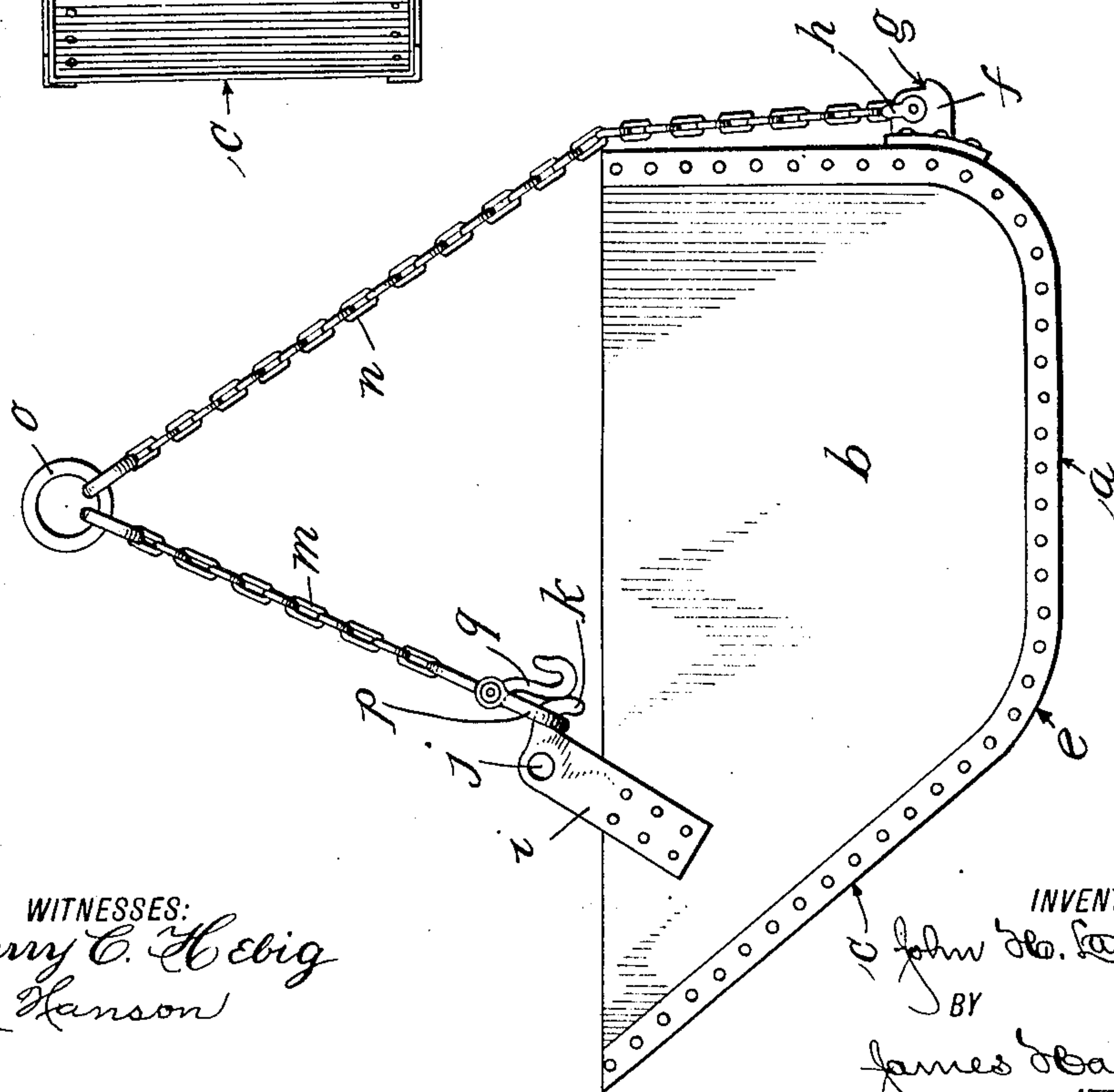
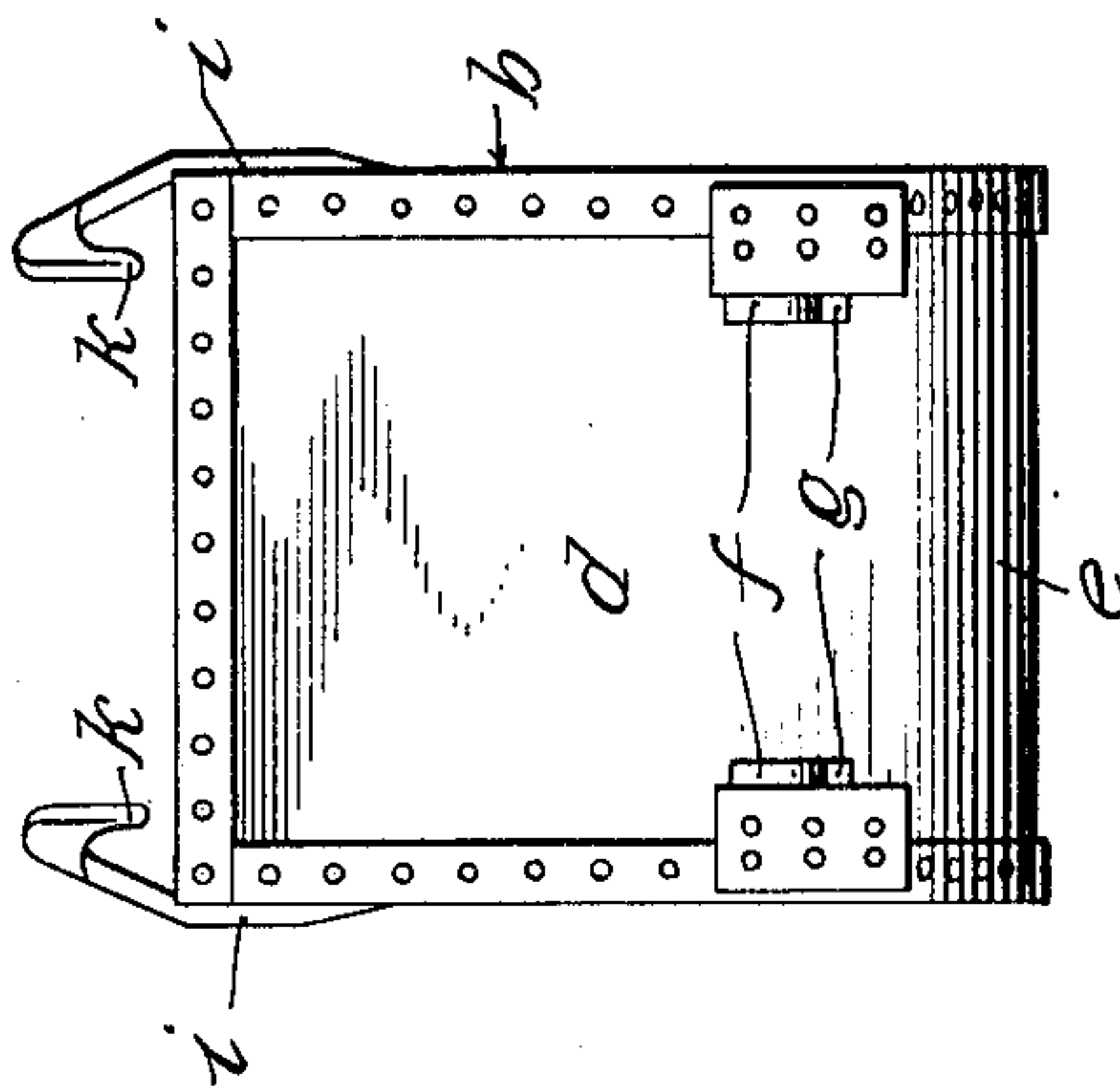


APPLICATION FILED MAY 8, 1907.

**916,331.**

Patented Mar. 23, 1909.

2 SHEETS—SHEET 1.



**WITNESSES:**

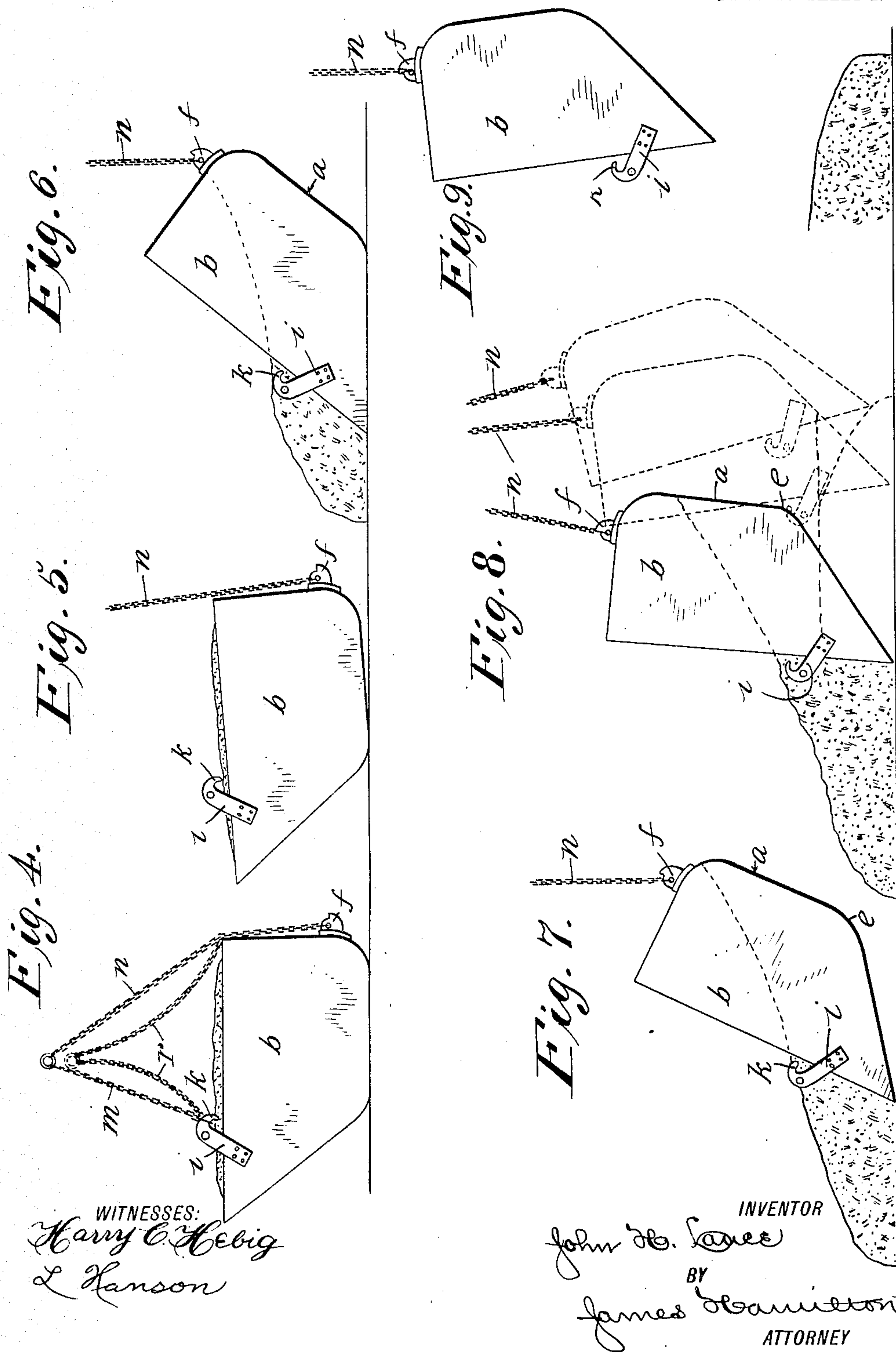
WITNESSES:  
Harry C. Hebig  
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ATTORNEY

916,331.





# UNITED STATES PATENT OFFICE.

JOHN H. LANCE, OF KINGSTON, PENNSYLVANIA.

## DUMPING-BUCKET.

No. 916,331.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed May 8, 1907. Serial No. 372,569.

*To all whom it may concern:*

Be it known that I, JOHN H. LANCE, residing at Kingston, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Dumping-Buckets, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in dumping buckets; and the object of my invention is to provide a bucket which is compact in construction and thereby adapted for use in narrow places, which is readily handled and which will place the concrete without shock and thereby in its integrity.

Heretofore, so far as known to me, two general classes of buckets have been used in the handling of concrete; namely, the bail bucket and the bottom-dumping buckets. Each of these types has its advantages. Thus, the bail bucket does not drip cement, as does the bottom-dumping bucket in the use of wet concrete; but, in the bail bucket the entire load is dumped at once, there is no slow sliding action and thus the shock of placing the load generally drives the mortar out of the concrete. With the bottom-dumping bucket the general action is one of sliding and there is no separation of the ingredients; but the bottom-dumping bucket is wasteful of cement, particularly in the use of wet concrete, it is difficult to operate and is generally provided with levers or like devices which interfere with the quick handling of the bucket, especially in narrow forms. It is an object of my invention to provide a bucket which will possess all the advantages of the bail bucket and the bottom-dumping bucket, without the defects of either.

In the drawings illustrating the principle of my invention and the best mode now known to me of applying that principle, Figure 1 is a side elevation of my new dumping bucket; Fig. 2 is a plan view and Fig. 3 is an end view of the same; and Figs. 4, 5, 6, 7, 8, 9 show different positions of the bucket assumed in the operation of placing the cement.

The bucket is provided with a base *a* from which rise the sides *b* perpendicular to the base. The dumping end or front of the bucket *c* is inclined to the base, as is shown in Fig. 1; and both the front wall *c* and the rear wall *d* join the base *a* by means of a curve *e* which serves to keep the bucket clean and permits the free movement of the

material. The rear wall *d* is provided with lugs *f* formed with a shoulder *g* which limits the downward travel of the clevis *h* and which thereby prevents the entangling of the chains. Near the upper front portion or edge of each side *b* is secured an ear *i* formed with an eye *j* and with a hook *k*. The suspensory members, which in this case are the chains *m* and *n*, are connected at the upper end to a common ring *o*. The lower end of each rear chain *n* is connected by the clevis *h* with the lug *f*, heretofore described; and the lower end of each front chain *m* is provided with a clevis *p* which engages the hook *k* and with a hook *q* which, whenever occasion arises in the handling of the bucket, may be engaged in the eye *j*. The latter may be used to receive a pole-hook or like guiding device for handling the bucket, while the chain is engaged with the hook *k*.

The bucket having been filled with concrete, it is carried by means of a derrick, carriage of a cableway, or the like over the point where the concrete is to be laid. The bucket is then lowered until it rests upon its base *a*. The chains are then slackened as shown at *r* in Fig. 4, until the clevis *h* is disengaged from the hook *k*. The rear chain *n* is then tautened and the bucket begins to tip as shown in Fig. 5. A further pull upon the rear chain moves the bucket into the position shown in Fig. 6; and as the ring *o* continues to ascend, the bucket takes successively the positions shown in Figs. 7, 8 and 9. The concrete slides without shock and in its integrity along in a layer about seven feet in length; and this greatly aids in the work of placing the concrete, where it is necessary to place it in layers, and is thereby saving of labor. A continuation of the hoisting motion prevents swinging and the bucket may be either let down again and the front chains hooked up in the eyes *j* or it may be carried back to the starting point by the back chains *n*, as may be found most desirable under the practicable circumstances.

As is best shown in Figs. 2 and 3, the upper part of the hooks *i* are bent over the top of the bucket inwardly and toward each other. This in conjunction with the vertical sides of the bucket make it possible for the bucket to enter into narrow places, where it would be impossible to lay concrete with buckets the sides of which are inclined and which are provided with bails attached to these inclined sides.

I claim:

1. The combination of a dumping bucket;  
a lug secured thereto; said lug being formed  
with a shoulder, and a clevis mounted in  
5 said lug; said shoulder limiting the travel  
of said clevis.

2. A dumping bucket the sides of which  
are substantially perpendicular to the plane  
of its base and the upper edge portion of each  
10 of which is provided with an ear for handling  
the bucket; said ears being formed with  
downwardly-turned hooks and being turned

inwardly toward each other over said upper  
edge portions to permit the bucket to be  
used in narrow places.

In testimony whereof I hereunto set my  
hand in the presence of the two undersigned  
witnesses at said Kingston, this 23d day of  
March, A. D. 1907.

JOHN H. LANCE.

Witnesses:

H. W. PLATT,  
W. H. WEBBER.