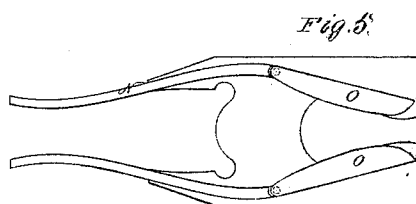
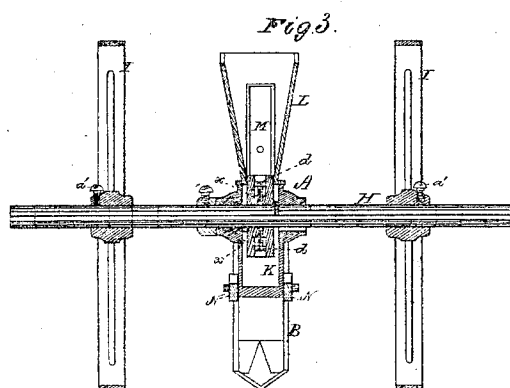
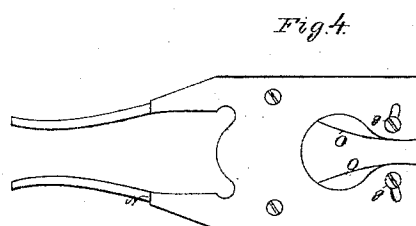
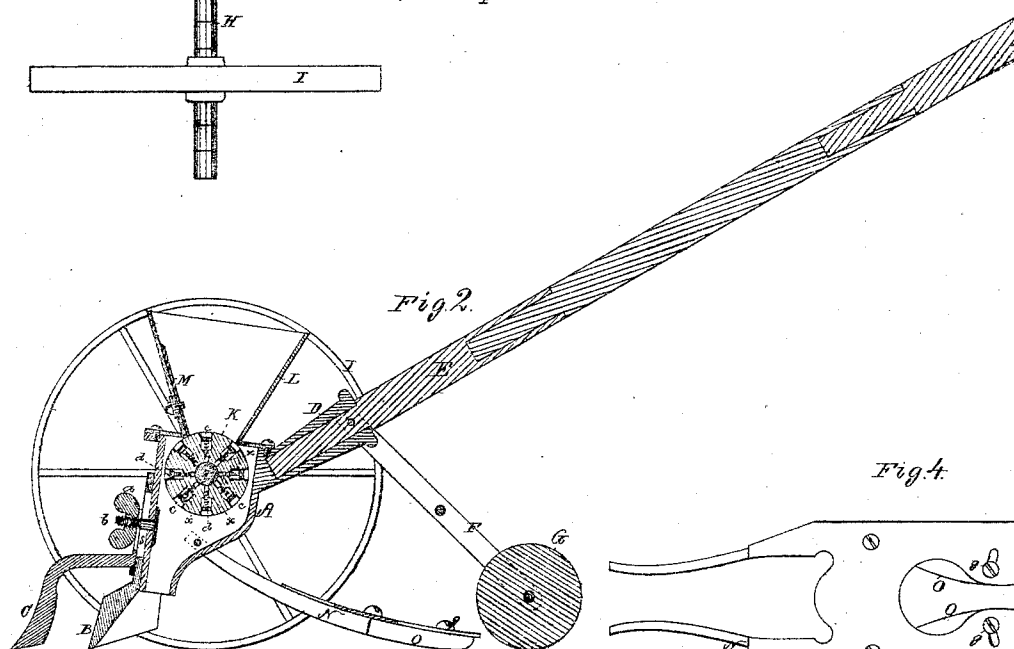
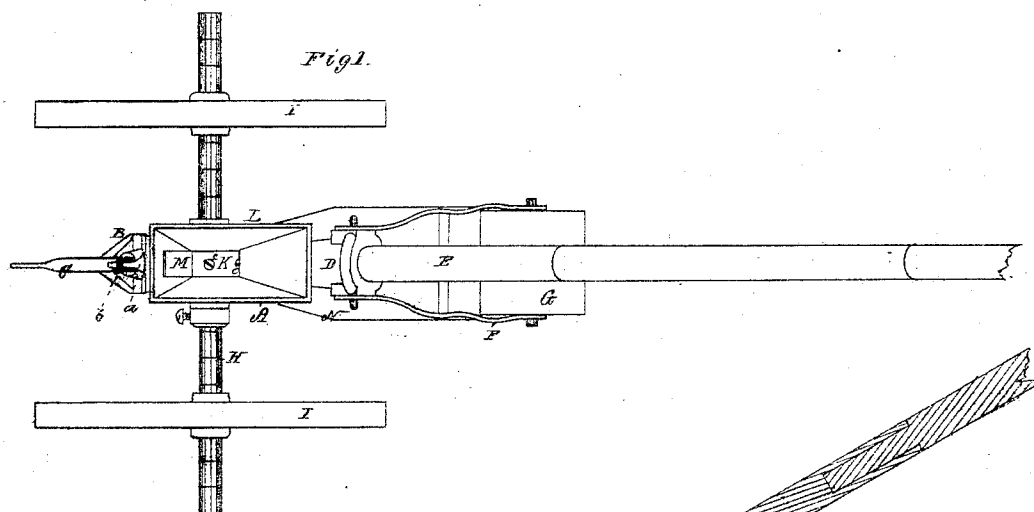


CHARLES R. SARGENT.
Improvement in Seed-Planters.

No. 114,047.

Patented April 25, 1871.



Witnesses

S. H. Piper
L. A. Miller

C. R. Sargent.

by his attorney.

R. H. Huddy

United States Patent Office.

CHARLES R. SARGENT, OF NEWBURYPORT, MASSACHUSETTS.

Letters Patent No. 114,047, dated April 25, 1871.

IMPROVEMENT IN SEED-PLANTERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, CHARLES R. SARGENT, of Newburyport, of the county of Essex and State of Massachusetts, have made a new and useful invention having reference to Seed-Planters; and do hereby declare the same to be fully described as follows, reference being had to the accompanying drawing which makes part of my specification, and of which—

Figure 1 is a top view;

Figure 2, a longitudinal section; and

Figure 3, a transverse section of a seed-planter containing my invention.

Figure 4 is a top view; and

Figure 5, an under-side view of the coverer-carrier and the coverers applied thereto.

In such drawing—

A denotes the seed-wheel frame and conduit of the machine, such, on its front, being provided with a furrow-opener, B, which is confined to the said frame by a clamp-nut, *a*, and a screw, *b*, the screw being extended from the frame through a slot, *s*, made vertically in the upper part of the furrow-opener.

In front of the furrow-opener is what I term the "pioneer" or auxiliary furrow-opener C, it being formed as represented. Its purpose is to enter the earth in advance of the main furrow-opener and raise up or cast aside any grass or roots or rootlets that would be likely to work underneath the main furrow-opener (when penetrating but a short distance into the soil) and be likely to interfere with the proper dropping or placing of the seed.

The seed-frame A I cast with a socket-piece, D, to extend back from it in manner as represented, it being to receive a handle, E, to project from it, as shown, and also to sustain the frame or carrier F of a roller, G, such frame being pivoted to the socket-piece.

A shaft, H, extends horizontally and laterally through the said wheel-frame A, and has two bearing-wheels, I I, arranged upon it, each being so applied to the shaft as to be capable of being moved on it either toward or away from the frame A.

A clamp-screw, *a'*, going through the hub of each wheel, serves to fix the wheel to its shaft.

The object of having the wheels movable on their shaft in manner as explained is to enable them not only to be adjusted to different distances apart, but to admit of one being arranged from the middle of the seed-dropping and measuring-wheel K a distance equal to one-half of that to which the other may be disposed therefrom. Under such an arrangement of the wheels the rut made by the nearer one will always, with such

wheel, serve as a guide to cause the furrow-opener, during the return movements of the machine over a piece of land, to make the furrows at equal distances apart and parallel.

Within the frame A is the said dropping-wheel K, which is arranged on the axle or shaft H and at the lower part of a hopper, L, fixed on the frame A.

A scraper, M, arranged in the front part of the hopper, bears on the periphery of the seed-dropping wheel.

This latter wheel is furnished with a series of holes, *c c*, bored radially in it from its circumference and at equal distances apart, each hole having a female screw, *r*, cut in it to receive a short male-screw cylinder, *d*, having a length less than that of the hole into which it screws.

The outer end of each of the cylinders *d* is inclined diametrically in order that it may receive the sharp end of a screw-driver.

Those parts of the holes *c* which extend beyond the screws *d* are to serve as seed-measuring receptacles, their screw-cylinders being to enable a person to vary the depths of such receptacles as circumstances may require, according to the kind or quality and quantity of seed to be planted.

In rear of the frame A, and hinged to it, is a furcated frame, N, to which two coverers, O O, are pivoted, each of them being movable laterally, and furnished with a clamp-screw, *g*, for fixing it in position to the frame N, the whole being as represented in the drawing.

The machine operates to open a furrow, measure and plant seed therein, cover the furrow, and roll it down, as the various other seed-plinters; and; therefore, I make no claim to a seed-planter composed of a hopper, a conduit, a spout, a measuring-wheel, a furrow-opener, coverers, and a roller, combined with a frame supported by wheels.

What I do claim as of my invention in the above-described seed-planter is as follows:

The seed-planter hereinbefore described, the same consisting of the pioneer or auxiliary furrow-opener C, the main furrow-opener B, the seed-wheel K, the frame or conduit A, the hopper L, the adjustable coverers O O, and the pressing-roller G, all constructed, combined, and arranged substantially in manner, and provided with wheels so as to operate, as and for the purpose set forth.

CHARLES R. SARGENT.

Witnesses:

R. H. EDDY,

S. N. PIPEE.