P. SINNHOLD.

Corn Planter.

No. 49,661.

Patented Aug. 29, 1865.

Fig. 2

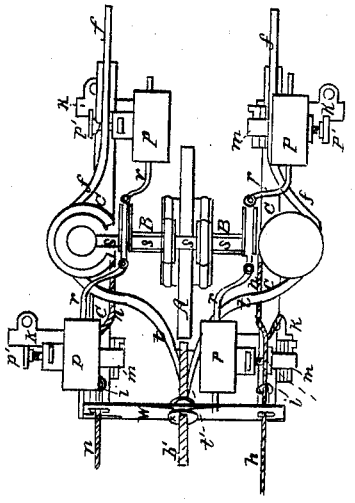


Fig. 1

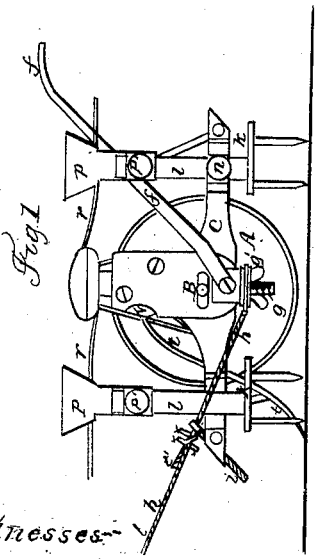
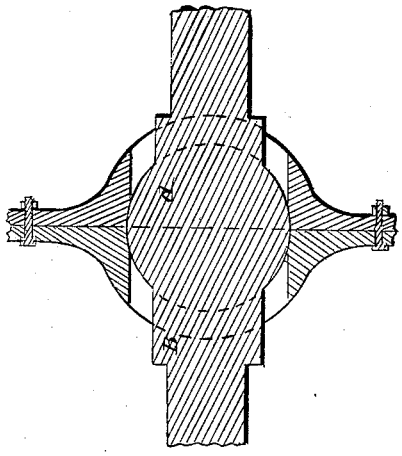


Fig. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

PAUL SINNHOLD, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN COMBINED SEED-PLANTER AND CULTIVATOR.

Specification forming part of Letters Patent No. **49,661**, dated August 29, 1865.

To all whom it may concern:

Be it known that I, PAUL SINNHOLD, of the city and county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Combined Seed-Planters and Cultivators; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and made to form a part of this specification.

The object of this invention is to produce a new farming implement that may be employed for seed-planting, cultivating, plowing, or distributing fertilizers, and which may be worked with less positive power, greater regularity, and ease in management (while in motion) by the operator, in effecting like results, than any implement now in use for similar purposes; and the nature or subject-matter of the improvement relates to the use of a single wheel arranged to support the machine at its center of gravity; to adjustable central joints or bearings of the beams or side frames of the machine, in combination with the supporting-axle; and also to the arrangement of the draft attachments.

In reference to the accompanying drawings, Figure 1 represents a side elevation, and Fig. 2 a top view or plan, of my improvement; and Fig. 3 is a horizontal sectional view, representing the formation of the adjustable joints of the beams or side frames.

A represents the supporting-wheel, so arranged that its bearing-point upon the ground will be the center of gravity of the entire machine, as sustained by said wheel, which is provided with an axle, B, adapted to carry the beams C C. The axle B will be cast or provided with two ball-rings, one at each end, as *d*, (seen in Fig. 3,) which are adapted to fit and rotate in spherical sockets prepared for them in the beams C C, the poles of said spherical sockets being formed horizontally oval, (see Figs. 1 and 3,) by means of which the ends of said beams are allowed free lateral and vertical motion, and at the same time the cultivating, plowing, or seeding devices carried by said beams will be maintained always in their proper upright positions. These said beams C C are entirely independent of each other in their operation, and by means of the adjustable joints above described are rendered individually adaptable to the surface of the ground over which the machine may be operated, and their lateral management placed under the control of the operator through the medium of the handles *f f*. Directly under the axis or center of motion each of the beams C C will be provided with a screw-bolt, (see *g*, Fig. 1,) carrying an adjustable ring-nut, *g'*, to which the draft-cords, *h h*, chains, or rods will be attached, and these devices *h h* will be made to pass through the adjustable eyebolts *i i* of the beams C C, by means of which arrangement said beams may be regulated in such manner that the cultivating devices at their ends may operate upon the same plane, or so that the said devices, either at the rear or front ends of the beams, as the case may be, according to the nature of the work, may be made to run deeper in the ground than at the opposite ends of the beams, and also with reference to the elevation of the front ends of the devices *h h*, as attached to different draft-animals.

The cultivator teeth, plows, or devices used in opening the ground for seed may be carried by suitable frames, as *k k*, Fig. 1, at each of the ends of the beams. These frames are rigidly secured to standards *l l*, and these standards are made to pass through clamps *m m*, where they may be adjusted as desired and secured by means of set-screws *n n*. Said clamps *m m* may be adjustable laterally by means of keys or wedges, and thereby secured in a proper manner upon the beams. (See Fig. 2.)

p p represent seed-hoppers, that may be secured upon the standards *l l* in such manner as to be adjustable with reference thereto and removable therefrom by means of set-screws *p' p'*.

Ordinary seed-spouts, arranged in the usual manner, may be employed to conduct the seed from the hoppers to the ground, and the seed in the hoppers may be suitably agitated and fed to the spouts by means of eccentric-rods *r r* of shaft *s*. Said shaft *s* will be furnished with suitable bearings in standards of the beams C C, directly over the axis of motion, and these bearings will be made with adjustable joints, so that said shaft *s* may not interfere with the free individual operation of the beams, as before described. Said shaft may be actuated by means of pulleys and belts from the axle B.

t represents a cleaner, or a device for remov-

ing obstructions before the passage of the wheel. Its point will be fashioned like a shovel-plow, and it will be carried by means of its two arms, which have universal bearings or joints in the beams C C, as seen at *v*, Fig. 1. Leading from the point of this device *t* forward is a rod, *t'*, which passes with a screw-thread through a cross-bar, *w*, through the ends of which the draft devices *h h* are made to pass. The said bar *w* is made adjustable on the rod *t'* by means of the nuts *x x*, by means of which the position of the point of the cleaner or device *t* may be regulated as desired.

When used as a plow the beams C C will be braced at their ends with cross bars or rods, which render said beams rigid and harmonious in their lateral action. The plows will be attached one to the forward end of one beam and one to the rear end of the other beam, the center of gravity of the entire machine being still maintained at the center of motion, so that the two plows may be as readily handled as one.

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

1. The combination and arrangement of the wheel A with the handles *f f*, and with the draft-cords *h h*, the same forming two triangles whose apexes are in the axis of A, and by the application of power at their bases *f f* and *h h* acting to preserve the correct equilibrium of the entire machine.

2. The adjustable central joints or bearings of the beams C C, in combination with a supporting-axle, B, or its equivalent, all being constructed and arranged to operate substantially as and for the purposes set forth.

3. The arrangement and combination of the draft attachments comprising the adjustable ring-nuts *g'*, adjustable eyebolts *i i*, or their equivalents, and the cords, rods, or chains *h h*, substantially as and for the purposes herein set forth and specified.

In testimony of which invention I have hereunto set my hand and seal, this 5th day of September, 1864.

PAUL SINNHOLD. [L. S.]

Witnesses:

H. E. CLIFTON,

J. M. RANDOLPH.