

(No Model.)

G. E. WOMACK.
CORN OR COTTON PLANTER.

No. 391,998.

Patented Oct. 30, 1888.

Fig. 1.

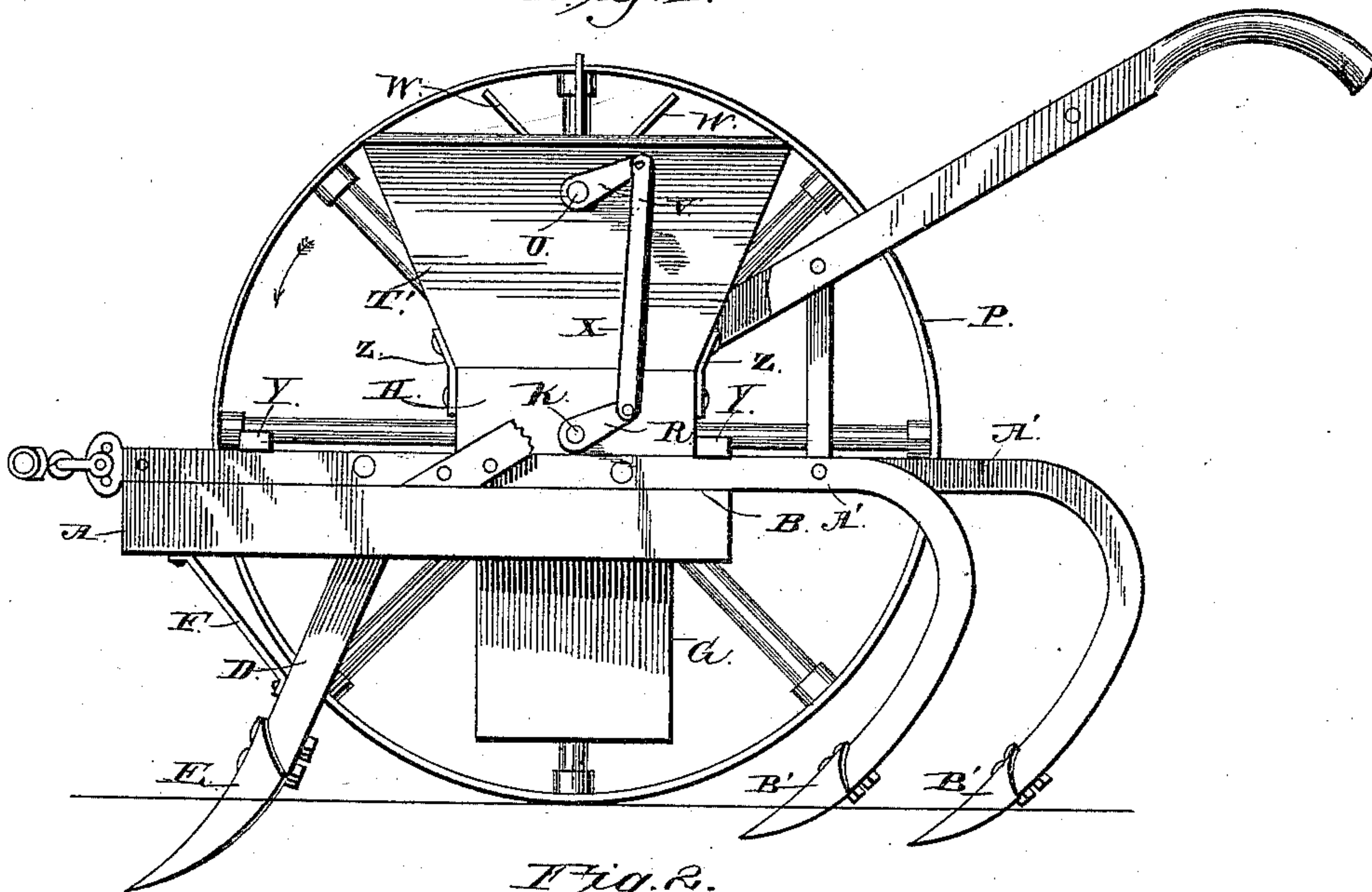


Fig. 2.

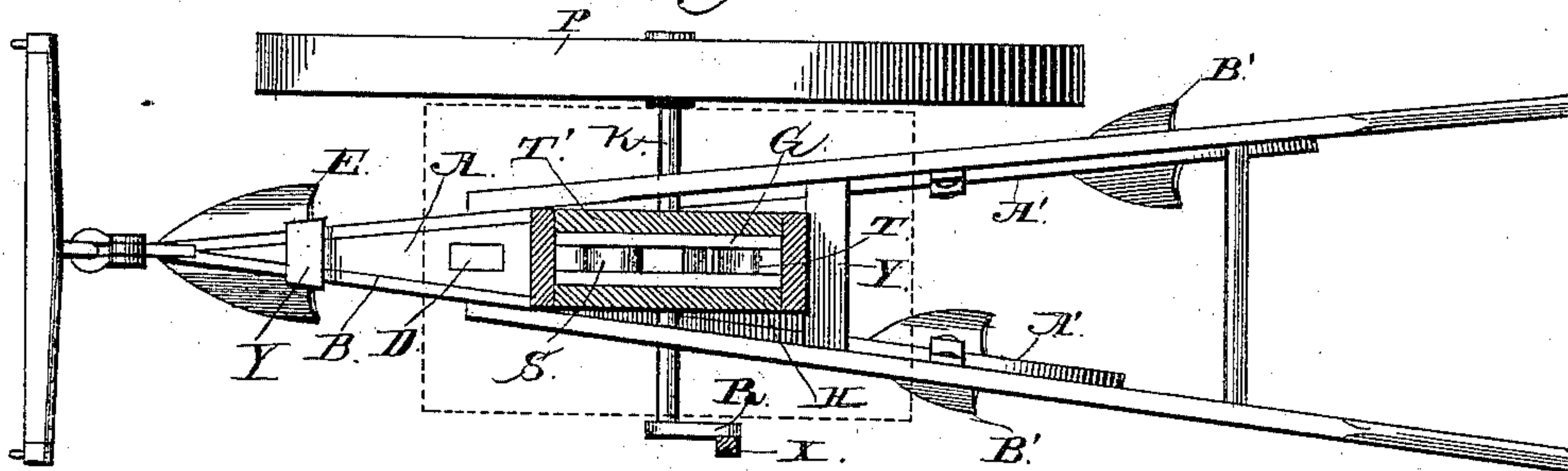
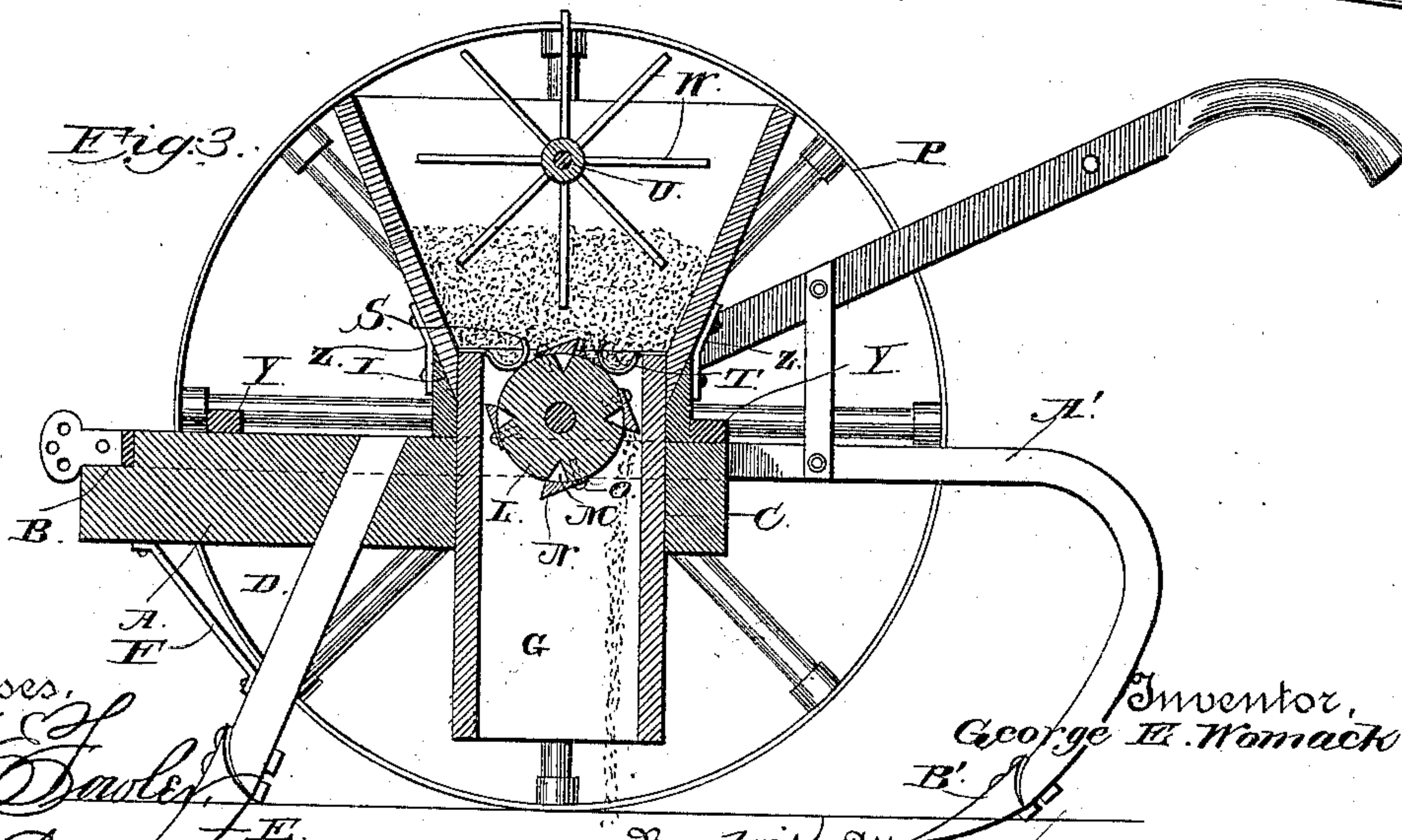


Fig. 3.



Witnesses,

M. S. Sawyer
E. J. Siggers

Inventor,
George E. Womack

By his Attorneys

C. A. Snow

UNITED STATES PATENT OFFICE.

GEORGE EDWIN WOMACK, OF LLANO, TEXAS.

CORN OR COTTON PLANTER.

SPECIFICATION forming part of Letters Patent No. 391,998, dated October 30, 1888.

Application filed January 17, 1888. Serial No. 261,034. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EDWIN WOMACK, a citizen of the United States, residing at Llano, in the county of Llano and State of Texas, have invented a new and useful Improvement in Corn or Cotton Planters, of which the following is a specification.

My invention relates to an improvement in corn or cotton planters; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a corn or cotton planter embodying my improvements. Fig. 2 is partly a top plan view and partly a sectional view of the same. Fig. 3 is a vertical longitudinal section of the same.

A represents the main frame, which is formed of a single block of wood or other material that is wedge-shaped, as shown, and is provided on its upper side edges with converging grooves B, and has near its rear end a vertical longitudinal slot, C.

D represents an inclined standard, which has its upper end mortised in the block A at a point slightly in advance of the slot, and to the lower end of the said standard is secured a furrow-opener, E. A brace arm or rod, F, connects the standard to the front end of the frame or block A, and strengthens the said standard to enable it to resist strain.

G represents a vertical seed-tube, which is rectangular in horizontal section, as shown, and is fitted in and extends through and depends from the slot C. Near the upper end of this feed-tube is a box or frame, H, which extends around the sides of the same and forms a shoulder or flange to bear upon the upper side of the frame or block A. The upper edges of this frame or box are beveled outwardly, as shown at I, so as to leave grooves surrounding the upper end of the seed-tube.

K represents a shaft which is journaled in bearing-boxes secured to the seed-tube, and extends to the center of the same at a suitable distance from the upper end thereof. To this axle or shaft is rigidly secured a seed-wheel, L, which is arranged in the upper end of the seed-tube and is provided with a series of peripheral seed-cups, M, which are arranged at suitable regular distances apart.

N represents a series of removable teeth or blocks, which have one side beveled or inclined, as shown, and the said teeth or blocks are adapted to be secured to the periphery of the seed-wheel, by means of screws or bolts O, in such positions as will enable the said teeth or blocks to cover the seed-cups M. To the outer end of the shaft K, on the right-hand side of the machine, is rigidly secured a driving-wheel, P, of suitable size, and to the inner or opposite end of the said shaft is secured a crank, R.

In the upper end of the seed-tube, at the front and rear sides of the same, are secured springs T, which bear upon the periphery of the seed-wheel and prevent seed from falling through the seed-tube, excepting when the seed-wheel rotates.

T represents a hopper, the sides and ends of which are inclined, as shown, and converge to a rectangular discharge-opening at the bottom of the hopper, which opening is of suitable size to receive the upper end of the seed-tube. The lower edge of the hopper is beveled, and thereby adapted to fit snugly in the groove which surrounds the upper end of the seed-tube and enables the hopper to effect a tight joint with the seed-tube.

U represents a rock-shaft which is journaled transversely in the sides of the hopper, near the upper edges of the same, and is arranged directly over the center of the hopper. To one end of this rock-shaft is secured a crank, V, and to the center of the rock-shaft are secured a number of radial stirring-arms, W, which extend downward into the hopper.

X represents a pitman which connects the crank R with the crank V.

On each end of the frame or block A, at the upper side of the same, is secured a transverse bar, Y, which is preferably made of iron or other metal, and the ends of which project slightly beyond the sides of the frame or block.

Z represents a pair of metallic straps, which connect the end walls of the hopper with the ends of the box H at the upper end of the seed-tube, and thereby secure the hopper firmly to the said seed-tube.

A' represents a pair of diverging beams of

a common double-shovel plow, which are arranged in the grooves B of the block or frame A, and have their front ends united. The bars Y bear upon the beams and secure them in the grooves. The rear ends of the said beams are curved downward, as shown, said beams being of unequal length, and to the lower ends of the said downwardly-curved portions of the beams are secured covering-shovels B'.

The operation of my invention is as follows: When it is desired to plant cotton, the teeth or blocks are secured to the periphery of the seed-wheel, a draft-animal is attached to the machine, and the same is directed across the field in straight lines. As the machine advances, the driving-wheel is rotated by frictional contact with the earth, and thereby imparts rotary motion to the driving-shaft and to the seed-wheel, causing the latter to revolve in the direction indicated by the arrow in Fig. 1, and as the teeth successively come to the top they engage a number of cotton-seeds and draw them down into and discharge them through the seed-tube into the furrow made by the furrow-opener. The covering-shovels throw earth from opposite sides of the furrow onto the seeds and effectually cover them. The crank R, being attached to the driving-shaft, rotates, and the crank V of the rock-shaft U, being longer than the said crank R, is caused by the pitman, which connects the said cranks, to oscillate, and thereby impart rocking motion to the rock-shaft and cause the radial stirring-arm W to move back and forth in a longitudinal direction in the hopper and keep the seeds thoroughly stirred, and thereby prevent them from clogging in the hopper. When it is desired to plant corn, the peripheral teeth or blocks are removed from the seed-wheel and corn is placed in the hopper. As each cup or depression in the seed-wheel successively comes to the top by the rotation of the seed-wheel, it becomes filled with corn, and the

spring in the front side of the seed-tube sweeps off the surplus corn from the periphery of the seed-wheel, and the corn is dropped from each cup or depression when the same reaches the lower side of the seed-wheel downward through the seed-tube, as before.

Having thus described my invention, I claim—

1. The combination of the frame, the seed-tube secured therein, the box H, secured around the upper end of the seed-tube and having the upper beveled edge, I, the hopper having its lower end resting on the said beveled edge, and the straps S, secured to the hopper, and the box H, as set forth.

2. The combination, in a planter, of the block or frame A, having the vertical longitudinal slot in its rear end, the seed-tube having its upper end secured and projecting through said slot, the box or shoulder on the upper end of seed-tube bearing on the block or frame, the said box or shoulder having the grooves in its upper side surrounding the sides of the seed-tube, the hopper having its lower edges fitted in the said grooves, the driving-shaft extending through and journaled in the sides of the seed-tube and box or shoulder, the driving-wheel at one end of said shaft, the seed-wheel secured to the shaft and arranged in the upper end of the seed-tube, the crank R at the opposite end of the driving-shaft, the rock-shaft journaled in the sides of the hopper and having radial stirring-arms and the crank V, and the pitman connecting the said cranks R and V, substantially as described.

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

GEORGE EDWIN WOMACK.

Witnesses:

W. T. CHAPMAN,
A. L. DAVIS, Jr.