S. BURNSIDE.

Corn-Planter.

No. 20,547. Patented June 15, 1858.

Fig. 1.

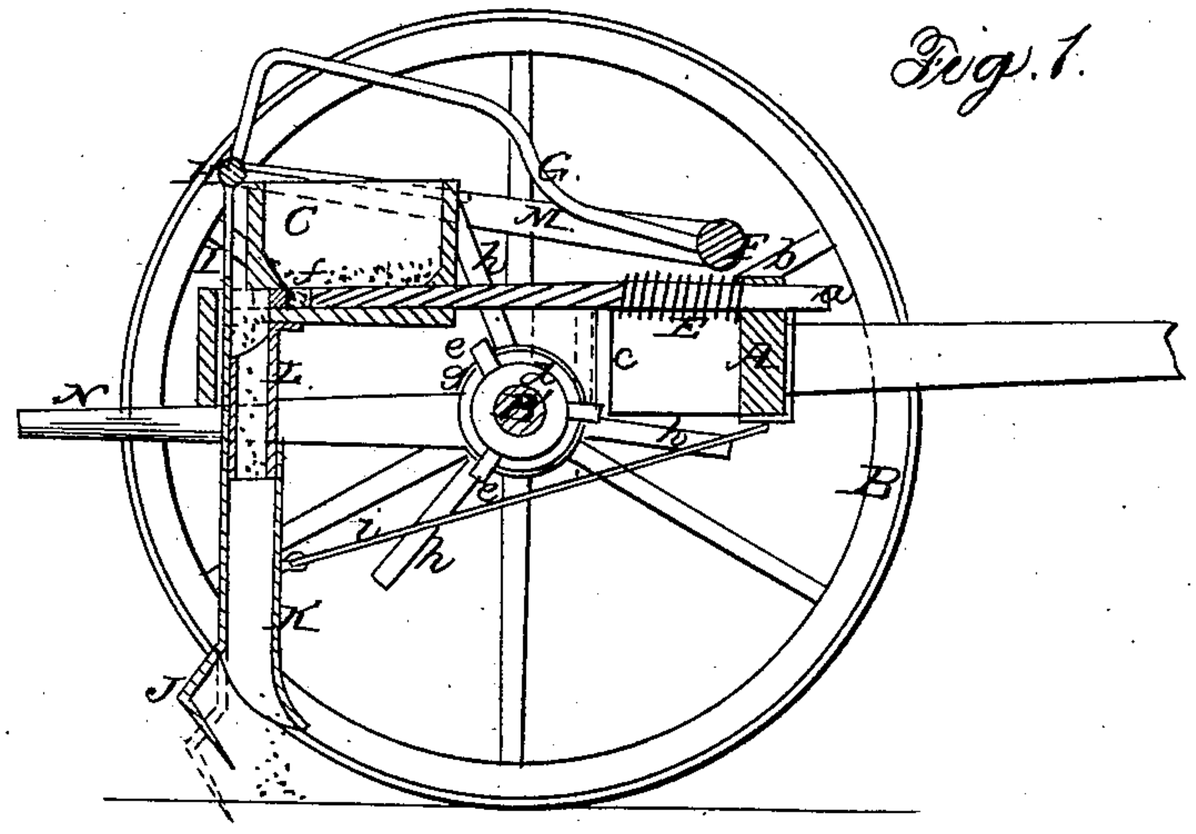
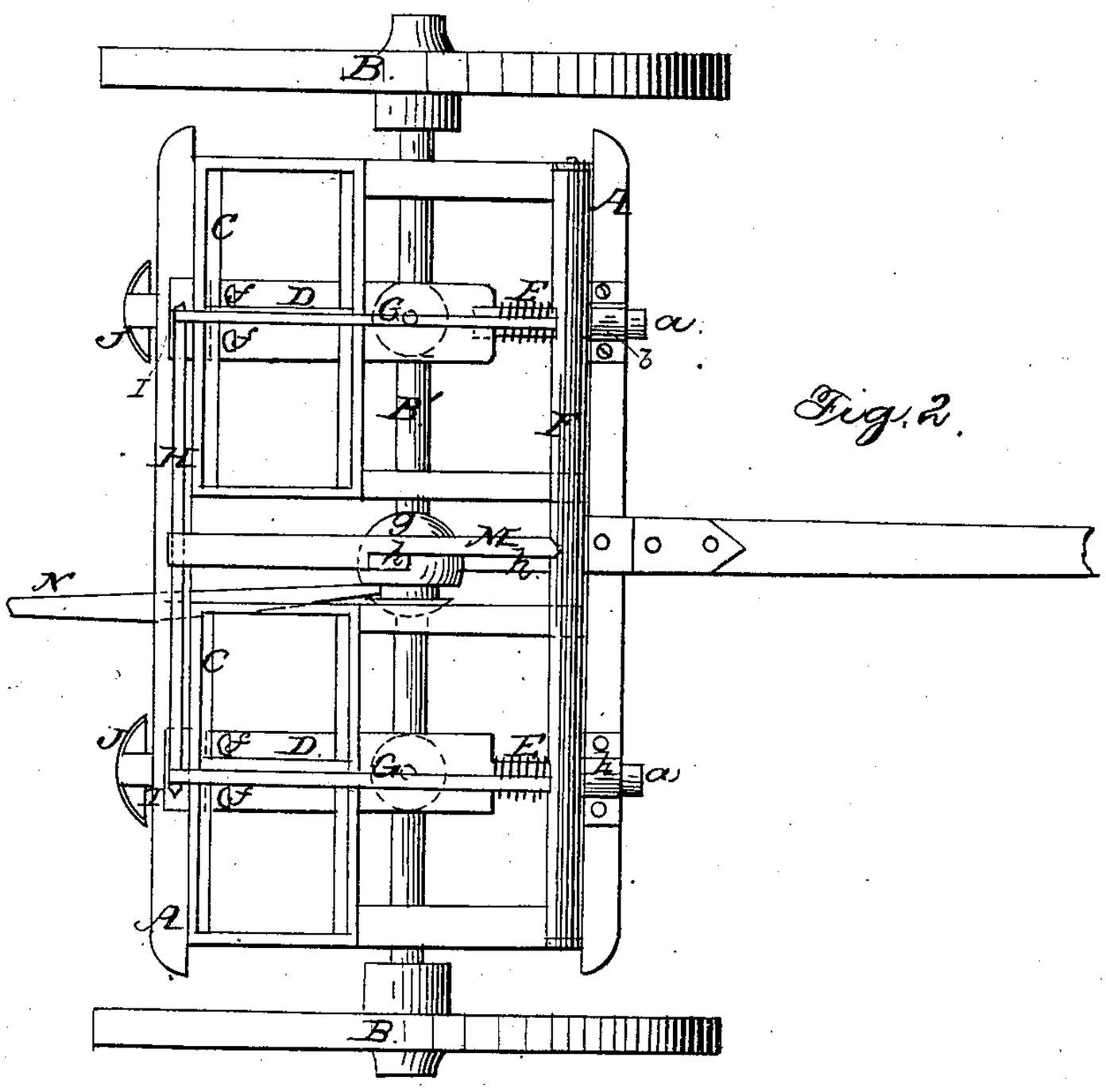


Fig. 2.



UNITED STATES PATENT OFFICE.

S. BURNSIDE, OF READING, OHIO.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. **20,547**, dated June 15, 1858.

To all whom it may concern:

Be it known that I, SAMUEL BURNSIDE, of Reading, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Seeding-Machines; 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 sectional elevation of a seeding-machine constructed according to my invention. Fig. 2 is a plan or top view of same.

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

This invention consists in the employment or use of a seed-slide, conveying-tube, and hoe, so arranged and operated that the seed is deposited in the hills, covered, and the hills marked, the several parts operating automatically as the machine is drawn along. The machine is designed for planting seed in check-rows and to facilitate the operation of perfect planting in this way.

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

A represents a horizontal rectangular frame, which is mounted on two wheels, B B, said wheels being permanently attached to their axle B′. On the back part of the frame A two seed-boxes, C C, are placed, and a seed-slide, D, is fitted or placed in the bottom of each seed-box. The front ends of the seed-slides D have cylindrical rods *a* attached to or formed on them, and these rods or cylindrical portions form guides, and they work through bearings *b*, attached to the front part of the frame A. On the rod *a* of each slide D a spiral spring, E, is placed, said springs having a tendency to keep the slides D shoved back. Each slide D has a pendent bar, *c*, attached to its under side, and to the axle B′ two bosses, *d*, are attached. These bosses have each a series of radial pins, *e*, projecting from it. These pins are shown in Fig. 1 projecting from the bosses. On the front part of the frame A a shaft, F, is placed, and two arms, G G, are attached to this shaft, one near each end, the outer ends of said arms being connected to a rod, H, to which two vertical plates, I, are attached, one opposite each arm G. To the lower end of each plate I a hoe, J, is formed or attached, and a conveying-tube, K, is attached to each plate. The lower ends of the tubes K are made in the form of a tooth or share, in order that they may form the necessary hole to receive the seed.

L are stationary tubes, which are attached one to the under side and back part of each seed-box C, as shown clearly in Fig. 1. The conveying-tubes K are fitted and allowed to work over the tubes L, and the seed-slides D work in line with the tubes L. The seed-slides D are perforated, as shown at *f*.

To the shaft F a bar, M, is attached, and on the axle B′ a hub or boss, *g*, is placed, said hub or boss having radial arms *h* projecting from it. These arms are directly in line with the bar M.

The operation is as follows: As the machine is drawn along a reciprocating motion is given the seed-slides D by the springs E and the pins *e* on the bosses *d*, which as said bosses rotate act against the pendents *c* of the slides and force the slides toward the front part of the frame and within the seed-boxes C, the springs E having a tendency to move the slides in the opposite direction. The springs E, in forcing the seed-slides toward the back part of the frame A, cause a certain quantity of seed to be discharged into the tubes L, and simultaneously with the discharge of the seed therein the conveying-tubes K and hoes J are made to descend, the tubes K making the necessary holes in the earth, and the hoes J, by the movement of the machine, covering the seed and forming a distinct mark at each hill. The hoes J and tubes K are raised by the arms *h*, but are depressed by springs *i i*, and the seed will be deposited in hills, the spaces between the hills being formed by the movement of the machine during the interval of the action of the arms *e h* against the pendants *c* and bar M.

The arms *e h* may be thrown out of gear at any time with the pendants *c* and bar M by moving the axle B′ longitudinally by means of a lever, N.

By marking the hills the driver is enabled to properly adjust the machine at the commencement of each row, so as to plant in check-rows. The machine is much simpler than any with which I am acquainted for planting in

check-rows and having a marking device for marking the hills.

I do not claim separately the reciprocating seed-slides D, for they are in common use; nor do I claim the hoes J separately; but

I claim as new and desire to secure by Letters Patent—

The movable conveying-tubes K, with hoes J attached, in combination with the seed-slides D, the above parts being operated as and for the purpose herein set forth.

SAMUEL BURNSIDE.

Witnesses:
D. S. ACKERMAN,
E. C. PITMAN.