

J. PEIRSON.
Grain-Drill.

No. 7,268.

Patented Apr. 9, 1850.

Fig. 1.

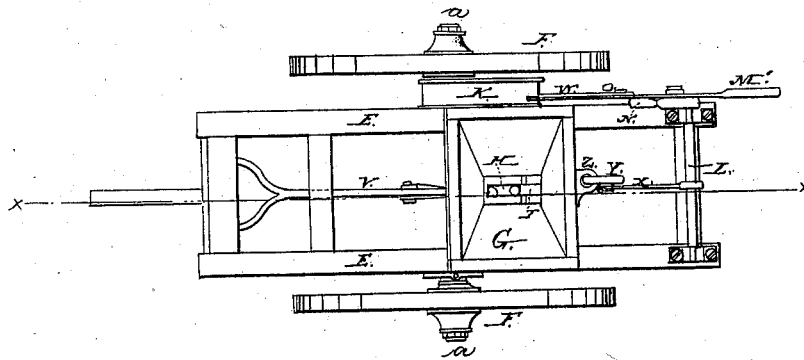


Fig. 2.

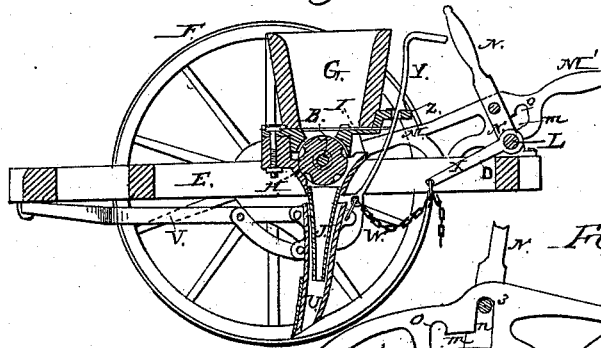


Fig. 4.

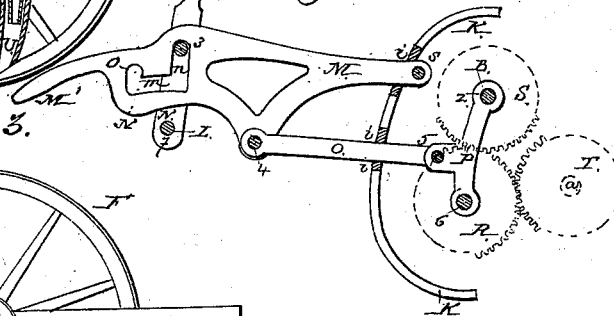
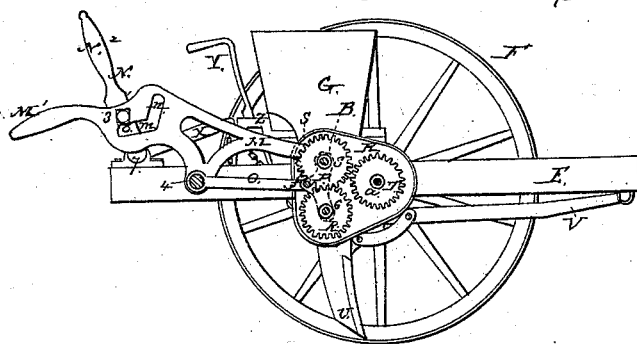


Fig. 3.



UNITED STATES PATENT OFFICE.

JACOB PEIRSON, OF WILMINGTON, DELAWARE.

IMPROVEMENT IN GEARING FOR SEED-PLANTERS.

Specification forming part of Letters Patent No. 7,268, dated April 9, 1850.

To all whom it may concern:

Be it known that I, JACOB PEIRSON, of the city of Wilmington, in the county of New Castle and State of Delaware, have invented a new and useful Improvement in my "Patented Seed-Drills," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a top view of a machine containing only one drill-tooth, it being evident that any required number of teeth may be used. In this view the cogged gearing is concealed by the case. Fig. 2 is a vertical longitudinal section of the same on the line *xx* of Fig. 1, the intermediate cog-wheel being in gear and the drill-tooth raised and suspended above the surface of the ground by the hook-rod. Fig. 3 is a side elevation, showing the drill-tooth raised and the intermediate cog-wheel out of gear with the cog-wheel on the hub of the large supporting and propelling wheel, the front plate of the case being removed in order to show the cog-wheels. The tongue to which the horses are attached is not shown. Fig. 4 is an elevation of the latch-plate, carrier, and connecting-plate detached from the case and drawn on an enlarged scale, the lever-latch *M* being depressed and the intermediate cog-wheel, *R*, being represented by dotted lines as in gear with the cog-wheel *T* on the propelling-wheel *F*.

Similar letters in the several figures refer to corresponding parts.

I construct the drill substantially as described in my patent of 1849, except the case *K*, lever-latch *M*, connecting-plate *O*, and carrier *P*, which I make as follows: The case *K* is made of cast metal about three-sixteenths of an inch thick, more or less. In the edge of the case, next the handles, are made two openings, *i i*, to admit the latch and connecting-plate. On one end of the rock-shaft and lifting-bar *L*, I place a holding-lever, *N*. The slotted latch-plate *M* and connecting-plate *O* are made of strong metal or other suitable material. The carrier *P* is made of cast metal or other suitable material, cored out to receive the end of the roller-shaft *B*. One end of the latch-plate *M* works on a round stud, *s*, inserted into the case *K*. An angular-shaped slot, *m n o*, is made through the said latch-plate. The segmental part of the slot at *n* is struck or scribed from the center of the stud

s. The part of the slot marked *m* is scribed from the center of the lifting-bar *L* when the latch-plate is raised to nearly a horizontal position. Said slot admits the bolt or stud *3* in the lever *N* to pass freely through the same. One end of the connecting-plate *O* is attached to latch-plate at *4* by a bolt and stud, and the other end, after passing through the slot *i* in the case *K*, is attached to carrier *P* by a bolt or stud, *5*, passing through the carrier. The carrier *P* swings or works freely on the end of the seed-roller shaft *B* in the space between the spur-wheel *S* and the inner side of the case *K*. The intermediate wheel, *R*, runs loosely on the stud *6*. By raising the handle or rear end, *M'*, of the latch-plate *M* the intermediate wheel, *R*, is thrown out of gear with the cog-wheel *T* on the propelling-wheel and the seed-roller stopped, and by drawing back the upper end of the handle *N* of the lifting-bar *L* in the arc of a circle the seed-tubes are raised out of the ground, and an opposite effect is produced by a contrary action. The motion of the carrier *P* and lifting-bar *L* being alternate, the seeding-cylinder and drill-teeth are thrown in and out of gear alternately and not simultaneously, as in Pennock's machine and in others.

E is the frame for containing and supporting the several parts, made in the usual manner.

F are the sustaining and propelling wheels, turning on my patented axles.

G is the hopper.

H is the seeding-cylinder.

I is the slide-valve in the lower part of the hopper.

J is the flexible conducting-tube; *U*, tubular drill-tooth.

V is the beam to which the tubular drill-tooth is attached, said beam having its forward end attached to the frame and its rear end to the lifting-arm by a chain, *W*.

X is the lifting-arm, projecting at right angles from the lifting-bar *L*, for lifting the drill-tooth.

The last-named parts are made and arranged as in my patented machine, and of course are not intended to be claimed in this application.

Y is the lifting and suspending rod for lifting the drill-tooth by hand and suspending it to a mortised shelf, *Z*, fastened to the rear side

of the hopper, the hook portion of said rod resting upon said shelf Z when the drill-tooth is raised.

The before-described arrangement of cogged gearing may be used with or without the case K.

I wish it to be distinctly understood that I do not claim the alternate motion by which the seed-tubes and seed-rollers are thrown in and out of operation; but

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

The employment of the latch-plate M, in com-

bination with the connecting-plate O, carrier P, and intermediate cog-wheel, R, for alternately gearing and ungearing the cog-wheel S on the axle of the planting-cylinder with the cog-wheel T on the hub of the driving-wheel F, in the manner and for the purpose described.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

JACOB PEIRSON.

Witnesses:

I. T. ROBINSON,

JOSHUA L. PUSEY.