

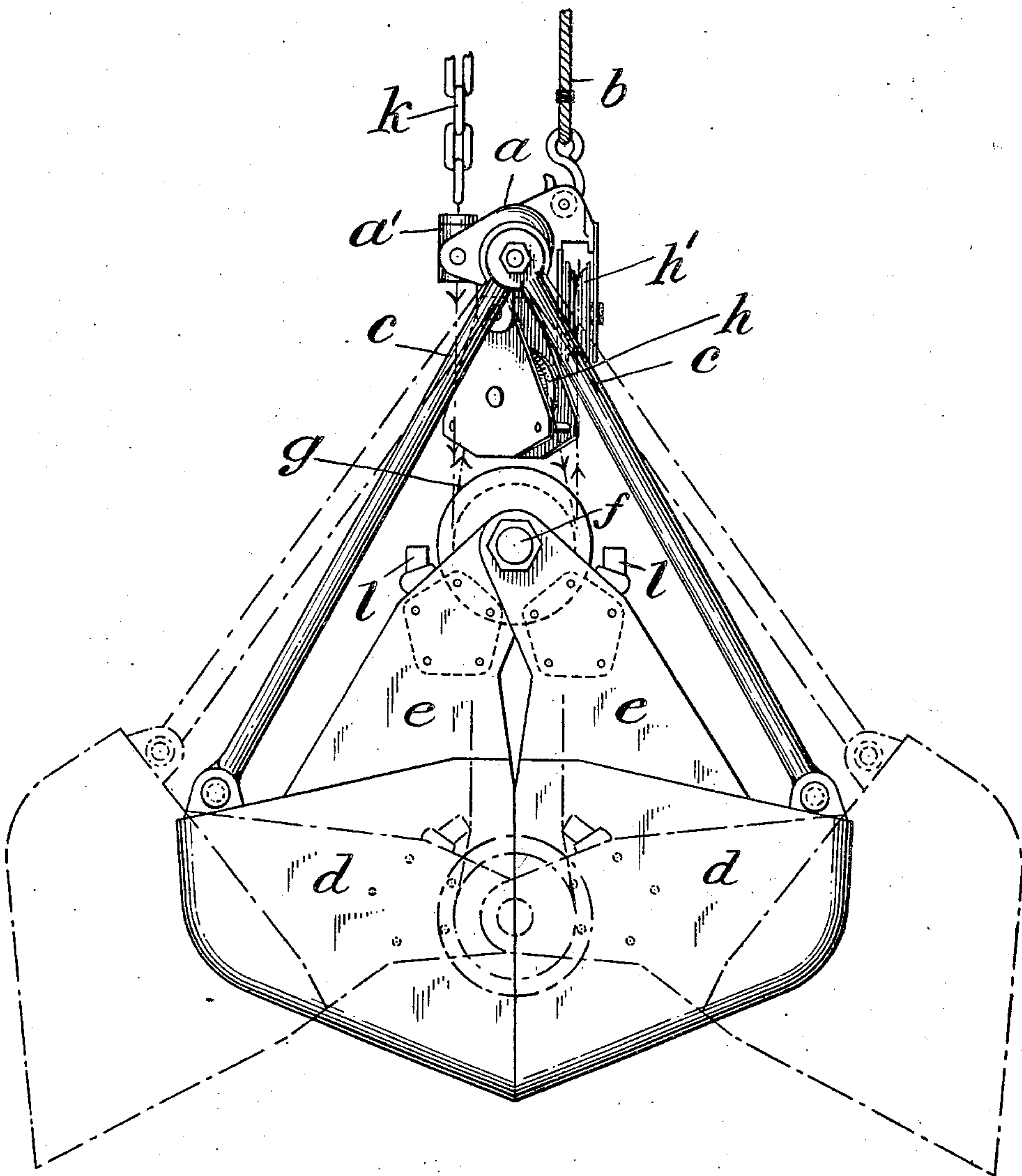
No. 891,699.

PATENTED JUNE 23, 1908.

C. W. HUNT.  
CLAM SHELL BUCKET.  
APPLICATION FILED APR. 4, 1908.

2 SHEETS—SHEET 1.

*Fig. 1.*



Attest:  
*Edgeworth Greene*  
*Ellis J. Kruger*

Inventor:  
by *Charles Wallace Hunt*  
*Redding, Greeley & Austin*  
Attys.

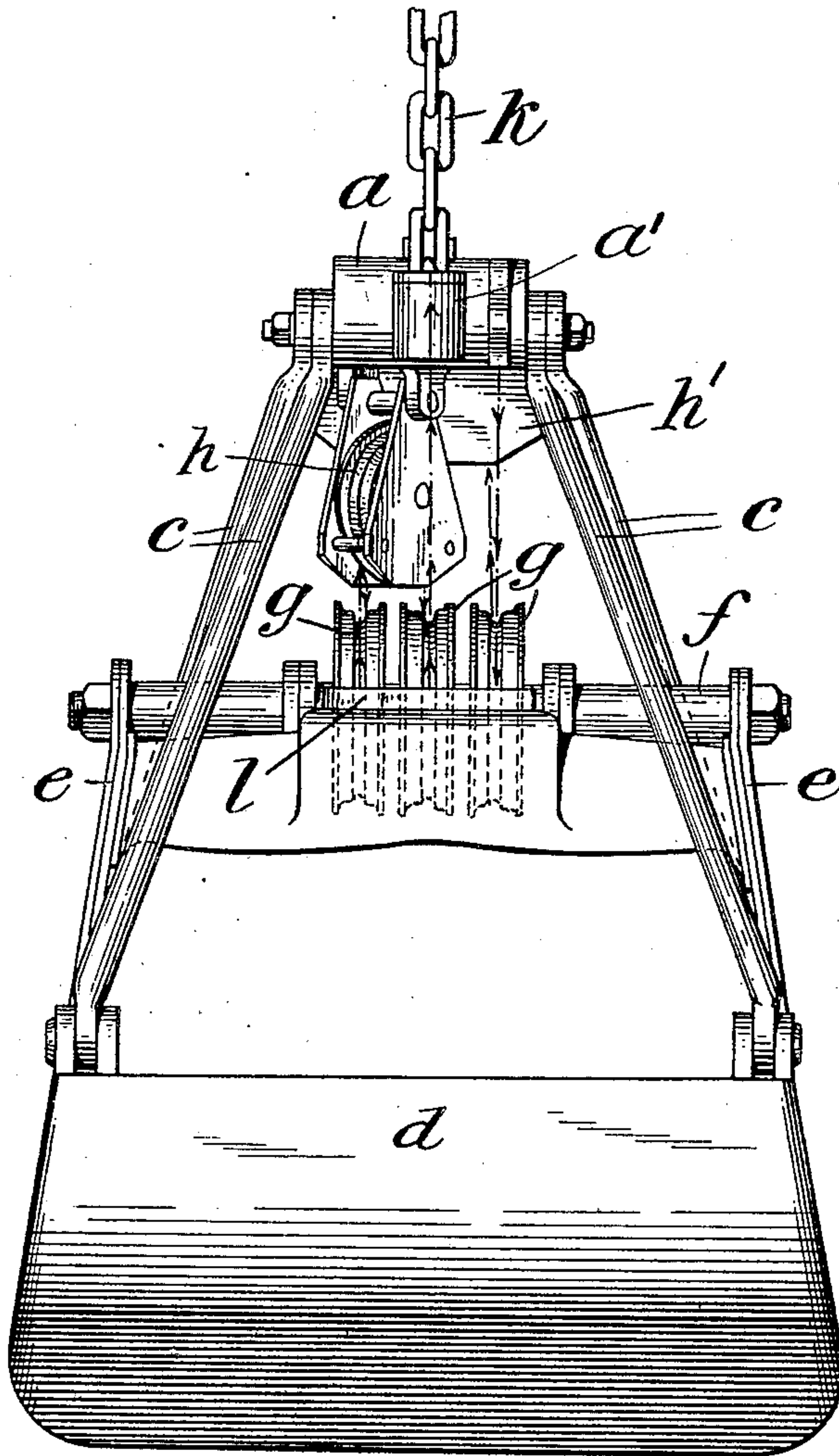
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2 SHEETS—SHEET 2.

*Fig. 2.*



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# UNITED STATES PATENT OFFICE.

CHARLES W. HUNT, OF NEW YORK, N. Y.

## CLAM-SHELL BUCKET.

No. 891,699.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed April 4, 1908. Serial No. 425,133.

*To all whom it may concern:*

Be it known that I, CHARLES WALLACE HUNT, a citizen of the United States, residing in West New Brighton, in the borough of Richmond, of the city of New York, in the State of New York, have invented certain new and useful Improvements in Clam-Shell or Grab Buckets or Shovels, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to clam shell or grab buckets or shovels, such as are commonly employed in handling coal, ore, &c., and in excavating, and comprise scoops or shovel members which are pivotally connected with the head of the shovel or bucket and are arranged to swing open when the tension of the closing chain or rope is relaxed. It is usual to secure to the closing chain or rope a stop which, by contact with the head of the bucket, limits the opening movement of the scoops, preventing the further relative movement of the scoops when they have opened to the proper extent. Such buckets or shovels are now commonly operated at high speed and the parts acquire considerable momentum, so that when the stop on the closing rope strikes the head of the bucket the shock is considerable, frequently resulting in injury. It is the object of this invention to provide means for gradually checking the movement of the parts so as to prevent such objectionable shock. In accordance with the invention a brake is arranged to bear upon the closing rope as the scoops approach the open position, being caused to move into operative position by the opening movement of the scoops and being conveniently carried upon the frame or arms of one of the scoops.

The invention will be more fully explained hereinafter with reference to the accompanying drawings in which, for purposes of explanation of its nature, it is represented as applied to a shovel or bucket of a well known type.

In the drawing—Figure 1 is an end view of a bucket to which the invention is applied, and Fig. 2 is a side view thereof.

The shovel or bucket to which the invention is applied may be of any usual or suitable construction. As shown in the drawings it comprises a head *a* to which the holding or dumping rope *b* may be secured. Also connected with the head piece are arms *c*, the arms on opposite sides of the bucket be-

ing relatively pivoted so that they swing relatively about the common axis. At their lower ends the arms *c* are pivotally connected, at opposite sides, to the scoops or shovel members *d*. Arms or frame members *e*, extended upward from the scoops or shovel members *d*, are pivotally connected near their upper ends, as by a shaft or stud *f* which may form the support for the lower sheaves *g*. The upper sheaves *h*, *h'*, are carried by the head piece *a* in any convenient manner. The closing chain *k* passes through a guide *a'* on the head piece and thence around the upper and lower sheaves and is secured to the head piece as usual.

All of the parts thus far referred to may be constructed and arranged in any usual or suitable manner, the construction and arrangement thereof not being concerned with the present invention except so far as such parts provide for the application of a closing chain or rope and also provide a support for the brake piece which is made to bear upon the closing chain or rope as the bucket opens.

Suitably mounted upon some convenient part of the bucket so as to stand clear of the closing chain or rope while the bucket is closed, as shown by full lines in Fig. 1, but so as to bear against such chain or rope when the bucket approaches its open position, which is indicated by dotted lines in Fig. 1, is a brake piece *l*. This brake piece may be conveniently carried by the arms *e*, on the outside thereof and near the pivot *f*, so that it shall bear against the closing chain or rope, as clearly shown by dotted lines in Fig. 1, as the scoops approach the open position. Obviously, it may be placed in any suitable position and may be supported by any part of the bucket as the particular construction of the bucket to which the invention is applied may render convenient or desirable. Preferably a brake piece *l* is carried by each scoop or shovel member, as shown in Fig. 1 of the drawings, so that the several brake pieces, bearing against the parts of the chain or rope from opposite directions, shall act with greater braking efficiency on the moving chain or rope and also better cushion the opening movement of the shovel members by contact with the chain or rope.

Various modifications in the position and means of support of the brake piece will readily suggest themselves when the invention is applied to buckets or shovels of different constructions, and it is therefore to be



understood that the invention is not restricted to the precise construction and arrangement shown and described herein.

I claim as my invention:

5 1. A clam shell or grab bucket or shovel having a brake piece adapted to bear against the closing rope as the bucket or shovel opens.

10 2. A clam shell or grab bucket or shovel having a brake piece carried by one of the scoops and bearing against the closing rope as the scoop approaches its open position.

15 3. A clam shell or grab bucket or shovel comprising a head piece, scoops or shovel members pivotally connected with the head piece and with each other, upper and lower sheaves carried by the head piece and the scoops or shovel members, and a brake piece carried by one of the shovel members and

bearing against the closing rope as the shovel 20 approaches its open position.

4. A clam shell or grab bucket or shovel comprising a head piece, links pivotally connected therewith, scoops pivotally connected with the links and having upwardly extend- 25 ing arms pivotally connected together, upper and lower sheaves carried by the head piece and by said scoops, and brake pieces carried by said arms and adapted to bear against the closing rope passing about said sheaves as 30 the shovel opens.

This specification signed and witnessed this first day of April, A. D., 1908.

CHAS. W. HUNT.

Signed in the presence of—

R. B. KELLY,  
C. C. KING.