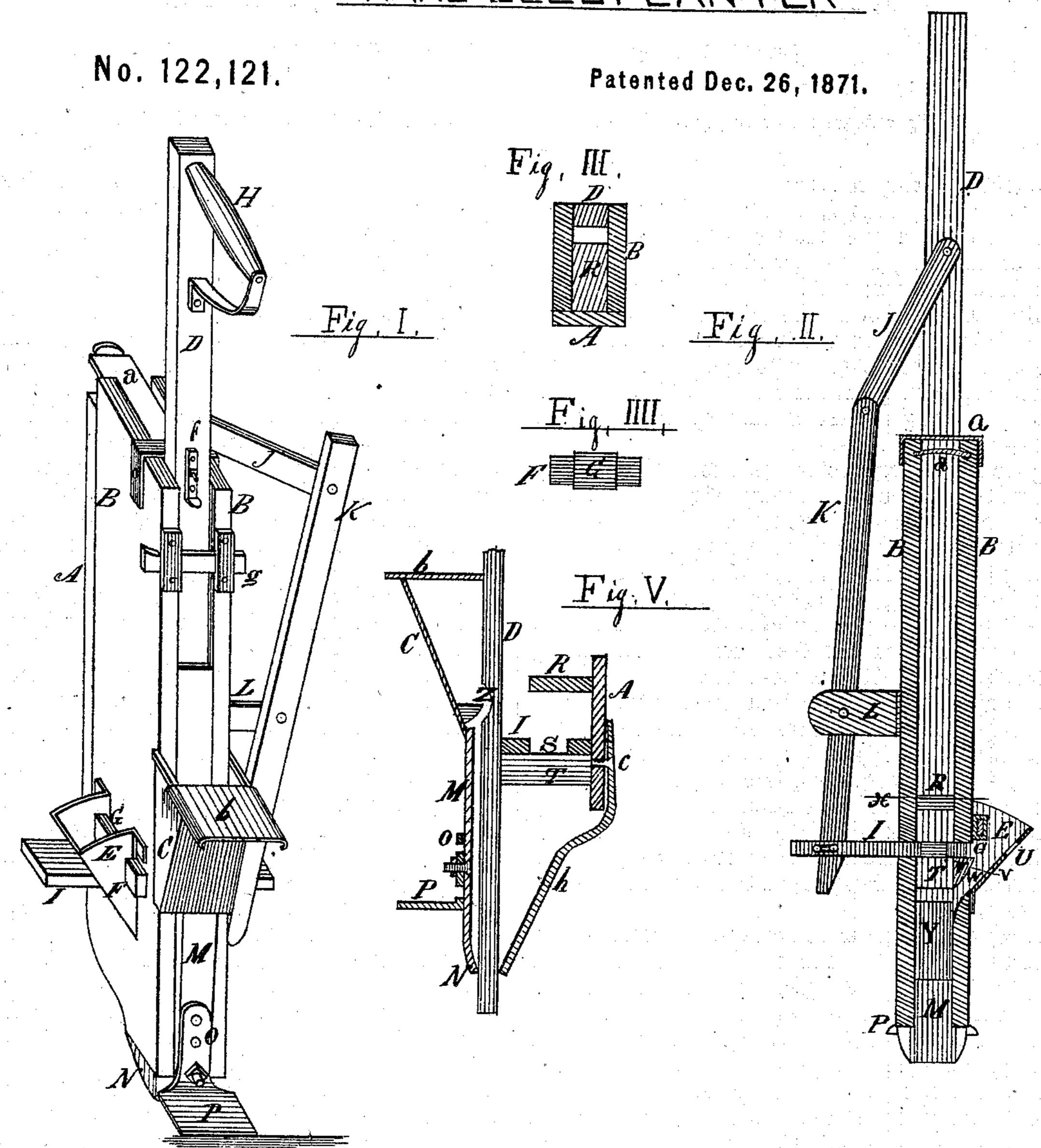
JOHN H, LATIMER,
HAND-SEEDPLANTER



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN H. LATIMER, OF CRYSTAL LAKE, ILLINOIS.

IMPROVEMENT IN HAND-PLANTERS.

Specification forming part of Letters Patent No. 122,121, dated December 26, 1871.

To all whom it may concern:

Be it known that I, John H. Latimer, of Crystal Lake, in the county of McHenry and State of Illinois, have invented an Improved Hand Seed-Planter; and I do hereby declare that the following is a full and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing and letters marked thereon, making a part of this specification, in which—

Figure 1 is a perspective representation of my improved hand seed-planter; Fig. 2, a vertical section of the same, showing the plunger raised up, and also the stop to prevent the seed from packing in the seed-box; Fig. 3, a horizontal section on line x, Fig. 2, showing a plan view of the stop aforesaid; Fig. 4, an elevation of the combined metal and rubber feed-bar for distributing the seed; Fig. 5, the nozzle-plate.

The present invention is an improvement on the hand seed-planter patented by me on the 4th of December, 1866; and its nature consists in the attachment of levers for operating the cut-offs of the seeders, in the construction of the springnozzle, and in the metal-covered feed-gauge for regulating the amount of seed sown and preventing it from being crushed, as the whole is herein-

after fully shown.

B B represents a vertical seed-box, constructed similarly to the seed-box in the patent referred to, a plunger, D, being used to force the seed out of the box B in the same manner. In the present construction, however, there is a material difference, inasmuch as levers are used to operate the seed cut-offs. The device is arranged to sow two or more kinds of seed, and for that purpose the box B B usually holds the corn to be planted, and the box or hopper C to hold the other, such as pumpkin-seed, &c. Now in order to accomplish this in a better manner, in the present seeder I place an auxiliary hopper, E, on the outside of the box B B, similar in exterior form to the first hopper C on the seeder referred to. The object of this hopper is to receive the corn from the box B B as it is carried out by means of a slide, I, Fig. 2. This slide is operated by levers J K, the latter being pivoted to an arm, L, projecting out from the box BB, and its under surface rests on a solid bottom, T, same figure, so that when the corn falls into an opening, S, in the side I, it (the corn) will be carried into the aforesaid hopper E, from which it will pass from the hopper to a point under the plunger D, pre-

paratory to its being forced into the earth in the usual manner. In order always to secure the proper disposition of the corn, a feed-bar, F G, is used as a gate above the slide. This feed-bar is made of rubber or other elastic material, fastened in the sides of the hopper E, and its central part is housed or covered with sheet metal, as shown in Fig. 4, in order that the seed, whether it be large or small, may pass into hopper E under an elastic surface, so formed as not to be easily worn out. In covering the rubber I generally use tin or some thin non-corrosive metal, and after it is formed around the rubber fasten it with tacks or rivets; although, if the metal plate G is properly soldered and clamped, the tacks are not needed. In the patent of 1866 the nozzle was formed by means of a hinged plate, which was made to bear against the lower end of the plunger by means of a spring. Now I have in the present invention made a spring nozzle-plate, P, which fully answers the purpose, at much less cost than the pivoted plate and spring, as shown in Fig. 5, said plate being made of common rolled iron, possessing sufficient spring to press lightly against the plunger and close any space there might otherwise be. The pumpkin-seed or other similar seed is put into the hopper C, and is carried into the earth in the same manner, by a notch in the plunger D, as it is in the original planter; nothing being claimed in the present invention for planting two kinds of seed, only so far as the construction is concerned.

In order to prevent seed in the box B B from packing so as not to pass freely out into hopper E by means of the slide I, a partition, R, is placed in it a little above the slide, as shown in Figs. 2, 3, 5, a sufficient space at the end of the partition being left for seed to pass through. This arrangement is important, inasmuch as the corn in suitable quantities is always sure to fill the opening or cup in the said slide I. A serious objection to hand corn-planters is thus obviated.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In combination with the plunger D and slide I, the pivoted lever K and toggle-link J to operate said slide by the movement of said plunger, as set forth.

JOHN H. LATIMER.

Witnesses:

JOHN PETERS, JOHN HELM.

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