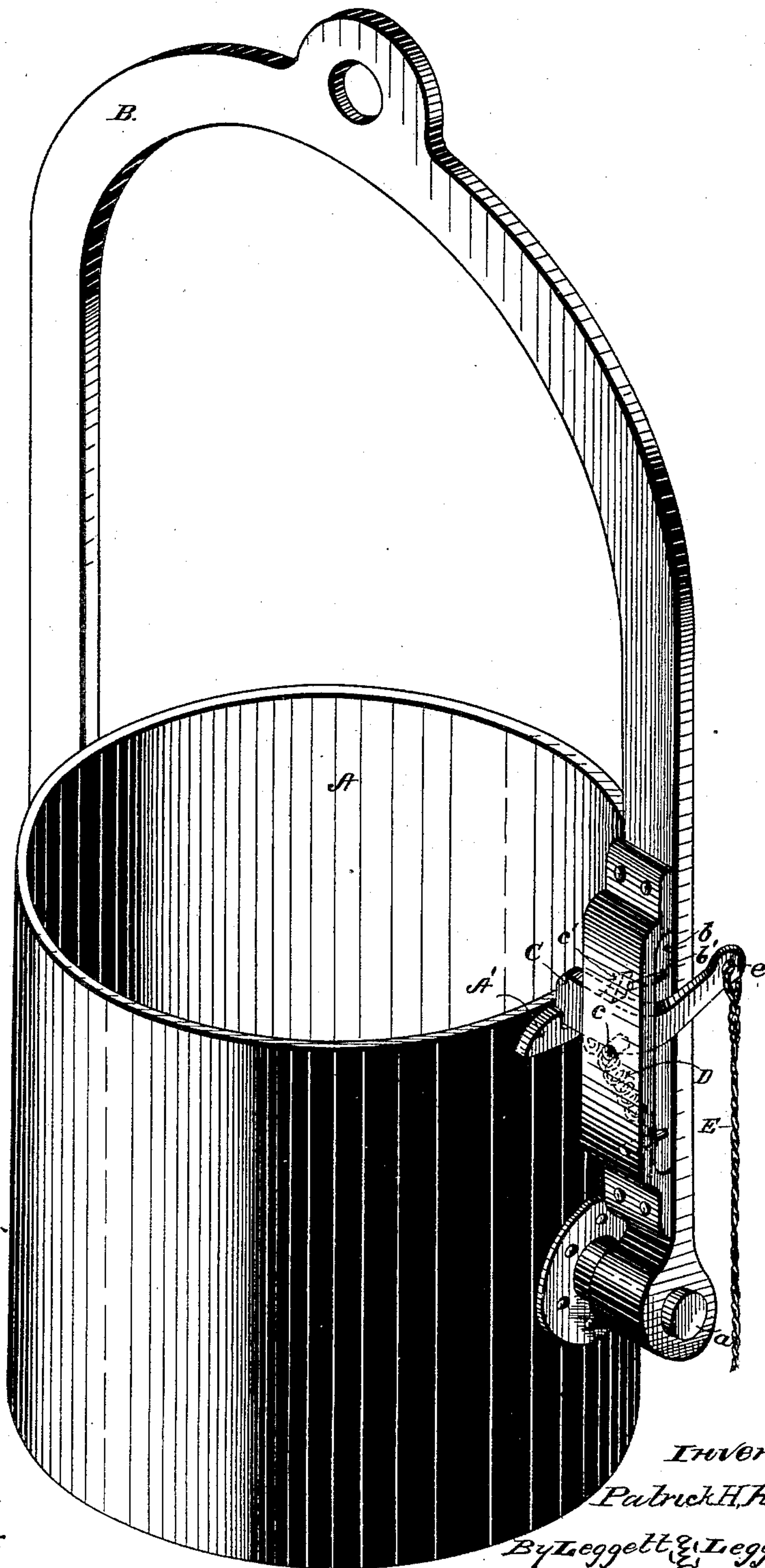
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Fig. 5.



Witnesses.
W. R. Eddlen.
Geo. W. King

Inventor.
Patrick H. Hageney
By Leggett & Leggett
& Att'ys

UNITED STATES PATENT OFFICE.

PATRICK H. HAGENEY, OF ASHTABULA, ASSIGNOR TO JOHN McMYLER, OF CLEVELAND, OHIO.

HOISTING-BUCKET.

SPECIFICATION forming part of Letters Patent No. 442,432, dated December 9, 1890.

Application filed November 1, 1888. Renewed May 14, 1890. Serial No. 351,750. (No model.)

To all whom it may concern:

Be it known that I, PATRICK H. HAGENEY, of Ashtabula, in the county of Ashtabula and State of Ohio, have invented certain new and
5 useful Improvements in Hoisting-Buckets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use
10 the same.

My invention relates to improvements in hoisting-buckets, and more especially to the latch mechanism for the same; and it consists in certain features of construction and in combination of parts, hereinafter described, and
15 pointed out in the claims, the object being to provide a more durable latch and attachments and one less liable to be accidentally unlatched than the varieties heretofore in
20 use. Heretofore the latch has usually been pivoted by the side of the bail, the pivotal point being some distance below the top of the bucket, the upper or free end of the latch vibrating toward or from the side of the
25 bucket, with a flat spring behind the latch to hold the latter to its engagement with the catch or keep. With such construction the latch, owing to lost motion, as between the trunnions of the bucket and the bail, was
30 likely to be accidentally unlatched by the swaying of the bucket, and the flat spring, from natural causes and from rough usage, was frequently broken. I have therefore devised the improvements illustrated in the
35 accompanying drawings.

Figure 1 is an end elevation. Fig. 2 is an enlarged elevation at right angles to the view shown in Fig. 1. Fig. 3 is an enlarged elevation, in section, of the portion of the bail
40 having the latch attached. Fig. 4 is an elevation showing an edge view of the bail and latch. Fig. 5 is a perspective view of the device.

A represents the bucket pivoted some distance below the center of gravity—for instance, at *a*—to the bail B. The bail, on the side where the latch is attached, is broad and is provided with a slot *b*, in which operates
45 the latch C. The latch is of the bell-crank variety shown and pivoted at *c*. The latch

operates by gravity, assisted by helical spring D, the latter operating in slot *b* of the bail, the spring being fastened to the latch and at or near the bottom of the slot, as shown. An upwardly-projecting finger *c'* of the latch
55 engages, when the latch is drawn back, pin *b'* of the bail. A cord E is fastened at *e* to the free end of the latch, and by drawing down on this cord the latch is unlatched. The catch or keep E' is of the variety shown, and is
60 secured to one side of the bucket in position to engage the latch. As the latch is raised to disengage it from the catch any lost motion of the bucket-trunnions and the consequent lateral swaying of the bucket has no tend-
65 ency to disengage the latch; also, the latch, operating in the said slot, is well protected—a matter of importance in view of the rough usage to which such mechanism is subjected. The helical spring is also fully protected, and
70 is a great improvement over the flat spring heretofore used, in that the flat spring yields at one point or along a limited section thereof and eventually crystallizes at this part and breaks, while the helical spring yields about
75 equally throughout its length, such yielding or bending of metal being infinitesimal at a given point, by reason of which the helical spring for such purpose is likely to last a
80 lifetime.

Of course no novelty is claimed on a helical spring, *per se*; but a helical spring fastened on the outside of the bail, as would necessarily be the case without the slot aforesaid, would likely be broken daily; also, the latch
85 operating by gravity will still operate, though slowly, in case the spring were broken or removed.

What I claim is—

1. In a hoisting-bucket, the combination, 90 with a slotted bail, substantially as described, of a gravity-latch of the bell-crank variety, the same being pivoted to the bail at a point below the side edge of the bucket and operating in the said slot, and a spring connected
95 with the latch and operating in the slot of the bail for depressing the latch, substantially as set forth.

2. In a hoisting-bucket, the combination, 100 with a slotted bail having a pin, substantially

as indicated, of a latch of the bell-crank variety pivoted to the bail and operating in the slot, said latch being provided with a finger, and a spring connected with the latch, said
5 finger of the latch engaging the pin of the bail for stopping the reverse movement of the latch, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 8th day of October, 1888.

PATRICK H. HAGENEY.

Witnesses:

E. LANGWORTHY,
HENRY FASSETT.