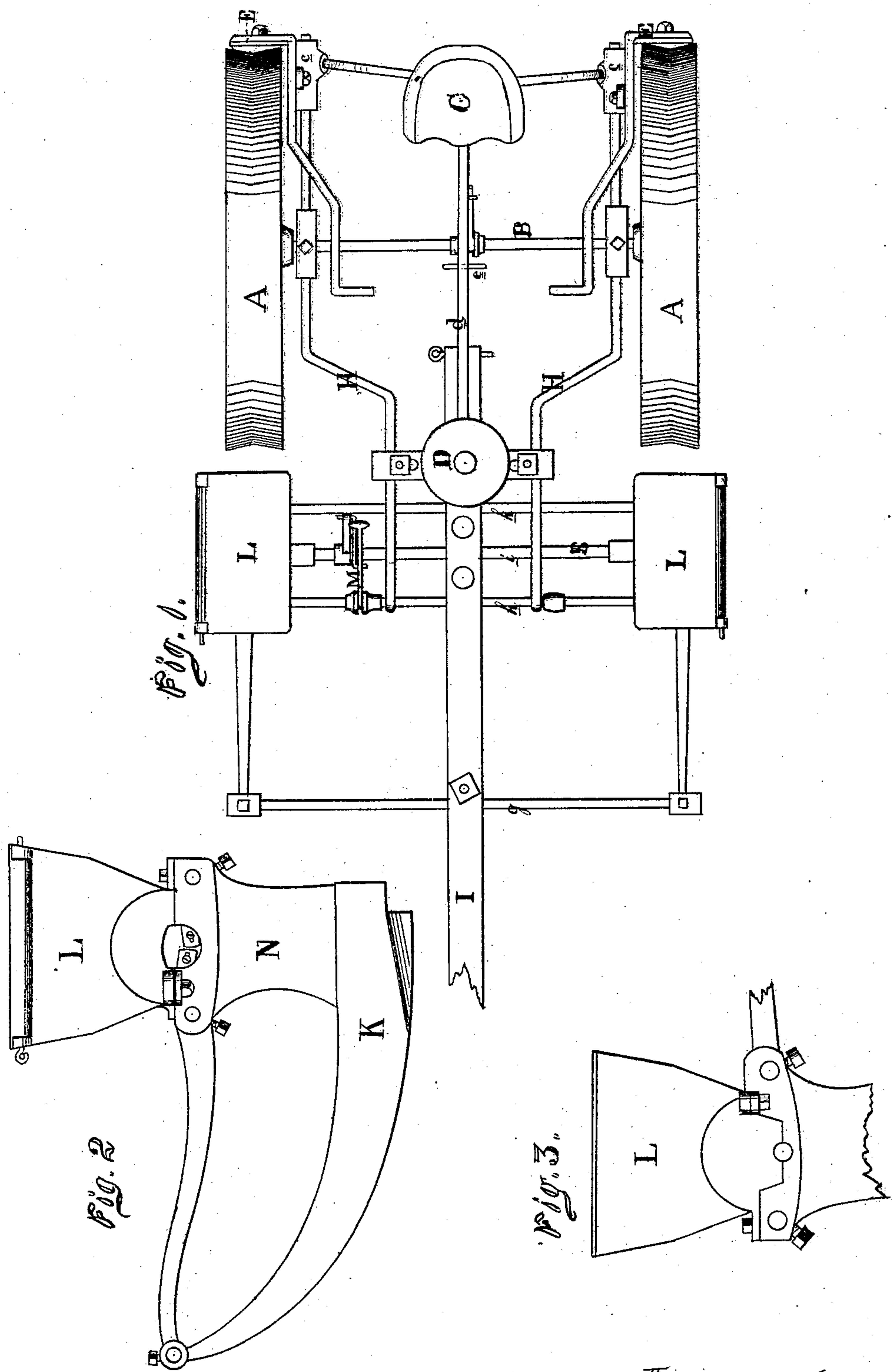


H. KOELLER.
Seeding Machine.

No. 102,684.

Patented May 3, 1870.



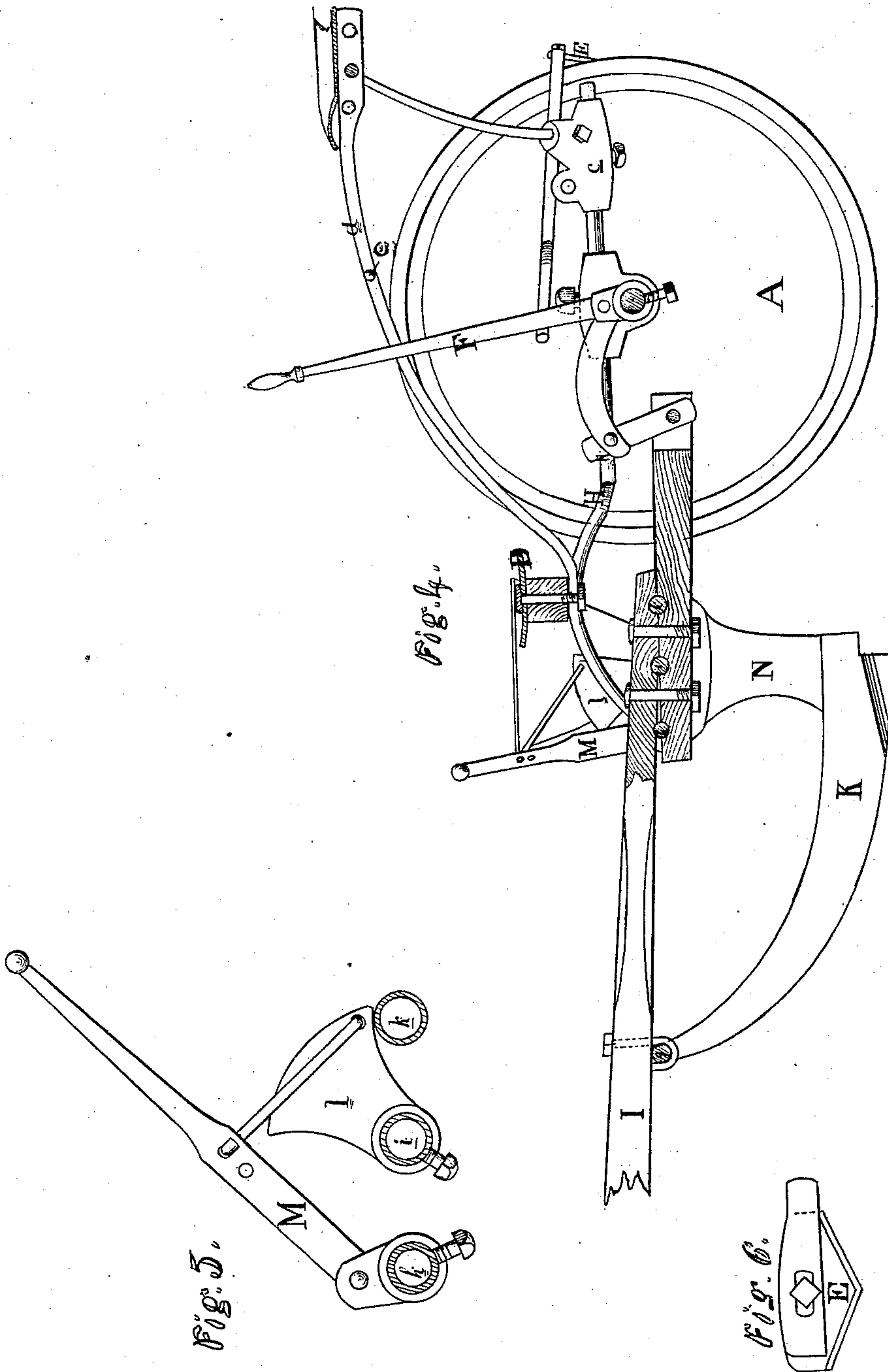
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Fig. 7.

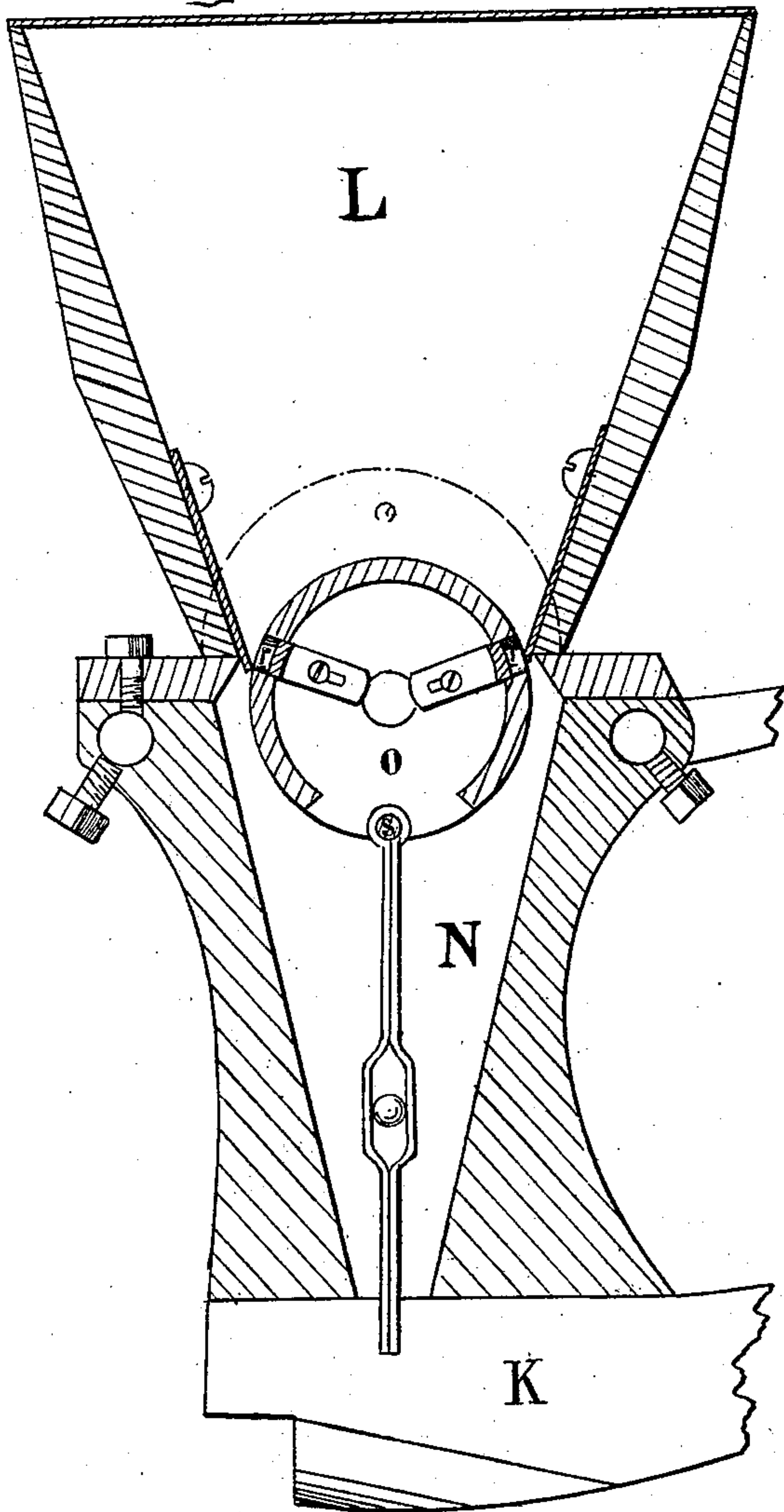
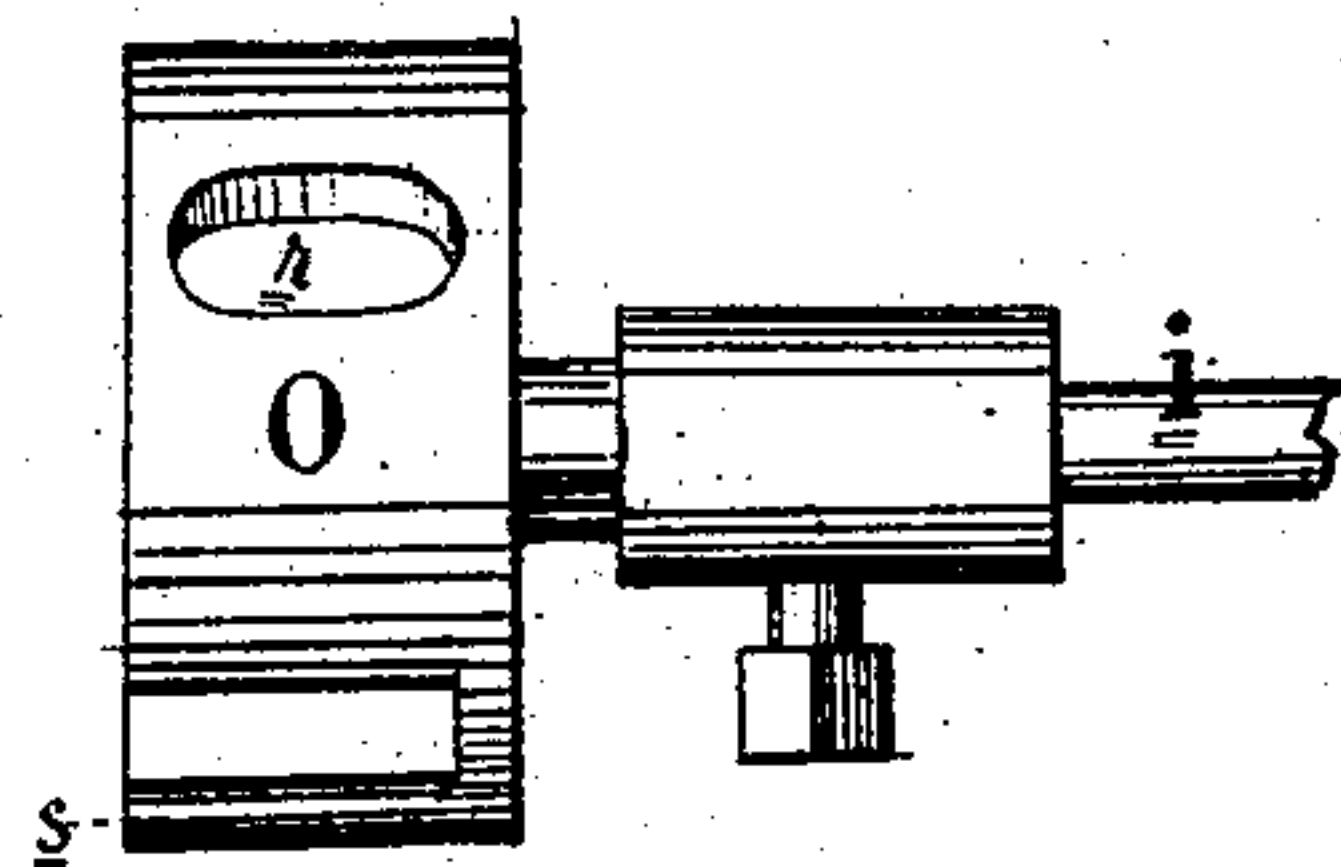


Fig. 8.



WITNESSES.

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HERMANN KOELLER, OF ADAMS COUNTY, ILLINOIS.

Letters Patent No. 102,684, dated May 3, 1870.

IMPROVEMENT IN SEEDING-MACHINES

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, HERMANN KOELLER, of the county of Adams and State of Illinois, have invented a new and valuable Improvement in Seeding-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, is a top view of my invention.

Figure 4 is a central vertical section thereof.

Figures 2, 3, 5, 6, 7, 8, are details.

My invention relates to seed-planters, and it consists in the construction and novel arrangement of devices intended to increase the efficiency of such machines.

A, of the drawings, represents the wheels of my planter, which are usually constructed of metal, and have peripheries hollowed out, as shown, to serve as aids in covering the seeds and rolling the track formed by the markers.

B represents the axle of the carriage.

C is the carriage-seat for a man, and

D another seat for a boy.

The seat C is made removable by means of the set-screws *a*, by which its rear supporting-rods are held in their sockets at *c*, and by a nut and screw under the seat D, by which its front supporting-bar, *d*, is united with the cross-bar on which the seat D is fixed.

E represents scrapers pivoted to the socket *c*, as shown, the office of which is to scrape the dirt from the wheels. These scrapers are operated by the feet of the man on the seat C.

F represents an elbow-lever pivoted to the carriage-axle and operated by the hand of the man on seat C.

A pin, *e*, is attached to the supporting-rod *d* to serve as an aid in operating said lever.

H represents curved-bars that serve to unite the front, or marking and seeding portion of my planter, with the rear, or covering and rolling portion thereof, in the manner shown.

Of this front portion of my planter—

I represents the neap;

K the markers;

L the seed-boxes;

g, *h*, *i*, *k*, transverse rods, and

M a lever intended to be operated by the boy on his seat C.

This lever M is pivoted to the rod *h*, and united by a crank or hoop with the crank *l* on rod *i*, in the manner represented.

The seed-boxes are adjusted immediately over the conduits *n*, one at each end of the transverse rods

above mentioned, and above the same. They are respectively attached by means of screws, and are removable at will.

O represents a cylindrical feeder attached by a set-screw to the end of the rod *i*, and working in the bottom of the seed-carrier.

It has openings, *r*, in its sides to receive the seed, which, when the feeder is rotated, is carried downward and into the conduit.

Two slots are cut in the side of this cylinder, leaving a pin or tongue between them, marked *s* on the drawings.

To this tongue *s* I attach the reciprocating valve *v*, in the manner shown in fig. 7.

To operate my planter I place a man on the seat C, and a boy on the seat D.

The office of the man is to drive the team, and actuate the lever F and the scrapers E, the latter by his feet.

The office of the boy consists in actuating the lever M, by means of which the seed is conveyed into the conduits in the openings *r* of the carriers, and, at the same time, the valve *v* is made to open and close the spaces at the lower ends of the conduits, and at each back and forth movement of said lever deposits the seed in the furrows cut by the markers.

The flanges of the markers, in conjunction with the wheels of the carriage, serve to cover the seed, and thereby effectually planting the same.

It will be observed that nearly all the material parts of my planter are connected by means of set-screws, and made removable thereby.

This arrangement enables the operator to substitute a new for any broken or worn-out part with great ease, and is also advantageous in stowing the machine within a small space for the winter.

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

1. In a seed-planter, the curved bars H, constructed with the sockets *c* upon their rear ends, and connected with the axle, substantially as shown and described, and combined with the supporting-rods and driver's seats, as and for the purposes specified.

2. The seed-planter herein described, having markers K, metallic wheels A with concave peripheries, levers F and M, feeder O, valves *v*, seats C and D, scrapers E, and rods *g*, *h*, *i*, *k*, when constructed and arranged to operate substantially as and for the purpose specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

HERMANN KOELLER.

Witnesses:

THOS. BAILEY,

E. E. B. SAWYER.