

No. 652,312.

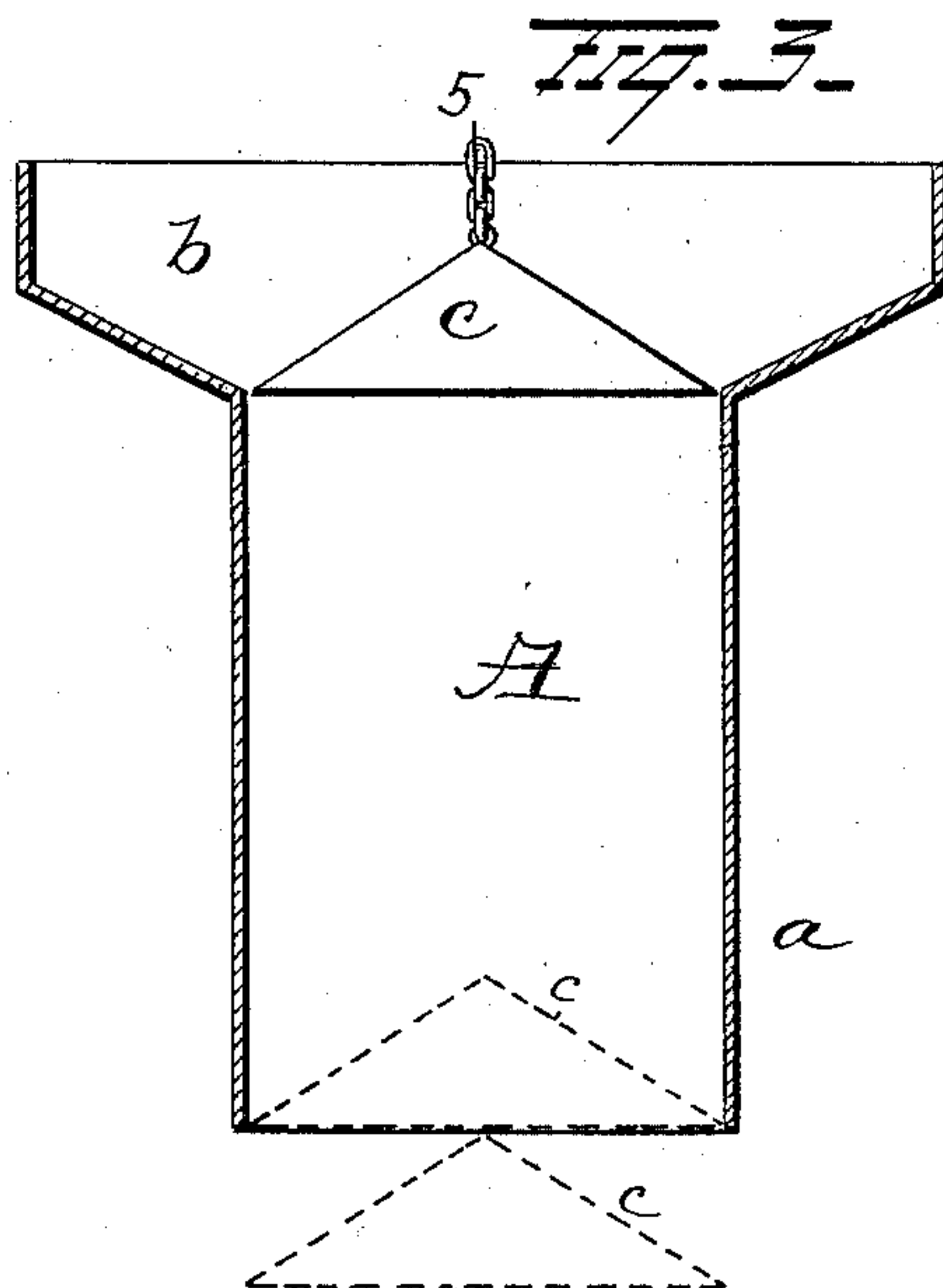
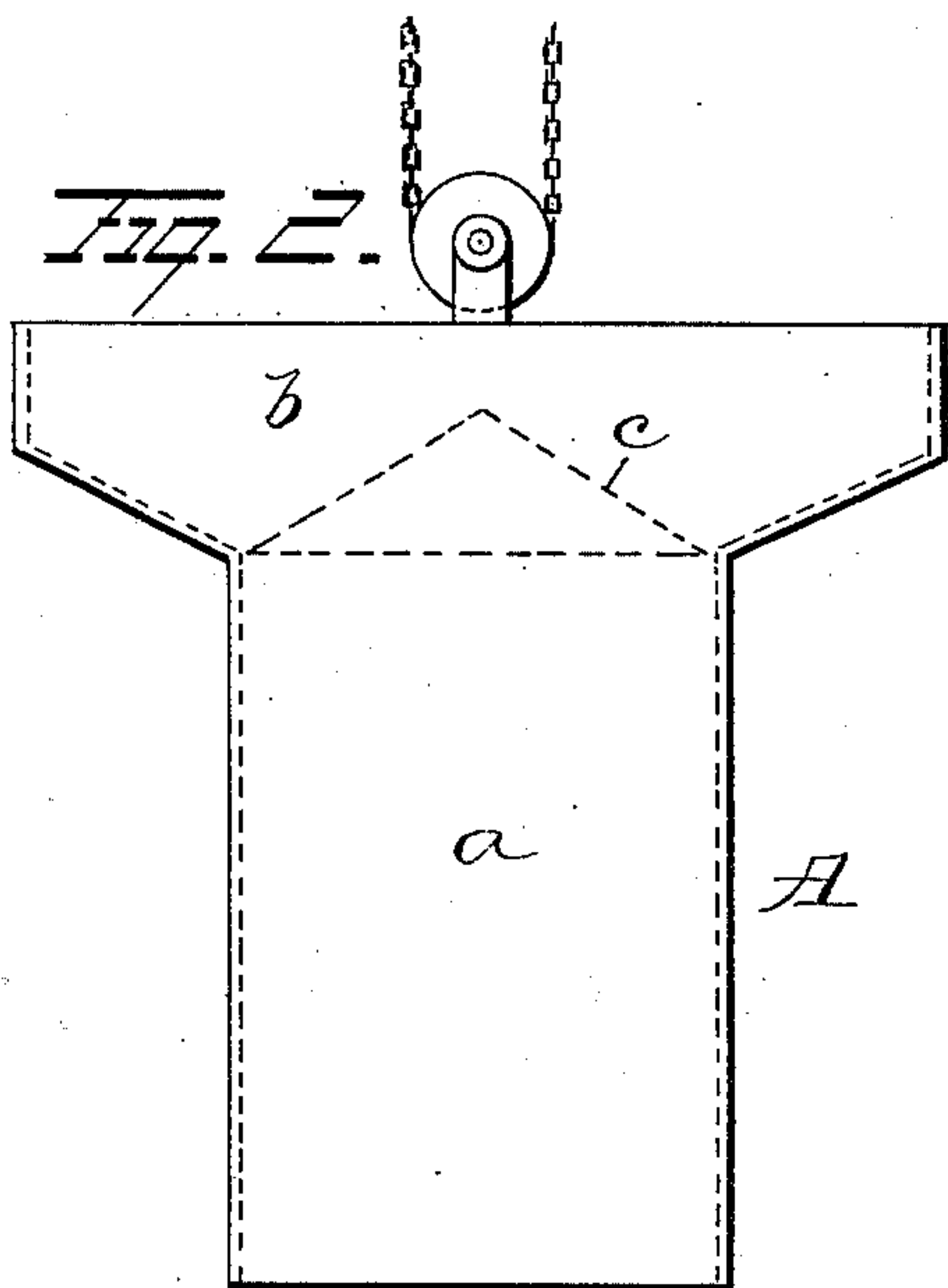
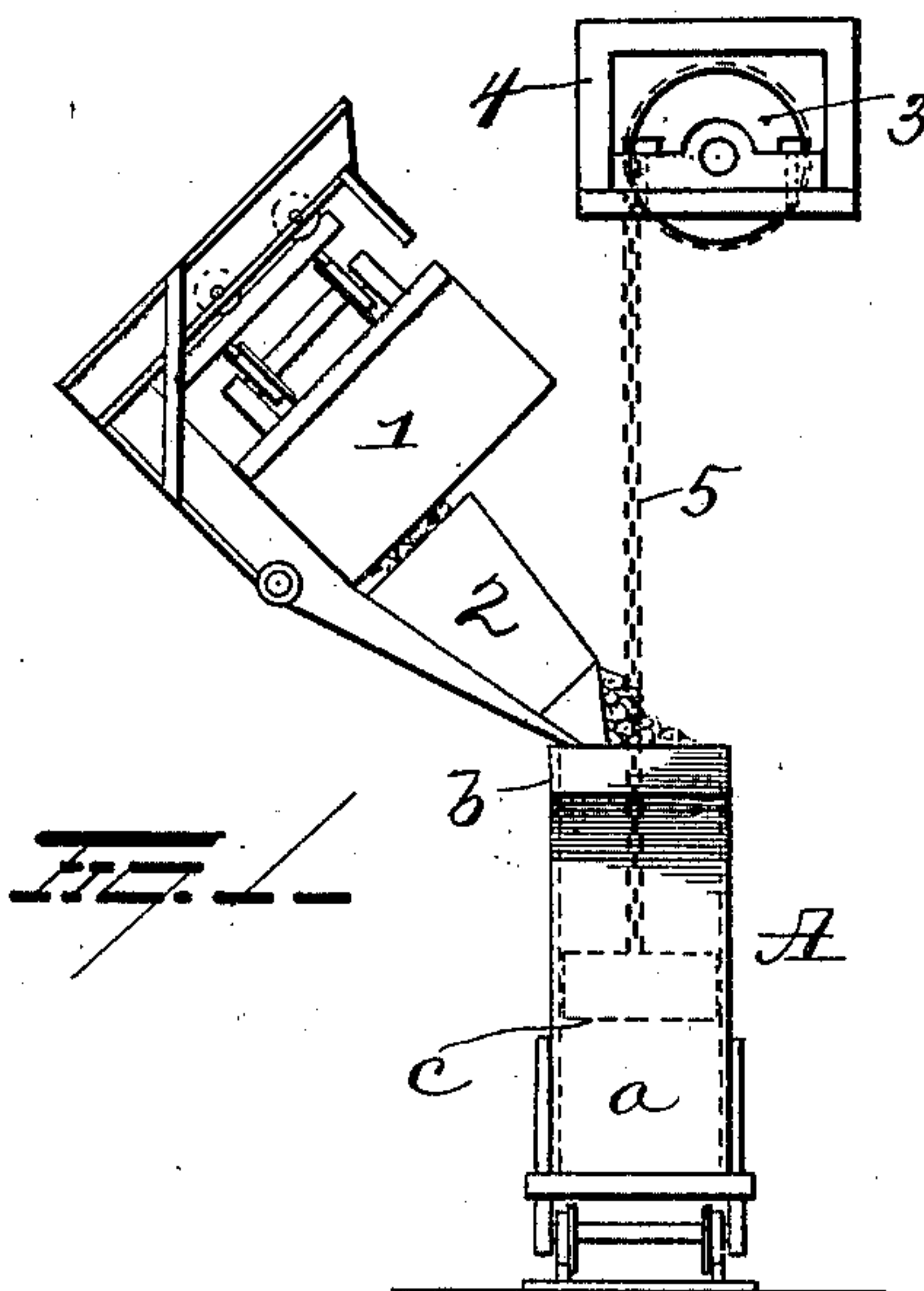
Patented June 26, 1900.

G. H. HULETT.

BUCKET FOR LOADING OR UNLOADING APPARATUS.

(Application filed Aug. 3, 1899.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

GEORGE H. HULETT, OF AKRON, OHIO.

## BUCKET FOR LOADING OR UNLOADING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 652,312, dated June 26, 1900.

Application filed August 3, 1899. Serial No. 725,938. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. HULETT, of Akron, in the county of Summit and State of Ohio, have invented certain new and useful  
5 Improvements in Buckets for Loading or Unloading Apparatus; 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 appertains  
10 to make and use the same.

My invention relates to an improvement in loading and unloading apparatus, and more particularly to an improved construction of bucket for use with such apparatus, one ob-  
15 ject of the invention being to avoid the use of a concentrating-chute heretofore employed with car-dumping machines and to this end to so construct a bucket that the fall of the coal from a car to the bucket shall be reduced  
20 to a minimum, and thus reduce liability of the coal being unduly shivered.

A further object is to so construct the bucket that the bottom thereof shall be permitted to gradually descend through the body  
25 portion as the coal is deposited into said bucket, and thus avoid the fall of coal from the top to the bottom of the bucket, which fall is liable to cause the coal to be broken.

With these objects in view the invention  
30 consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is  
35 a view illustrating an application of my invention. Fig. 2 is a side view of the bucket, and Fig. 3 is a sectional view.

A represents a bucket, and B the movable bottom thereof.

40 In loading coal into boats difficulty is sometimes encountered because the hatches will not admit of a very large bucket; but in order to transmit a car-load of coal with two buckets (a greater number with separate op-  
45 erating mechanism for each being impractical for use at the same time for transmitting coal from a car to the boat) the buckets must of course be quite large. To enable the bucket to descend through the hatchway of a small  
50 boat to the proper distance, the lower portion *a* of the body of the bucket is made smaller than the upper portion *b*, the length of the

smaller portion *a* of the bucket corresponding to the distance which it is desired the bucket shall project through the hatchway. 55  
By thus constructing the bucket with the flaring or enlarged upper portion the capacity of the bucket to receive a half car-load of coal will not be reduced and at the same time the bucket will be permitted to project a proper  
60 distance through the hatchway.

One object of my present invention being to avoid the use of the concentrating-chute heretofore sometimes employed with car-  
65 dumping machines to prevent the breaking of the coal during transit from the car to the boat, I provide the bucket with a bottom *c*, movable within and independently of the body portion of the bucket, and the upper face of said bottom *c* is made  $\Lambda$ -shaped. 70

Suitable apparatus may be employed for supporting and operating the body and bot-  
75 tom of the bucket independently, so that when the empty bucket is in position to receive coal from the car the bottom *c* can be dis-  
posed at or near the top of the bucket and be permitted to descend gradually as the bucket fills. Thus the fall of coal from the car 1 and  
80 chute 2 through the full depth of the bucket will be avoided and all liability of the breaking of the coal on account of excessive length of fall avoided.

For supporting and operating the bottom of the bucket a drum 3, mounted in a suit-  
85 able frame 4, may be employed and connected with the bottom *c* of the bucket by means of a chain 5. Any suitable means may be provided for operating the drum.

When the bucket is lowered into a boat, the bottom can be allowed to descend below  
90 the lower end of the body portion, and thus discharge the contents.

My improvements are simple; but they are important for the accomplishment of the pur-  
95 pose for which they are intended.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bucket comprising a body portion and an independently-movable bottom construct-  
100 ed and adapted to pass through said body portion.

2. A bucket comprising a body portion and an independently-movable bottom adapted to



pass through said body portion, said bottom having its top face made inclined in opposite directions from the center.

3. A bucket having a body portion made  
5 flaring at its upper end and an independently-movable bottom adapted to pass through said body portion.

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

GEORGE H. HULETT.

Witnesses:

FRANCIS SEIBERLING,  
JAMES B. HUBER.