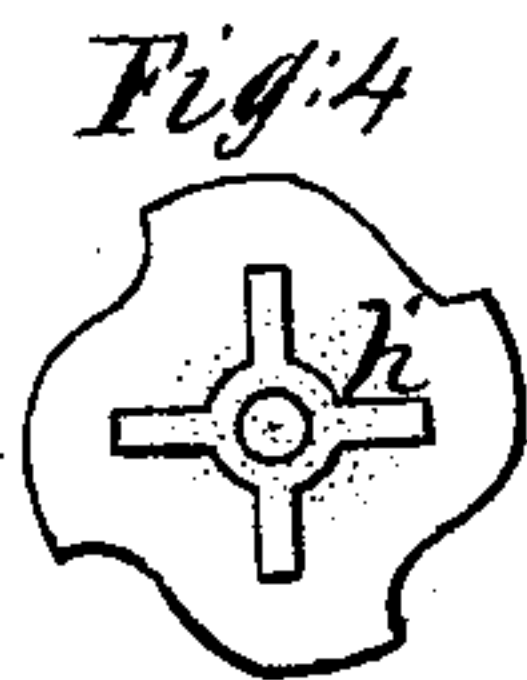
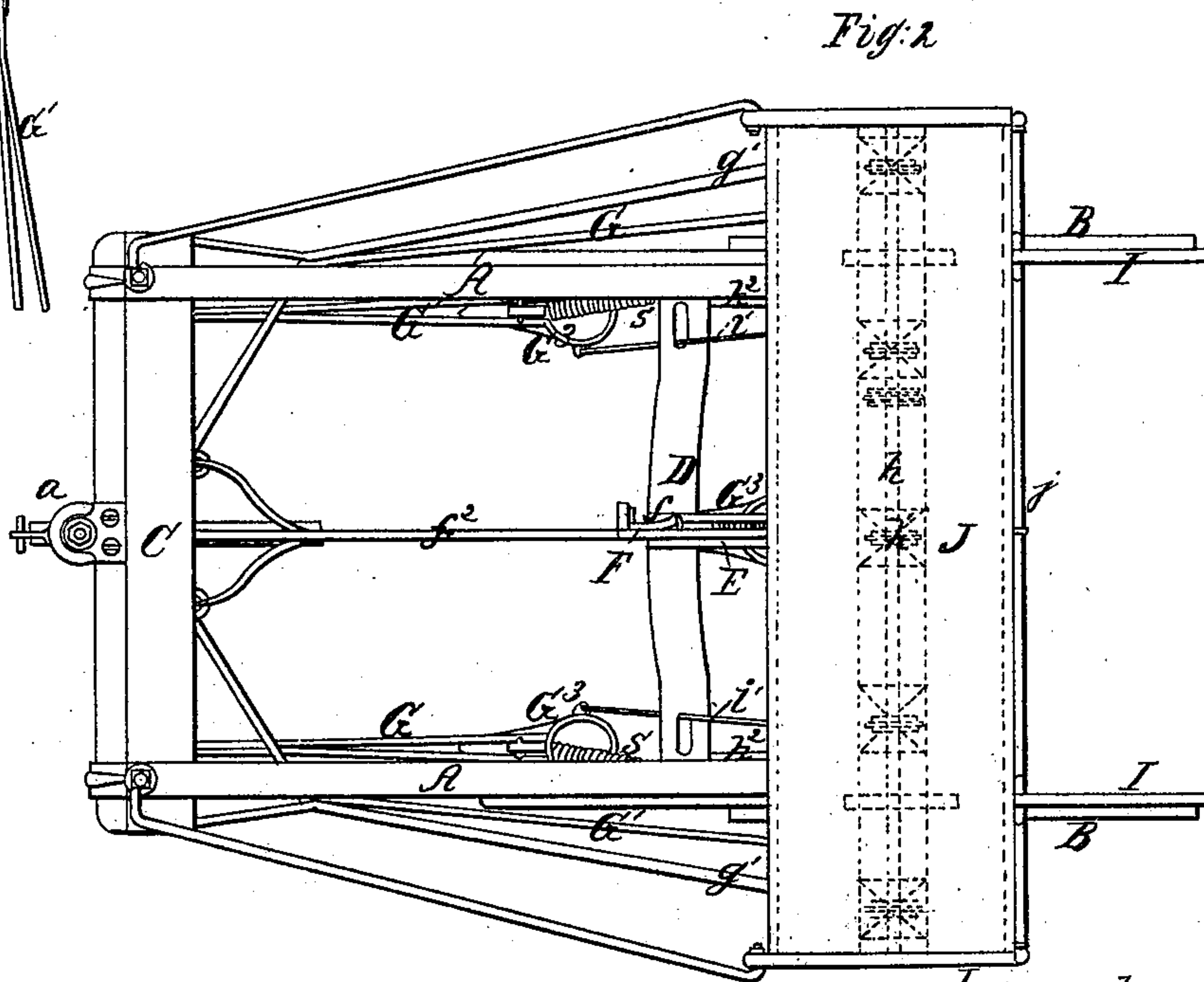
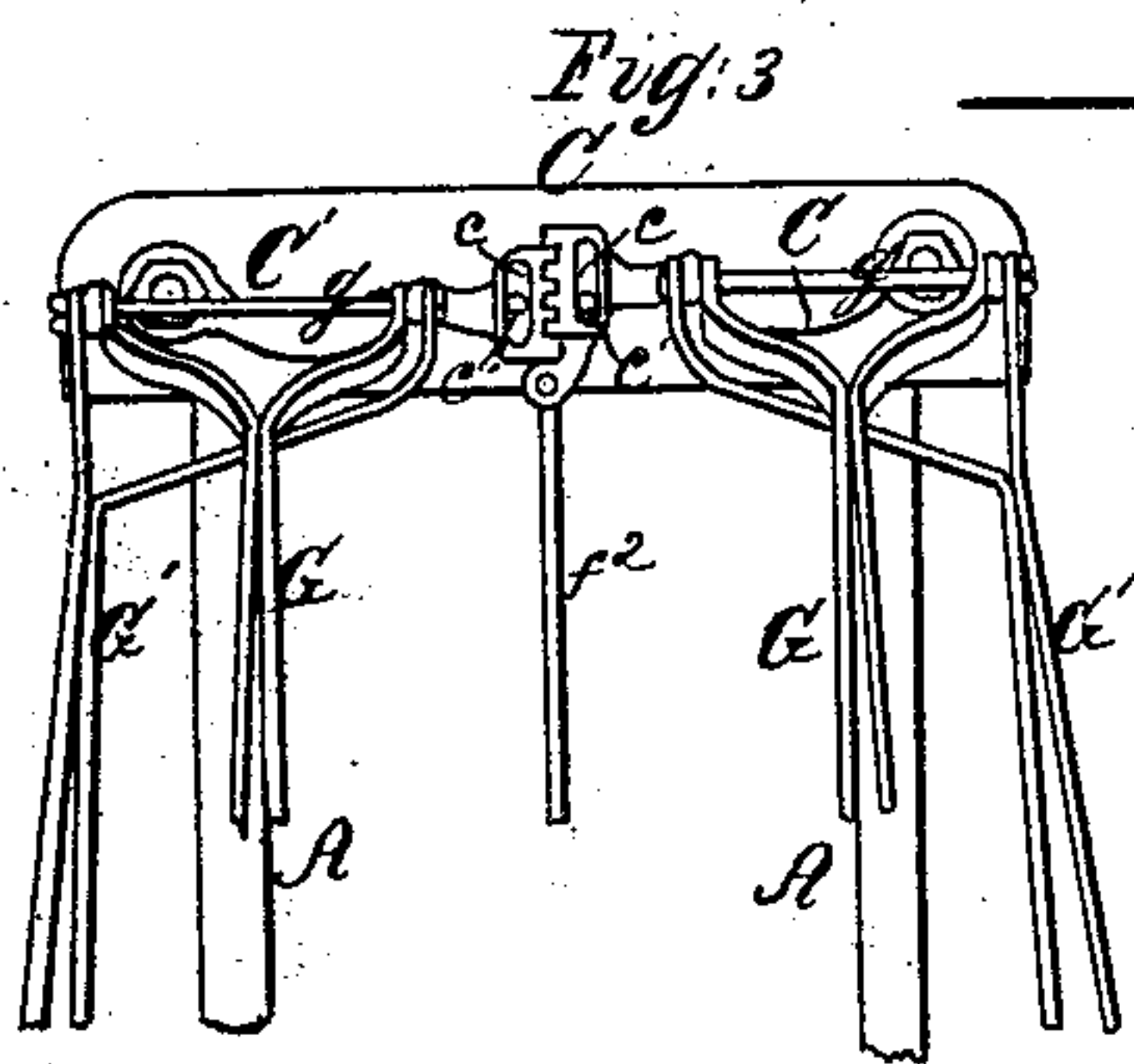
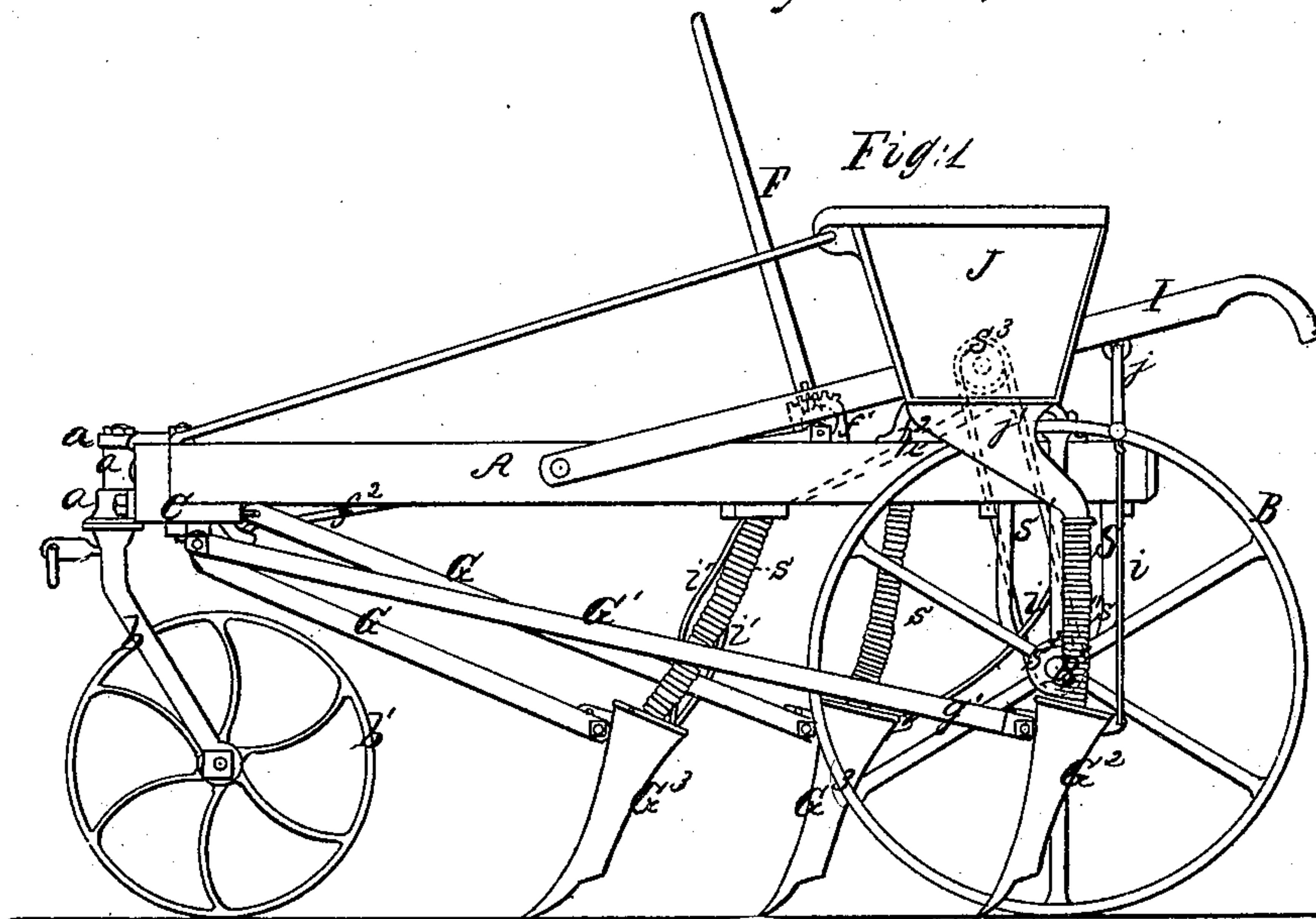


Patented Apr. 27, 1869.



Witnesses.

John A. Coles
J. W. Minter

Inventor

J. R. Rude
Per
J. H. Alexander
Atty.

United States Patent Office.

J. R. RUDE, OF LIBERTY, INDIANA.

Letters Patent No. 89,350, dated April 27, 1869.

IMPROVEMENT IN SEEDING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, J. R. RUDE, of Liberty, in the county of Union, and State of Indiana, have invented certain new and useful Improvements in Seeding-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 represents a side elevation of my seeder; and

Figure 2, a top or plan view of the same.

Figure 3, an under-side view of the front part of the machine; and

Figure 4, a side view of one of the distributors, situated on the agitator-bar.

The nature of this invention consists in the employment of two metal bars, or arms, pivoted to the lower side of the front part of the frame, and provided with cogged segments, gearing into each other, and to said arms are secured the inner ends of the beams of the seed-drills, which are operated substantially as will be hereinafter described.

My invention consists, further, in the employment of such other devices as will be more fully hereinafter described.

To enable others to make and use my invention, I will now proceed to describe it.

In the accompanying drawings—

A represents the frame of the seeder, to the front part of which are secured two metal clips, *a*, through which passes the vertical hollow axle, *a'*, secured therein by a nut, at its upper end, the lower end being formed with a flange.

Passing through hollow axle *a'* is a shaft, provided, at its lower end, with a shoulder, upon which shaft, and between its shoulder and the flange, on axle *a'*, revolves the upper end of the inclined frame *b*, which embraces, at its lower end, the guiding-wheel, *b'*.

Upon the front part of the lower side of frame A, is secured a brace, C.

C' C' designate two arms, or bars, pivoted, at their outer ends, to the under side of brace C, and provided, at their inner ends, with cogged segments, gearing into each other.

In the outer ends of these arms, and alongside of the cogged segments, are also slots, *c c*, into which work projections, *c' c'*, secured to brace C, for the purpose of allowing the arms C' C', while engaging with the cogged segments on their inner ends, to be retained in their proper position.

By means of the arms C' C', a lateral motion can be given to the seed-drills, that is, they can be thrown in or out when desired.

The arms C' are formed with clips, to which the forked ends of the beams G G', of the seed-drills G² G³, are fastened, by bolts, *g g*.

To the outer ends of the beams are pivoted the seed-drills, G² G³, the drills G³ being situated in front of the wheels B B, or nearly so, while the drills G² are placed outward from the drills G³, their beams being made to extend outward, nearly opposite the axle of the wheels, at which point they, the drills G², are pivoted.

The beams of the drills G², are formed, or provided with fenders, *g'*. (See fig. 2.)

D is a brace, secured to the lower side of frame A, to the centre of which is secured a bar, or brace, E, which has its opposite end mortised into the rear end of frame A.

Pivoted in the centre of brace E is a lever, F, which is provided with a similarly-shaped bar, *f*, acting as a stop, to secure the lever at any desired point, by engaging with a serrated plate, or piece, *f'*, secured to the side of brace E.

The lever F is connected with the arms C', by means of a metal rod, *f''*, fitting into a projection, secured to one of the said arms.

J designates the seed-box, mounted on supports, curved downward at each end, and secured to the frame A.

The seed-box J is also secured to frame A, by metal rods secured at its upper and outer ends, and extending therefrom to the front end of said frame, where they are securely fastened.

I I are the handles, secured to frame A, and passing up and outward, through the seed-box J, a short distance therefrom.

j is a shaft, hinged, or pivoted to the under side of handles I, and cranked, or provided with loops, so as to allow it to be pushed or turned upward when it is desired to raise the seed-drills, they being attached to said shaft, by means of cords, *i i'*.

j' j' are spouts, or outlets, on the lower side of the seed-box, at its outer ends, for the purpose of allowing the seed from the box J to enter the wire tubes *s*, to be attached to said outlets, which are designed to enter the seed-drills.

h is the agitator-bar, working in seed-box J, and provided with the distributors, *h' h'*, made as seen in fig. 4, and situated directly above the openings in the bottom of the seed-box.

Secured to the lower side of the seed-box, directly beneath the openings in its bottom, are seed-troughs, *h² h²*, which conduct the seed from the box J to wire tubes *s*, entering the drills G² and G³.

s' designates a band, or cord, passing around a grooved pulley, *s²*, on the axle B', and a pulley, *s³*, on the agitator-bar *h*, and by which motion is communicated to said bar.

The axle B' is made to pass through boxes, or eyes formed on the lower portion of braces, or supports, S S, secured to the lower side of the rear end of frame A, and is supplied with the wheels B B.

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

1. The arms, or bars $C' C'$, pivoted to the brace C , of frame A , and provided, at their inner ends, with slots $c c$ and cogged segments, gearing into each other, and operated by rod f^2 and lever F , substantially as and for the purpose set forth.

2. The crank-shaft j , cords $i i'$, seed-drills $G^2 G^3$, and beams $G G^1$, all arranged and operated substantially as described.

3. The peculiar construction of the seed-distributers $h^1 h^1$, arranged and operated substantially as described.

4. The combination of frame A with the inclined frame b , embracing guiding-wheel b' , arms $C' C'$, beams

$G G^1$, seed-drills $G^2 G^3$, wire spouts $s s$, secured to outlets $j' j'$, on seed-box J , cords $i i'$, crank-shaft j , lever F , stop, or brake f , serrated piece f^1 , connecting-rod f^2 , and braces $S S$, provided with boxes, through which axle B' , supplied with wheels $B B$, passes, all constructed, arranged, and operated substantially as described.

In testimony that I claim the foregoing as my own, I affix my signature, in presence of two witnesses

J. R. RUDE.

Witnesses:

G. W. TAYLOR,

A. B. JOHNSON.