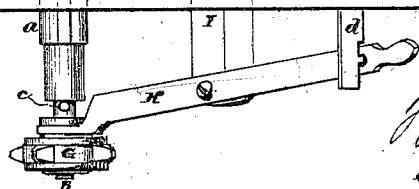
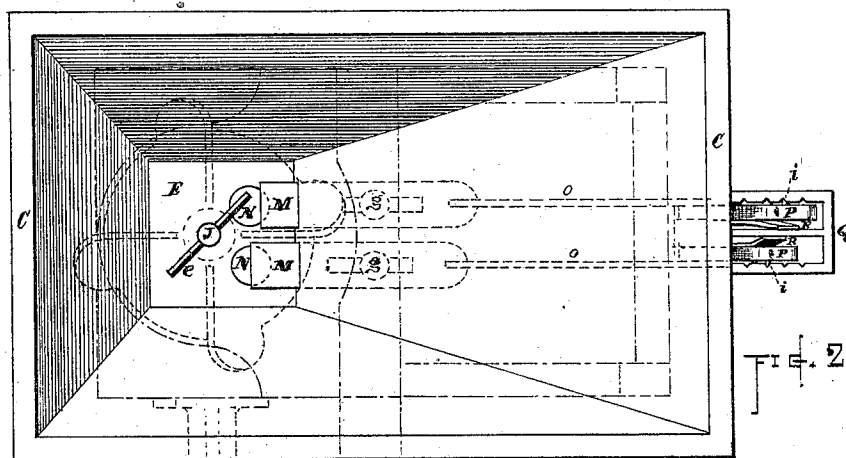
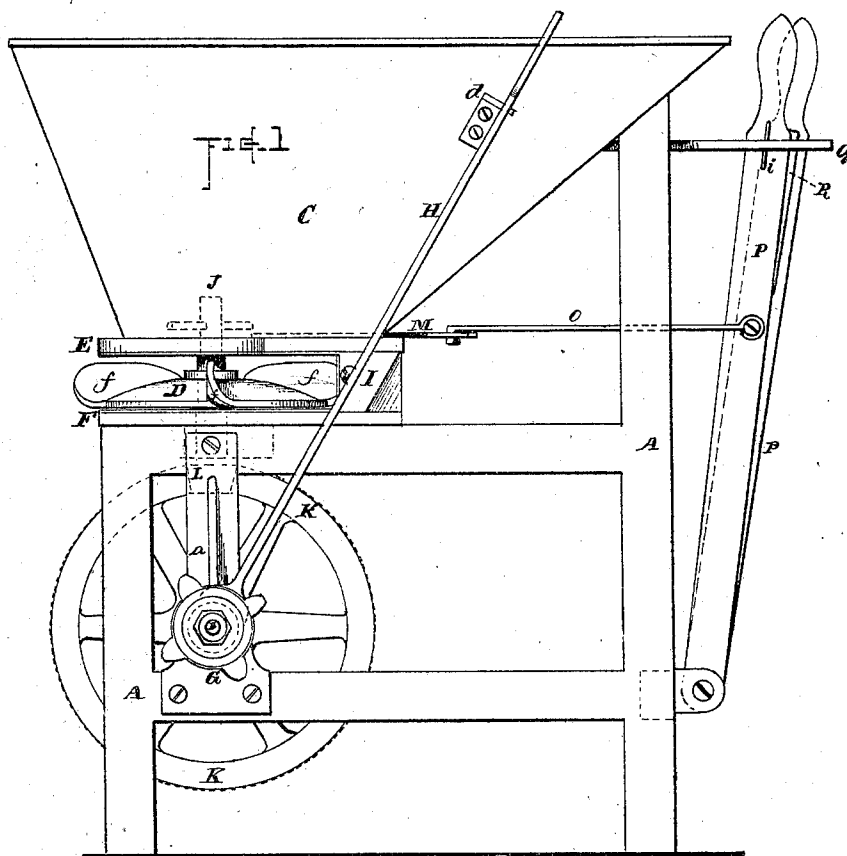


(133.) 2 Sheets--Sheet 1.
J. PRICE, B. JOHNSTON, I. J. TRUMAN & R. M. HAMILTON.

Improvement in Broadcast Sowers.

No. 122,405.

Patented Jan. 2, 1872.



Witnesses

Wm. H. Smith
A. E. Price

Inventors
Jacob Price
Baptist Johnston
I. J. Truman
R. M. Hamilton

By their Attorney *Thos. H. Dodge*

(133.)

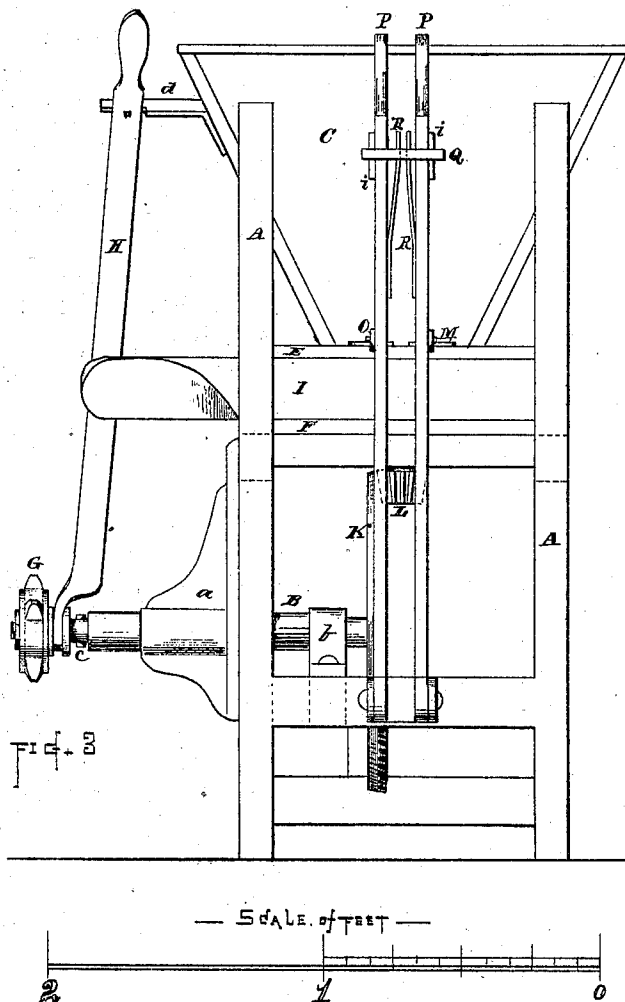
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Witnesses

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UNITED STATES PATENT OFFICE.

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AND ROBERT M. HAMILTON, OF SAN FRANCISCO, ASSIGNORS TO LIVING-
STON L. BAKER AND ROBERT M. HAMILTON, OF SAN FRANCISCO, CAL.

IMPROVEMENT IN BROADCAST SOWERS.

Specification forming part of Letters Patent No. 122,405, dated January 2, 1872.

To all whom it may concern:

Be it known that we, JACOB PRICE, of San Leandro, in the county of Alameda and State of California, BAPTIST JOHNSTON, of San Francisco, in the county of San Francisco and State of California, and IRWIN J. TRUMAN, of the city and county of San Francisco, State of California, and ROBERT M. HAMILTON, of the city and county of San Francisco, in the State of California, have invented certain new and useful Improvements in Seed-Sowers; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 represents a side elevation of our improved seed-sower. Fig. 2 represents a plan view, and Fig. 3 represents a front view of the same.

The nature of our invention consists in certain improvements in power seed-sowers, as will be hereinafter described.

In the drawing, the parts marked A represent the supporting-frame, which may be made of any suitable form and material. B indicates the driving-shaft, which is supported in bearings *a b* upon the frame A. C indicates the seed-hopper, arranged upon the top of the machine; and D indicates the distributing-disk, which is situated in a horizontal position between the bottom plate E of the hopper and the bed-plate F at the rear of the machine, as illustrated. The driving-shaft B projects beyond one side of the frame and is provided at its outer end with a toothed chain-wheel, G, to receive the driving-chain that operates the machine, and which chain receives its power from one of the wheels of the wagon whereon the seed-sowing machine is mounted when in use. The wheel G is made loose on the shaft B and is provided with notches at its inner side to engage with lugs or pins *c* on the shaft, thereby locking the parts together for operation. A shipper-lever, H, is provided for throwing the parts into and out of clutch, when desired. The lower end of said lever H works in a groove on the hub of the wheel G. Its center is fulcrumed upon a projecting end of the bolster-piece I, while its upper end is provided with a suitable and convenient handle, as illustrated. A latch-piece, *d*, is secured to the side of the hopper, which

is furnished with suitable projections to receive and hold the lever H in its several positions. The driving-shaft B is connected to and operates the vertical distributing-spindle J by means of a bevel-gear, K, fixed to the end of the shaft B, and a bevel-pinion, L, at the lower end of the spindle J. The spindle J is arranged in suitable bearings and passes up through the bed F and hopper bottom E. Its upper end, which projects into the lower portion of the hopper, is furnished with a stirring-finger, *e*, for agitating the seed and insuring its uniform discharge through the passages or openings N in the hopper bottom to the distributing-disk D beneath. The distributing-disk D is formed of cast metal and is secured to the vertical spindle J just above the bed-plate F. Said disk is provided with vertical wings or flanges *f*, with curved ends for throwing the seed as the disk revolves in a horizontal position. Flat metallic plates M are provided for closing the seed-passages N. These plates pass out through the front of the hopper and are secured at the outside thereof by means of screws or bolts *g* that pass through longitudinal slots in said plate and screw into the bottom piece E of the hopper, as indicated by dotted lines in Fig. 2 of the drawing. The plates M are joined, by suitable rods O, to hand-lever P, arranged at the front of the machine, pivoted to the frame A at their lower ends, with their upper ends passing through a slotted catch-piece, Q, which is secured to the upper part of the hopper. Flanges *i* are attached to the outer sides of the lever P, which catch into notches formed for their reception in the catch-piece Q, and springs R are secured to the inner sides of the levers, which springs rest against the central bar of the catch-piece Q and press the levers P outward to prevent the flanges *i* from jarring out from the notches, and to thus retain the levers P and gate-plates M in position as adjusted. By means of the levers P the gate-plates M can be adjusted so that the machine will throw the seed more or less to the right or left, as desired, accordingly as the openings or passages N are increased or diminished in relation to each other, and the amount of seed distributed to a given surface of land can also be very accurately regulated by the adjustment of the plates and levers. If preferred, the ends of the levers may

extend higher up than shown, and the catch-piece Q may be arranged to project from the upper edge of the hopper, or nearly so.

The grain is, by means of the revolving flanged disk D, thrown to the sides and rear of the machine, the bolster piece I being arranged to prevent the grain from going in a forward direction. The side of the bolster piece I next to the disk is faced with metal, as is also the under side of the hopper bottom E and top of the bed F, thus insuring a smooth and even surface and rendering the parts durable.

It will be understood that, when used, the machine is to be placed upon a wagon or cart in the usual manner, upon which it may be secured in the proper position by clamp-bolts from the frame, so that it will spread the grain from the rear and sides as the team moves forward.

It will be seen by reference to the drawing and the foregoing description that the lever for controlling the delivery of the seed, as well as the lever for throwing the machine in and out of action, are arranged in relation to the seed-box or hopper, and each; that the driver can readily operate each lever when necessary by one hand, thus enabling him to adjust and regulate the sower, while, at the same time, retaining full control of the team. Then, again, it will be observed that the hopper, being supported by the bolster-plate I and by the posts of the frame at the front, receives a firm and substantial support, while the space at the rear

and sides of the disk D is left open and free, not being encumbered by braces or connecting-rods to obstruct the passage of the seed or interfere with its uniform distribution in all directions.

Having described our improved seed-sower, what we claim therein as new and of our invention, and desire to secure by Letters Patent, is—

The combination of a hopper and the seeding mechanism of a broadcast sower with the levers P P and H, arranged within reach of the driver, to govern the flow of grain and the operation of the machine, substantially as set forth.

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(133)