No. 782,527. PATENTED FEB. 14, 1905.

G. W. SPENCER.

POTATO PLANTER.

APPLICATION FILED FEB. 20, 1904.

2 SHEETS—SHEET 1.

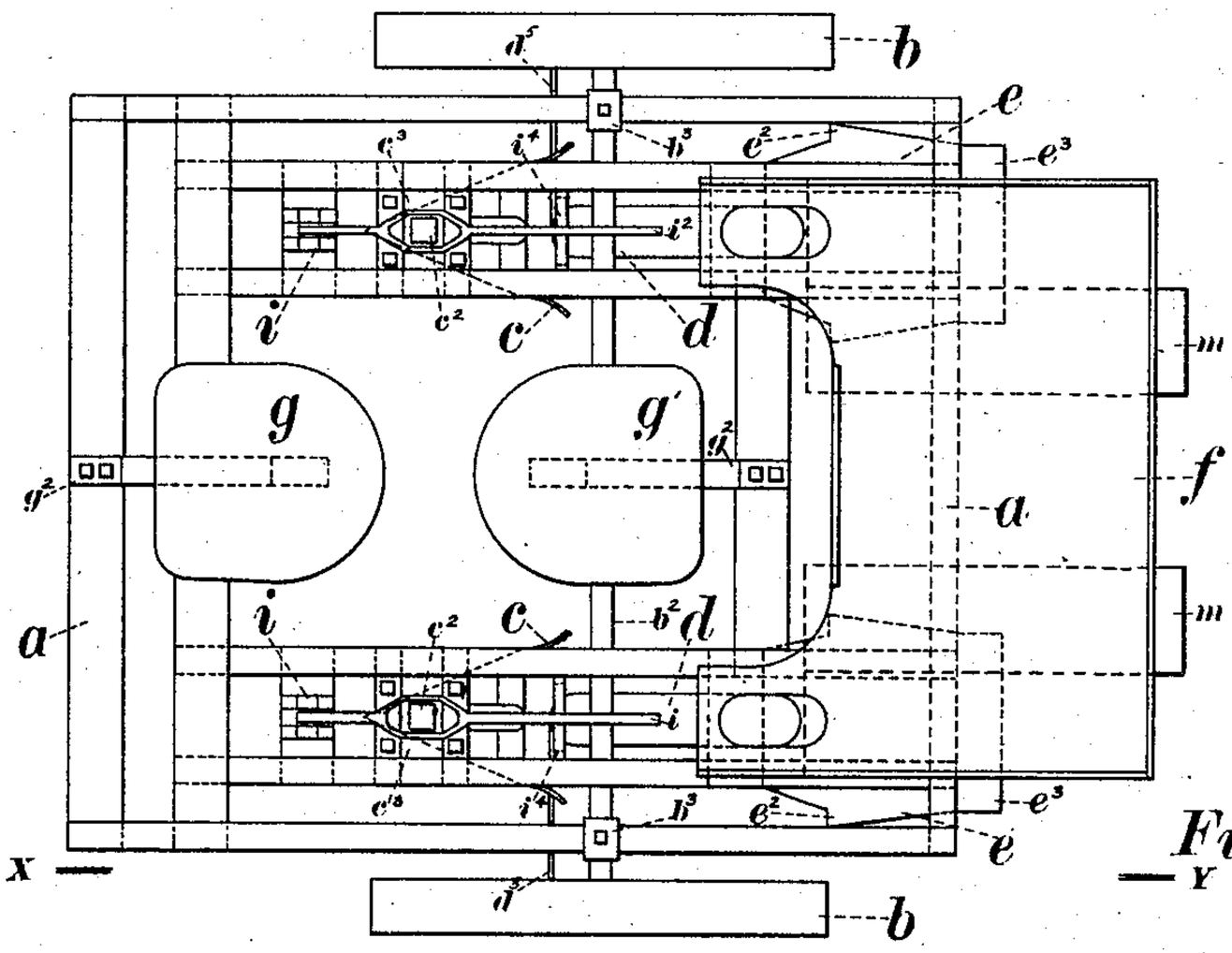


Fig. 1

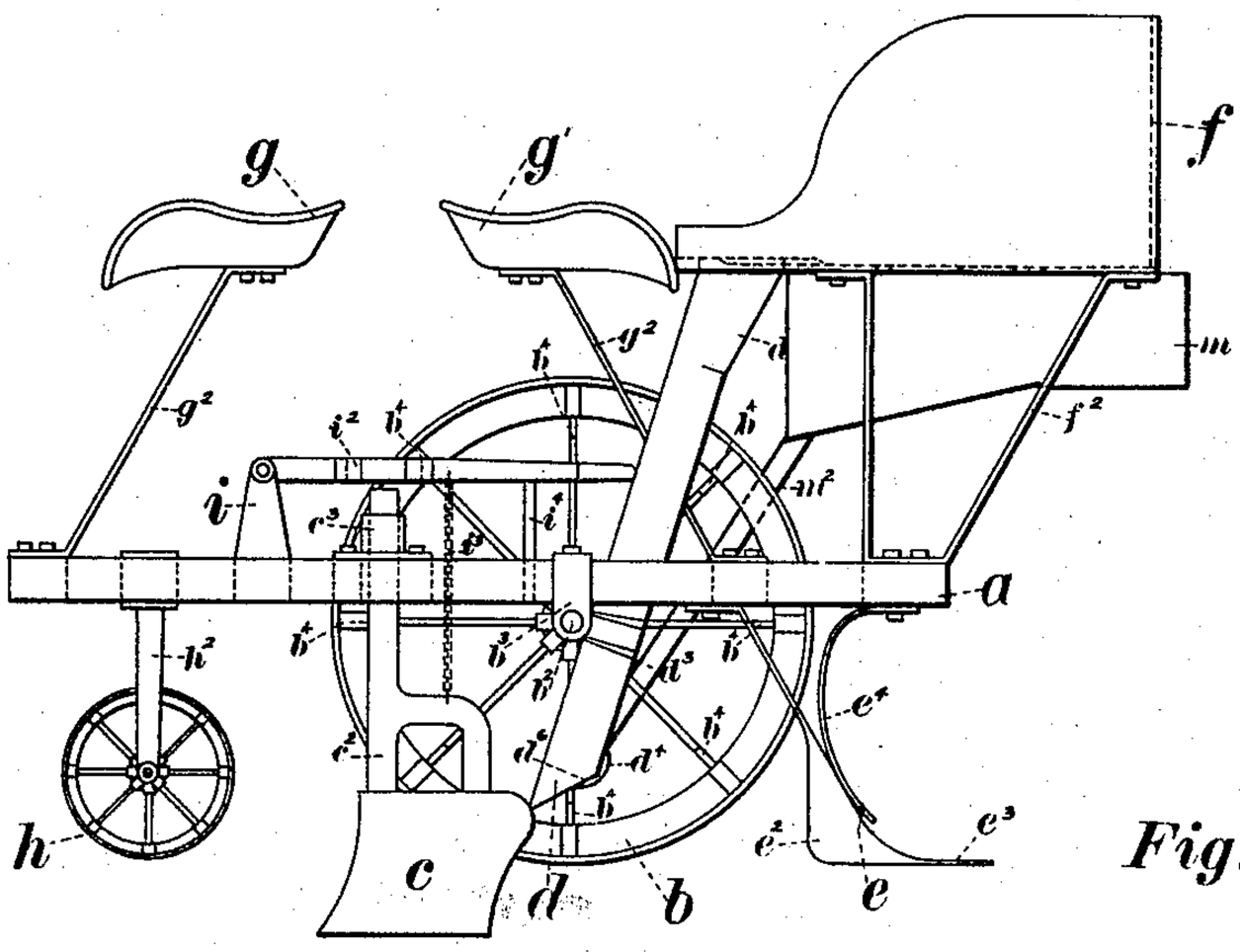
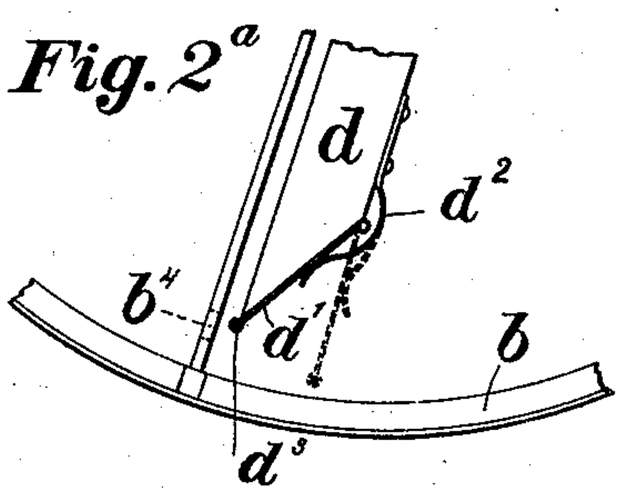


Fig. 2

Fig. 2a



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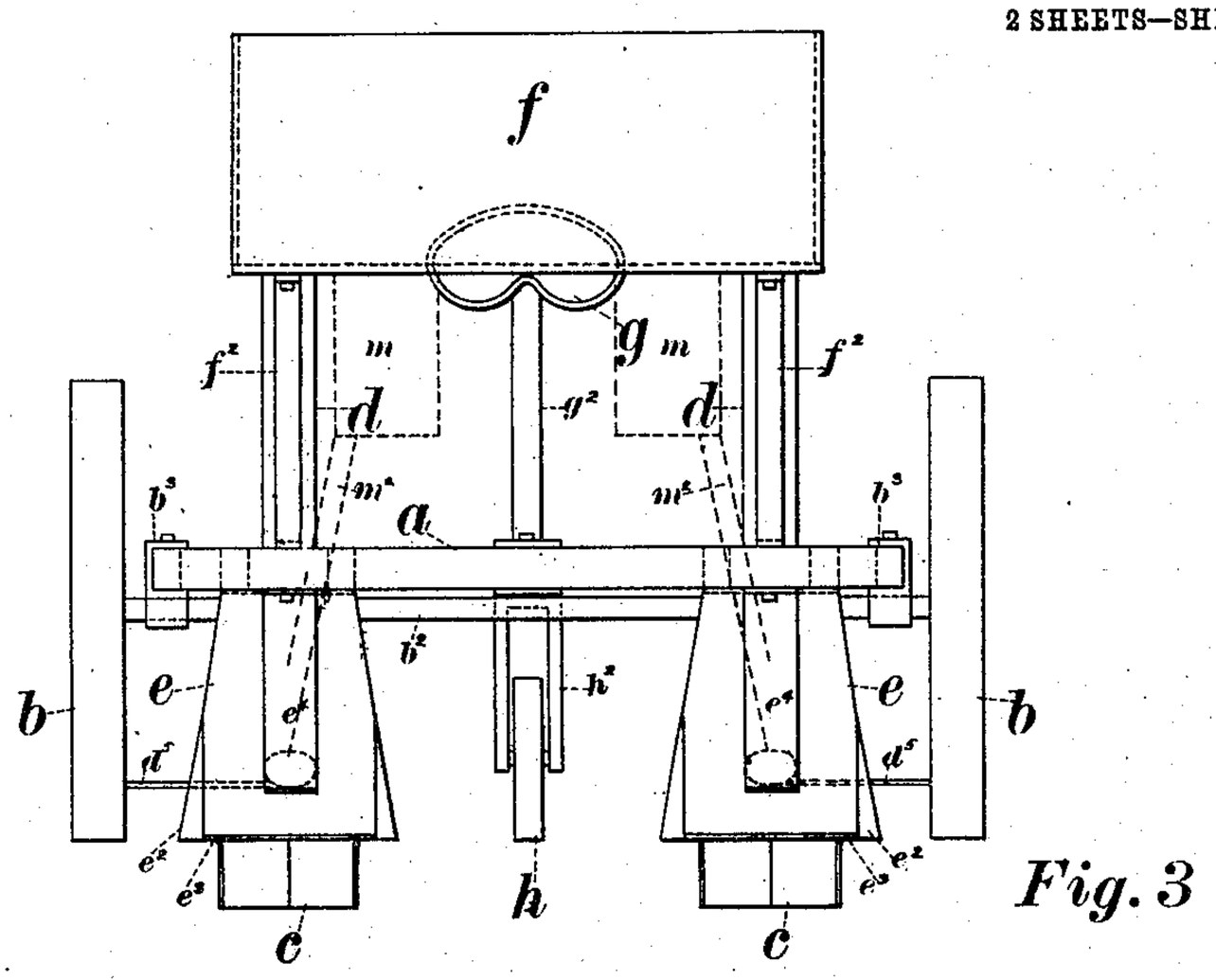

Fig. 3

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No. 782,527. Patented February 14, 1905.

UNITED STATES PATENT OFFICE.

GEORGE W. SPENCER, OF ST. JOHNSBURY, VERMONT.

POTATO-PLANTER.

SPECIFICATION forming part of Letters Patent No. 782,527, dated February 14, 1905.

Application filed February 20, 1904. Serial No. 194,488.

To all whom it may concern:

Be it known that I, GEORGE W. SPENCER, of St. Johnsbury, in the county of Caledonia and State of Vermont, have invented certain new and useful Improvements in Potato-Planters, of which the following is a specification.

This invention relates to potato-planters, and has for its object to provide a machine which while it may be termed "automatic," yet is not so entirely, for the reason that the seed-potatoes are fed by hand.

It has often been found that with the use of potato-planters which are entirely automatic there is a possibility of some of the hills being skipped, owing to the unevenness of the ground, resulting in occasional inaccurate feeding of the seed. With this present machine there is no chance of error, for reasons which will become apparent hereinafter.

Other objects of the invention are simplicity as well as accuracy of operation.

These objects are accomplished by means of the construction and arrangements of the parts of the machine, all as will be hereinafter described.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a plan view of a planter constructed according to my invention. Fig. 2 represents a side elevation on the line X Y of Fig. 1, the near wheel being omitted. Fig. 2^a represents a detail elevation of the lower end of one of the feed-spouts and its closing-flap. Fig. 3 represents an elevation from the rear of the machine.

Similar reference characters designate similar parts throughout the several views.

The frame a of the machine has secured to it bearing-clips b^3, in which is fixed an axle or shaft b^2. Wheels b are mounted to rotate on said axle or shaft. At the forward portion of the frame is journaled a yoke or fork h^2, in which the wheel h is mounted. The object of this particular structure of the wheel and its supporting-yoke will be more fully set forth hereinafter.

The seed-hopper f is mounted upon suitable supports f^2, secured to and rising from the rear portion of the frame a. At each side of the hopper f is formed an opening which communicates with a feed-spout d, having its lower discharge end normally closed by a lid or flap d', hinged thereto and held closed by a spring d^2. Secured to the lower end of the lid d' is a finger d^3, said finger extending laterally and into the path of movement of the lugs b^4, carried by each wheel b. As the machine advances the lugs b^4 successively engage the finger d^3 of the flap of each feed-spout and open said lid to discharge the seed in said spout. The seed-potatoes are dropped at certain times into the spouts by a feeding operator, for whom a seat is provided at g', said seat being supported upon an upright or brace g^2 in such position that the operator may conveniently reach both the stock of seed in the hopper f and also the openings leading to the feed-spouts.

The seat for the driver of the machine is represented at g, said seat being also supported upon a suitable upright or brace g^2.

A plow c for opening the furrow to receive seed is located in advance of the lower end of each spout d. Said plow is secured to the lower end of an adjustable standard c^2, the upper end of which projects upward through a bearing-sleeve c^3, secured to the frame. The sleeve may be provided with any suitable means whereby said standard is held in any preferred vertical adjustment. Means for raising or lowering each plow c may comprise a lever i^2, pivoted to bracket i and having a chain i^3 or other suitable flexible connection leading to the lower portion of the standard c^2. A standard for supporting the lever i^2 in a substantially horizontal position is represented at i^4, said standard projecting upward from the frame a. Each lever i^2 is formed with an eye or opening, as clearly shown in Fig. 1, through which eye or opening the upper end of the standard c^2 may pass if the chain i^3 be shortened, so as to cause the plow c to normally remain in a plane or position relatively higher than that indicated in Fig. 2.

Secured to the frame a, behind the lower end of each feed-spout, is a furrow-coverer e, having upwardly-extended side portions e^2 for pushing the soil from the sides of the furrow

and horizontal portions e^3, which press the soil down onto the seeds. A spring e^4 is employed to apply a yielding pressure to the coverer.

The pivoted guiding-wheel h, at the front of the frame a, steadies the planter and prevents swaying of the machine. Since the bearing-frame h^2 is pivoted, the wheel may turn when the machine is turned. The wheel h is designed to follow a mark or small furrow made by a suitable marker during a previous traverse of the field by the planter.

A fertilizer reservoir or reservoirs m may be secured under the seed-hopper f and communicate with the lower portions of the feed-spouts d by means of tubes m^2, through which the fertilizer will feed simply by gravity.

I claim—

1. In a potato-planter, the combination with the frame, and carrying-wheels therefor, of the seed-hopper supported at the rear end thereof and having two openings, spouts leading from said openings through the frame, a seat facing the seed-hopper and mounted to enable the operator to reach the seed-hopper and openings, lids normally closing the lower ends of said spouts, and means secured to said carrying-wheels for periodically moving said lids to open said spouts.

2. In a potato-planter, the combination of the frame, and carrying-wheels therefor, of the seed-hopper supported at the rear end thereof and having two openings, spouts leading from said openings through the frame, a seat facing the said hopper and mounted to enable the operator to reach the seed-hopper and openings, and lids normally closing the lower ends of said spouts, said lids having fingers projecting laterally therefrom to intercept the path of movement of the spokes of said carrying-wheels.

3. In a potato-planter, the combination with a frame and its wheels, a seedbox, spouts leading therefrom, bearing-sleeves secured to the frame, vertically-adjustable standards mounted in said bearing-sleeves, furrow-opening plows secured to said standards and located adjacent to the lower ends of said spouts, levers pivotally supported upon said frame and having openings in juxtaposition with said standards, and flexible connections between said levers and said standards.

4. In a potato-planter, the combination with furrow-opening plows, and seed-depositing mechanism, of furrow-coverers each comprising an angular plate having a horizontal pressing portion provided with upwardly-extended sides, the forward portion of said plate being extended to form a standard, and springs for imparting a yielding pressure to said coverers.

In testimony whereof I have affixed my signature in presence of two witnesses.

GEORGE W. SPENCER.

Witnesses:

GILBERT E. WOODS,

HARRY M. NELSON.