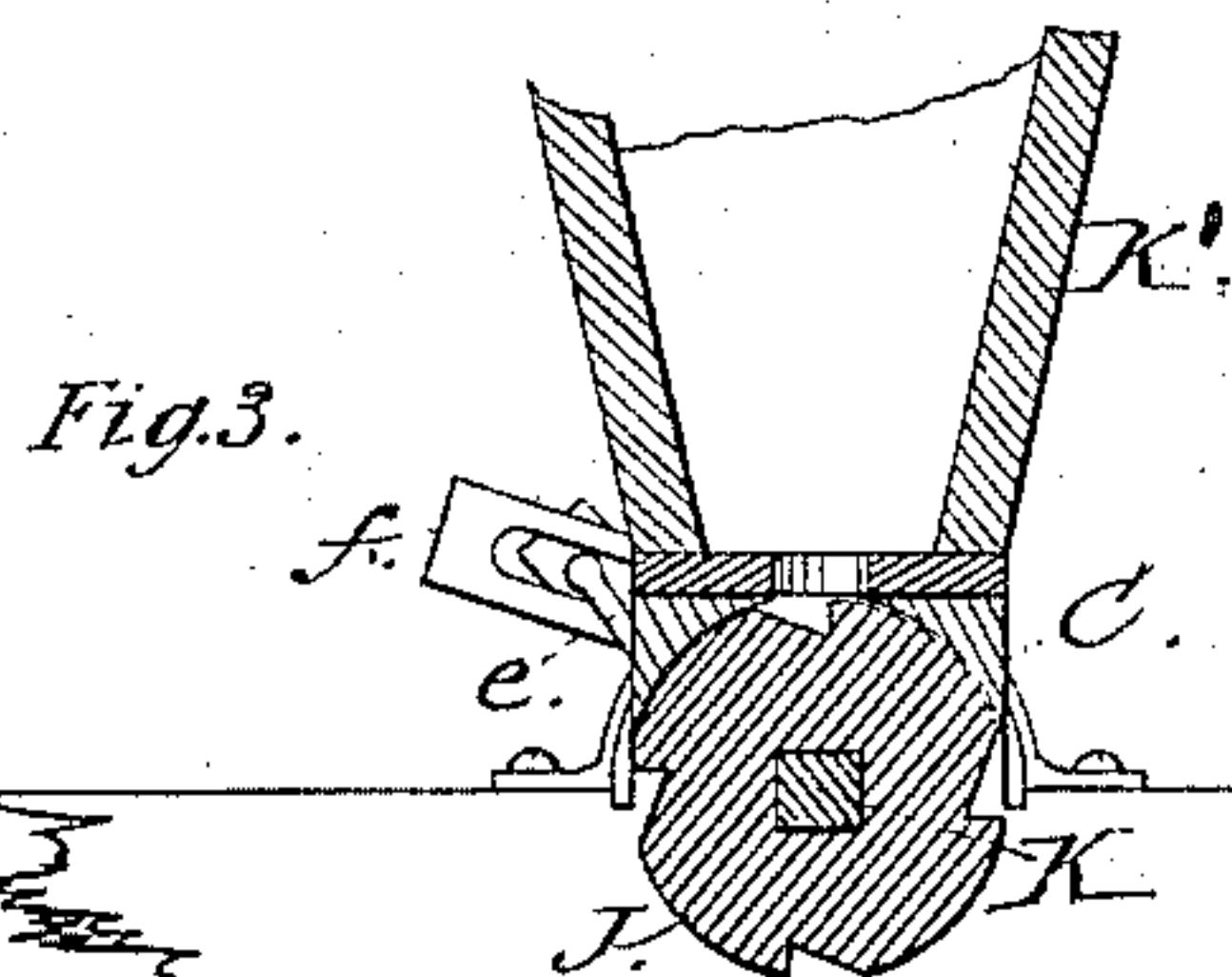
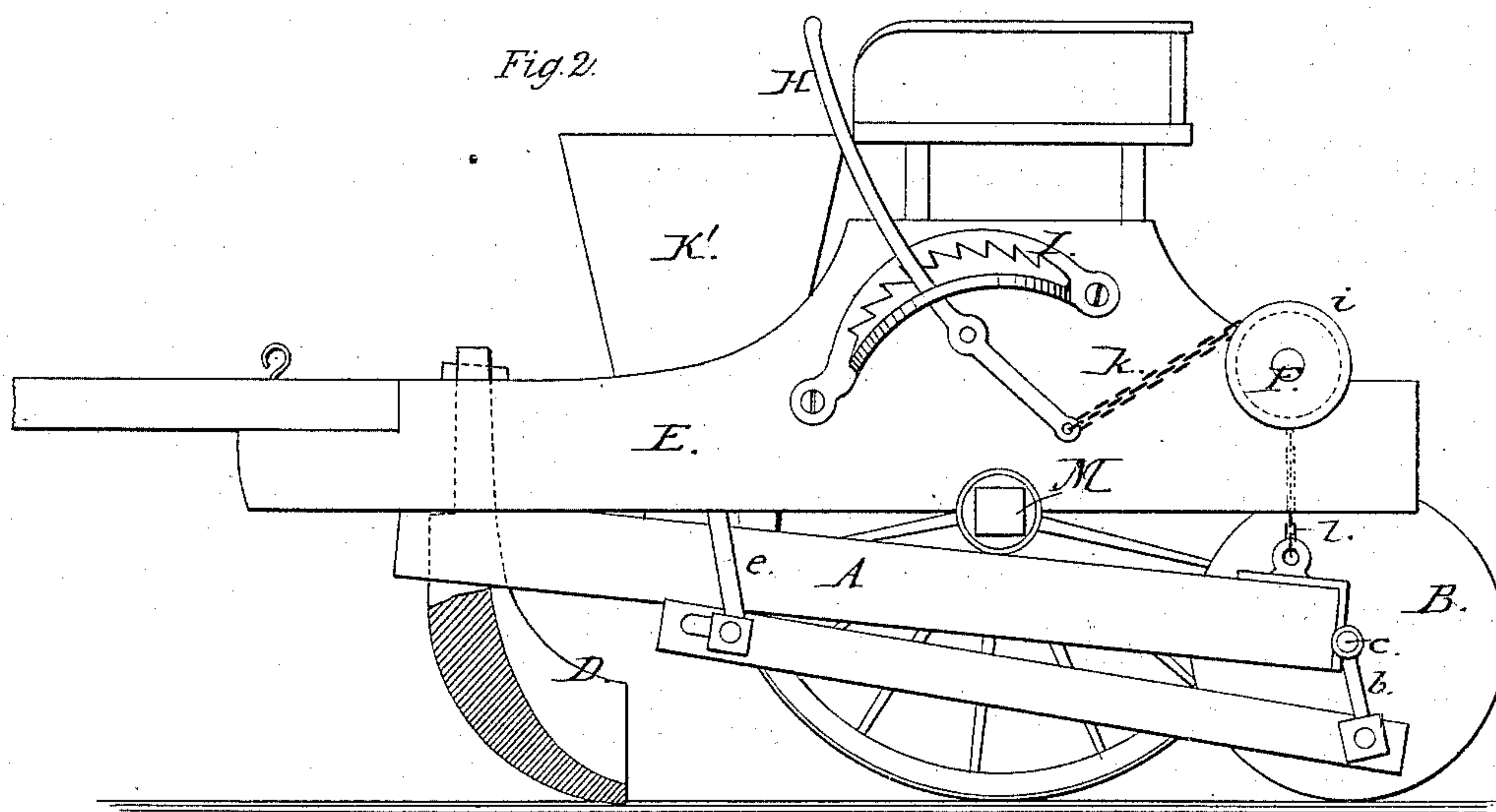
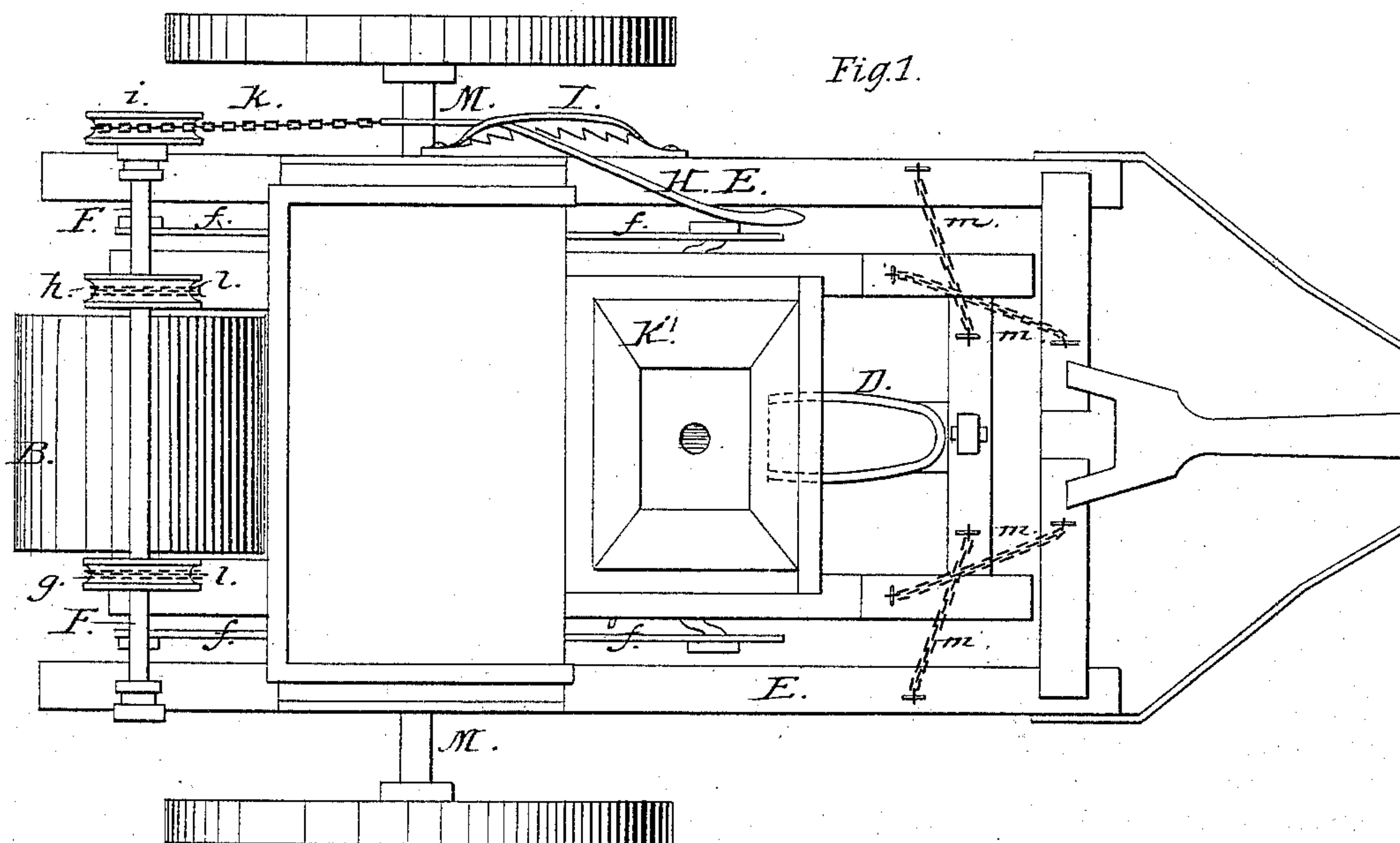


(No Model.)

M. J. HALLIBURTON.
COMBINED SEEDER AND CART.

No. 331,131.

Patented Nov. 24, 1885..



Witnesses:

E. W. Dunn
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UNITED STATES PATENT OFFICE.

MARTIN J. HALLIBURTON, OF PORTAGEVILLE, MISSOURI.

COMBINED SEEDER AND CART.

SPECIFICATION forming part of Letters Patent No. 331,131, dated November 24, 1885.

Application filed September 8, 1884. Serial No. 142,520. (No model.)

To all whom it may concern:

Be it known that I, MARTIN J. HALLIBURTON, a citizen of the United States of America, residing at Portageville, in the county of New Madrid and State of Missouri, have invented certain new and useful Improvements in Combined Seeders and Carts, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention is an improvement in seeding-machines and in a combination of a seeding-machine with a road-cart.

It consists of a convertible seeder and cart having a removable and adjustably-pivoted seeder-frame carrying the opener, the hopper, a seeder-wheel, and a housing for same, and having suitable cranks and raising and lowering devices, all of which are arranged in a manner to be hereinafter described.

It consists, secondly, in combination with the said seeding-machine, of a body mounted upon wheels, which, when attached to the seeding-machine, constitutes the moving medium of the same over the land, and when detached may be used independently as a road-cart, all of which will be herein fully set forth.

In my drawings, Figure 1 is a plan view of my invention, showing the two parts combined. Fig. 2 is a side elevation of the same. Fig. 3 is a section of the seeding portion proper, showing its relation to the opening-plow.

Similar reference-letters indicate like parts in all of the figures.

Referring to the drawings, A is a frame braced laterally at two or three points, and open in the rear to receive a coverer. B is the coverer, formed preferably of cast-iron, and provided with an axle, *c*, journaled in the frame A. At the ends of the axle *c* are formed cranks *b b'*.

At a point near the front of the frame A is mounted a housing, C, which incases or covers a seed-cylinder, J, and supports a hopper, K', which communicates by a suitable opening with the said seed-cylinder. The seed-cylinder J, at a middle point between its two ends, is provided with slots at suitable intervals around the same of a depth to suit the kinds and quality of seed to be dropped. Said cylinder J has a shaft, K, which is fashioned at its ends to form cranks *e*, which correspond

with certain cranks, *b b'*, on the ends of the shaft of the roller. These cranks *e* and *b b'* are connected by pitman-rods *f*, through which motion is communicated from the roller to the seed-cylinder.

At the forward end of the frame A is secured a plow, D, which, being fixed in line with the slots of the seed-cylinder, serves to open the furrow in advance of the dropping seed.

The cart is composed of the body E, axle M, and suitable wheels and a seat. The axle M is bent up at right angles to form a space beneath for the free movement of the seeding-machine frame and other parts of the seeder. At the rear of the cart-body is journaled a shaft, F, upon which are fixed three pulleys, *g h i*, provided each with an annular groove. The two first-mentioned pulleys are fixed at points within the body E just above the frame of the seeding-machine when the latter is in place beneath the cart. The pulleys *g h*, just referred to, are connected to the frame A of the seeding-machine by chains *l*. Chains *m* in the forward part of the cart serve to connect the seeder-frame and the cart-body. To the side of the cart-body is pivoted a lever, H, the short arm of which is connected to the pulley *i* by a chain, *k*. A segmental toothed rack, I, is fixed to the side of the cart-body just above the pivot of the lever H, and serves to engage the free arm of said lever and hold it to adjustment. The cart-body is provided with a tongue, which is braced to the forward part of the frame in the usual manner.

It is desirable at times to lift the covering-roller from the ground—as, for instance, when a turn is made in the field, or when the seeder is to be taken from the field. In such cases the lever H is brought into play and thrown forward to draw the chain *k*, in order to revolve the shaft and pulleys fixed thereon. Chains *l l* are now wrapped about the pulleys *g h* to lift the roller-frame, and with it the roller.

It is obvious that when the lever H is freed from its hold the chains attached to the pulleys will uncoil and lower the roller again to the ground.

The cart-body is provided with cleats near the lower edges of its sides on the inside to receive the floor which is adjusted to place in parts when the seeder is detached and out of

the way. Pulley *i* is connected to the frame of the roller by a chain, *k'*; or this latter chain may be a continuation of the one *k*, attached to lever H.

5 I am aware that machines are in use having seeders somewhat like mine, combined in various ways with the ordinary covering-roller; and I am also aware that the frames of covering-rollers have been suspended from
10 a supporting-frame by chains and ropes. These features I do not claim, broadly, as features or as features in combination.

Having thus described my invention, what I claim as new, and desire to secure by Letters
15 Patent, is—

In a convertible seeder and cart, the removable and adjustably-pivoted seeder-frame composed of the side and cross bars, carrying the opener D, hopper K', housing C, shaft K, seed-wheel J, with cranks *ee*, coverer 20 B, with cranks *b b'*, and raising and lowering devices H *k i l*, substantially as and for the purpose set forth.

In testimony whereof I affix my signature, in presence of two witnesses, this 29th day of 25 January, 1883.

MARTIN J. HALLIBURTON.

Witnesses:

EDW. DELISLE,

L. F. LINN.