W. Y. GILL.

Corn-Planter.

No. 18,333. Patented Oct. 6, 1857.

Fig. 1.

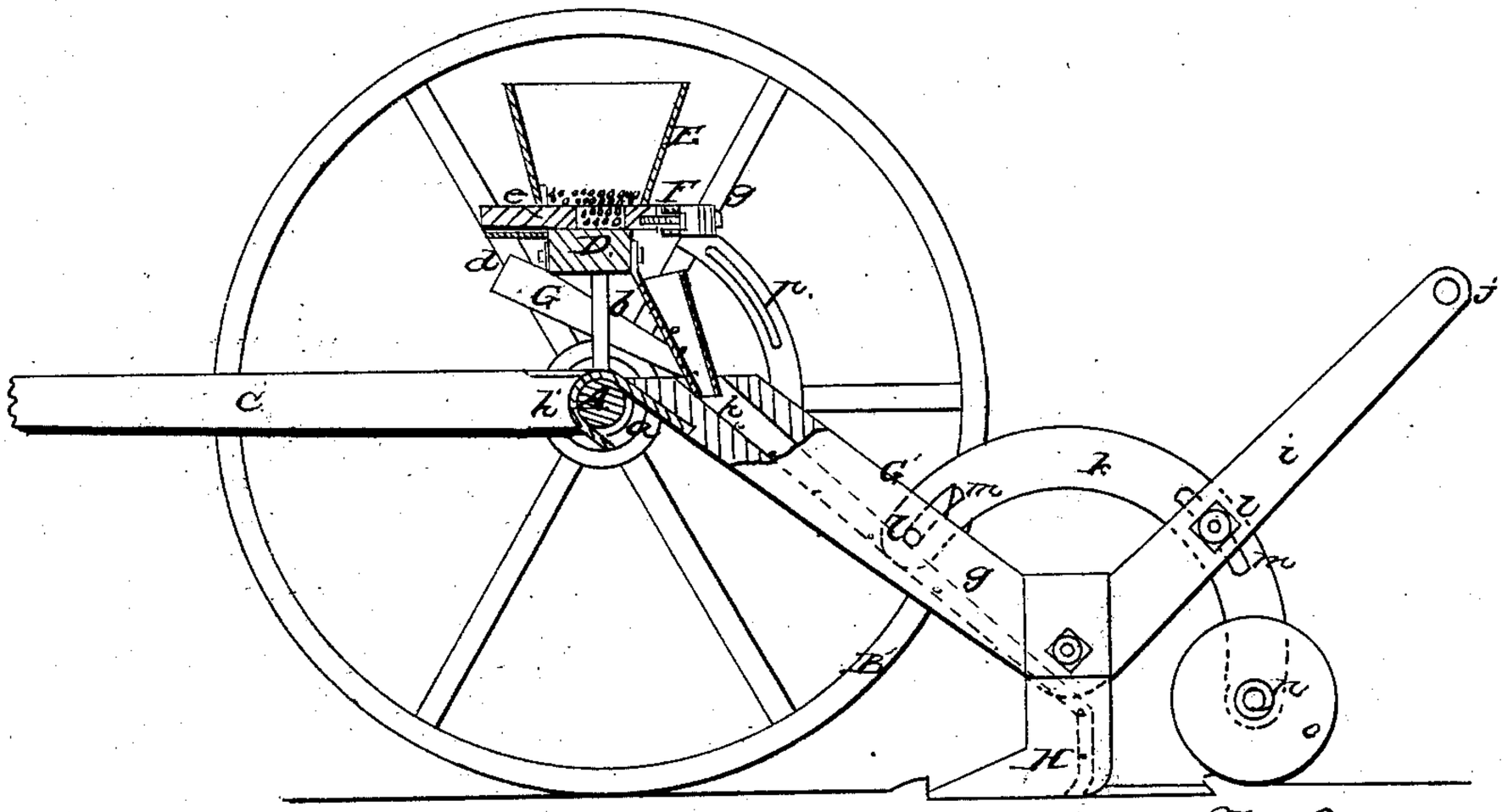

Fig. 2.

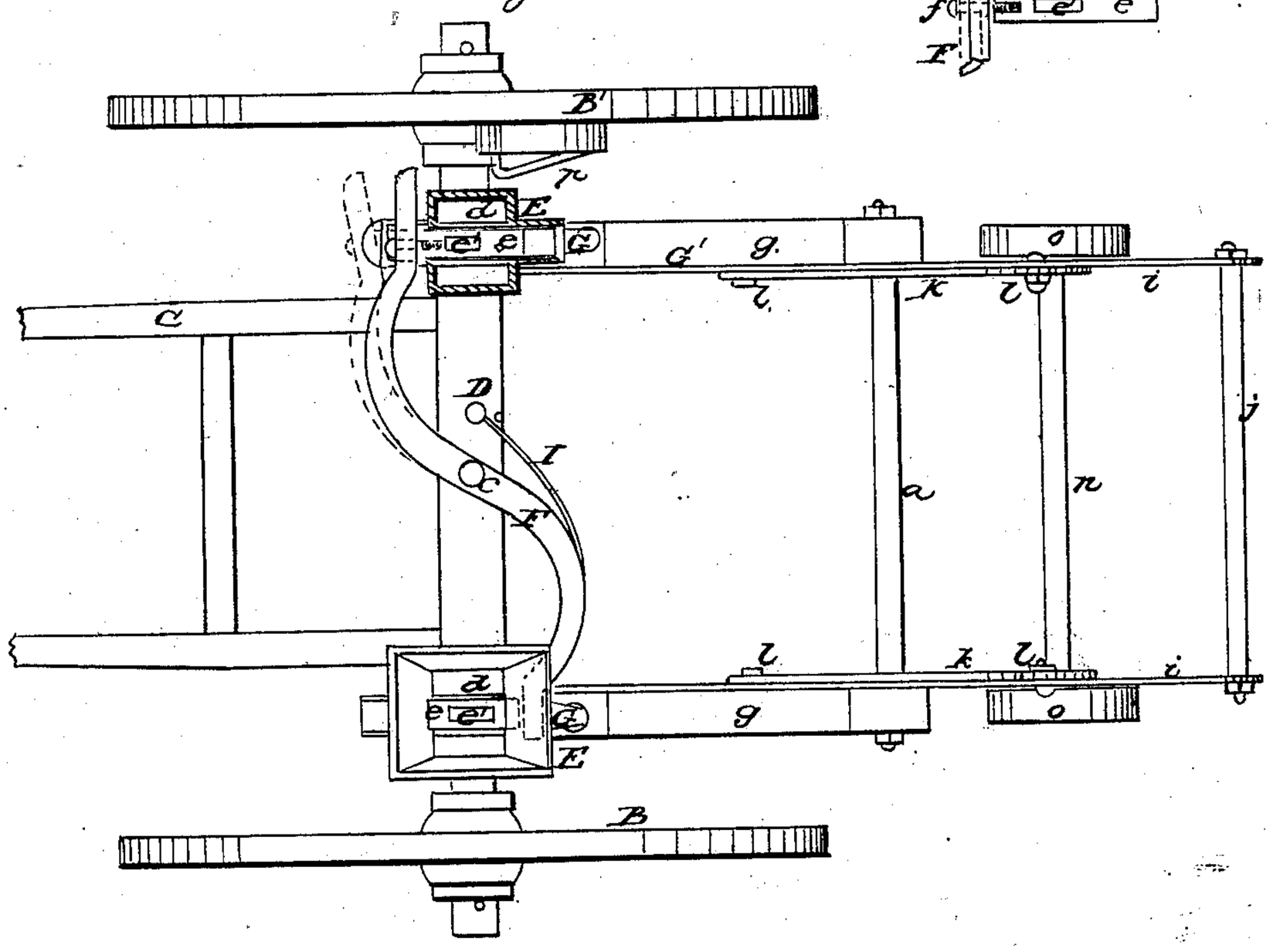

Fig. 3

UNITED STATES PATENT OFFICE.

W. Y. GILL, OF HENDERSON, KENTUCKY.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. **18,333,** dated October 6, 1857.

To all whom it may concern:

Be it known that I, W. Y. GILL, of Henderson, in the county of Henderson and State of Kentucky, have invented a new and Improved Machine for Planting Corn and other Seeds; 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 longitudinal vertical section of my improvement, the plane of section passing through the center. Fig. 2 is a plan or top view of the same. Fig. 3 is a detached view of one of the slides and a portion of the lever by which they are operated.

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

My invention consists in a peculiar means employed for operating the slides and for regulating the distribution of the seed.

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

A represents an axle, and B B′ are its wheels, placed loosely on its arms.

C represents the shafts or thills, which are attached by clips or straps *a* to the axle A.

D represents a bar, which is supported by uprights *b*, attached to the axle A. The bar D and axle A are in the same plane, and a hopper, E, is placed at each end of the bar D, as shown clearly in Fig. 2.

On the bar D a lever, F, is secured, *c* being the fulcrum-pin, which passes through the center of the bar D. This lever is of curved form, as shown clearly in Fig. 2, so that the ends of the lever will be at opposite sides of the two hoppers—that is, one end will be at the front side of one hopper and the opposite end will be at the back side of the other hopper.

The bottom of each hopper E has a semi-tube, *d*, (tube longitudinally bisected,) fitted in it. These semi-tubes form recesses or grooves to receive the slides *e*, which are fitted within the semi-tubes *d*. The slides *e* have oblong rectangular recesses *e′* made through them, one through each, and the slides are connected to the ends of the lever F by screws *f*. These screws *f* pass through oblong slots *g* in the ends of the lever F, and the screws *f* may be secured a greater or less distance into the slides, so that the ends of the lever F may by allowed more or less play on said screws.

To each end of the bar D a tube, G, is attached. The tubes are attached to opposite sides of the bar D, and the ends of the tubes are fitted in the upper ends of the side bars, *g g*, of a frame, G′, which is looped or hung upon the axle A by means of straps *h′*, which are secured to the upper ends of the side bars, *g g*, the side bars being hollow or having passages *h* made through them, one through each.

To the lower end of each side bar, *g*, a furrow-share, H, is attached, and an inclined bar, *i*, is attached to each side bar, *g*, the upper ends of the bars *i* being connected by a cross-piece, *j*, which serves as a handle.

To the inner sides of the bars *g i* segment-bars *k* are attached, one to each side of the frame G′. These bars *k* are attached to the bars *g i* by means of set-screws *l*, which pass through curved slots *m* in the bars *k*. (See more particularly Fig. 1.) The lower ends of the bars *k* are connected by a cross-piece, *n*, and this cross-piece serves as an axle for two rollers, *o o*, which are placed on its ends.

To the wheel B′ a spring-projection, *p*, is attached, and a spring, I, is attached to the bar D, said spring having a tendency to keep the slides *e* within the hoppers E E.

The corn or other seed is placed within the hoppers E E, and as the machine is drawn along the spring-projection *p* will, at every revolution of the wheel B′, strike the end of the lever F, which will, in consequence, draw the slides *e* out from the hoppers, and the seed within the recesses *e′* will drop into the tubes G and down through the passages *h* in the side pieces, *g g*, of the frame G′, and will be deposited in the furrows made by the shares H. The seed is distributed or drawn from the hoppers in greater or less quantities, as desired, by allowing more or less play of the lever F on the screws *f*. If the ends of the lever are fitted snugly between the ends of the slides and the heads of the screws, the slides will be withdrawn from the hoppers or tubes *d* sufficiently far to allow the whole of the recesses *e′* to pass out from the hoppers. Consequently all the seed in said recesses will be deposited in the furrows. If play, however, is allowed the ends of the lever on the screws *f*, the movement of the slides *e* will be restricted, as regards distance, and the recesses will only be partially withdrawn from the hoppers, so that a portion only of the seed within the recesses

will pass into the tubes G. The slides *e*, as before stated, are drawn out from the hoppers by the action of the spring-projection *p* against the end of the lever F, and the slides are thrown back by the action of the spring I. The rollers *o o* cover and press the earth upon the seed, and, as the shares and rollers are attached to the frame G′, both the shares and rollers may be readily elevated by the attendant to allow them to pass over obstructions of any kind. The depth of the furrows may also be regulated as desired by merely adjusting the segment-bars *k* on the bars *g i*.

In consequence of operating the slides *e* by means of the lever F, a trifling power only is expended in distributing the seed, as there is but a small amount of friction created and but few operating or working parts employed, and by connecting the slides *e* to the ends of the lever F by the screws *f*, as shown, the amount of seed to be discharged from the hoppers at each movement of the lever may be graduated or regulated as desired, and with the greatest facility.

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

The lever F, attached to the bar D, and having the slides *e* connected to its end by means of the screws *f*, the lever being operated by means of the spring I and the spring-projection *p* on the wheel B′, the parts being arranged, substantially as described, for the purpose of distributing or discharging the seed from the hoppers and regulating or graduating the amount at each discharge as desired.

W. Y. GILL.

Witnesses:

B. BRASHEAR,

WM. E. BARNETT.