

(No Model.)

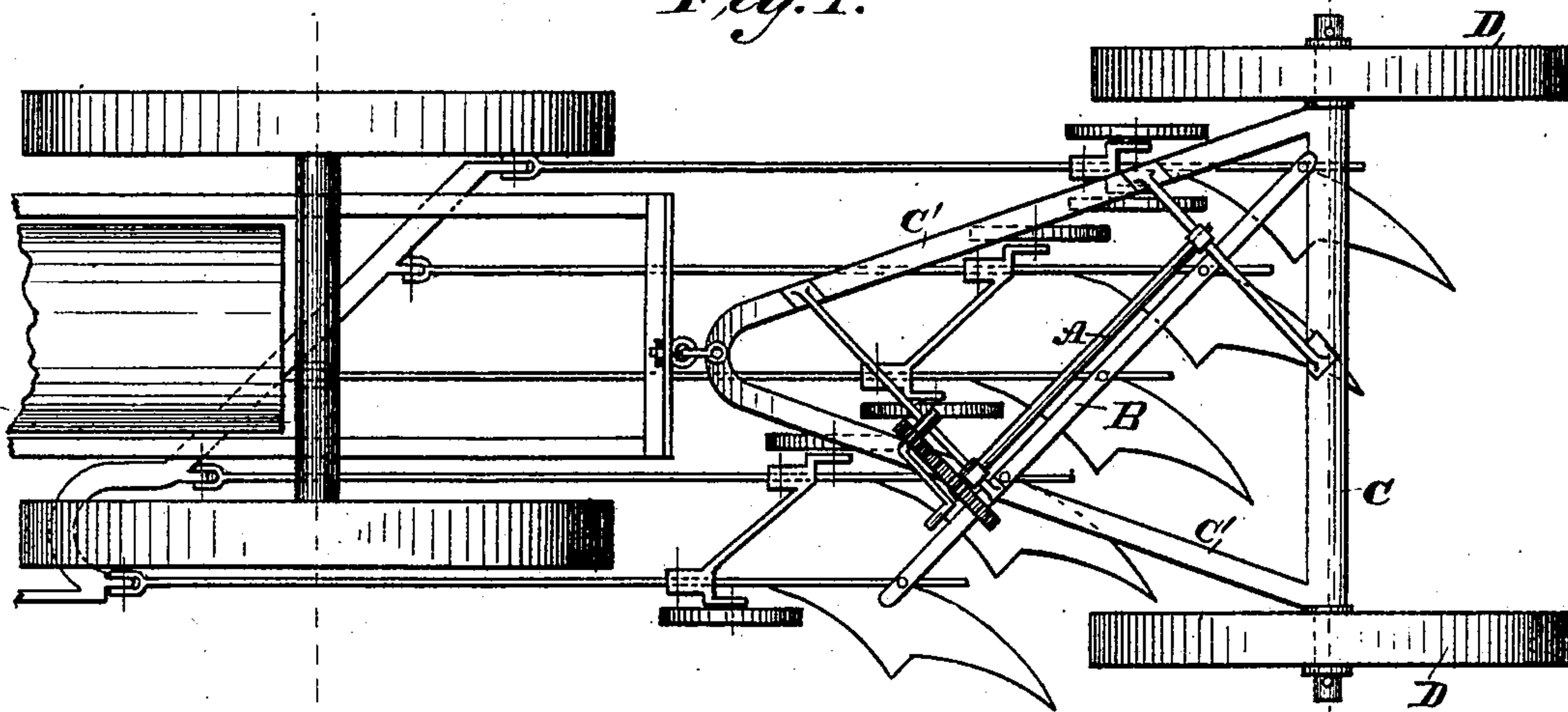
2 Sheets—Sheet 1.

E. PENNEY.  
STEAM GANG PLOW.

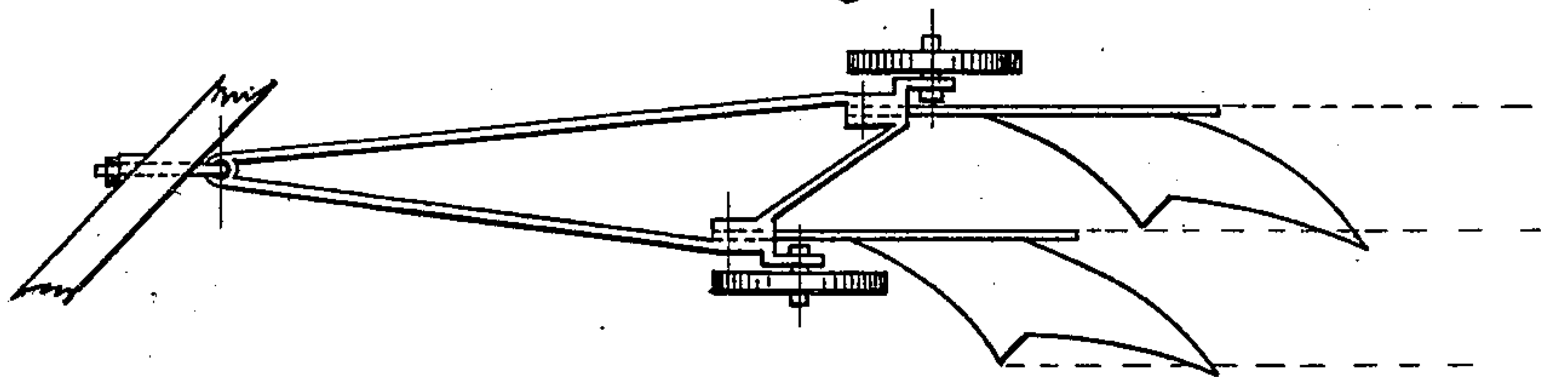
No. 316,388.

Patented Apr. 21, 1885.

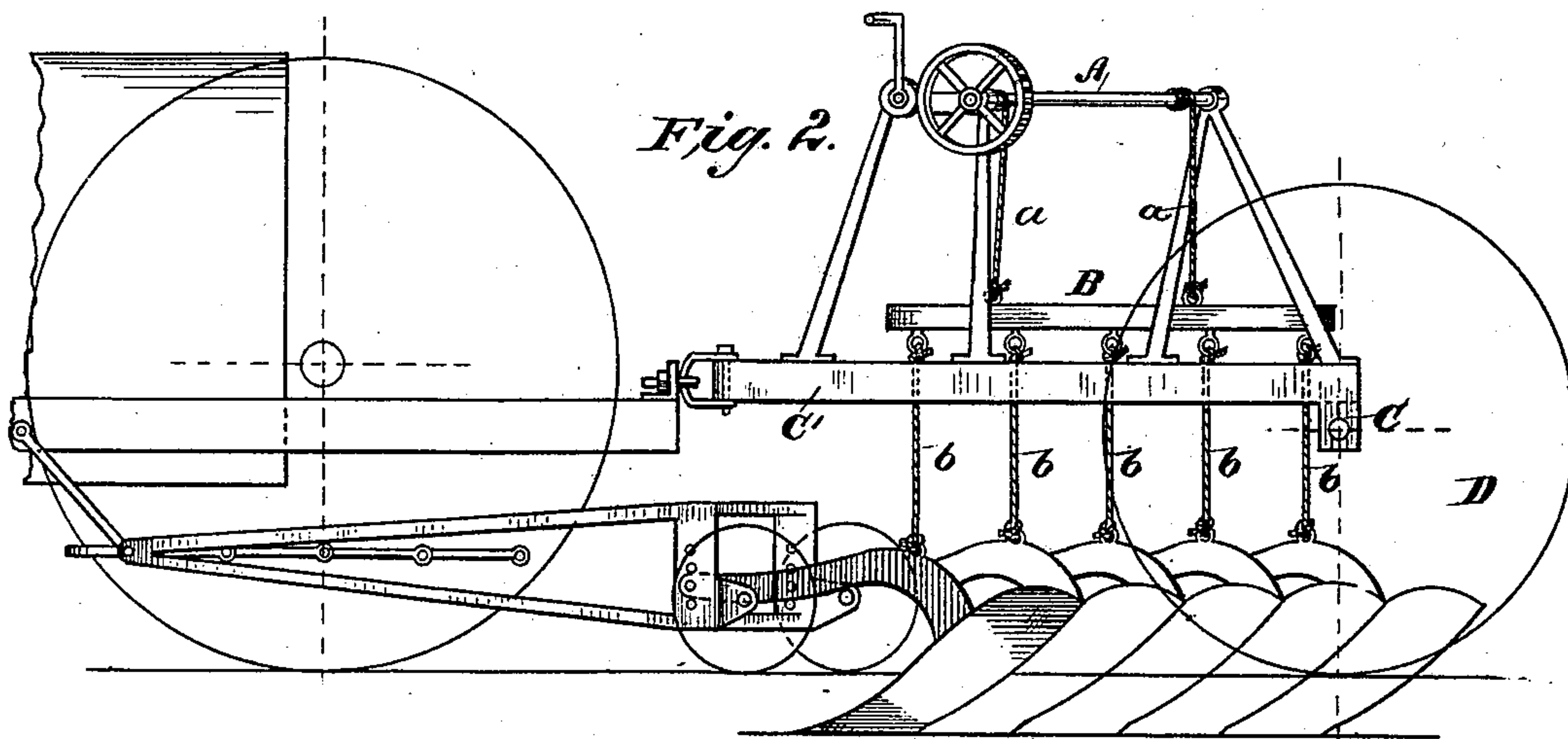
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



Witnesses:

E. J. Walker  
W. W. Mortimer

Inventor.

Edgar Penney  
By his Attorney  
J. B. E. E.

(No Model.)

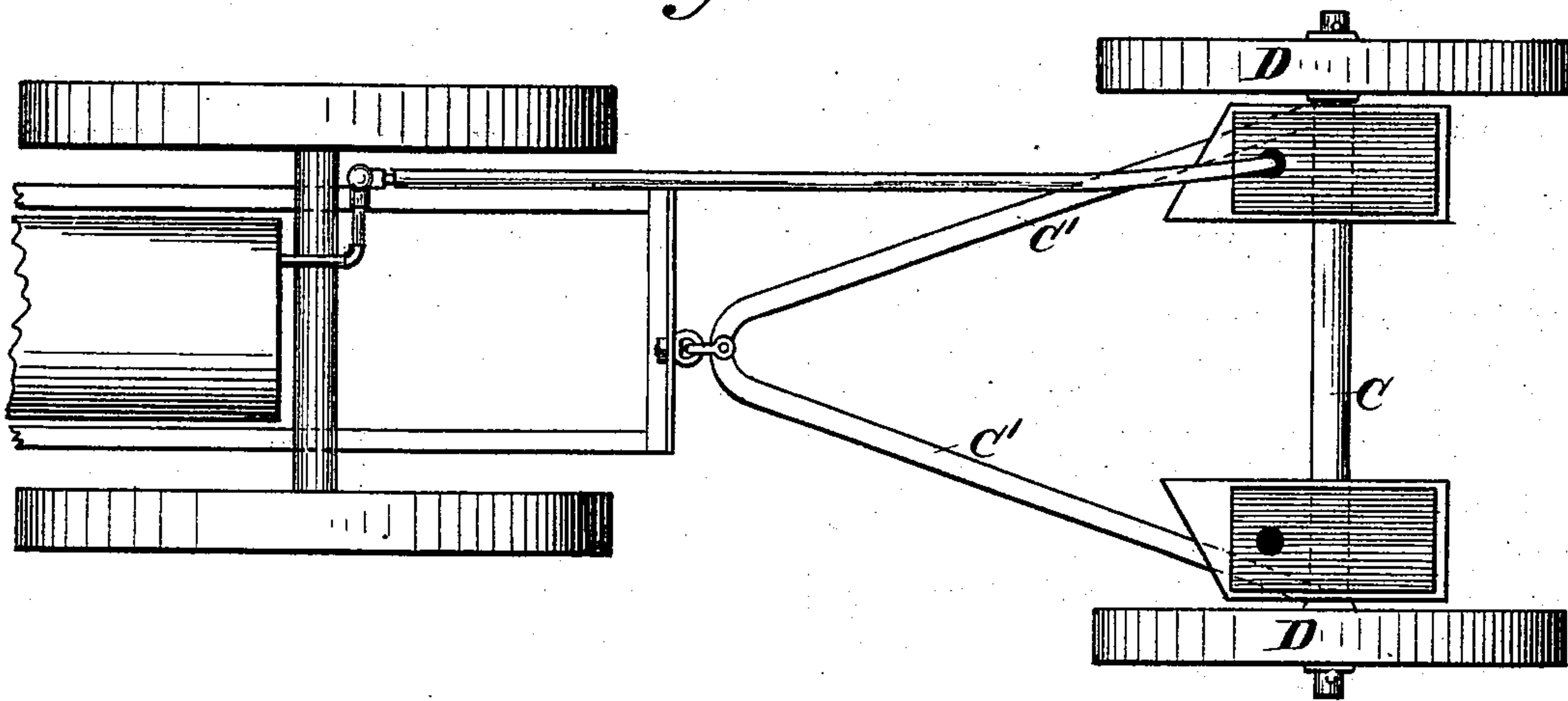
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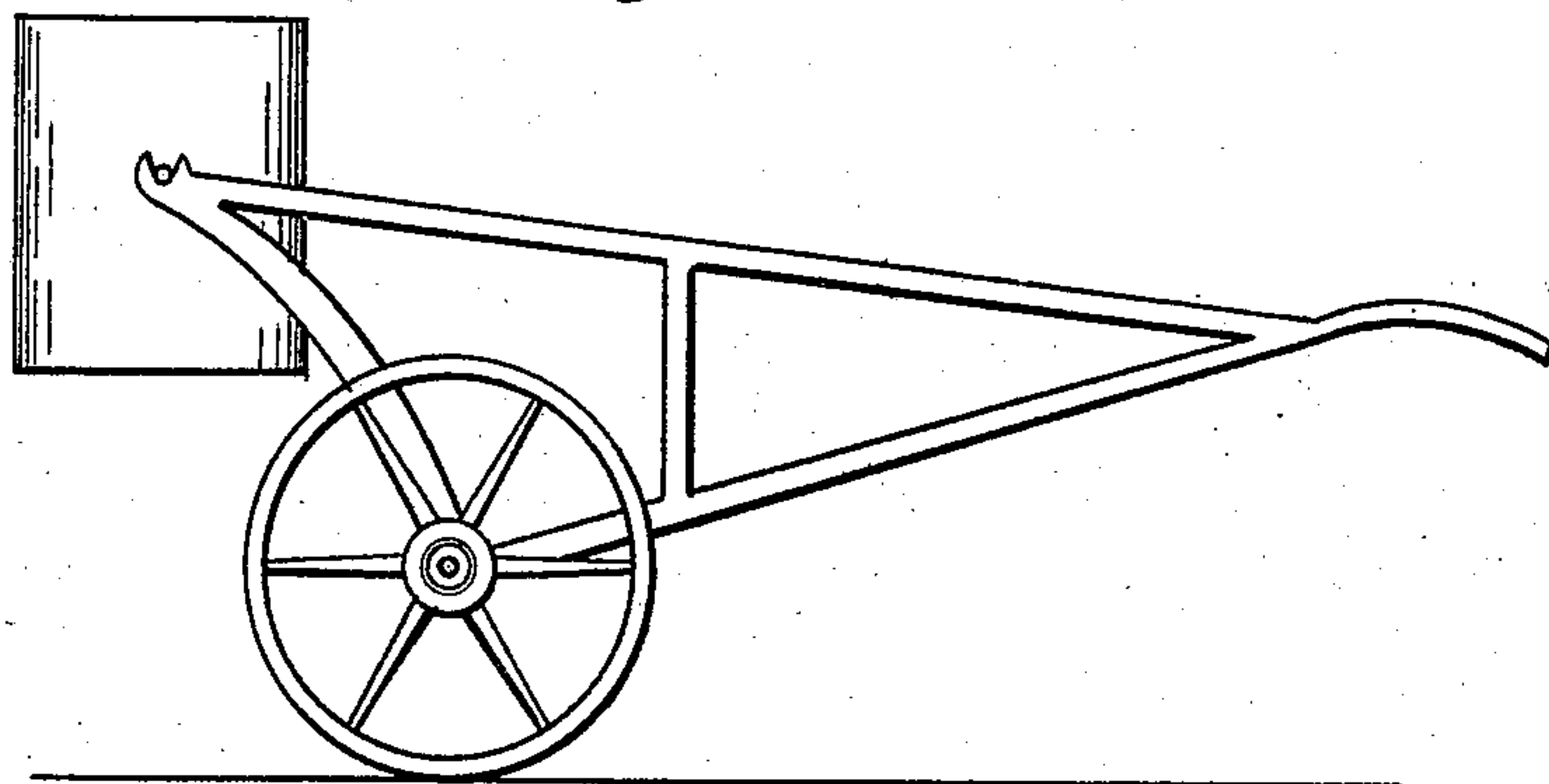
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*Fig. 4.*



*Fig. 5.*



*Witnesses:*

*Edw. T. Walker*  
*W. H. Walker*

*Inventor:*

*Edgar Penney*  
*By his attorney*  
*A. J. K. S.*



# UNITED STATES PATENT OFFICE.

EDGAR PENNEY, OF WAYNESBOROUGH, PENNSYLVANIA.

## STEAM GANG-PLOW.

SPECIFICATION forming part of Letters Patent No. 316,388, dated April 21, 1885.

Application filed October 14, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, EDGAR PENNEY, a citizen of the United States, residing at Waynesborough, in the county of Franklin and State of Pennsylvania, have invented certain new and useful Improvements in Steam Gang-Plows; 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 to make and use the same.

This invention relates to steam gang-plows of that type in which the gang of plows has no separate frame, the plows being directly attached to and drawn by a traction-engine.

My invention consists of the combination, with such a steam gang-plow, of a separate truck (drawn by but detachable from the traction-engine) supporting the plow-hoisting apparatus, and which may also be adapted for the carriage of fuel and water tanks.

In order that my invention may be clearly understood, I have illustrated in the annexed drawings, and will proceed to describe, one practical form thereof.

Figure 1 is a plan view showing so much of a steam gang-plow of the character mentioned as will suffice to illustrate the practical application of my invention. Fig. 2 is a side elevation thereof. Fig. 3 illustrates a mode of hitching the plows in pairs somewhat different from that shown in Figs. 1 and 2.

The same letters of reference indicate identical parts in all the figures.

I make no claim herein for any features of construction or combination relating to the manner and means of mounting a gang of plows and connecting them with the traction-engine. Therefore I deem it unnecessary to describe these features of the steam gang-plow illustrated in the drawings, my invention being applicable not only to this particular steam gang-plow, but to all such where the plows are not mounted on a separate main frame, but are directly connected with the traction-engine. The hoisting apparatus may also be constructed in any known form that may be desired, or specially adapted to the particular style of gang-plow required.

I have shown a hoisting apparatus consisting of a winding drum or shaft, A, provided with two chains or ropes, *a a*, carrying a diagonal lifting-bar, B, to which the diagonally-ranked plows are connected by chains or ropes *b*. The winding-shaft, operated by suitable gearing and also provided with a suitable brake, (not shown,) is supported on standards of the truck-frame in a diagonal position about vertically above the points where the ropes *b* are attached to the plows. The truck-frame is of triangular form, consisting of the axle-beam C and converging side bars, C' C'. The axle-beam is supported on a pair of ordinary wheels, D D, and the front end of the truck-frame is provided with a clevis or other suitable device, affording a convenient means for effecting its attachment to the rear end of a traction-engine. In the example shown the truck is so constructed that one of its wheels runs on the unplowed land and the other in the furrow cut by the plow in advance of it; but this construction may be varied, and in case it is desirable to carry the whole weight of the plows by this truck a suitable wheel or wheels should be placed at the front end of its frame in addition to the wheels D D.

This independent truck may also be used for carrying tanks of water and fuel for the traction-engine, in addition to its office of carrying the plow-hoisting apparatus, as shown in Fig. 4. In such cases it would be advantageous to use two such trucks with each steam gang-plow, so that as soon as the water and fuel tanks of one truck are exhausted such truck can be disconnected and its mate having a full supply of water and fuel substituted. A great deal of time and expense could be saved by the use of two such trucks with each steam gang-plow, for one could be supplied with water and fuel ready for attachment while the other is in use. To some extent this result might be attained by the use of a single truck and double sets of detachable water and fuel tanks, which should be provided with trunnions, so that they might be lifted and transported by a hand-truck, as indicated in Fig. 5.

I claim as my invention—

1. The combination, substantially as before  
set forth, of a traction-engine, a gang of plows  
hitched thereto, an independent truck, also  
hitched to the traction-engine, and a hoisting  
5 apparatus on said truck for hoisting the plows.

2. The combination, substantially as before  
set forth, of a traction-engine, a gang of plows  
hitched thereto, and an independent truck,  
also hitched to the traction-engine, carrying

tanks for water and fuel, as well as a hoisting 10  
apparatus for hoisting the plows.

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

EDGAR PENNEY.

Witnesses:

S. M. STOLER,

A. H. CAMPBELL.