

L. A. BUTTS.

Corn-Planter.

No. 19,404.

Patented Feb 23. 1858.

Fig: 2.

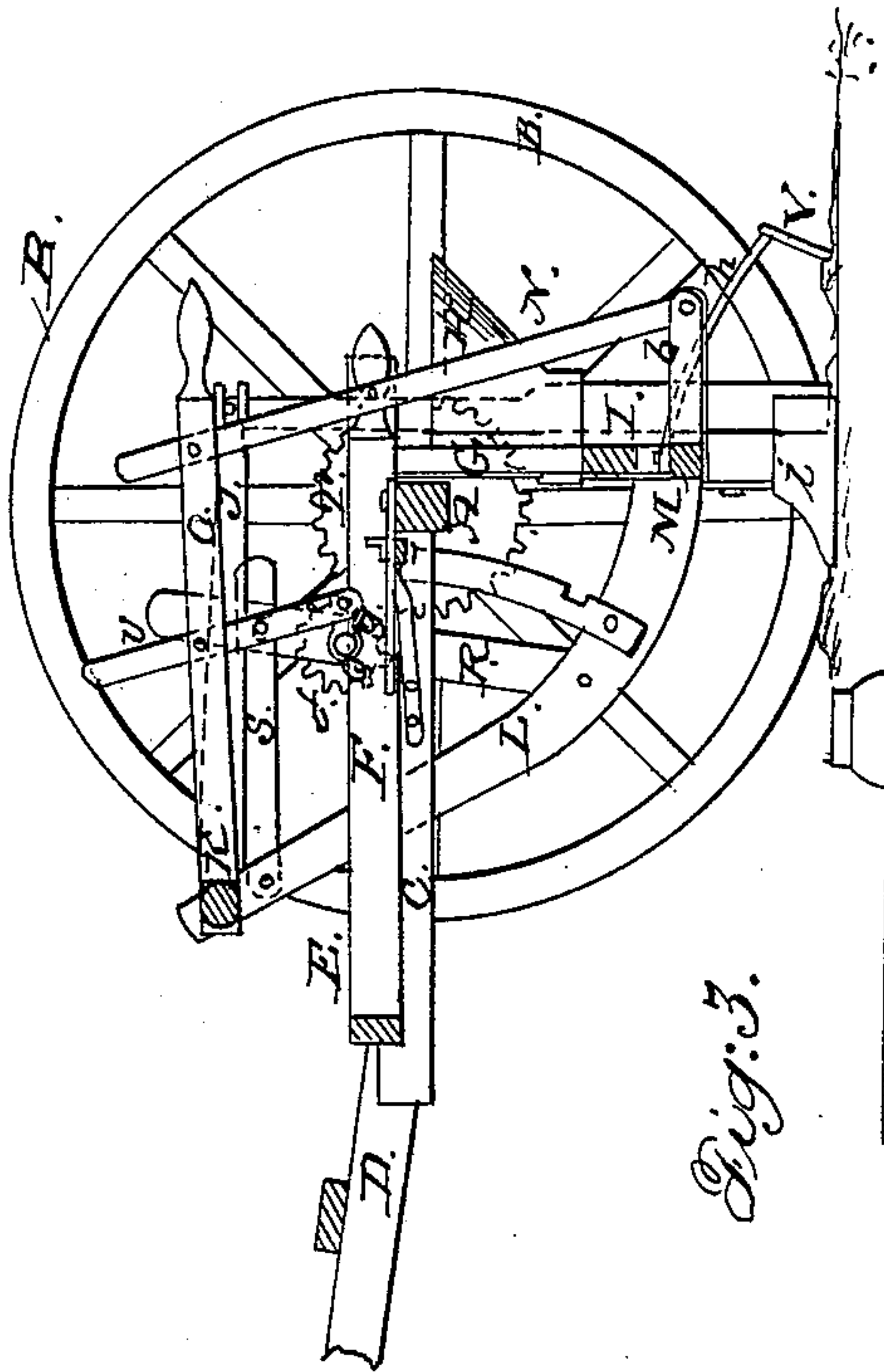
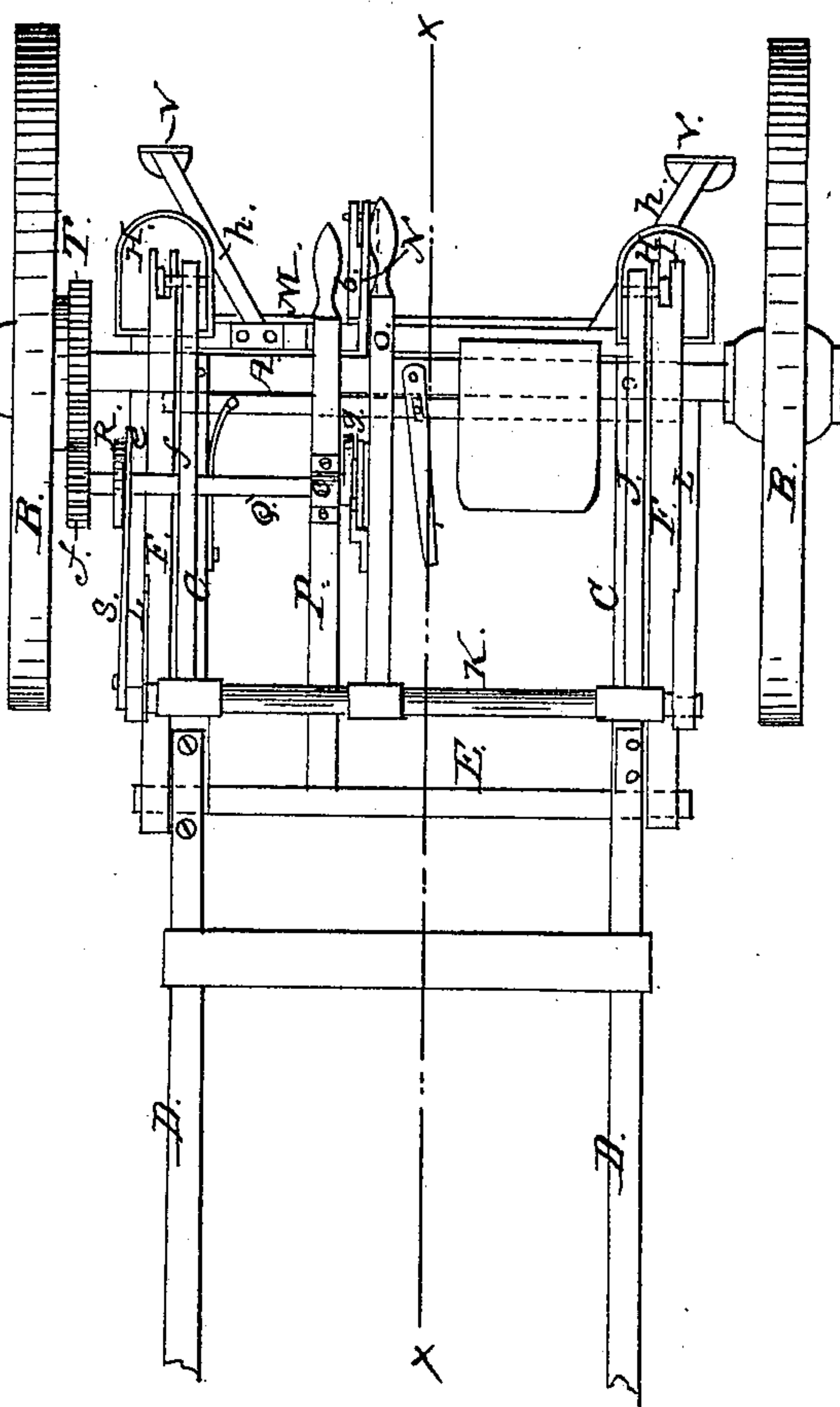
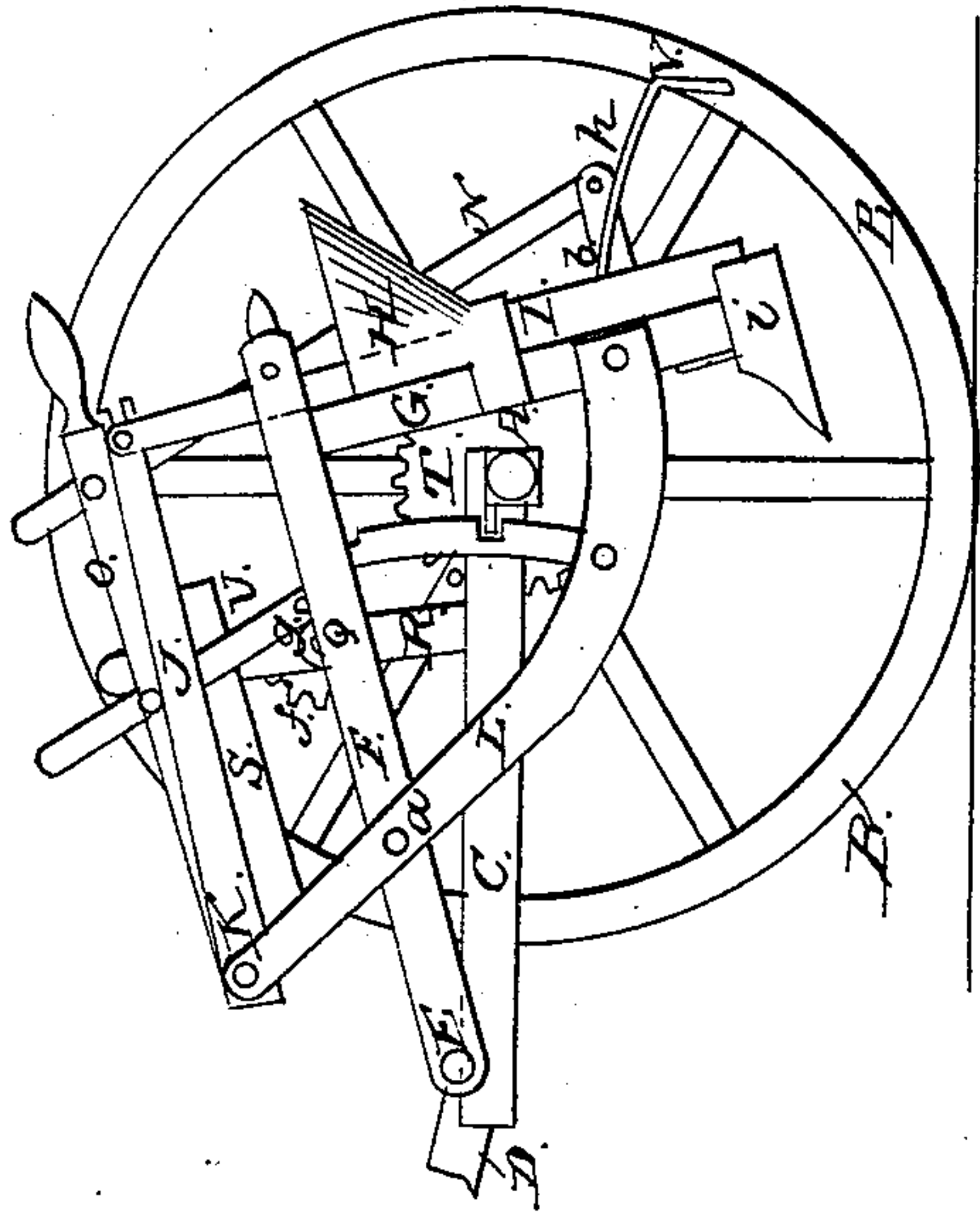


Fig: 3.



UNITED STATES PATENT OFFICE.

L. A. BUTTS, OF CUBA, NEW YORK.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. 19,404, dated February 23, 1858.

To all whom it may concern:

Be it known that I, L. A. BUTTS, of Cuba, in the county of Allegany and State of New York, have invented a new and useful Improvement in Seed-Planters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view of my improvement. Fig. 2 is a longitudinal vertical section of same, taken in the line *x x*, Fig. 3. Fig. 3 is a plan or top view of same.

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

This invention consists in connecting a seed-distributing with a covering device in such a way that both will be operated simultaneously, and the seed not only planted and covered at the same time with one and the same machine, but also planted in readily, distinguishable hills, and the parts also so placed under the complete control of the operator that the seed may be planted in perfect or even check-rows.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents an axle, having a wheel, B, placed loosely on each end, and C C are two bars attached to one side of the axle and projecting from it at right angles, said bars having the thills D attached to their outer ends.

Between the front or outer ends of the bars C C a shaft, E, is placed, the journals of which pass entirely through the bars C, and have each a bar, F, attached. To the back end of each bar F a pendent bar, G, is attached, and these bars have each a seed-hopper, H, attached, in which a plunger or rod, I, is placed, the upper ends of said plungers or rods being pivoted to bars J, the front ends of which are attached to a shaft, K, having its bearings in the upper ends of inclined bars L L, the lower ends of which are attached to the pendent bars G, said bars being also attached to the bars F at their points of intersection, as shown at *a*, Fig. 1.

Between the lower ends of the bars G G a shaft, M, is placed. This shaft has a projecting bar, *b*, attached, in the outer end of which the lower end of a bar, N, is pivoted. The upper end of bar N is pivoted to a bar, O, the front end of which is attached to the shaft K.

To the shaft E a bar, P, is attached, said bar being parallel with the bars F. On this bar P the inner bearing, *c*, of a shaft, Q, is placed, the outer bearing being in a bar, R, the lower end of which is pivoted to one of the inclined bars L. The upper end of the bar R is retained in proper place by a plate, S, provided with a notch, *d*, in which a pin, *e*, on the bar R fits.

On the outer end of the shaft Q a pinion, *f*, is placed, and this pinion, when the bar R is not thrown forward, gears into a wheel, T, which is placed on the inner end of the hub of one of the wheels B. On the inner end of the shaft Q a crank, *g*, is placed, and a rod, U, is attached thereto, the upper end of said rod being attached to the bar O.

To each end of the shaft M a hoe, V, is attached, said hoes being attached to elastic rods *h*, projecting out obliquely from the shaft M, so that the hoes will be in line with or directly in the path of furrow-shares *i i*, which are attached to the lower ends of the bars G G—one to each.

The operation is as follows: As the machine is drawn along motion is given the shaft Q from one of the wheels B by means of the gearing T *f*, and the two shafts K M will have a rocking motion given them by means of the crank *g* and connecting-rods U and N. The seed is distributed or discharged from the hoppers H by any proper arrangement connected with the plunger or rods I, and the seed, as it drops into the furrows made by the shares *i*, is covered by the hoes V, which descend and enter the soil at the proper time, at or about the time the seed is deposited in the furrow, and the hoes, by the forward motion given them in consequence of their attachment to the machine, draw the soil over the seed, and then rise out from the soil, to again descend when a succeeding quantity of seed is dropped so as to cover it, as before. By this means the seed is properly covered, and the hoes in consequence of operating, as shown, form very apparent hills, so that they can be readily distinguished as the succeeding rows are dropped, and the operator is thereby enabled to regulate the distributing device so that the seed will be evenly planted in hills, forming check-rows parallel with each other when viewed in either direction.

The operation of the distributing and cover-

ing devices may be retarded at any time by throwing the bars F upward at any time, so that the pinion *f* will be out of gear with the wheel T. This enables the operator to keep the rows parallel, as the operation of the parts are placed more completely under his control.

I would remark that although I do not confine myself to any particular distributing device, still I design to employ one formly patented by me, the Letters Patent bearing date June 5, 1855, this device being well adapted to the machine herein described.

I am aware that covering-hoes have been applied to seed-planting machines; and I am also aware that various plans have been devised for connecting and disconnecting or

throwing in and out of gear with the driving-wheels the distributing devices of such machines. I therefore do not claim, broadly and irrespective of construction and arrangement, such devices; but,

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

The arrangement of the hoes V, rods *h*, shafts K M, plungers I, and connecting-rods U N, substantially as and for the purposes herein set forth.

L. A. BUTTS.

Witnesses:

S. A. HUDSON,

J. S. DELANE.