A. C. CAREY.

Seed-Planter.

No. 20,467. Patented June 1. 1858.

Fig. 1.

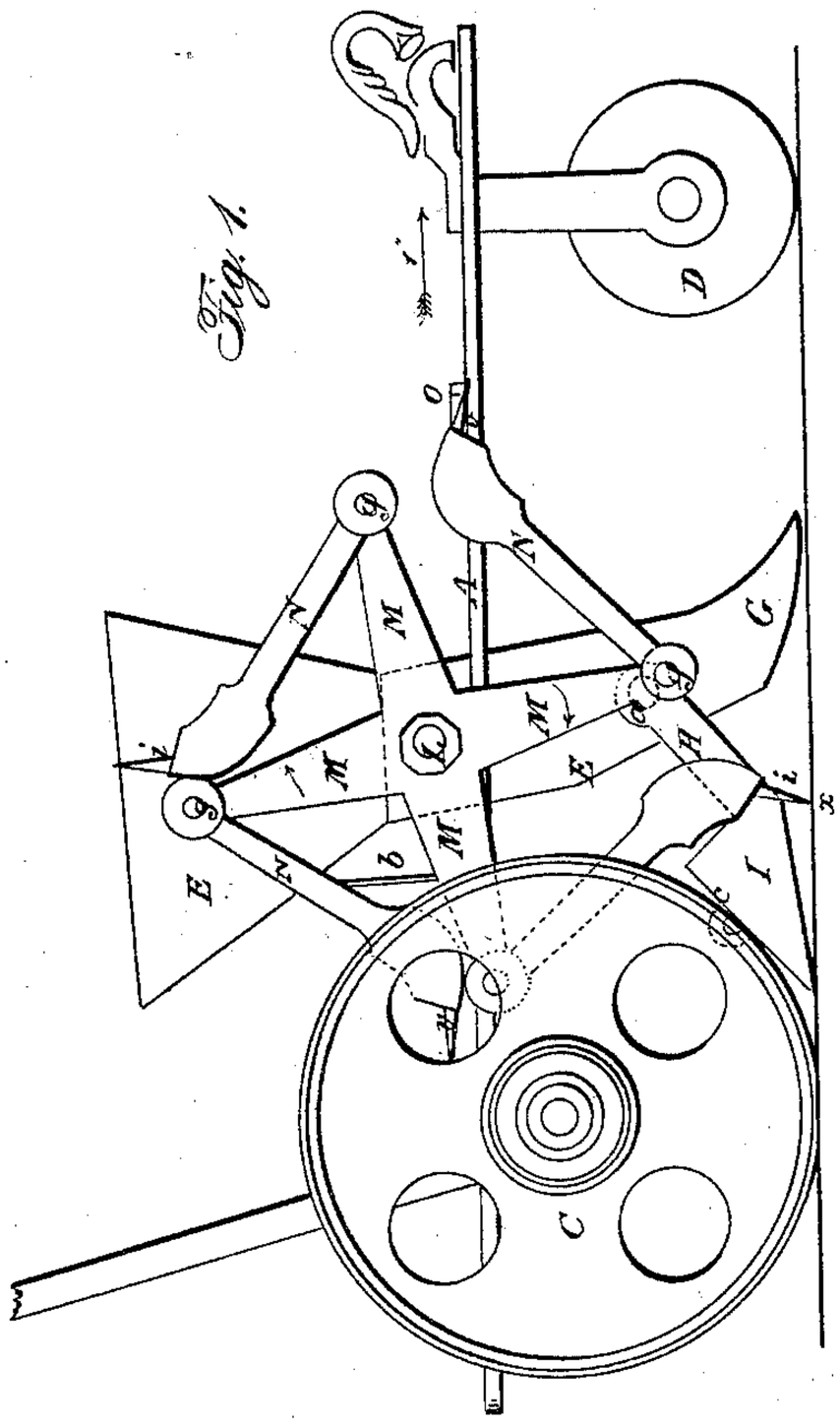


Fig. 2.

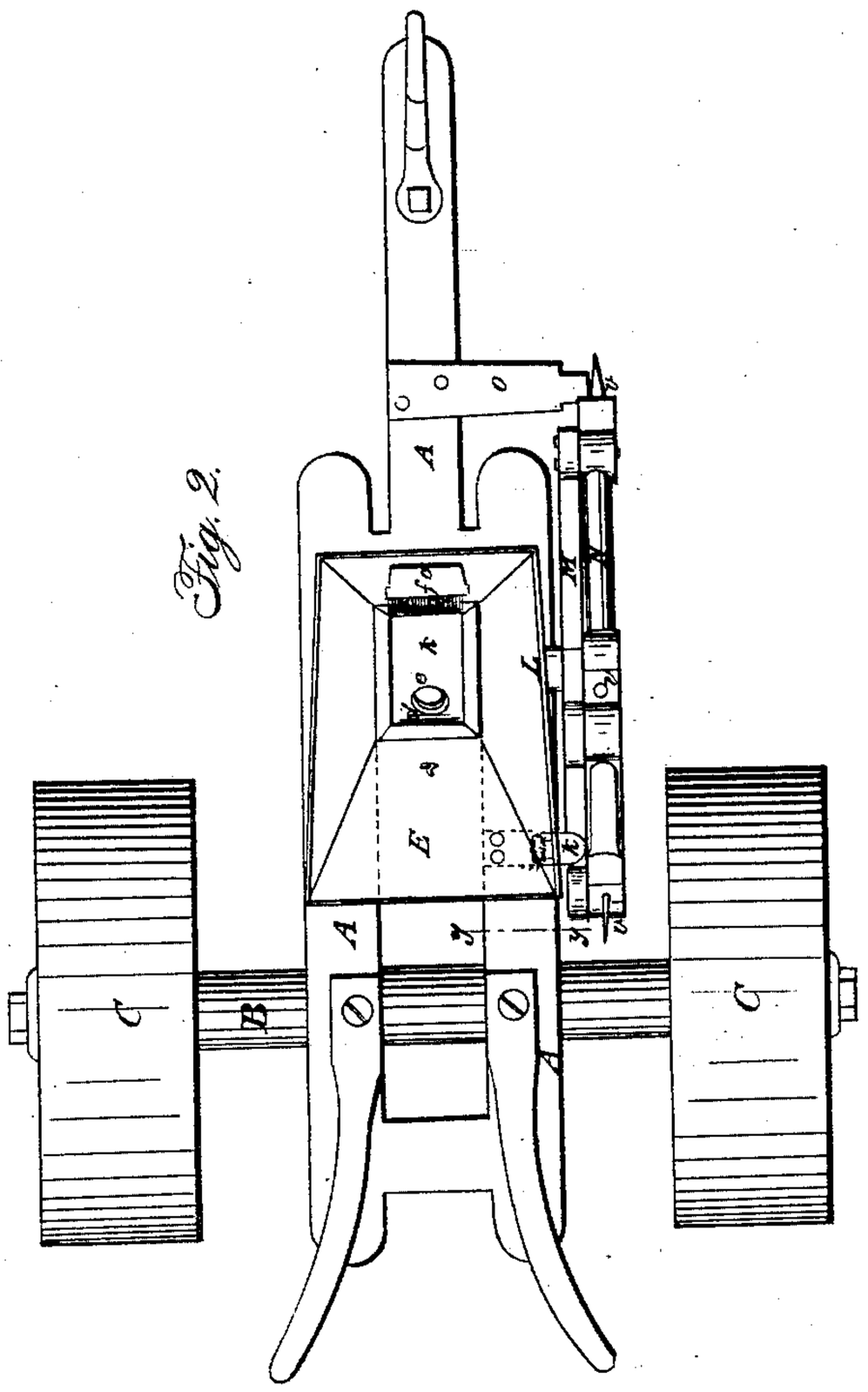


Fig. 4.

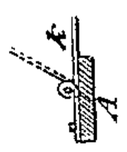
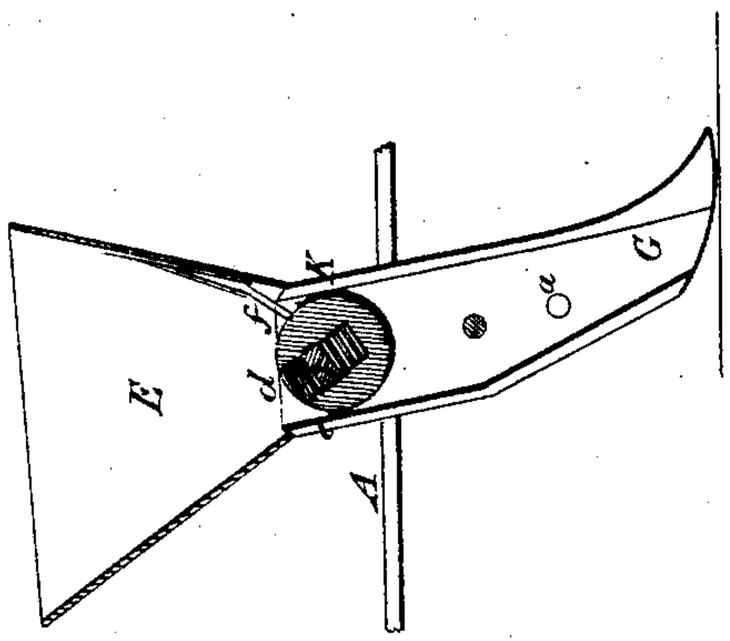


Fig. 3.



UNITED STATES PATENT OFFICE.

A. C. CAREY, OF IPSWICH, ASSIGNOR TO HIMSELF AND ALFRED B. ELY, OF NEWTON, MASSACHUSETTS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **20,467**, dated June 1, 1858.

To all whom it may concern:

Be it known that I, AUGUSTUS C. CAREY, of Ipswich, in the county of Essex and State of Massachusetts, have invented certain new useful Improvements in Corn-Planters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an elevation. Fig. 2 is a plan. Fig. 3 is a section through the hopper. Fig. 4 is a section on the line *y y* of Fig. 2.

Many efforts have been made to obtain a corn-planter that shall drop the corn at uniform distances apart in the row; but they have all failed in accuracy, owing to the inequalities of the surface over which they have to pass.

The object of my invention is to overcome this difficulty, and to obtain a corn-planter that will measure off the distances between the hills in a row with much greater accuracy than has heretofore been obtained, and without being materially affected in its measurements by any slight inequalities of the surface over which it is drawn.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried out the same.

The frame A is supported on the axle B of a pair of wheels, C, and at its front end by a single guide-wheel, D. In this frame A is supported a hopper, E, having a spout, F, descending from it, which is terminated in a shoe or plow, G, for opening the furrow to receive the seed. To the spout F is hinged, at *a*, an arm, H, to which is attached a scraper, I, for covering the seed. When the machine is not in operation, or is to be backed, this scraper I may be hooked up out of the way by a rod, *b*, Fig. 1, which hooks into a staple, *c*, on the scraper. The grain from the hopper E is fed out and allowed to drop through the spout F at the proper intervals as the machine is drawn along in the following manner: The bottom of the hopper is occupied by a roller, K, having in its face one or more holes, *d*, the capacity of which is regulated by a screw, *c*, in it in a well-known manner. A brush, *f*, is secured to the front part of the hopper and serves to brush off the surplus grain after the hole *d* is filled. This roller K is secured on a horizontal axle, L, which has its bearings on the sides of the spout F. To the outer end of this axle is secured a frame consisting of four arms, M, to the outer end of each of which is pivoted, at *g*, a swinging arm, N, which vibrates freely on its pivot *g*. To the frame A, in front of the hopper E, is secured a rigid piece, O, which projects out on one side into the path of the arms N as they revolve in a vertical plane. The end of each arm N is furnished with a claw or long spike, *i*, which enters the ground as the arm N falls, and thus detains the arm, and as the machine advances over the ground causes the arms M to revolve in the direction of their arrows. This rotates the roller K and discharges the contents of the hole *d* at regular intervals. A piece of metal, *k*, Figs. 2 and 4, is hinged loosely to the frame A, so that it can be raised, as shown in red, and in such a position that it shall extend out into the path of the arms M and be lifted up by each of them as it revolves, and falls again into a horizontal position so soon as the arm has passed. It thus serves to support the arm M, which may be next above it when the machine is drawn backward, which is sometimes necessary, as when starting at the commencement of a row.

There are various ways in which the distance between the hills in the row may be varied, as by altering the length of the arms M, or altering the points at which the arms N are pivoted to them, or by altering the position of the piece O.

The operation of this machine is as follows: The part being properly adjusted, the machine is drawn forward in the direction of the arrow 1. The point *i* of the arm N which happens to be lowest catches on the ground, as at *x*, Fig. 1, and detains this arm, and as the machine advances this causes the arms M and the axle L to revolve, when another of the arms N falls forward and is caught by the piece O, and by it is detained from falling until the machine has advanced the proper distance to make the next hill, when this arm, being drawn backward by its arm M as it revolves, slips off from the piece O and its point strikes the ground at the proper distance from the last point at *x* to make the hills at the required distance apart, the hole or holes *d* in the roller

K being placed in the proper position with reference to the arms M on the axle L that the charge of grain shall be emptied out through the spout F each time one or more of the arms N fall or pass some definite point. With the machine as above described it is obvious that the intervals at which the corn will be dropped will be little affected by the slight inequalities of the surface over which the wheels have to pass.

What I claim as my invention, and desire to secure by Letters Patent, is—

The within-described arrangement of mechanism, operating independently of the carrying-wheels of the machine for the purpose of spacing off the distances between the hills—that is to say, the roller K, the arms M and and N, and the piece O—arranged and operating in the manner described, for the purpose set forth.

AUGUSTUS C. CAREY.

Witnesses:

P. E. TESCHEMACHER,

THOS. R. ROACH.