

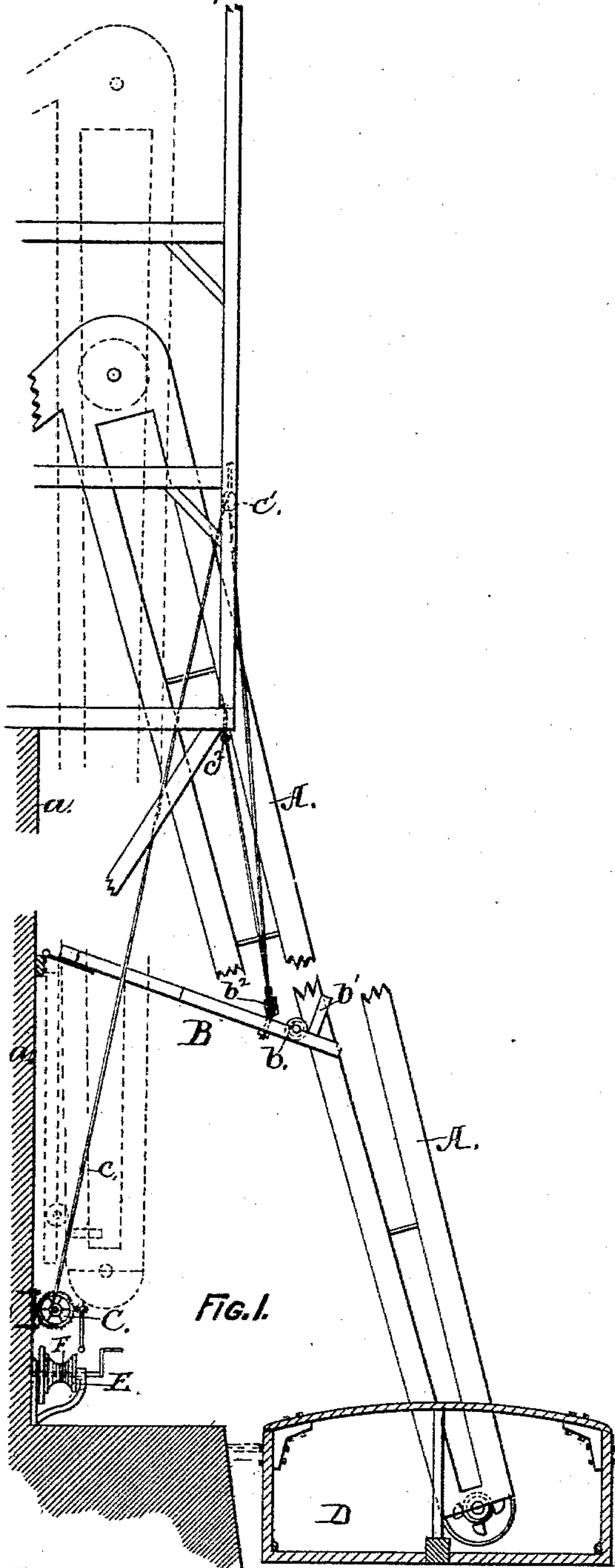
(No Model.)

L. MESSIER.

# APPARATUS FOR UNLOADING GRAIN BOATS.

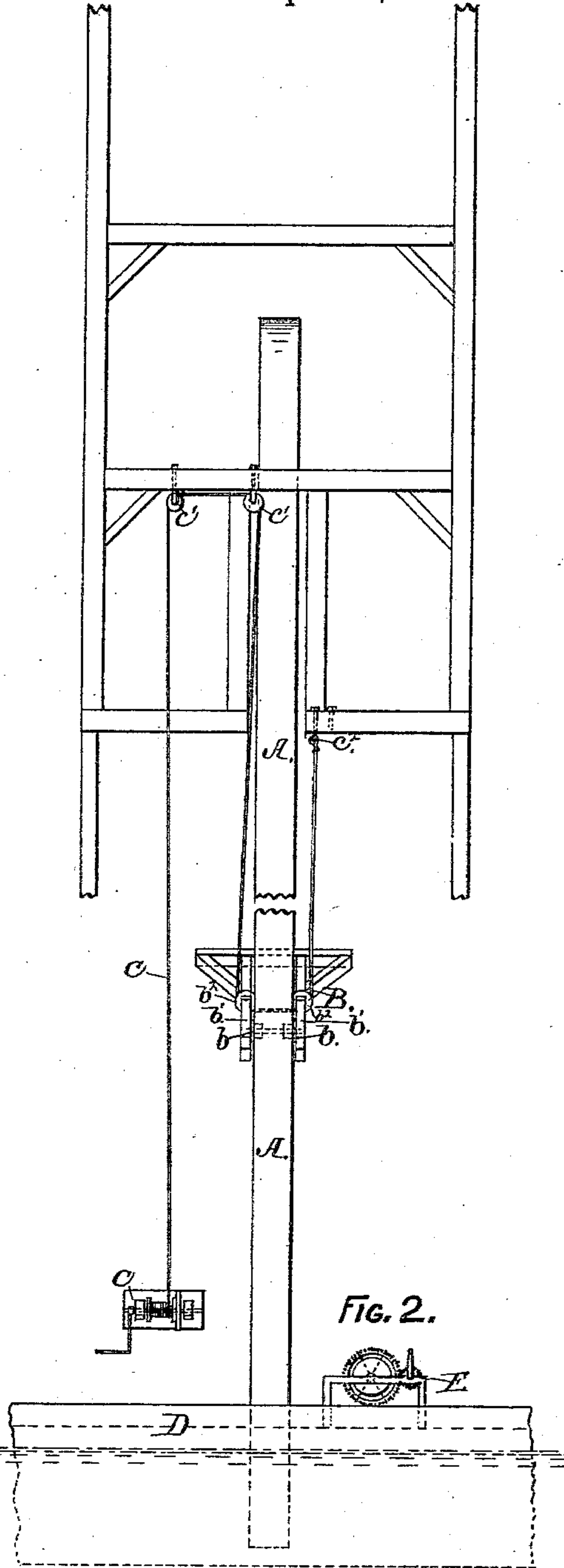
No. 369,460.

Patented Sept. 6, 1887.



**Witnesses:**

S. B. Brewer,  
H. V. Scattergood.



*Inventor:*

**LUKE MESSIER,**

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# UNITED STATES PATENT OFFICE.

LUKE MESSIER, OF SCHENECTADY, NEW YORK.

## APPARATUS FOR UNLOADING GRAIN-BOATS.

SPECIFICATION forming part of Letters Patent No. 369,460, dated September 6, 1887.

Application filed March 6, 1886. Serial No. 194,219. (No model.)

*To all whom it may concern:*

Be it known that I, LUKE MESSIER, of the city and county of Schenectady, in the State of New York, have invented new and useful  
5 Improvements in Apparatus for Unloading Grain-Boats, of which the following is a specification.

My invention relates to improvements in machinery for unloading grain from boats and  
10 transferring it into store-houses by means of an elevator; and the object of my invention is to provide means for regulating the outthrow of the leg of the elevator. I attain this object by means of the mechanism illustrated in the  
15 accompanying drawings, which, being herein referred to, form part of this specification, and in which—

Figure 1 is a side elevation of my invention, with the grain-boat shown in vertical section;  
20 and Fig. 2, a front elevation of part of the same.

As represented in the drawings, A is the leg of a grain-elevator of a common and well-known construction, attached to and adapted  
25 to deliver grain into a store-house, the front wall of which is designated by the letter *a*. Said elevator is provided with the usual endless belt having grain-buckets attached thereto, and driven in the usual manner common  
30 to all this class of machines. It is also provided with the usual appliances for using the motive power by which the elevator is driven for raising the leg A from the lower position shown by full lines in Fig. 1 to the higher position shown by the dotted lines in said figure.

35 B is a swinging frame, hinged to the wall *a* between the latter and the leg A, and in a position where it will range in line with said leg. The outer end of the frame B is entirely disconnected from said leg, and is provided with  
40 a pair of flanged wheels, *b*, which bear against the inner face of the leg A. Said frame should also be provided with guide-arms *b'*, which are fixed at right angles to the upper face of  
45 the frame, so as to lie at the two opposite sides of the leg A, to retain the latter in position laterally. A rope, *c*, passes upward from the

winch C, over the tackle-blocks *c'*, then downward around the tackle-blocks *b''*, and then upward to an eyebolt, *c''*, and by this arrangement an even strain can be applied to the  
50 frame B to swing it outward.

By means of the swinging frame B the leg A can be readily swung outward and retained in any required position, and be eased back  
55 to its normal position without liability to accident.

To prevent the straining of a boat when loaded with grain, it is necessary that too much of the weight should not be removed  
60 from any one part of the boat while an excess of the weight remains in another part. This necessitates the removal of the grain in limited quantities through the different hatchways in as uniform a manner as possible, and  
65 consequently the leg of the elevator must be frequently lifted out of the hold and the boat shifted to bring another hatchway in front of the leg of the elevator. To repeatedly perform  
70 this work by hand while unloading a cargo involves a great loss of time and cost of labor, as the elevator-leg must be swung out every time the boat is shifted. By my improvement  
75 one man can swing the elevator-leg outward, where it will be retained by the frame B during all the different shiftings of the boat.

I claim as my invention—

The combination, with the elevator-leg A and the swinging frame B, hinged to the elevator-building, but disconnected from the leg  
80 A, said swinging frame having wheels *b* and guide-arms *b'* at its outer end, said guide-arms being fixed to the upper side of said frame, so as to retain the elevator-leg in position laterally, and the said elevator-leg having a sliding  
85 movement independently of said swinging frame, of the winch C, having a rope, *c*, connected to said swinging frame, as and for the purpose specified.

LUKE MESSIER.

Witnesses:

WM. H. LOW,  
S. B. BREWER.