

W. RHODES.

CLASPS FOR DREDGE-BUCKETS.

No. 172,584.

Patented Jan. 25, 1876.

Fig. 1.

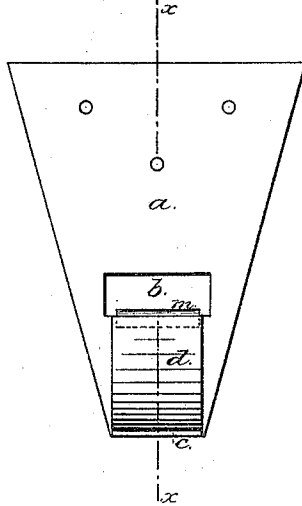


Fig. 2.

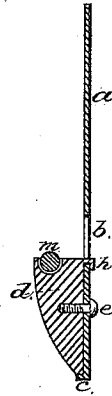
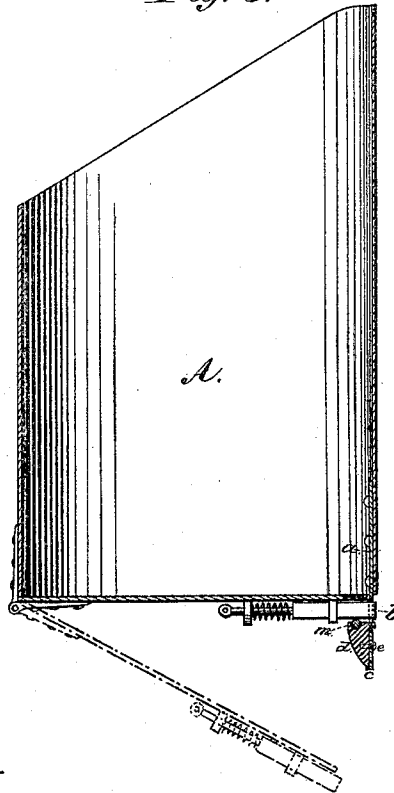


Fig. 3.



Witnesses:

W. M. Sargent
J. T. Snow.

Inventor:

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per Smith & Bond
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM RHODES, OF BALTIMORE, MARYLAND, ASSIGNOR TO JOHN B. CURTIS, CHARLES FOBES, GEORGE C. FOBES, AND LAMARTINE J. FOBES, OF PORTLAND, MAINE.

IMPROVEMENT IN CLASPS FOR DREDGE-BUCKETS.

Specification forming part of Letters Patent No. **172,584**, dated January 25, 1876; application filed September 23, 1875.

To all whom it may concern:

Be it known that I, WILLIAM RHODES, of Baltimore, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Clasps for Dredge-Buckets; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front view, and Fig. 2 a section, of my device. Fig. 3 is a sectional view of a dredging-bucket with my device attached.

It is the purpose of my invention to provide a convenient and at all times reliable clasp for use upon the buckets or scoops of dredging-machines. It is the office of this clasp to receive and support the end of the spring-bolt upon the under side of the hinged bottom of the bucket or scoop, by means of which the contents of the scoop are retained until the withdrawal of the bolt from the clasp. The clasp is placed opposite the hinges on the side of the scoop. As commonly constructed, it consists of a piece of metal welded upon the side of the scoop, or upon a piece of metal which is bolted thereto. In use it is found that, when the scoop passes through the mud, clay, or other substance to be removed, portions of it are often lodged upon the clasp, (the earthy matter thus lodged often containing small stones or shells,) which prevent the bolt from shooting over the clasp, so that the bottom of the scoop falls back when the scoop is raised, allowing the contents to escape.

This defect is obviated by my device, which is constructed as follows: I take a piece of metal of shape and size suitable for the purpose, and the size and weight of bucket used, the shape shown in the drawing being, perhaps, as convenient as any. (See Fig. 1, *a*.) In the lower part of this an aperture, *b*, is cut, which is not necessarily of any particular shape, but should be slightly larger than the end of the spring-bolt used. The lower end of the piece *a* may terminate in a lip, *c*. To

this piece or shank *a* is attached, by means of a bolt or bolts, *e*, (see Fig. 2,) the piece *d*, which is substantially of the shape shown in Figs. 1 and 2, its height being equal to the space between the lip *c* and the lower line of the opening *b*. The piece *d* has a lip, *h*, at the back, and the roller *m* may be placed in its upper part, as shown in the drawing. By means of the lips *c* and *h* and the bolt or bolts *e* the piece *d* is securely held in place.

The clasp is attached to the dredge-bucket *A*, as shown in Fig. 3, the end of the spring-bolt resting on the piece *d*; or the clasp may be so attached that the spring-bolt will slightly project through the opening *b*, the end of the spring-bolt being, in that case, so beveled as to allow the passage of the spring up and by the piece *d*. The hinged bottom is also shown in dotted lines when open.

In operation, when the bottom of the scoop is closed, the bolt is forced back by the inclined surface of the piece *d*, and then is forced forward by the spring over the upper surface of the piece *d*, its action being rendered more easy by the roller. Any clay, mud, or other substances lodged upon the clasp, which would otherwise prevent the bolt from passing over it, is forced through the opening by the motion of the bolt.

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

1. In a dredge-bucket, the combination of a spring-bolt with a clasp consisting of the piece *a*, aperture *b*, and piece *d*.

2. In a dredge-bucket, the combination of the spring-bolt, piece *a*, aperture *b*, piece *d*, and roller *m*.

3. The combination, in a dredge-bucket, of a spring-bolt with the piece *a*, aperture *b*, and piece *d*, with its lips *c* and *h*.

In testimony that I claim the foregoing I have herewith set my hand this 31st day of August, 1875.

WILLIAM RHODES.

Witnesses:

E. J. CODD,
GEORGE C. FOBES.