(No Model.)

T. H. NOXON.

DRIVING GEAR FOR SEEDING MACHINES.

No. 481,539. Patented Aug. 23, 1892.

Fig. 1.

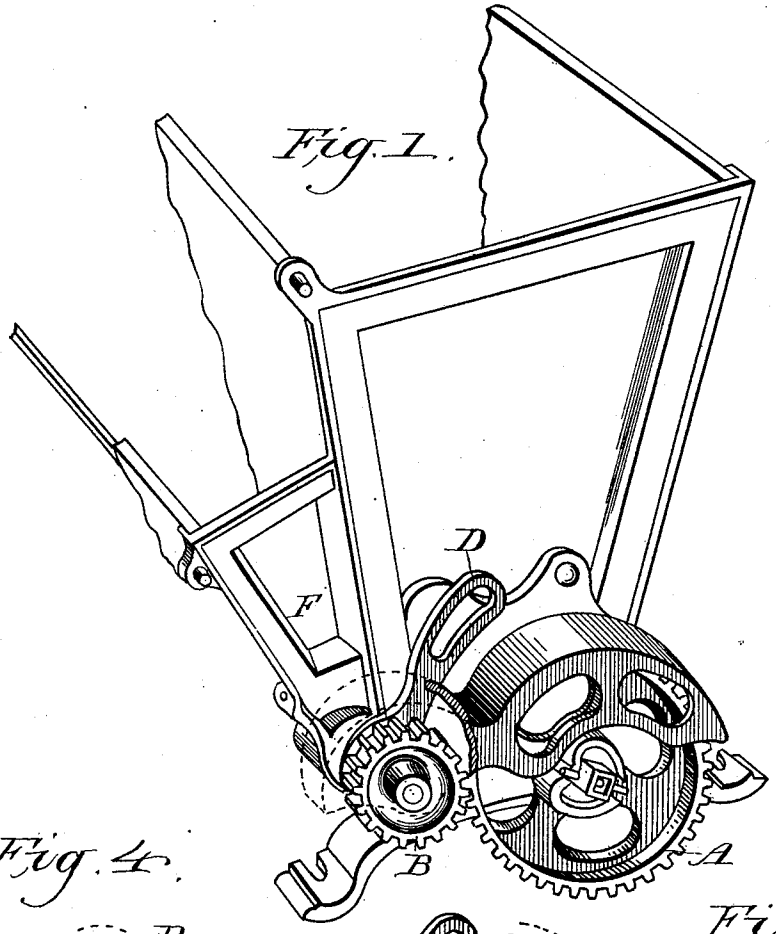


Fig. 4.

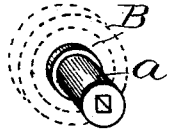


Fig. 3.

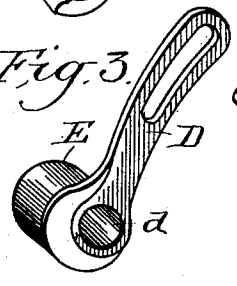
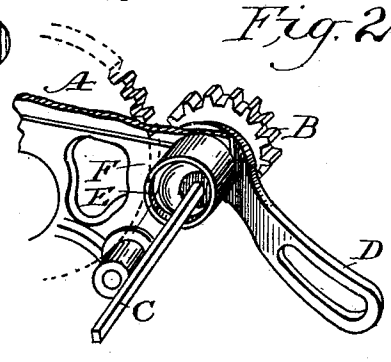


Fig. 2.



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UNITED STATES PATENT OFFICE.

THOMAS HENRY NOXON, OF INGERSOLL, CANADA.

DRIVING-GEAR FOR SEEDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 481,539, dated August 23, 1892.

Application filed May 4, 1892. Serial No. 431,836. (No model.) Patented in Canada May 30, 1887, No. 26,787.

To all whom it may concern:

Be it known that I, THOMAS HENRY NOXON, a subject of the Queen of Great Britain, residing at Ingersoll, in the county of Oxford, Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Driving-Gear for the Feed-Rod of a Grass-Seed Hopper, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of this invention is to so construct the gearing which drives the feed-rod of a grass-seed hopper in a seeding-machine that the said gearing may be readily thrown into and out of action.

Figure 1 is a perspective view of one end of a part of a machine containing my improved gearing. Fig. 2 is a detail in perspective showing the manner of connecting the grass-seed feed-rod to its driving-gear. Fig. 3 is a detail of the handle and its eccentric hub. Fig. 4 is a detail of the gear-pinion by which the feed-rod is driven.

The gear-wheel A is connected to and derives motion from any suitable moving part of the machine; but as I claim nothing peculiar in the gear-wheel A or in the manner in which it is driven it is not necessary for the purpose of this specification to show more than is exhibited in Fig. 1.

B is a gear-pinion having an internally-projecting hub *a*, in the center of which is a hole to receive the end of the feed-rod C.

D is a handle having a hub E, which is designed to fit into a bearing formed in the frame F, such as is common at the end of a seed-box.

A hole *d* is made in the hub E, eccentric to its center, into which hole the hub *a* of the pinion B is fitted. Consequently while the center of the feed-rod C is always true with the center of the pinion B the said center may be moved nearer to or farther from the gear-wheel A, according to the direction in which the handle D is moved. When the handle is thrown into the position indicated in Fig. 1, the pinion B is in mesh with the gear-wheel A, so that when this latter wheel is rotating the pinion B revolves, and with it the feed-rod C. When, however, the handle D is thrown into the position shown in Fig. 2 and in dotted lines, Fig. 1, the pinion B is out of gear with the wheel A, and consequently the feed-rod C remains stationary.

As this grass-seed feed-rod in seeding-machines is small in cross-section, its elasticity is such that it will spring or yield enough to permit the above-described pinion to be placed into and out of gear.

I am aware that it is common to mount a shaft eccentrically in an oscillating hub in order to withdraw a gear carried by one end of the shaft from engagement with its driver in a great variety of machines, including those adapted for the sowing of grain, under such construction and arrangement of parts that either the entire shaft is moved to and fro or that one end of a practically rigid and inflexible short shaft is moved toward and from the driving-gear, its opposite end being loosely connected to a shaft which rotates in stationary bearings; but I have discovered that with a grass-seed feed-rod of the length and diameter employed in seeding-machines and of the ordinary grade of iron used in their construction it possesses such a degree of elasticity or resiliency that its geared end can be deflected enough to permit its pinion to be moved out of and into mesh with its driver without imparting any set to the shaft or in any way impairing its efficiency or making any changes in its bearings, whereby I am enabled to materially simplify and cheapen the cost of the devices used for stopping the rotation of the grass-seed distributers when it is desired to suspend the discharge of the grass-seed.

What I claim is—

A grass-seed feed-rod C, connected to the center of a gear-pinion, in combination with a handle having an eccentric hole for the rod and journaled in the frame F of the machine and the driving-gear A, whereby the pinion may be moved out of engagement with its driver by bending the rod, substantially as set forth.

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

THOMAS HENRY NOXON.

Witnesses:

VALENTINE BEDFORD,

GEORGE GILLESPIE.