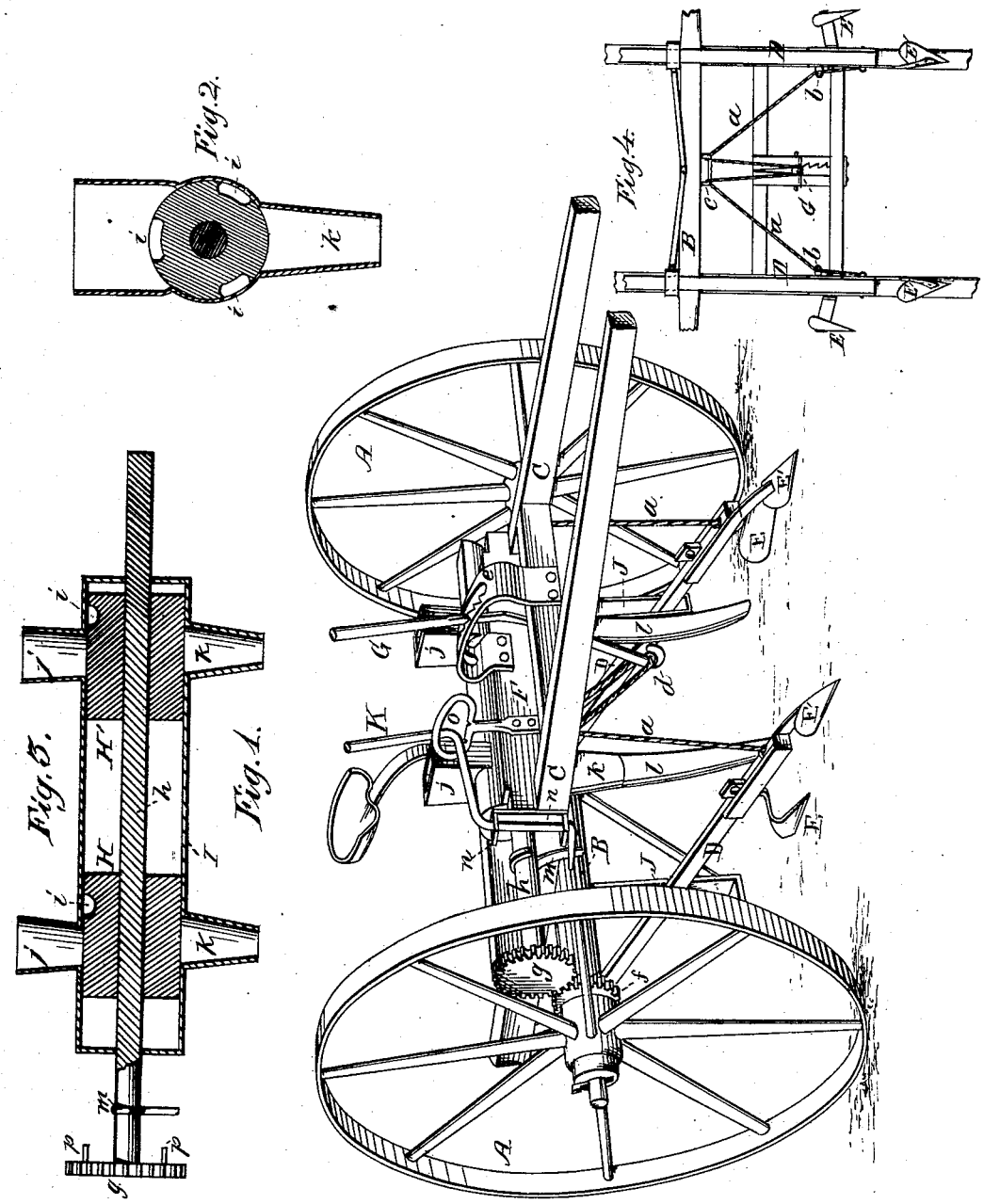
W. V. BURGESS.
Seed-Planter.

No. 162,527. Patented April 27, 1875.



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UNITED STATES PATENT OFFICE.

WILLIAM V. BURGESS, OF BAXTER SPRINGS, KANSAS.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. **162,527**, dated April 27, 1875; application filed March 12, 1875.

To all whom it may concern:

Be it known that I, WILLIAM V. BURGESS, of Baxter Springs, in the county of Cherokee and State of Kansas, have invented a new and valuable Improvement in Seed-Planters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a perspective view of my improved seed-planter. Fig. 2 is a sectional end view of the hopper and dropping-cylinder. Fig. 3 is a longitudinal section of the same; Fig. 4, a view of the under side of the frame, showing the attachments for governing the two shovels.

This invention has relation to corn and seed planters; and consists in the mechanism employed to operate the dropping-cylinders; also, in the device used to control the shovels, so that they may be raised entirely out of the ground, or held to any desired depth therein, as will be hereinafter more fully described.

In the drawings, A represents the wheels, connected to an axle, B, secured to the frame-work of the sulky, and to which are also attached the working parts of the machine. To the rear ends of shafts C are pivoted arms D, carrying shovels or mold-boards E E′, said arms passing through guide-bars J, connected to the shafts C. To the ends of these arms D are secured cords or chains *a*, the same passing up through eyes *b* upon the inner side of the shafts D, as shown in Fig. 4, after which they pass down through a loop, *c*, upon the axle or cross-piece B, and afterward connected to a curved hand-lever, G, as seen at *d*, said lever being pivoted to a plate secured to the under side of the cross-piece F. The handle of this lever G passes up through an elongated slot in a plate, *e*, one side of the slot having serrations or teeth in which the lever G engages, and is held when it is desired to raise or lower the arms D and shovels or mold-boards E E′. Upon the axle B is a gear-wheel, *f*, engaging with teeth upon a wheel, *g*, connected to a shaft, *h*. This shaft carries two cylinders or drums, H H′, rigidly connected thereto, and having upon their outer periphery small pockets or cups *i*, of such size as will hold the desired amount of grain. These cylinders, which I will term "dropping-cylinders," work in a closed hollow cylinder or outer casing, I, provided with suitable hoppers J J, the casing being sufficiently large in diameter to allow the easy revolution of the dropping-cylinders, and act as a guide to the same when they are moved in a lateral direction.

It will be seen by such construction that the wheels B, by their revolution, cause the axle *h* to be rotated through the medium of the gear-wheels *f g*, which revolve the dropping-cylinders H H′, bringing the pockets *i* at every third of a revolution under the mouth of the hoppers *j j*, receiving its charge, and emptying it into the tubes *k k*, to which may be attached rubber or other suitable elastic hose or tubing *l*, to convey the seed directly behind the forward mold-board.

In order that the gear-wheels *f g* may be disengaged when desired, there is secured around an annular groove or depression upon the shaft *h* a short arm, *m*, the end of which passes through an elongated slot in the lower end of a bent hand-lever, K, the same being supported in bearing on a plate, *n*, secured to the shaft C and cross-piece F, the upper part of the lever passing through a guide-rod, *o*.

In operating the device, as the lever K is forced outward the shaft *h*, through the arm *m*, is brought toward the cylinder or casing I, disengaging the wheels *f g*. The dropping-cylinders H H′ are of such length as to cover the mouth of the hoppers when the gear-wheels are disconnected, thereby closing the mouth of the hoppers and preventing the escape of the seed.

As a means of ascertaining when the cups of the cylinders are directly under the mouth of the hoppers, I have provided the gear-wheel *g*, upon its inner face, with projecting pins *p*, the same running parallel with the axle B, and on a line with the cups *i* of the dropping-cylinders.

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

In combination with the closed cylinder I, hoppers *j j*, and dropping-cylinders H H′, the gear-wheels *f g*, shaft *h*, short arm *m*, supporting-plate *n*, bent lever K, and guide-rod *o*, the whole combined to operate as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM V. BURGESS.

Witnesses:
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