

J. L. Lloyd,
Hoisting Bucket
N^o 27,993 *Patented Apr. 24, 1860*

Fig: 1.

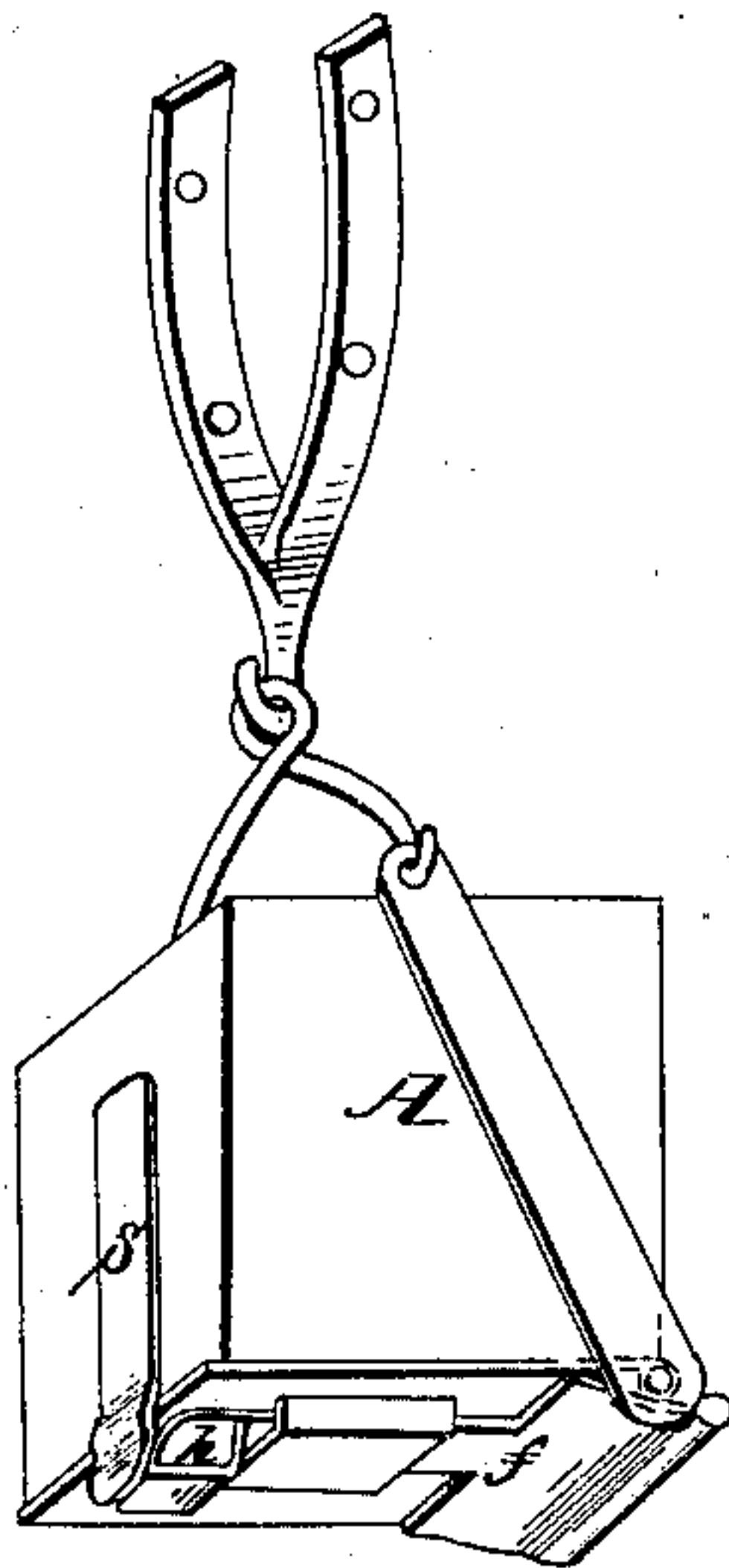
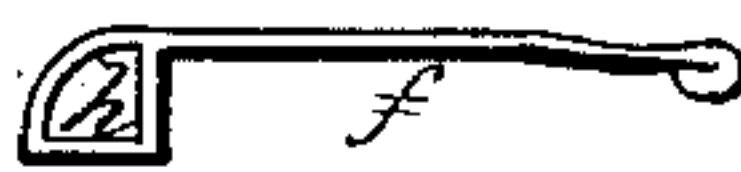


Fig: 2.



Fig: 3.



Witnesses.

Jos. A. Read
Geo. H. Clarke

Inventor.

John S. Lloyd

UNITED STATES PATENT OFFICE.

JOHN S. LLOYD, OF SALEM, NEW JERSEY.

BUCKET FOR REMOVING COAL, &c.

Specification of Letters Patent No. 27,993, dated April 24, 1860.

To all whom it may concern:

Be it known that I, JOHN S. LLOYD, of Salem, in the county of Salem and State of New Jersey, have invented a new and useful
5 Improvement in Self-Adjusting Buckets for Receiving, Removing, and Rapidly Discharging or Emptying Coal, Marl, Sand, or Grain or other Material; and I do hereby declare that the following is a full, clear,
10 and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

Figure I is a perspective view of the
15 bucket A. Upon two of its sides, are firmly attached two strips of wood or metal, opposite to each other and passing from the lower back corner, where they form supports for the hinge to the movable bottom, obliquely
20 to the center of the top of the sides and terminating in ears or loops into which the handle or bail of the bucket is hooked. The bottom is movable and when the bucket is closed, is supported at the back end by a
25 hinge resting in the pieces already described, and at the forward part by a notch in or by the head of the spring *s*, fastened on the front of the bucket and extending a little below it. The head of this spring is beveled, so as
30 to allow the bottom of the bucket to displace it and return to its place after it is discharged. Upon the middle of the outside of the bottom is placed a slide *f* confined to its place by clasps or loops which allow it to
35 have a forward motion. The back end of the slide, projects beyond the back of the bucket. The other end terminates in large oblong head, *h*, which is beveled on the upper side, while the under side projects below
40 the bottom of the spring, so that the weight of the descending bucket, when the head of the slide strikes the ground, forces the bot-

tom by the spring, *s*, to its natural position. In this position the head of slide just reaches to the head of the spring.

Fig. II represents a lateral view of the spring *s* with the beveled head *h'* and notch, *n*.

Fig. III is a lateral view of the slide with the loops or clasps by which it is kept to its
50 place, and the beveled head, *h*.

Operation: When the bucket is filled and taken to the place of discharge, the back part of the slide *f* which projects beyond the bucket, strikes against a post or other firm
55 substance, by which it is driven forward, the head of the slide pressing against the head of the spring, *s*, and forcing it back, and at the same time forcing the supporting head or notch of the spring, *s*, from under
60 the bottom of the bucket, which is then forced out by the weight of the contents of the bucket, thus allowing a discharge. When the bucket again descends to the ground, the projecting head, *h*, of the slide
65 first strikes, and forces the bottom by the beveled head and into the notch of the spring *s*, when the bucket is again ready for filling.

I do not claim the invention of buckets
70 for raising and discharging coal or other material.

What I do claim and desire to secure by Letters Patent is—

The application and use of a slide on the
75 bottoms of self-adjusting buckets, as well as its particular construction and arrangement in connection with the spring *s*, by means of which the bucket is made to open and close itself.

JOHN S. LLOYD.

Witnesses:

AUGUSTUS REEVE,
DAVID EVANS.