

GEORGE PRATT.

Improvement in Raisin Seeders.

No. 115,893.

Patented June 13, 1871.

FIG. 1.

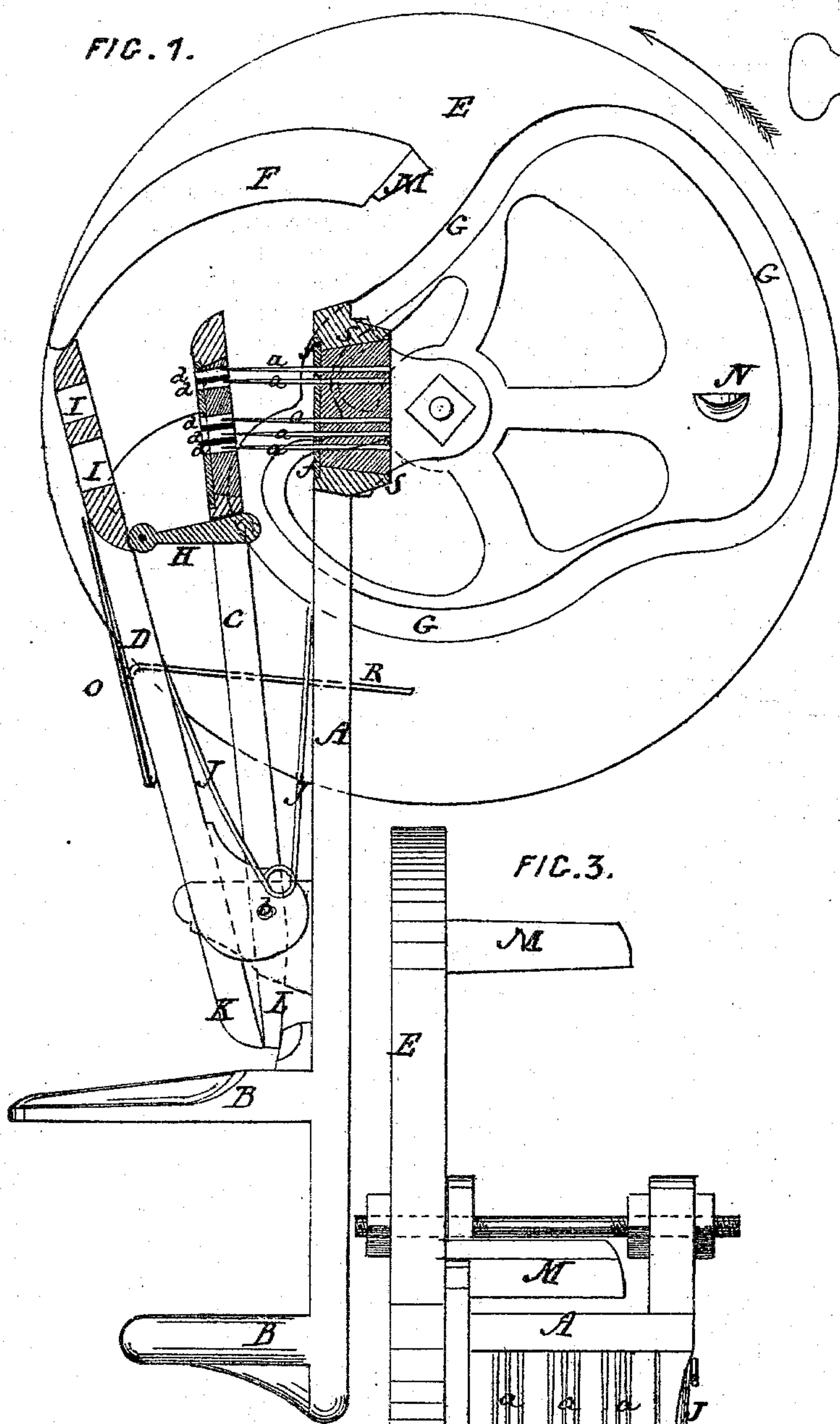


FIG. 2.

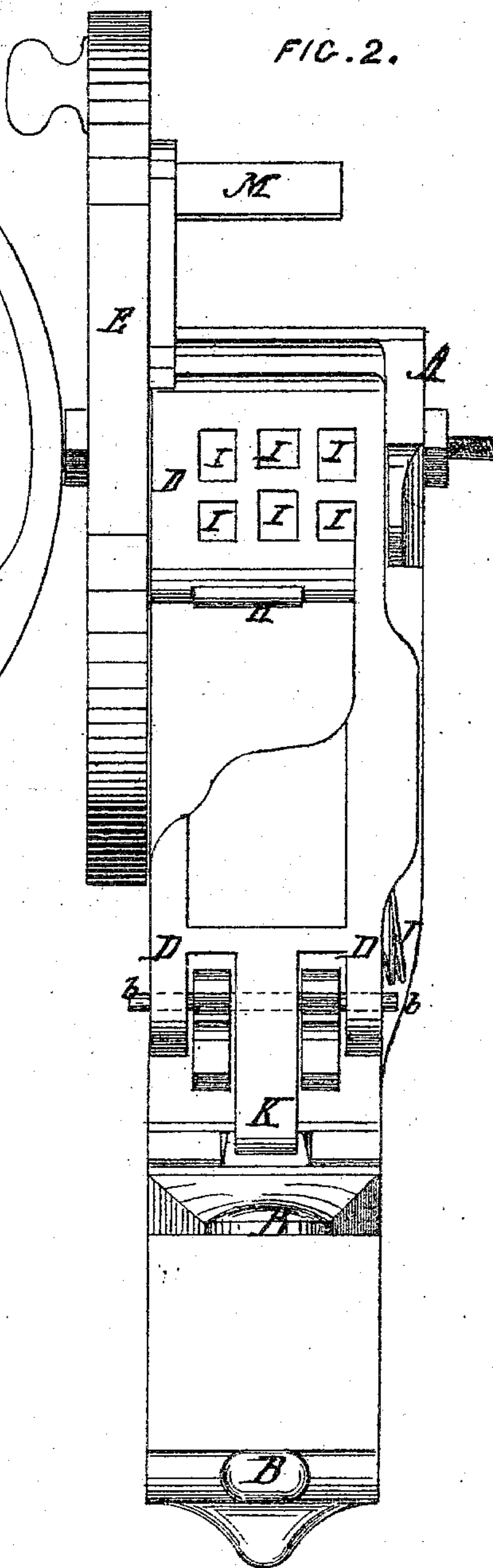
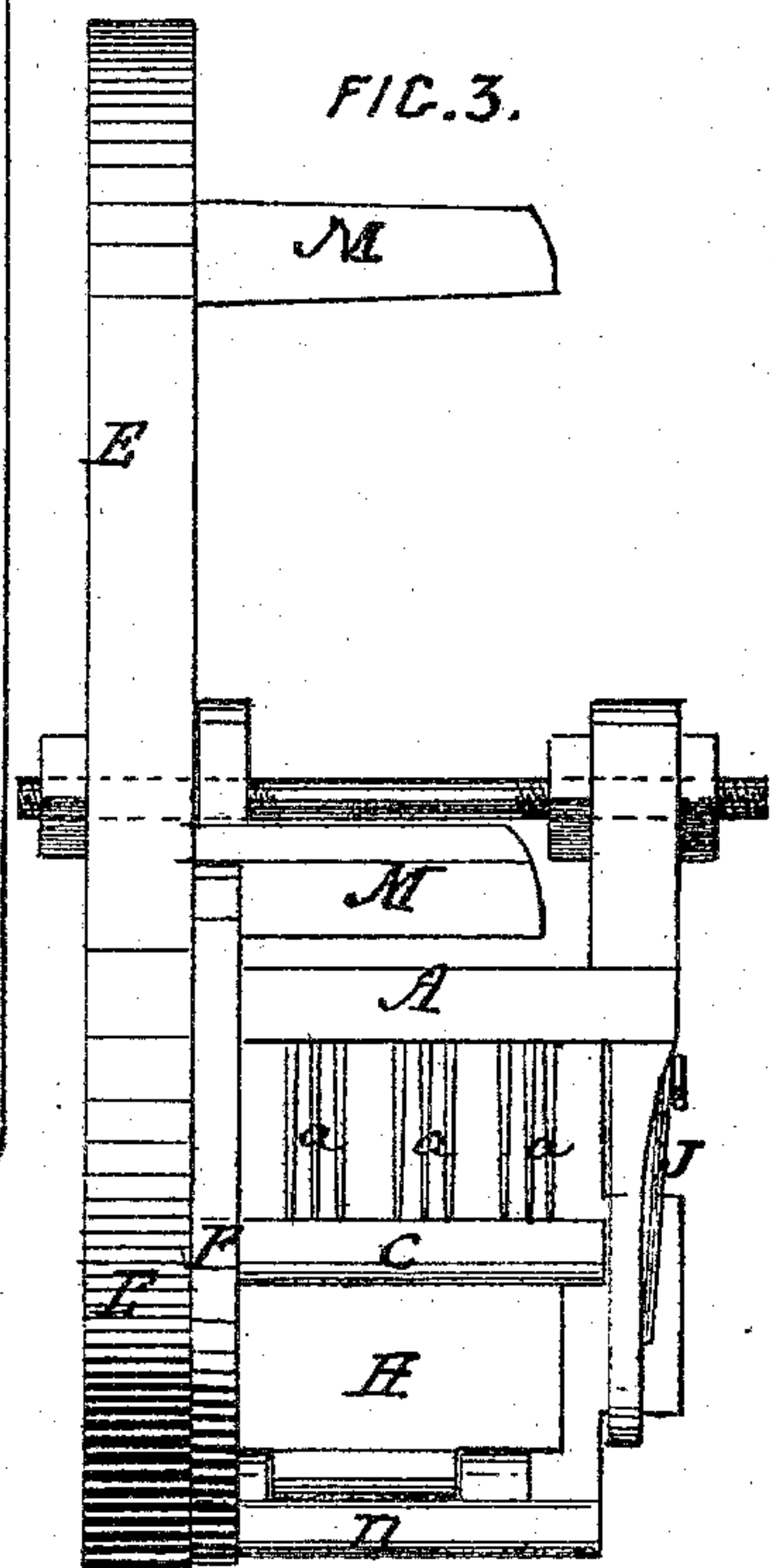


FIG. 3.



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IMPROVEMENT IN RAISIN-SEEDERS.

Specification forming part of Letters Patent No. 115,893, dated June 13, 1871.

To all whom it may concern:

Be it known that I, GEORGE PRATT, of West Roxbury, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Machines for Seeding or Stoning Raisins, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification.

This invention relates to that class of machines for seeding or stoning raisins that is provided with a grate, and expelling and compressing jaw arranged to act to expel the seeds, and to discharge both them and the seeded or stoned raisins. The invention consists of a novel arrangement and construction of the compressing, expelling, and grate jaws of the raisin-seeder, and also of the arrangement of other parts in addition to said jaws, as will be hereinafter more fully described.

In the accompanying drawing my improvements in raisin-seeders are illustrated, Figure 1 being a front view of a raisin-seeder constructed according to the present invention, with the several jaws in partial vertical section; Fig. 2, an edge view; and Fig. 3, a plan view.

A in the drawing represents an upright arm, constructed at its lower end with ear-pieces B for being clamped to a table, and at its upper end with pins *a* secured therein, as will be hereinafter described, suitable for producing the expulsion of seeds from raisins; C, the compressing-jaw, and D, the grate-jaw, hung upon a common center or fulcrum, *b*, both of which jaws extend upward, so that when swung upon fulcrum *b* they will come over and against the position of pins to expelling-jaws A; E, a wheel hung and arranged to turn upon center or axis of the expelling jaw or arm A. This wheel E, upon its face, toward the jaws A, C, and D, is provided with a raised circular or curved flange or lever, F, and a cam groove or way, G, the one, F, for operating the grate-jaw D, and the other, G, for operating the rest or retainer H that is pivoted or hung upon the grate-jaw below the openings I thereof. (See Fig. 1 more particularly.) This rest H, when the jaws are in the position shown in Fig. 1—that is, open from each other—extends across from the grate to the compressing-jaw, forming a bottom to the space between them. J,

a bent spring, applied between grate-jaw D and expelling-jaw A so as to throw the grate-jaw open, throwing at the same time, by its tail-piece K abutting against the tail-piece L, to compressing-jaw, the said compressing-jaw bringing itself and said jaw C into the relative position shown in Fig. 1. Through the compressing-jaw C are holes *d*, corresponding to the location of the expelling-pins *a*, through which holes said pins partially extend when the jaws are in the position shown. M and N, arms projecting from operating face of wheel E, the one for scraping the outside face of grate-jaw and the other for scraping the outside face of compressing-jaw, as, by turning of the wheel, they pass by, respectively, the said jaws.

With the several parts above described in the relative position shown in the drawing, by turning the wheel E, in the direction indicated by an arrow, through the circular or curved flange or lever, the grate-jaw is carried toward and against the compressing-jaw when impinging against it. The two then are moved as one, to and against the expelling-jaw, (its pins passing through the holes I and *d*, respectively, of the one and the other,) when the clearer-arm M of wheel having passed over the surface of the grate-jaw, said jaw is then released, and, by the action of the bent spring J, is thrown open while the raisin is still impaled on the pins passing through C, and then carrying with it, by the abutment of tail-pieces K L, the compressing-jaw in season to bring it into position for the arm N of wheel E to pass over and scrape it, and so on for each revolution of the wheel. As the jaws D C are being operated, as described, the rest or retainer H is carried from its position, shown in Fig. 1, to and into a position to allow the scrape-arm N of wheel E to pass and clear it, when, before the flange or lever F commences to again close the grate-jaw D, it is brought into the position shown in Fig. 1. This operation of the rest or retainer is produced through the cam-groove G of wheel E, which is of suitable form therefor.

In the operation of parts, as above described, a raisin being placed within and between the grate and compressing-jaws, when in the position shown it drops on the retainer, where, being held through the action of parts described, its seeds are forced out by the expelling-pins

a to the outside of grate-jaw D, from which, by the arm M of the wheel E, they are cleared, and then the raisin thus stoned or seeded cleared from the compressing-jaw by the arm N of same wheel E.

To prevent the seeds as thrown from the grate-jaw by the clearer from becoming mixed with the raisins, the opening P through the grate-jaw D is closed by a spring-plate, Q, fixed thereto, but in such position as to allow the seed-clearer to pass to the rear or inside of it. R, a floor applied to and between the several jaws A, C, and D, outside of the circuit of the clearer pins or projections to wheel E. This floor is for the purpose of preventing the raisins, as stoned, from dropping in and between the said jaws, and thus clogging the same; and in the present instance it is shown as attached to the grate-jaw D, moving with it, whereby it receives, at certain times in the operation of the machine, a sudden and jerking motion, throwing off whatever raisins should have a tendency to cling or adhere to it. This floor, however, could be attached to the stationary jaw A; but it is preferable to give it a movement, and also to have it somewhat inclined. For receiving the expelling-pins *a* the jaw A is cast with an opening, S, through it, with its several sides beveled, and over it, at its smaller end, is applied an overlapping perforated plate, *f*, through the perforations of which the expelling-pins *a* are extended, and then secured within the jaw by backing up the perforated plate *f* with fused soft solder or other metal poured into the bevel-sided recess of arm, the soft solder uniting the perforated plate and pins together. The beveled sides of opening in the expelling-jaw prevent the escape of the soft solder and pins in one direction, and the

overlapping perforated plate in the other. The compressing-jaw is constructed similarly to the expelling-jaw, with an opening bevel-sided, perforated plate, backed with soft solder, through which openings are left corresponding to the openings of perforated plate in the pouring of the molten metal, by locating the expelling-pins, or substitutes for them, prepared with oil or grease, in proper position within the arm to accomplish the same.

Having thus described my invention, I shall state my claims as follows:

1. The grate-jaw D and compressing-jaw C, in combination with lever or cam-flange F of wheel E, substantially as described.
 2. The grate-jaw D and compressing-jaw C, provided with tail-pieces K and L, in combination with spring J, substantially as and for the purpose specified.
 3. The retainer or rest H, operated by cam-groove G of wheel E, in combination with a grate-jaw, D, expelling-jaw A, and compressing-jaw, G, substantially as described, for the purpose specified.
 4. The expelling-jaw A or compressing-jaw C, or both, constructed with a bevel-sided opening, S, and perforated plate *f*, backed with soft solder, substantially as and for the purpose described.
 5. The floor R, attached to and in combination with a moving jaw of the raisin-seeder, substantially as and for the purpose set forth.
- The above specification of my improvements in raisin-seeders signed by me this 4th day of February, A. D. 1871.

GEORGE PRATT.

Witnesses:

ALBERT W. BROWN,
CHAS. J. TAYLOR.