(No Model.) 2 Sheets—Sheet 1.

A. MILLER.

SEAT FOR SEED DRILLS.

No. 316,805. Patented Apr. 28, 1885.

Fig 1

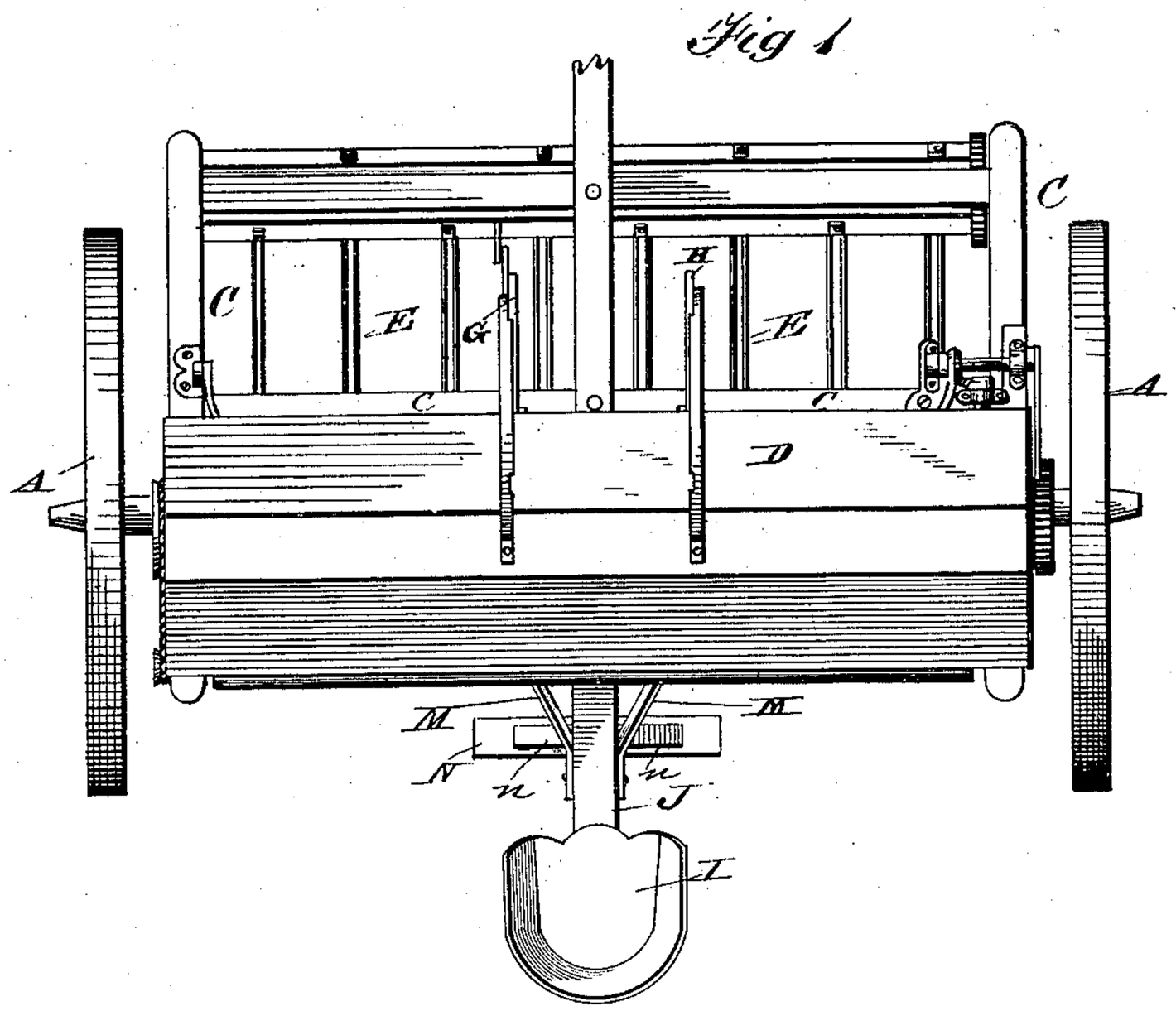
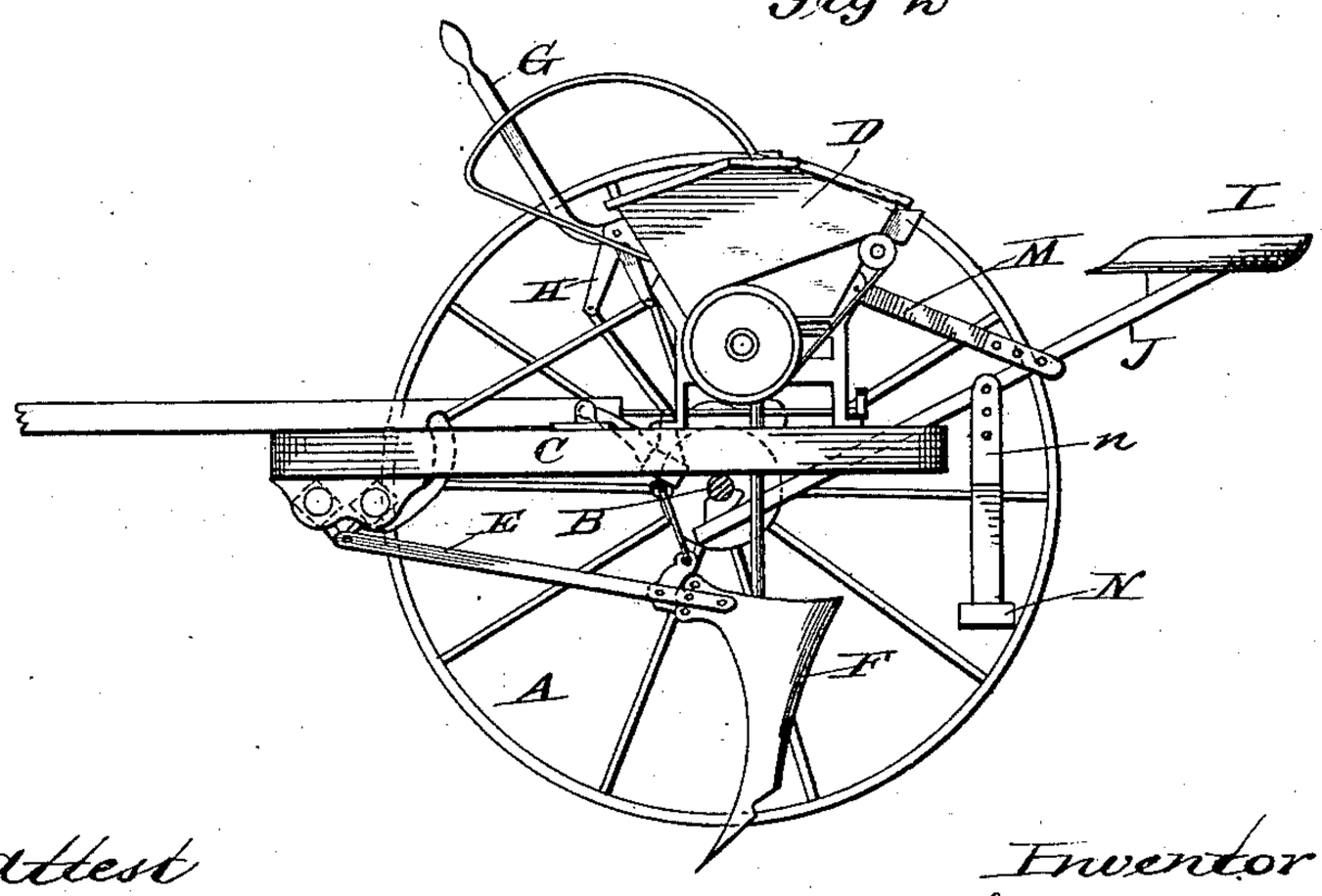


Fig 2



Attest
A. L. Heaton
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Inventor:
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per Edson Bros
Attorneys

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

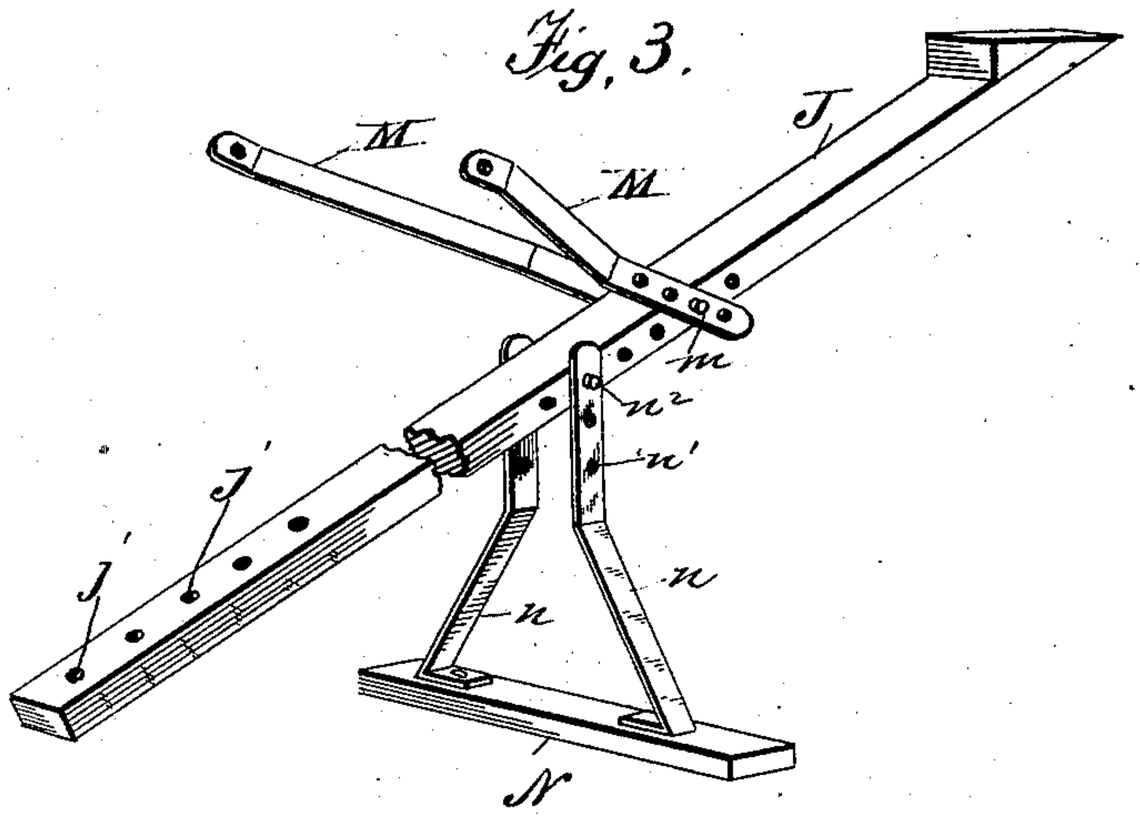


Fig. 4.

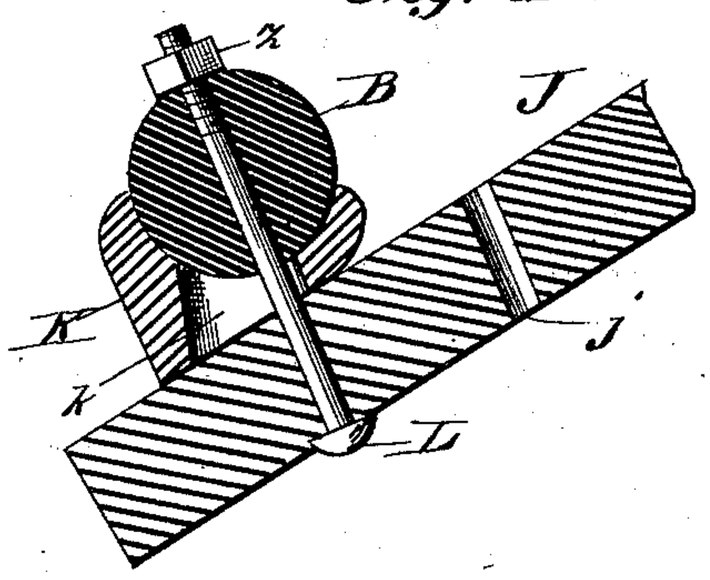
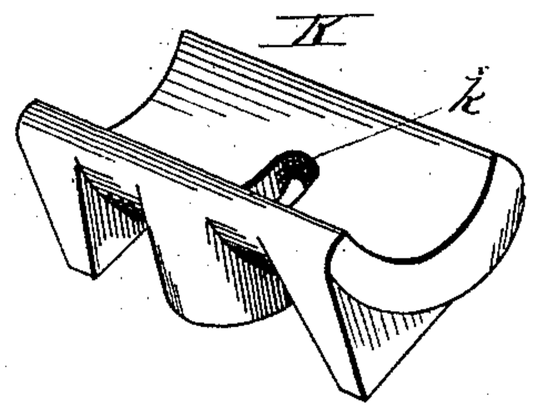


Fig. 5.



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UNITED STATES PATENT OFFICE.

ABRAHAM MILLER, OF NEWARK, ASSIGNOR TO THE NEWARK MACHINE COMPANY, OF COLUMBUS, OHIO.

SEAT FOR SEED-DRILLS.

SPECIFICATION forming part of Letters Patent No. 316,805, dated April 28, 1885.

Application filed August 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM MILLER, a citizen of the United States, residing at Newark, in the county of Licking and State of Ohio, have invented certain new and useful Improvements in Seats for Seed-Drills, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in seed-drills or fertilizers, having for its object the provision of a driver's seat made separate from and adjustably or otherwise secured to the machine in proximity to the levers for raising and lowering the boots, throwing the feed mechanism into and out of operation, &c., whereby the driver is placed in full control of the machine and enabled to throw it into or out of operation without stopping his team or dismounting from his seat.

To the accomplishment of the above object the invention consists of the construction, combination, and arrangement of parts, substantially as herein shown in the drawings, and hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of a grain-drill and fertilizer-distributer having my improved seat attached. Fig. 2 is a side elevation with one of the wheels removed to show details of construction. Fig. 3 is a perspective view, enlarged, of the adjustable seat-support and foot-rest, and Figs. 4 and 5 are detail views of the means whereby the seat-supporting beam is secured to the axle of the machine.

Like letters of reference in the several drawings denote like parts.

For the sake of clearness I have exhibited a complete machine in the drawings; but my description will be confined in this case to the improved seat and foot-rest hereinafter claimed, other features incidentally shown being reserved as the subjects of other applications.

A are the carrying-wheels; B, the axle; C, the frame; D, the hopper for the grain; E, the drag-bars supporting the drill or boots, and F the boots which are raised and lowered and thrown into and out of alignment by means of the levers G H.

I is the operator's seat, which is supported in the rear of the hopper, on the upper end of the inclined beam J, the lower end of which is rigidly secured to the under side of the axle by means of a through-bolt, L, which passes up through one of several adjustment-holes, *j*, in the lower portion of the beam J, through an interposed slotted metallic clamp-block, K, made concave on its upper side to fit the axle, and through a perforation in the axle itself, and is removably secured by a nut, *z*, tightened upon the axle. The form of the block K is more clearly shown in Fig. 5. Its upper face is made concave to fit the under side of the axle, while its under side is cut away and rounded, as shown, so as to give a straight face to bear against the upper face of the beam J, and at the same time to economize the material and lessen the weight, flat surfaces being left at the ends and at the middle about the slot, while the angles thus formed constitute biting edges, more firmly holding the wood of the beam from displacement by the agitation of the vehicle. By this means the beam may in a few minutes be lengthened or shortened and the seat adjusted to different heights, to suit the length of the body of the operator.

The beam J is held in position by means of the two metallic straps or arms M, the forward ends of which are secured to the rear face of the hopper D, while the rear ends are provided with adjustment-holes, as shown, and united to each other and to the seat by a pin, *m*, which passes through all three pieces, several adjustment-holes being provided through the seat-beam. By this means the seat may be raised higher from the ground and brought farther forward—nearer to the lever—or set farther back, according to the size and length of arm of the man or boy upon the machine. The slot *k* in the clamping-block K permits the play of the beam up or down in the forward or rearward adjustment of the upper end of the beam J. Several adjustment-holes are also provided in the seat-beam, as shown, below the points of attachment of the straps M, for the support of an adjustable swinging foot-rest, N, which is pivotally suspended from the seat-beam by two straps, *n*, rigidly secured at

their lower ends to the foot-board N, and perforated at their upper ends with adjustment-holes n', as shown, through which and the beam passes a pivot-pin, n^2. It will be seen that this suspended foot-rest may be adjusted in relation to the seat to suit the length of limb of the occupant of the seat, while its mode of attachment permits free exercise of the knee-joints, greatly increasing the comfort and convenience of the operator. It will be seen that the adjustment of the seat back and forth, as well as up and down, co-operates with the double adjustment of the foot-rest, the first having reference to the length of arm, and the second to the length of body, and the third to the length of limb of the operator, adapting it to be operated by any one with perfect ease.

Although I have shown and described a seat attached to the drill near the middle thereof, I wish it understood that I do not confine myself to locating the seat at that particular point, but may place it at any desired point between the ends of the hopper to suit machines already made and in use; also, if desired, the support for the feet may be attached directly to the hopper or to the frame of the machine and provided with suitable adjusting devices. Again, if desired, the foot-rest may be rigidly attached to the seat-supporting bar or to the hopper or frame at any convenient point without departing from the spirit of my invention.

I do not confine myself to the exact form and arrangement shown and described, but hold myself at liberty to make such changes as fairly fall within the scope of my invention—as, for instance, the foot-board can be suspended from the seat-frame by means of a single bar or strap, N.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In a machine substantially such as described, and in combination with the hopper thereof, a seat-supporting bar connected directly to the hopper and having a seat and foot supports attached thereto, substantially as described.

2. In a machine substantially such as described, and in combination with the hopper thereof, a detachable seat-supporting bar having a seat and foot support attached thereto, the latter pivotally, substantially as described.

3. In a machine substantially such as described, and in combination with the hopper and axle thereof, an adjustable seat-supporting bar pivotally connected to the hopper and having a seat attached thereto, substantially as described.

4. In a machine substantially such as described, and in combination with the hopper thereof, a single detachable and adjustable seat-supporting bar connected to the hopper and having a seat secured thereto, substantially as described.

5. In a machine substantially such as described, and in combination with the hopper and frame thereof, a seat-supporting bar provided with a seat and foot support, the latter connected to said bar, and the bar adjustably connected to the hopper, substantially as described.

6. In a machine substantially such as described, and in combination with the hopper thereof, a seat-supporting bar provided with a seat, and an adjustable foot-support pivoted to said bar, adjustably connected to the hopper, substantially as described.

7. In a machine substantially such as described, and in combination with the axle and hopper thereof, an adjustable seat-supporting bar provided with a seat and an adjustable foot-rest, the latter connected directly to said bar, substantially as described.

8. The combination of an axle, a hopper, a seat-beam connected at its lower end to the axle, and means, substantially as described, whereby its upper portion is connected to and supported from the hopper, substantially as set forth.

9. The combination of a seat, a seat-beam, a hopper, and adjustable straps connecting the seat-beam with the hopper, substantially as set forth.

10. The combination of a seat, a seat-beam, a pivotally-suspended foot-rest, and means, substantially as described, whereby the foot-rest may be lengthened or shortened to give greater or less play, and suspended nearer to or farther from the seat, substantially as described.

11. The combination of a seat-beam, an axle, an interposed clamp-block conformed on one side to the beam and on the other to the axle, and means, substantially as described, for securing the said parts together, substantially as described.

12. The combination of a perforated seat-beam, a slotted block made flat on one side and concave on the other, the perforated axle, and a tension bolt and nut, substantially as and for the purpose set forth.

13. The combination of a perforated seat-beam, a slotted block made flat on one side and concave on the other, the perforated axle, and a tension bolt and nut, substantially as and for the purpose set forth.

14. The combination of a seat, a seat-bar adjustable in length, a hopper, adjustable straps connecting the seat-bar and hopper, and an adjustable swinging foot-rest, substantially as and for the purpose set forth.

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

ABRAHAM MILLER.

Witnesses:

CHARLES C. GRASSER,

GEO. D. GRASSER.