

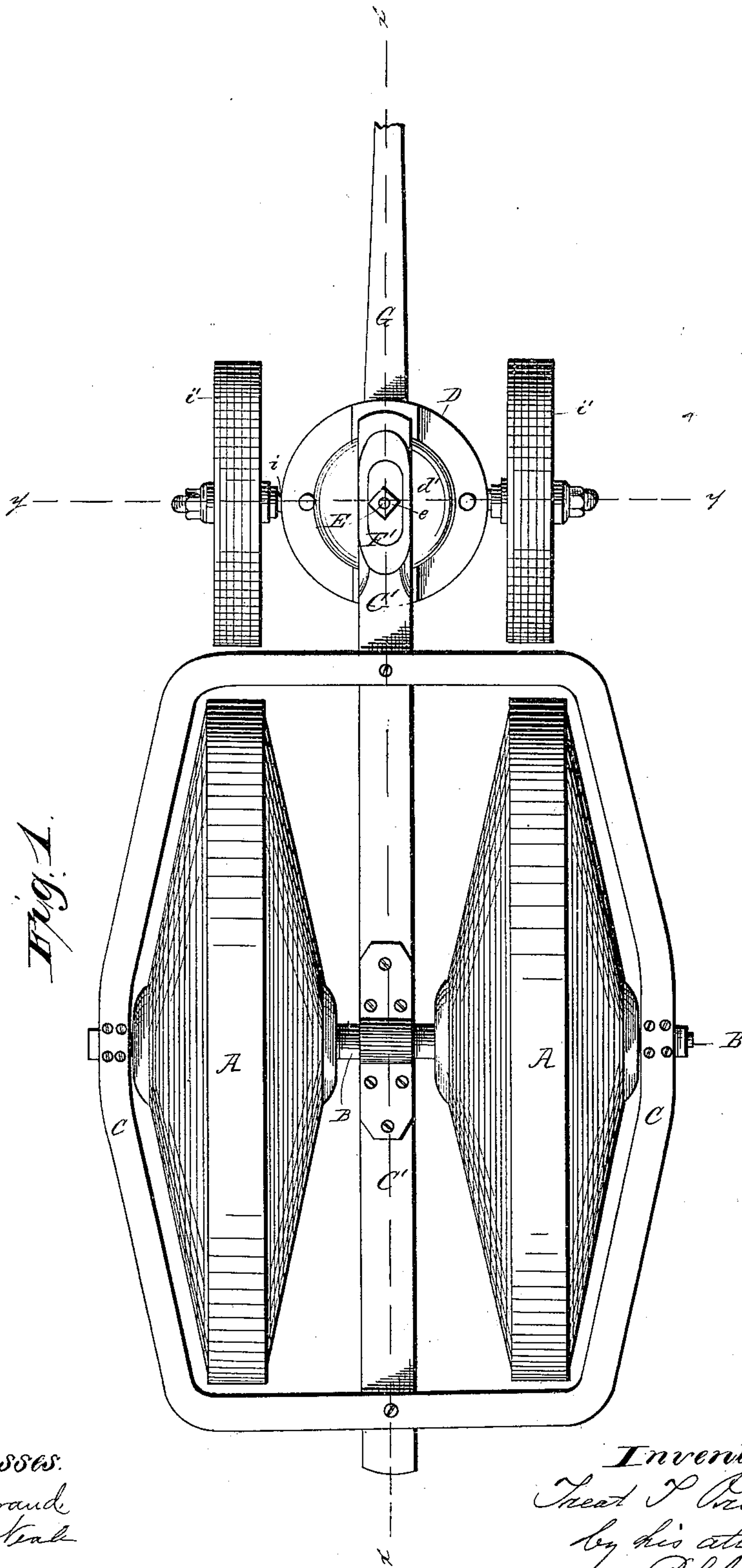
(Model.)

2 Sheets—Sheet 1.

T. T. PROSSER.  
Grain Cart.

No. 231,092.

Patented Aug. 10, 1880.



Witnesses.  
P. L. Ouraud  
Chas. H. Neal

Inventor.  
Thos. T. Prosser  
by his attorney  
R. J. Ellis

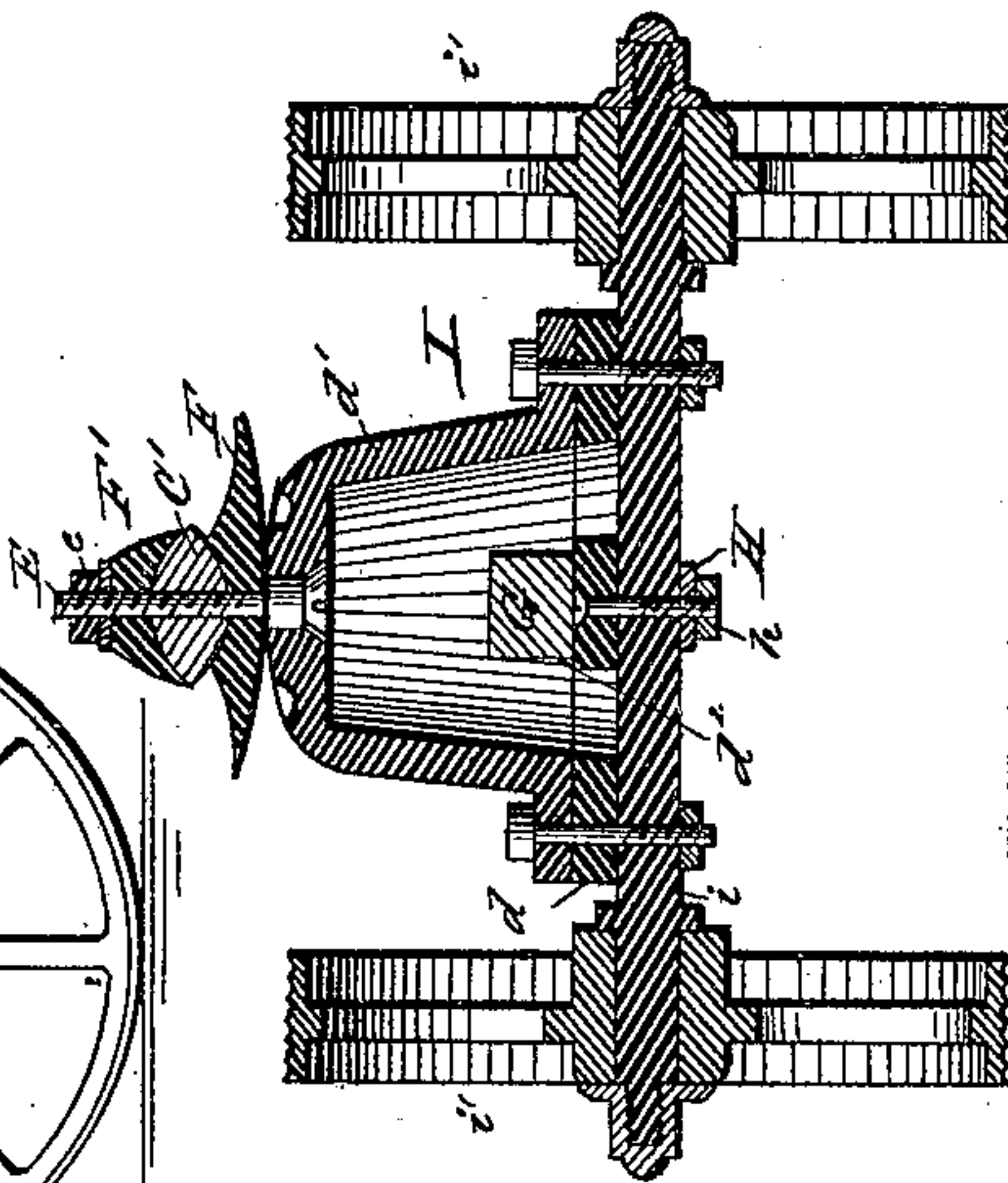
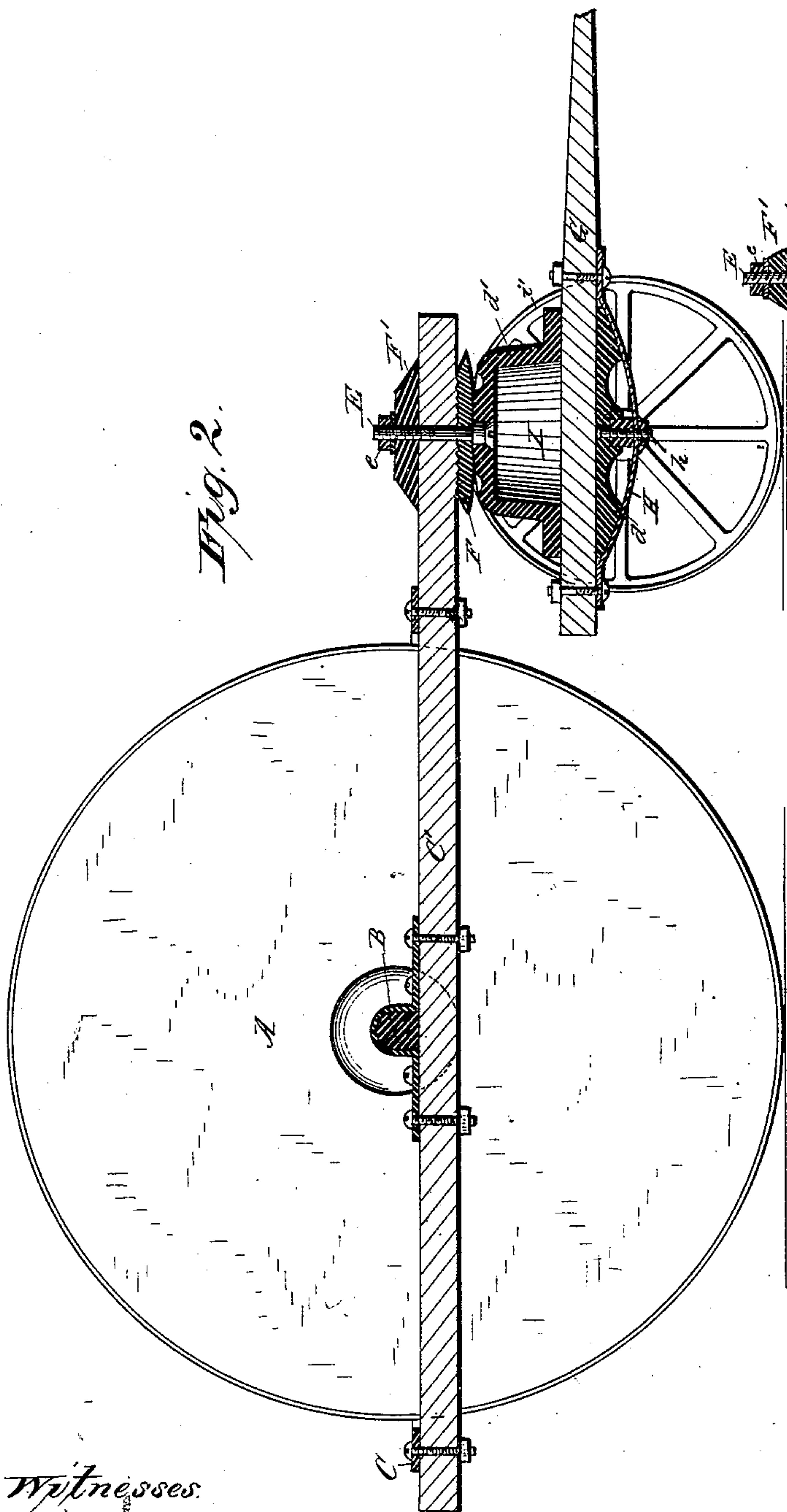
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2 Sheets—Sheet 2.

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Grain Cart.

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Witnesses:  
F. L. Ouraud  
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Inventor:  
Theo T. Prosser  
by his attorney  
[Signature]



# UNITED STATES PATENT OFFICE.

TREAT T. PROSSER, OF CHICAGO, ILLINOIS.

## GRAIN-CART.

SPECIFICATION forming part of Letters Patent No. 231,092, dated August 10, 1880.

Application filed May 1, 1880. Model.)

*To all whom it may concern:*

Be it known that I, TREAT T. PROSSER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Grain-Carts; 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 ap-  
10 pertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention is an improvement on the grain-cart for which Letters Patent No. 224,725  
15 were granted February 17, 1880.

The object of the improvement was to make the grain-cart described in said Letters Patent more manageable; to facilitate its getting  
20 out of ruts and bad places without danger of upsetting; to lower the tongue to a more convenient level for the draft-animals, and to increase the ease and capacity of turning corners.

To these ends the invention consists, mainly, in combining a swiveling truck with the said grain-cart, which swiveling truck is attached  
25 to the frame of the grain-cart so as to run in advance of it, and carries the tongue to which the draft-animals are hitched.

In order that my invention may be clearly understood, I have illustrated in the annexed drawings and will proceed to describe the best form thereof at present known to me, with the  
35 understanding that the details of construction may be considerably varied, and also that some parts of the invention may be used without the other parts thereof.

Figure 1 is a plan view of my improved  
40 twin-cylinder grain-cart. Fig. 2 is a vertical longitudinal section of the same on the line *x*, Fig. 1. Fig. 3 is a vertical section of the swiveling truck on the line *y y*, Fig. 1.

The same letters of reference are used in all  
45 the figures in the designation of identical parts.

A A refer to the rolling cylinders, in which the load of grain is carried, and which are capable of independent rotation on the axle B. These rolling cylinders are mounted on the  
50 draft-frame C, encircling them, and provided

with the centrally-arranged longitudinal beam C'. All these parts are constructed and connected together substantially as described in the aforesaid Letters Patent, with the exception that the beam C' is not a part of or directly connected to the tongue of the cart. Its forwardly-projecting end is, on the contrary, swivelingly connected with the box-frame D of the truck I, composed of an axle, *i*, and a pair of wheels, *i' i'*, mounted to turn  
55 loosely on the journal ends of the axle *i*.

The box-frame D is composed of a ring or disk, *d*, and an inverted cup-shaped box, *d'*. The ring *d* is on its under side constructed with recesses fitting the square part of the  
60 axle *i*, so that it may interlock with said axle and take a firm hold of the same.

The cap-plate of the box *d'* has a central aperture for the reception of the king-bolt E, which connects the box with the projecting  
70 end of the beam C'. This projecting end of the beam C' is clamped between a cap, F, on its under side and a plate, F', on its upper side. The king-bolt is passed up through the aperture in the cap-plate of box *d'* and through  
75 the cap, beam, and plate, its upper end being screw-threaded to receive a nut, *e*, or other means for securing it.

The king-bolt is provided with a head at its lower end to retain the box-frame, and a little  
80 higher up with a shoulder to abut against the lower side of the cap F, so that said cap and the beam and the plate may be tightly clamped together. The king-bolt has considerable play in the cap-plate of the box *d'*, and the adjacent  
85 faces of the cap F and the box *d'* are somewhat rounded, so that the truck may both turn horizontally and wobble to some extent on the king-bolt, there being also some little play provided for between the top of the box *d'* and  
90 the cap F to admit of this wobbling action. It will be observed that the king-bolt, cap F, and box *d'* constitute a kind of fifth-wheel.

The projecting end of the beam C' is fitted in a seat formed in the top of the cap F, and  
95 in order to relieve the king-bolt of canting strain I prefer to construct the seat in the cap with transverse ridges, which force themselves into the wooden beam C' in clamping the cap  
100 to the beam.



The tongue G is fitted in sockets  $d^2$   $d^2$  in the flanged lower end of the box  $d'$ , the lower side of the tongue being confined by the ring  $d$ . The rear end of the tongue projects through the rear socket,  $d^2$ , and the tongue is secured to the truck by means of a plate-spring, H, the forward end of which is bolted to the tongue in front of the box-frame, while its rear end is bolted to the tongue in rear of the box-frame. The center of the spring H is supported on a bolt,  $h$ , protruding downward through a hole in the axle and the ring seated thereon, the lower end of the bolt being provided with a nut to hold the spring in place upon it. The socket  $d$  may exceed in height the thickness of the tongue some little. Thus attached, the tongue can yield to some extent both in a longitudinal and in a vertical direction. The spring plays in grooves or ways formed in the lower side of the ring  $d$ , and is guided and supported thereby in that way.

The box-frame may be securely clipped to the axle  $i$  or bolted thereto, as shown in the drawings.

I have found that it is advisable to provide the tires of the truck-wheels with grooves, as in turning corners, especially upon a grade, the sharp edges will take hold on the ground and render said truck-wheels less liable to slip or slide sidewise.

Another advantage to be gained by this construction is that in traveling over wet ground the broad notched tires are less liable to sink deeply into the mud than a smooth tire, because the tendency of the notched tire is to pack the mud under it, whereas a smooth tire exerts a wedging action, pushes the mud aside, and sinks into it.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, substantially as before set forth, of the grain-cart composed of rolling twin-cylinders and the swiveling truck in front thereof.

2. The combination, substantially as before set forth, of the draft-frame of the twin-cylinder grain-cart, the cap secured to the projecting end of the center beam of said draft-frame, the box-frame of the truck, and the king-bolt.

3. The combination, substantially as before set forth, of the truck, the tongue, and the spring for securing the tongue to the truck.

In testimony whereof I affix my signature in presence of two witnesses.

TREAT T. PROSSER.

Witnesses:

L. J. PROSSER,  
WM. HANSBROUGH.