

(No Model.)

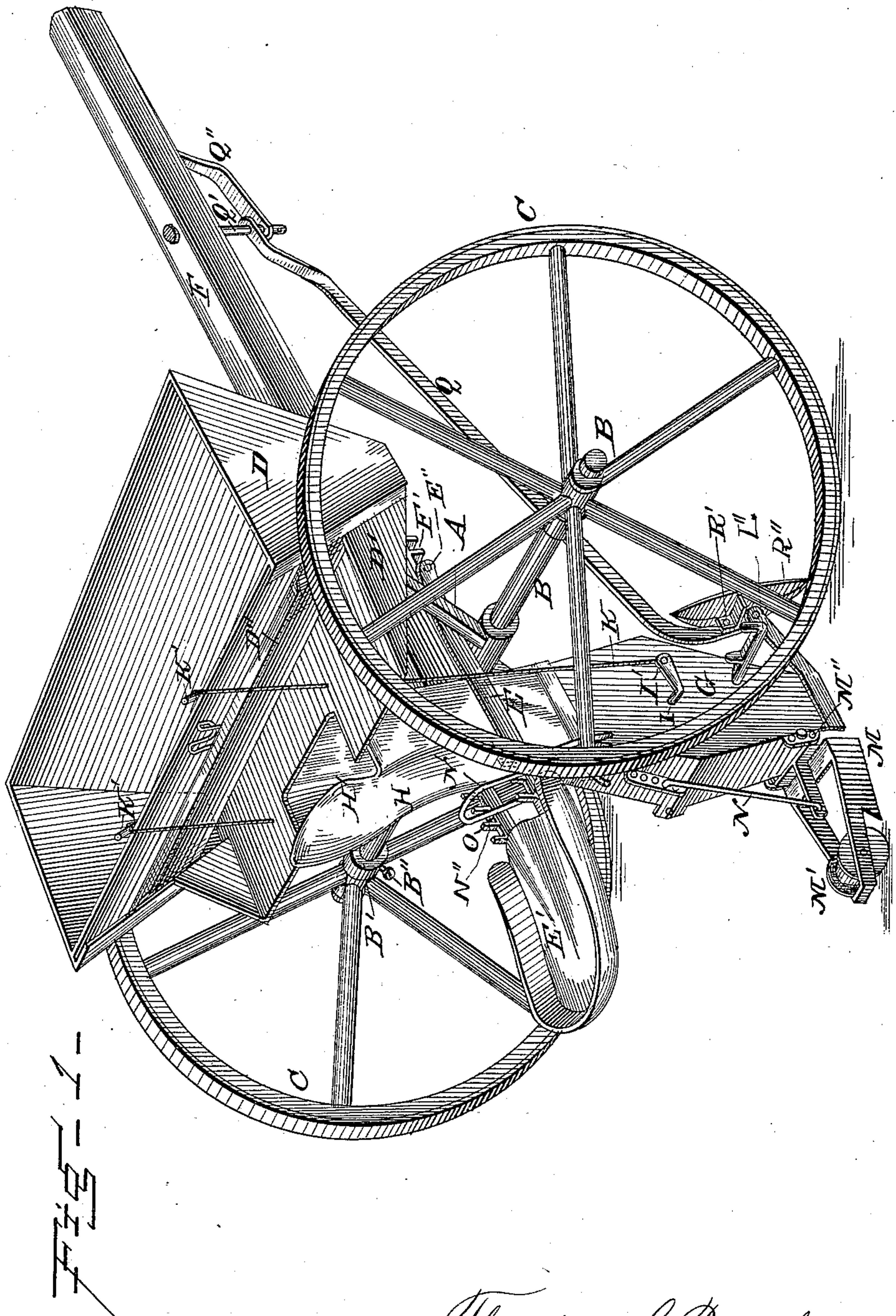
3 Sheets—Sheet 1.

T. L. BROOKS.

CONVERTIBLE SEEDING MACHINE.

No. 299,905.

Patented June 3, 1884.



WITNESSES:

Wm. S. Dietrich,
J. Fred. Reily.

Theodore L. Brooks
INVENTOR.

By Louis Baggett & Co.
ATTORNEYS.

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Fig. 2

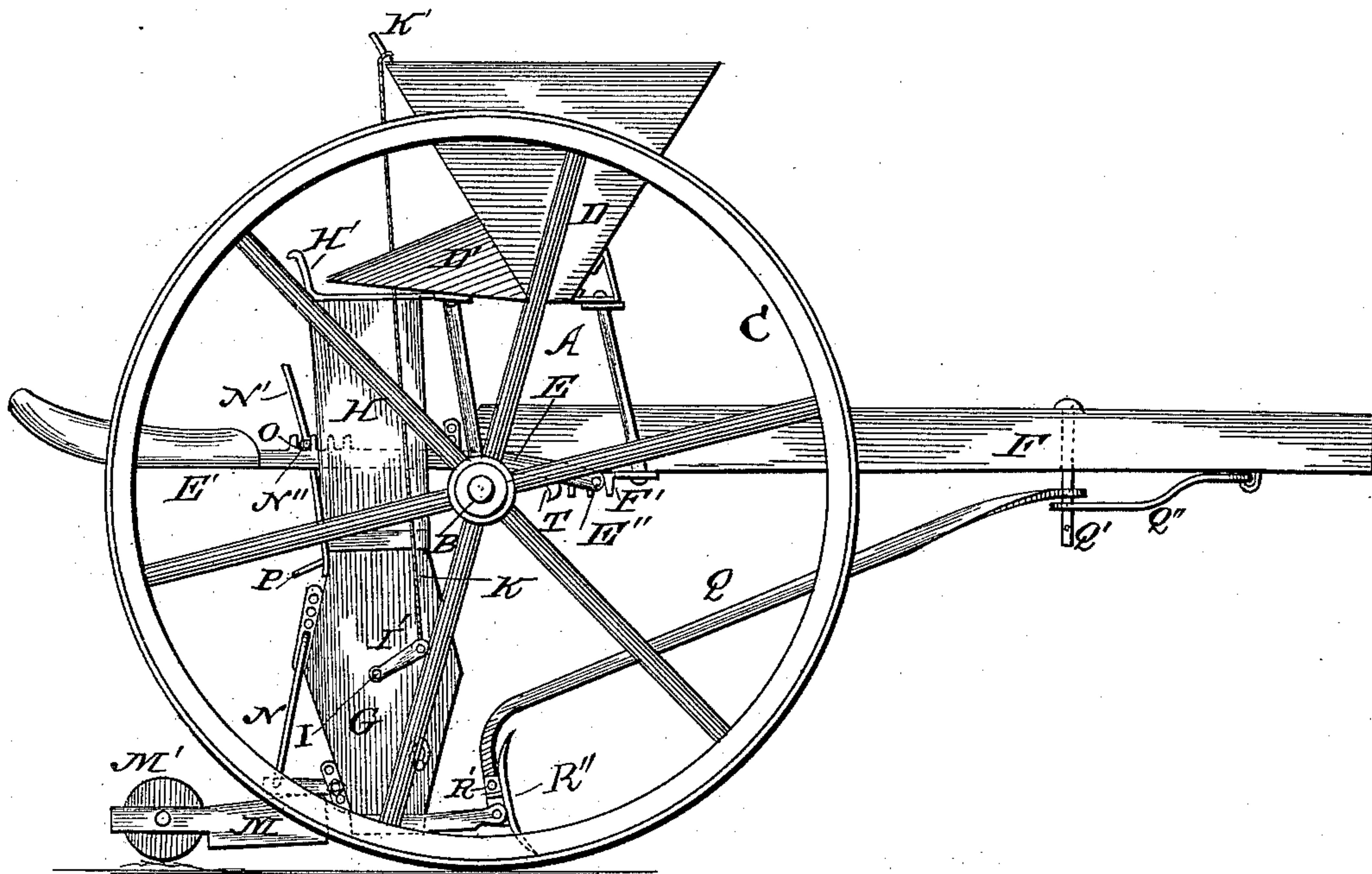
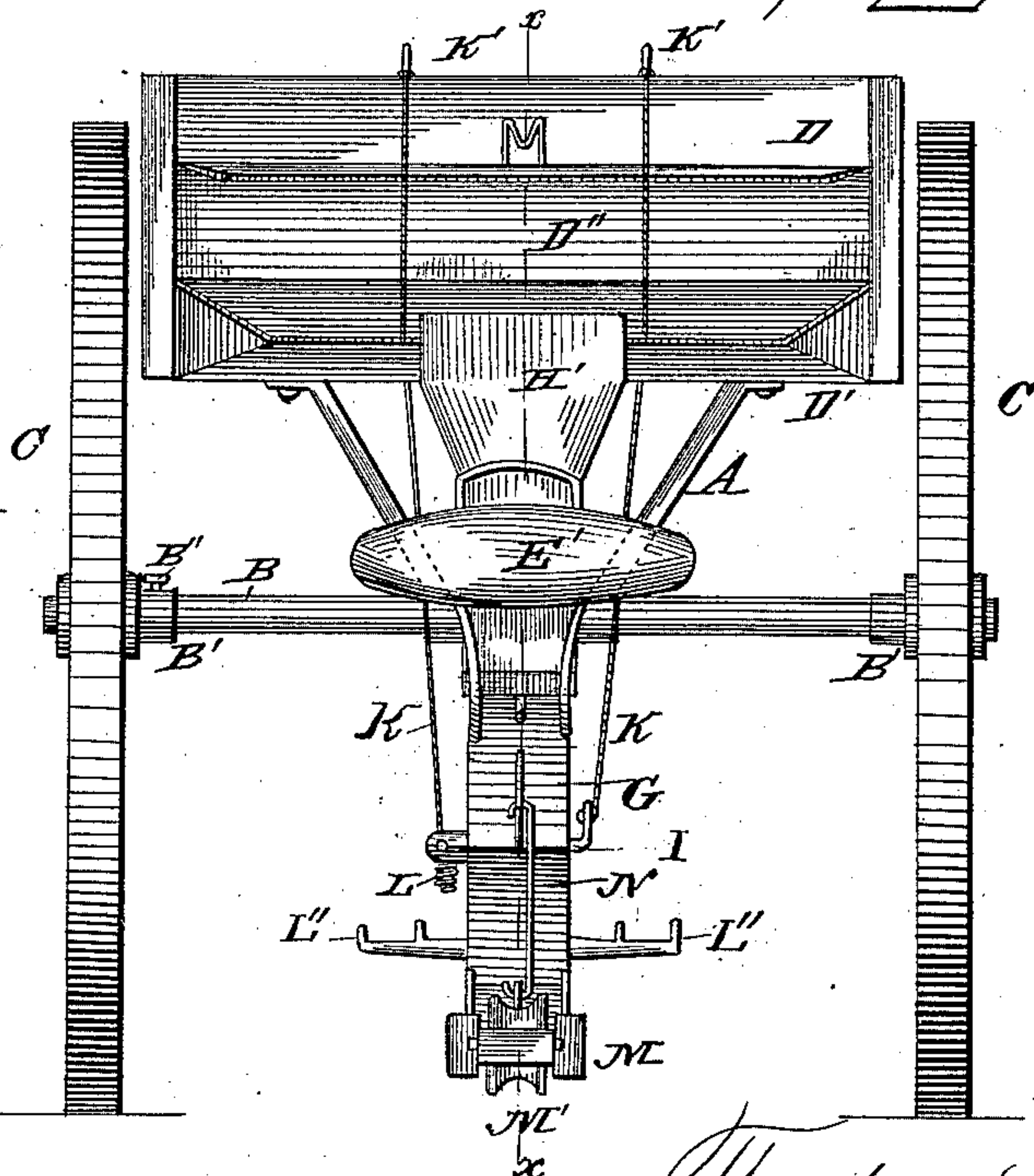


Fig. 3



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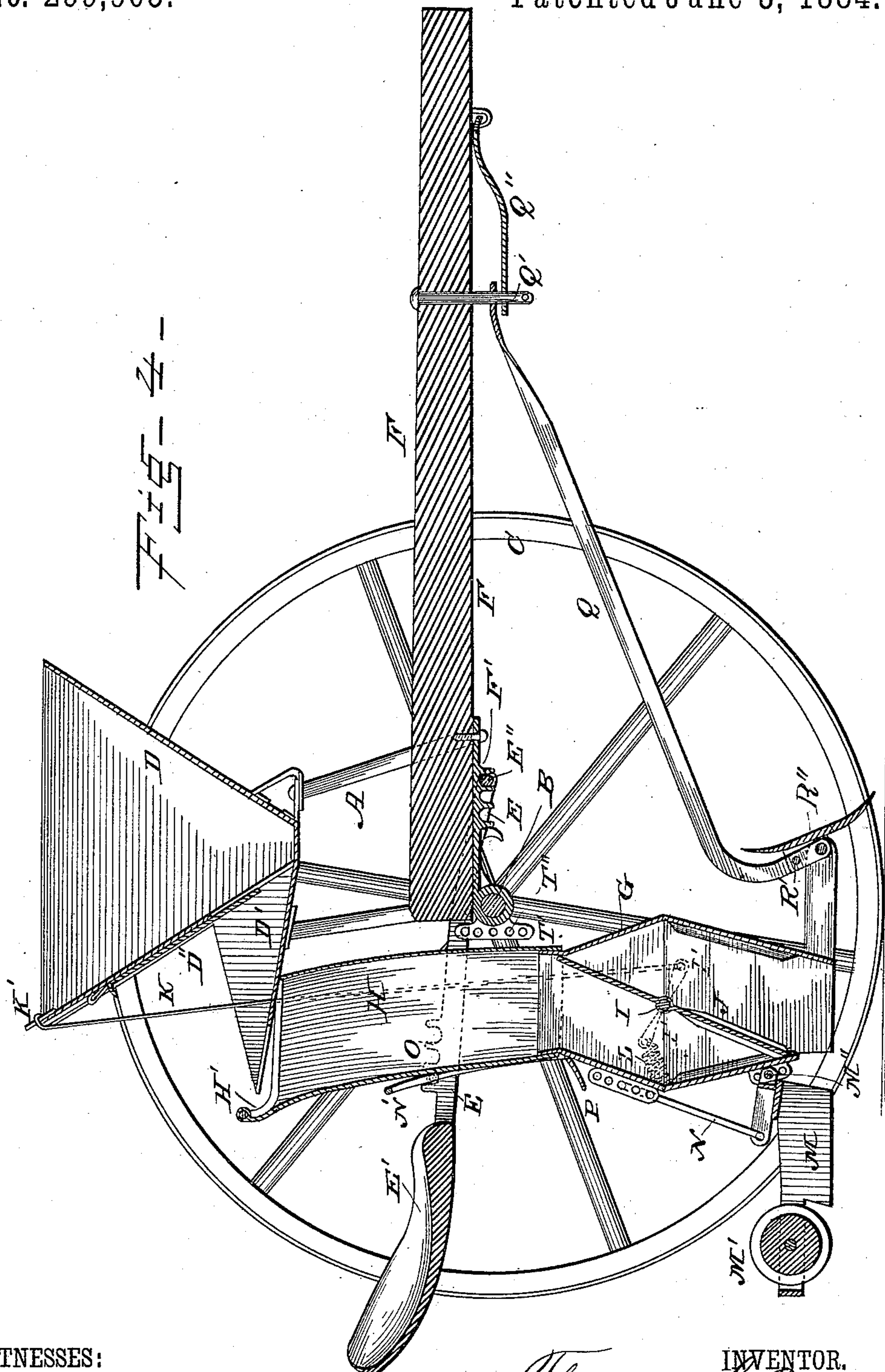
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UNITED STATES PATENT OFFICE.

THEODORE L. BROOKS, OF PORT BYRON, NEW YORK.

CONVERTIBLE SEEDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 299,905, dated June 3, 1884.

Application filed February 27, 1884. (No model.)

To all whom it may concern:

Be it known that I, THEODORE L. BROOKS, a citizen of the United States, and a resident of Port Byron, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Convertible Seeding-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved convertible seeding-machine. Fig. 2 is a side view of the same. Fig. 3 is a rear view, and Fig. 4 is a longitudinal vertical sectional view taken on line *x x*, Fig. 3.

Similar letters of reference indicate corresponding parts in all the figures.

My invention consists in the improved construction and combination of parts of a convertible seeding-machine, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings, A represents the frame of my improved machine, through the lower part of which passes and is rigidly secured the axle B, having secured upon its ends, by means of suitable collars, B', and set-screws B'', the wheels C C. The upwardly-extending arms of the frame serve to support the seed-box D, which is preferably made of the shape shown in the drawings, the forward side piece of the said box being extended backward, so as to form a shelf, D', while the rear side piece of the box is cut across at its lower part and provided with a slide, D'', by means of which the size of the said opening may be regulated, for the purpose hereinafter set forth.

E indicates the seat-support, which is cast in one piece, and upon the rear end of which the seat E' is secured, while the forward ends of the said support are connected by a bolt, E'', which extends beneath the tongue F, near its rear end, and there engages with the teeth of a rack, F', secured upon the lower side of the tongue F, near its rear end.

G represents the dropping device, which is

open at either end, and is connected at its upper end to the shelf D' by means of a flexible tubing, H, the shelf D' being notched or cut away at the point where the upper end of the tubing H meets it, and provided with spring-arms H', curving upward at their upper ends, and which serve to support the upper end of the flexible tubing. Through the center of this dropping device passes a transverse shaft, I, having its projecting ends bent to form cranks or handles I', while upon the central portion of the said shaft is centrally pivoted the valve J. To each end of the shaft I is fastened the lower end of an operating cord or wire, K. The said cords passing up through suitable apertures in the shelf D', and having their upper extremities fastened to two pins or lugs, K', on the top of the rear side of the seed-box. It will be seen that by means of these operating-cords the valve can be swung readily to either side, as desired, a spiral spring, L, secured to one end of one of the handles I' and to a lug on the shell of the dropper, serving to bring the valve rapidly into its closed position after it has passed a vertical line, and holding it firmly in its closed position. Near the lower end of the shell of the dropper are two projections, L"—one on either side—which serve as rests for the feet of the operator. To the lower rear end of the dropper is pivotally secured by means of a bolt, M'', the coverer M, which is cast in one piece, and has pivotally secured between its rear ends the roller M', the periphery or operating-face of which is made concave. The coverer is provided with an adjusting-hook, N, by which the coverer may be raised or lowered, as desired. The dropper is provided with an upwardly-extending handle, N', having lugs N'', adapted to fit between the teeth of racks O O on each side of the seat-support, and has also a hook, P, on its rear side, by means of which the dropper may be secured in a raised or elevated position when driving to and from the field.

Q indicates the shovel-beam, the forward end of which is provided with a suitable aperture to adapt it to fit upon the downwardly-projecting bolt Q', where it is held in place by means of a spring-catch, Q'', the rear

end of the beam being hinged between or in a bearing on the lower end of the dropper. Upon the lower extremity of the plow-beam is secured the double-pointed shovel-blade R", one end of which may be longer than the other, to adapt it to cut a deeper furrow for potatoes, &c., while the shorter end of the shovel is advantageously employed when planting corn, beans, &c. The shovel has a safety break-pin, R', of wood, which prevents the shovel from becoming broken when it comes in contact with large stones, immovable roots, &c.

The manner in which my improved convertible seeding-machine is operated is as follows: When the machine is in its operative position, the operator places his hands upon the shelf D', on each side of the central opening of the same, with which the upper end of the flexible tubing H communicates, so that in sliding the seed into the mouth of the flexible tubing H the wrists will come in contact with the operating-cords, the slide D" having been previously raised, so as to allow the potatoes or seed to rattle out loosely upon the shelf D'. Now pull right-hand cord, which will set the valve J for dropping the seed into first hill with the left hand. Slide what potatoes or seed are required from the shelf into the mouth of the flexible tubing H, from whence it will pass down into the dropper, ready to be dropped by the left hand when the first hill is reached. When on or over the first hill, slide what seed is required for the second hill into the dropper with the left hand, which motion of the hand will first, through the left-hand vertical cord, turn the centrally-pivoted valve of the dropper, so as to allow the seed already in the dropper to drop down into the first hill. When the second hill is reached, by making a corresponding motion with the right hand, the seed swept into the dropper by the previous motion of the left hand will be discharged into the second hill. It will be seen from the foregoing that the right hand dropped second and fourth hills, while the left hand dropped first and third hills. The lower end of the valve on each side and the lower inner walls of the dropper are corrugated or roughened, so as to prevent the moist potatoes from sticking thereto, and thus clogging the dropper.

For drilling, unfasten the upper extremities of the operating-cords from the lugs on the top of the seed-box, and secure them so as to hold the valve in a vertical position, and drop seed as desired.

To change the machine to a potato-digger, slip off the upper end of the flexible tubing from the spring-arms H', remove the spring-catch Q" from the downwardly-projecting bolt Q', slip off the forward end of the plow-beam from the said bolt, when, by raising the handle of the dropping device and turning the same, after having undone or unfastened the upper ends of the operating-cords, the dropping device and plow may readily be removed

from the frame proper. The seat and its support are then pulled back until its forward cross-bolt, E'', catches in the curved teeth T on the racks on the lower side of the rear end of the tongue, thus holding the seat-support in an inclined position up out of the way of the jaws, between which the upper end of the shovel-beam or potato-digging attachment is secured. These jaws T' are secured in a vertical position upon the frame A, just back of the tongue F, and are provided with a series of apertures, T'', which admits of the digging attachment being moved up or down, to regulate the depth at which the same shall enter the ground.

From the foregoing description, taken in connection with the accompanying drawings, the construction and manner of operating my improved convertible seeding-machine will readily be understood without requiring further explanation.

It will be seen that my improved machine is exceedingly simple in construction, and, being devoid of all complicated mechanism, is not liable to break or get out of order. It will also be seen that it can be used either for drilling, check-drilling, or check-rowing without any change of machinery, while the machine will also serve as an excellent potato-digger by making the few changes previously pointed out.

The beam of the digging attachment is provided with a suitable hook, by means of which it may be fastened up out of the way while driving to the field. The seat-support can be moved back or forward, according to the size of the operator, in order to enable his feet to readily reach the supports L, the cross-bolt E'' fitting between any two of the teeth on the lower side of the tongue.

It will be seen that the operator has only to feed the seed into the flexible tubing without paying the least attention to the dropper, as the motions of his hands in feeding the grain serve to readily and easily operate the valve of the dropper. By allowing the seed or potatoes to roll out freely upon the seed-box shelf, the said potatoes will be separated and loosen from one another without any extra work on the part of the operator.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with the main frame, of the seed-box, having one of its sides extended rearwardly to form a shelf, provided with a suitable opening through which the seed may pass, and provided with a suitable rear opening and a sliding cover for the same, to admit the seed to roll out freely upon the said shelf, a dropping device open at each end and provided with a central shaft having its ends bent at right angles, and having its inner surface corrugated at its lower end, a valve centrally secured upon the said shaft, and having its lower end corrugated on either side, a flexible

tubing connecting the upper end of the dropping device to the shelf of the seed-box, a spiral spring for holding the valve in its closed position, and operating-cords extending up through 5 suitable apertures in the seed-box shelf, and by means of which the valve of the dropping device is operated, as and for the purpose shown and set forth.

2. The combination, with the main frame, 10 of the seed-box, having one of its sides extended rearwardly to form a shelf, provided with a suitable opening through which the seed may pass, and provided with a suitable rear opening and a sliding cover for the same, to admit 15 the seed to roll out freely upon the said shelf, a dropping device open at each end, and provided with a central shaft having its ends bent at right angles, and having its inner surface corrugated at its lower end, a valve centrally 20 secured upon the said shaft, and having its lower end corrugated on either side, a flexible tubing connecting the upper end of the dropping device to the shelf of the seed-box,

a spiral spring for holding the valve in its closed position, and operating-cords extending 25 up through suitable apertures in the seed-box shelf, and by means of which the valve of the dropping device is operated, an adjustable seat-support having upwardly-projecting teeth or racks on each of its side pieces, a double 30 handle secured to the seed-dropping device, and provided with lugs adapted to fit between the teeth of the said racks, and a plow-beam secured removably beneath the tongue of the machine, and having secured upon its 35 lower end a reversible shovel-blade, all constructed and arranged to operate substantially in the manner and for the purpose shown and described.

In testimony that I claim the foregoing as 40 my own I have hereunto affixed my signature in presence of two witnesses.

THEODORE L. BROOKS.

Witnesses:

EDWARD B. ERITZ,
MADISON VORCE.