

(No Model.)

G. H. HULETT.
DROP BOTTOM BUCKET MECHANISM.

No. 513,327.

Patented Jan. 23, 1894.

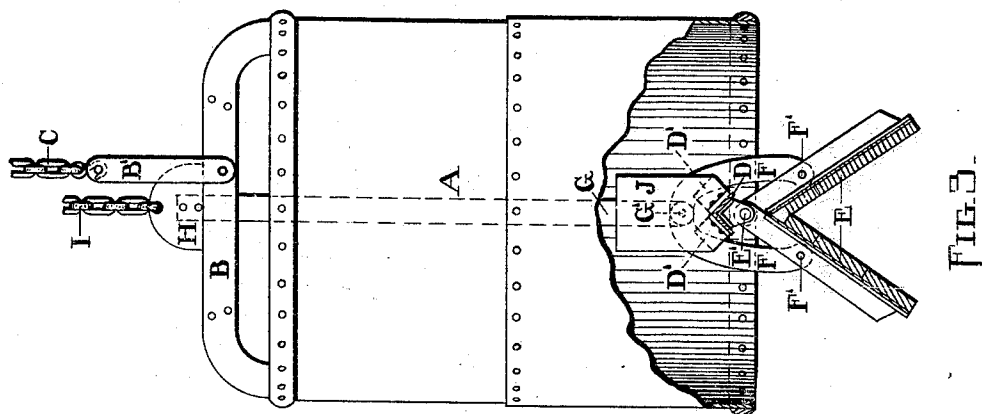


FIG. 3.

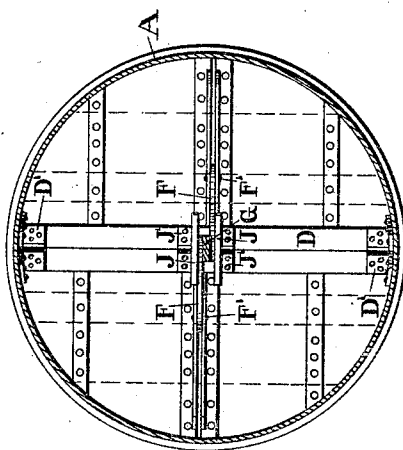


FIG. 2.

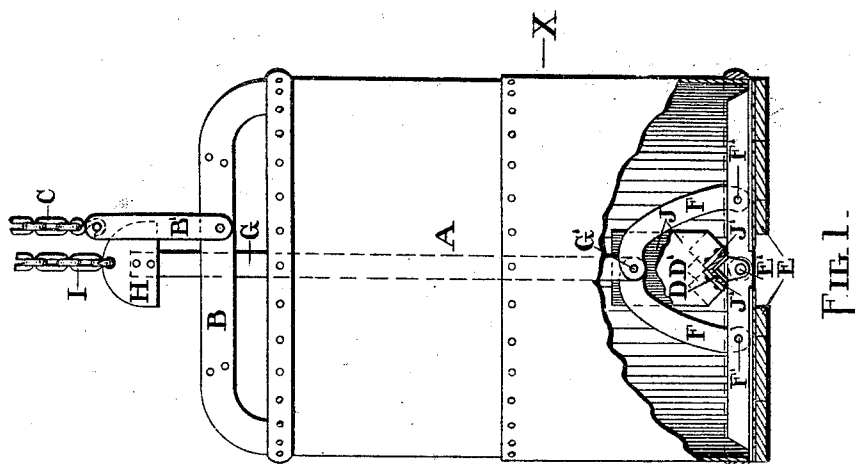


FIG. 1.

WITNESSES:

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UNITED STATES PATENT OFFICE.

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DROP-BOTTOM-BUCKET MECHANISM.

SPECIFICATION forming part of Letters Patent No. 513,327, dated January 23, 1894.

Application filed April 21, 1893. Serial No. 471,261. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. HULETT, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Drop-Bottom-Bucket Mechanism, of which the following is a full, clear, and exact description.

My invention consists of a bucket having a divided bottom hinged to a central angle-iron secured to said bucket, said bottom being operated by two curved straps and a rod extending through the center of the bucket and an opening in the bail to a head-block.

The object of my improvement is to provide a bucket for handling coal, or other fragile material, which shall be so constructed as to discharge its contents without breaking the same. It is obvious that coal discharged through the bottom of a bucket will be less liable to break than when dumped out of the top.

My improved mechanism is designed for use with any suitable hoisting apparatus.

That my invention may be seen and fully understood by others, reference will be had to the following specification and annexed drawings forming a part thereof, in which—

Figure 1, is a side view of my bucket mechanism, in partial section, showing the bottom closed; Fig. 2, a section on line X, X, Fig. 1, and Fig. 3, a similar view to Fig. 1, showing the bottom open.

Similar letters of reference designate like parts in the drawings and specification.

The bucket A has the bail B over the center at the top and the link B' connects said bail with the chain C, Figs. 1 and 3. The angle-iron D bisects the base of the bucket A and is secured at D' to the sides of said bucket. The two sections of the bottom E are hinged at E', Figs. 1 and 3, to the angle-iron D and the curved straps F, F are pivoted above to the rod G at G' and below to said bottom, one to each section at F', F'. The rod G extends upward, through the bucket A and an opening in the bail B, to be attached to the head-block H, Figs. 1 and 3. The head-block H depends from the chain I.

A guard consisting of the two angle-irons

J, J bolted or otherwise attached to the angle-iron D at J', J' is for the purpose of preventing the contents of the bucket A from getting between the curved straps F, F and said angle-iron D. The irons J, J, are arranged so closely together that there is only sufficient room between them for the straps F, F and the rod G to move up and down in. In Fig. 1 one of the irons J is broken away in order to show the pivotal connection G' in full.

In operation the loaded bucket A is held suspended by the chain C, link B' and bail B, and the chain I permitted to descend, when the contents of said bucket will force open the bottom E, drawing down the straps F, F, rod G and head-block H, and escape. After the bucket A is freed of its load, the chain I is drawn up, which closes the bottom E through the medium of the head-block H, rod G and straps F, F and elevates said bucket. A simple rod or bar may be substituted for the angle-iron D.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A drop bottom bucket mechanism consisting of a bisecting angle-iron or bar secured to a bucket near the base, a divided bottom hinged to said bar, straps pivotally connecting a rod to opposite sections of said bottom, a head-block at the top of said rod, and two angle-irons forming a guard for said straps, in the manner substantially as and for the purpose set forth.

2. In a drop-bottom bucket mechanism, an angle-iron or bar bisecting a bucket near the base and secured at opposite ends to the sides of said bucket, and the angle-irons J, J rigidly attached to said bar to form a guard, in combination with a divided bottom hinged to the bar, an actuating rod and straps connected to opposite sections of said bottom and arranged between said angle-irons J, J, in the manner substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. HULETT.

Witnesses:

WALTER A. BIDDLE,
F. A. CUTTER.