

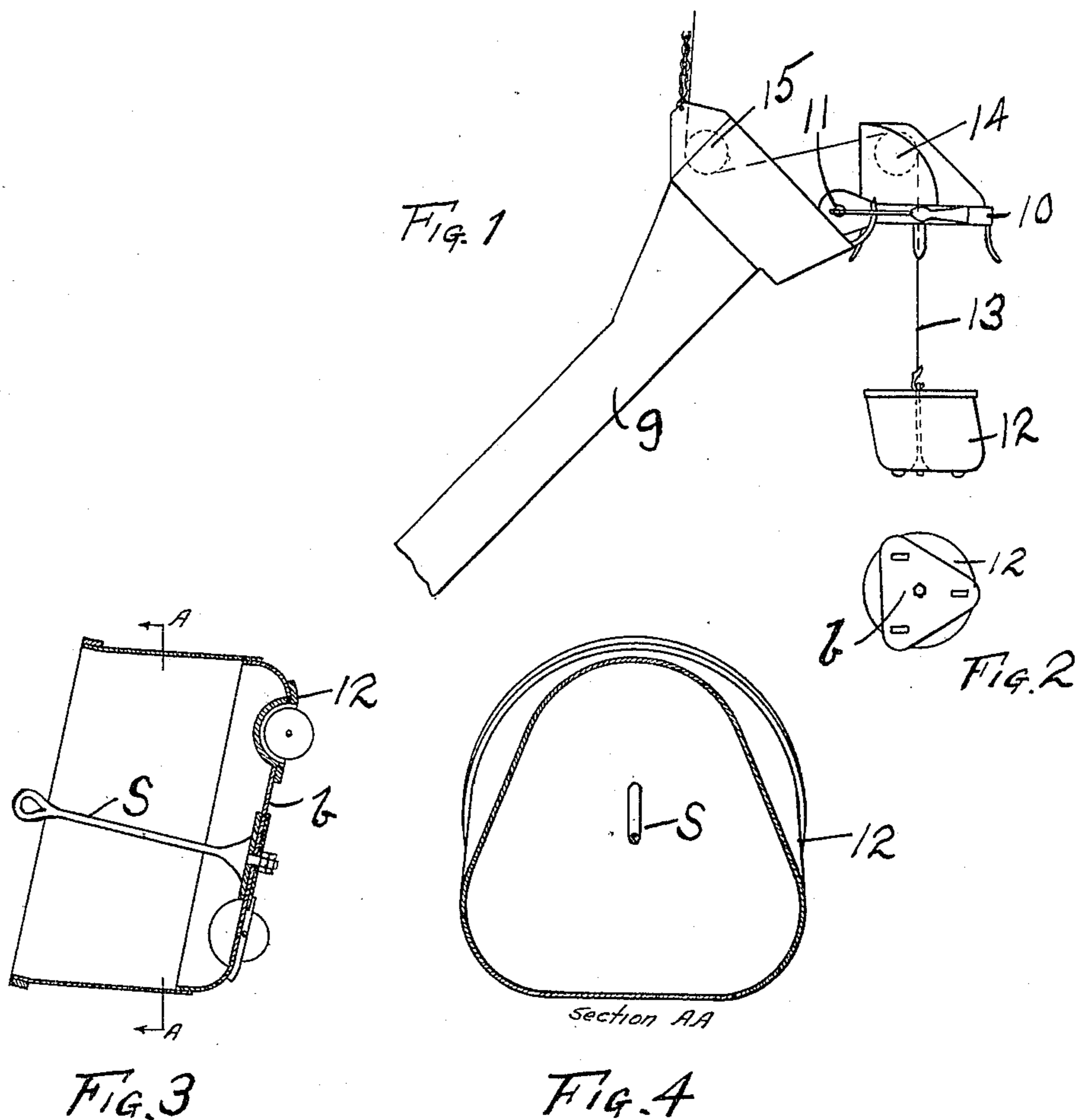
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PATENTED DEC. 4, 1906.

A. SMITH.

BUCKET FOR HOISTING AND DUMPING APPARATUS.

APPLICATION FILED JAN. 4, 1906.



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UNITED STATES PATENT OFFICE.

AUGUSTUS SMITH, OF NEW YORK, N. Y., ASSIGNOR TO DISCHARGING APPARATUS MANUFACTURING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

BUCKET FOR HOISTING AND DUMPING APPARATUS.

No. 837,744.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed January 4, 1906. Serial No. 294,574.

To all whom it may concern:

Be it known that I, AUGUSTUS SMITH, a citizen of the United States of America, residing in the borough of Manhattan, in the city, county, and State of New York, have invented certain new and useful Improvements in Buckets for Hoisting and Dumping Apparatus, of which the following is a specification.

These improvements are more particularly intended for buckets for use with hoisting and dumping apparatus of that construction in which there is combined with the upper end of a chute a hinged guide for receiving the bucket in such a manner that the continued pull on the hoisting-rope after the bucket has been raised into said guide will cause the latter to swing over on its hinge and dump the contents of the bucket into the chute.

The object of this invention is to so construct the bucket as to facilitate the loading of it.

In the accompanying drawings, Figure 1 is a side elevation illustrating the apparatus for which my improved bucket is especially useful. Fig. 2 is an inverted plan view of the bucket. Fig. 3 is a longitudinal section of the bucket, drawn to a larger scale; and Fig. 4 is a cross-section on the line A A, Fig. 3.

In Fig. 1 the apparatus or chute 9 is shown as adapted to be suspended from a boom; but any other suitable support may be used. The dumping-guide 10 is hinged, as usual, at 11 to the chute. The bucket 12 is raised by the hoisting-rope 13, passing over the sheave 14 in the dumping-guide and a sheave 15 on the chute.

The bucket is preferably suspended from a central stem S, secured to the bottom of the bucket instead of the usual yoke or bail; but this stem forms no part of the present invention.

These buckets have heretofore been made cylindrical in cross-section in order to properly enter the dumping-guides; but cylindrical buckets are troublesome to fill with coal or other material, because they have to be stood upright on their bottoms while being loaded and all the coal lifted up over their rims.

The present invention consists in constructing the bucket so that while it will have

a circular rim to enter the dumping-guide its lower part is of such angular cross-section that it can be laid and will stand on its side in a position to permit the coal or other material to be simply pushed instead of lifted in with a shovel. The bottom of the bucket is made, preferably, of substantially the same periphery as the periphery of the top will be, for by this means the walls of the bucket can be made of a substantially rectangular piece of metal rolled up into a cylinder, which is then flattened toward the straight edges of the bottom piece. It is not necessary, however, to make the bottom of the bucket of substantially the same periphery as the top, and sometimes it is preferable to make one smaller than the other, in which case the walls of the bucket consist of a truncated cone flattened at the bottom toward the straight edges of the bottom piece.

In the drawings, the lower part of the bucket is shown as made of a triangular cross-section and with a triangular bottom *b*, and this is preferred. In other words, the cylinder is flattened on three sides, the flattening increasing from below the rim to the substantially triangular bottom *b*. This construction permits the bucket to be laid and to stand on a flattened side, as illustrated in Figs. 3 and 4, with its open mouth in a position to permit convenient loading by shoving the coal or other material into the bucket without lifting.

I claim as my invention—

1. A hoisting and dumping bucket having a circular top, a bottom of angular outline and with sides flattened toward the bottom.

2. A hoisting and dumping bucket having a circular top, a bottom of triangular outline and sides flattened toward the bottom.

3. A hoisting and dumping bucket having a circular top, a bottom of angular outline with a periphery substantially the same size as the top periphery of the bucket, the sides of which are flattened toward the bottom.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

AUGUSTUS SMITH.

Witnesses:

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