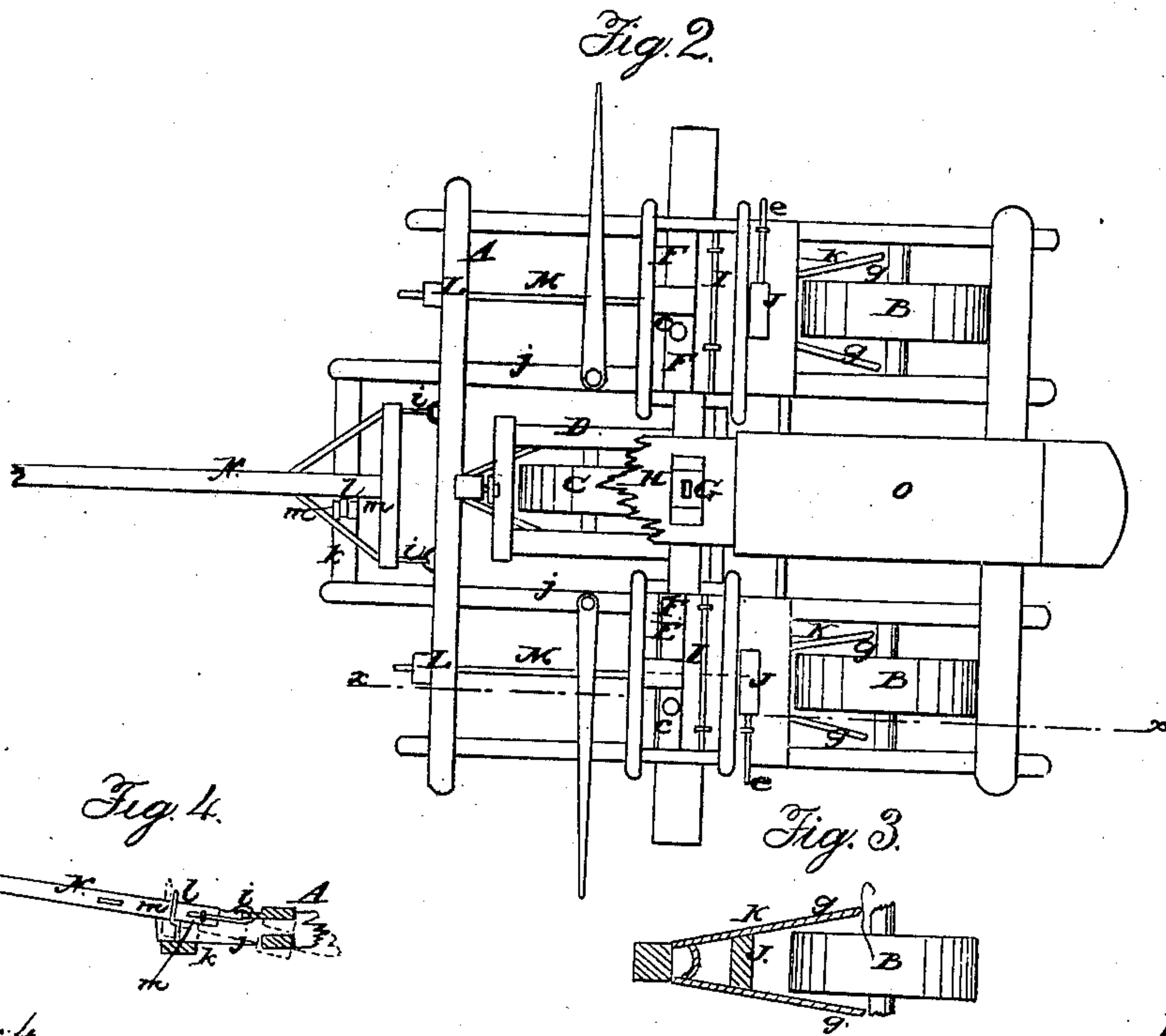
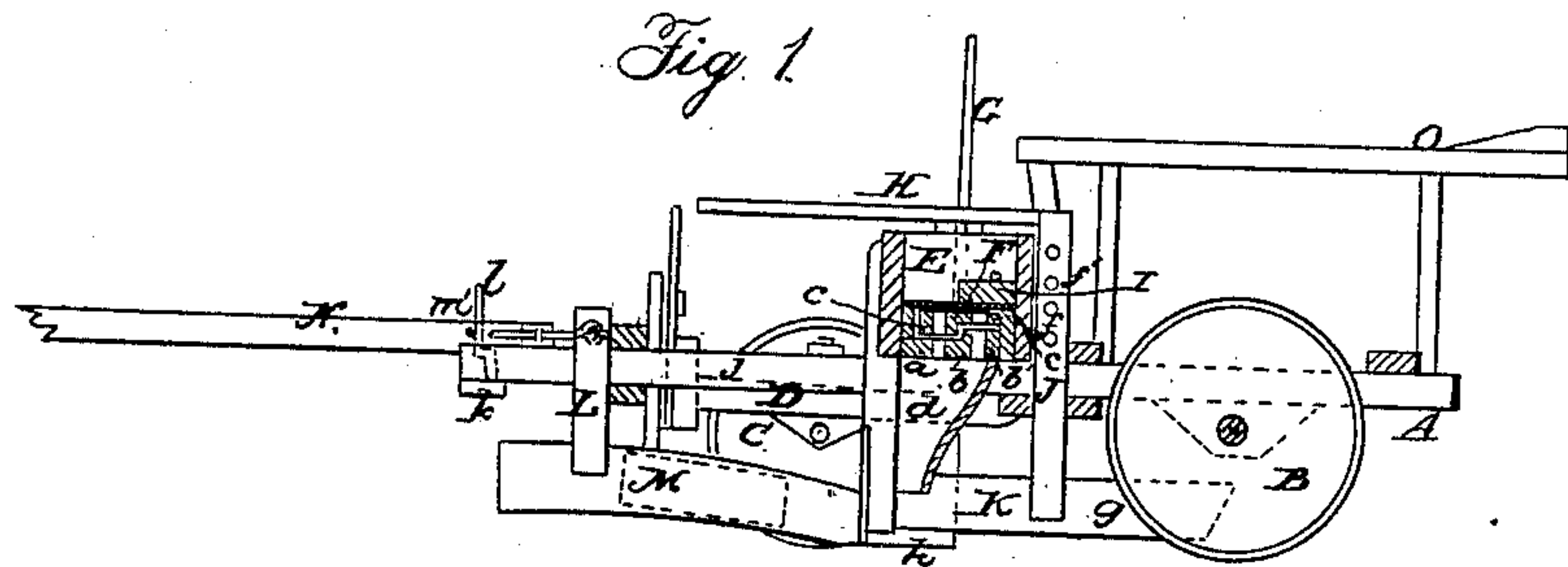


D. ELDRED.
Corn-Planter.

No. 30,129.

Patented Sept. 25, 1860.



Witnesses:
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UNITED STATES PATENT OFFICE.

DAVID ELDRED, OF MONMOUTH, ILLINOIS.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. 30,129, dated September 25, 1860.

To all whom it may concern:

Be it known that I, DAVID ELDRED, of Monmouth, in the county of Warren and State of Illinois, have invented a new and Improved Seeding-Machine; 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 view of my invention, taken on the line *xx*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a detached plan of one of the wheels and its guard; Fig. 4, a detached side view of the back part of the draft-pole and the front part of the frame of the machine.

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

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

A represents a rectangular frame, which is mounted on three wheels, B B C, the wheels B supporting the back part of the frame and the wheel C supporting the front part. The wheel C is fitted in an independent adjustable frame, D, so attached to the frame A that it may be raised and lowered to gage the depth of the furrow-openers hereinafter described.

E E are seed-boxes, which are placed one at each side of the frame A and arranged in the usual way.

F is a seed-slide, which passes through the lower part of the seed-boxes E E, and is operated by an attendant through the medium of a lever, G, the attendant being on a seat, H, between the two seed-boxes. The seed-slides work over the bottoms *a* of the seed-boxes, and each bottom *a* has two sets of discharge-openings, *b b'*, made through it, said openings being of equal size or diameter, and being respectively in planes with two sets of holes, *c c'*, in the slide F, the holes *c c'* being of unequal depth, the holes *c* being made through a thicker portion of the slide F than the holes *c'*, as will be fully understood by referring to Fig. 1. In each seed-box E a block or bar, I, is placed, by adjusting which either set of holes *c c'* may be covered, as desired, and consequently a greater or less number of seed discharged at each dropping. When the bars I are placed over the holes *c* the holes *c'*, being of smaller capacity, (less depth,) of course can-

not discharge as great a number of seeds as when the holes *c* are open and *c'* covered, as shown in Figs. 1 and 2. Each bottom *a* of the seed-boxes has seed-conveying spouts attached, and in the frame A, directly behind each seed-box E, there is placed a vertical adjustable bar, J, which is secured at any suitable height by pins *e*, passing into any of a series of holes, *f*, in the sides of the bars J.

To the lower end of each bar J a V-shaped guard, K, is attached, as shown clearly in Fig. 3. These guards are formed simply of two plates, *g g*, placed in a relatively-oblique position with each other, and attached to the sides of the bars J. The rear or distended ends of the plates *g g* are directly in front of the wheels B, the latter extending a certain distance inward and between the plates, as shown in Fig. 3, and the front ends of the plates *g g* project within the lower parts of furrow-openers *h*, which are of V form in their transverse section. By adjusting the bars J it will be seen that the guards K may be raised and lowered and adjusted at any required height. These guards clear the paths of the wheels of all obstructions, preventing clods of earth from coming in contact therewith and the machine from being deflected from its proper course.

To the front part of the frame A there are attached two pendants, L L. These pendants are in line with the furrow-openers *h h*, and the front parts of knives or cutters M are formed of metal plates of equal thickness, their lower edges being their cutting-edges, and the latter being longitudinally of concave form, as shown clearly in Fig. 1. The front parts of the cutting-edges of the cutters are nearly horizontal, and they gradually assume a decided concave form from their front to their back parts, as shown clearly in Fig. 1. As the machine passes along, the cutters M, owing to the form or shape of their cutting-edges, will not have a tendency to pass over the trash—such as weeds, stalks, &c.—that may lie in their path, but will gather them beneath their lower parts and cut through them, so that the furrow-openers *h* may form perfect furrows. The ordinary rounded or convex cutters, as well as the circular rotating ones, are liable to pass over the trash, stalks, &c., without cutting through them.

N is the draft-pole, which is attached to the frame A by hooks *i*, and between the front parts of two longitudinal bars, *j j*, of the frame

A, the bars *j* projecting a short distance in front of the front cross-piece of the frame. To the front ends of the bars *j j* a cross-bar, *k*, is attached, the latter having a spring or elastic metal plate, *l*, secured vertically to it. This spring or elastic plate *l* is bent at about its center, so as to form a shoulder, *m*, as shown clearly in Fig. 4. From one side of the draft-pole N a pin, *m'*, projects horizontally, said pin extending across the upper part of the spring or plate *l*, above its shoulder *m*—that is, when the machine is being drawn along and is performing its work. At any time when it is desired to elevate the furrow-openers *h* above the surface of the ground the driver, who is on his seat O, directly back of the dropper's seat H, moves to the back end of his seat, and thereby elevates the front end, so that the pin *m'* will catch under the shoulder *m* of the spring or plate, (see Fig. 4,) said shoulder and pin retaining the front end of the machine in an elevated state, and also retaining the furrow-openers *h* above the surface of the ground, so that the machine may be readily drawn from place to place.

From the above description it will be seen that the machine may be made to plant a greater or less number of seeds at each dropping, as may be required, the wheels B B protected from clods of earth and other obstructions that may lie in their path, all trash—such as weeds, stalks, &c.—that may lie in the path of the furrow-openers cut, so that the latter may open a proper furrow to receive the seed, and the front of the machine, and consequently the furrow-openers, readily elevated, so that the machine may be drawn from place to place.

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

The arrangement of the cutters M, guards K, and adjustable bars J with the variable cells *c c*, covers I, seed-boxes E E, elastic plate *l*, pole N, and frame A, as and for the purposes herein shown and described.

DAVID ELDRED.

Witnesses:

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