

J. H. BEAN.
Grain-Drill Cleaners.

No. 156,202.

Patented Oct. 27, 1874.

Fig. 1.

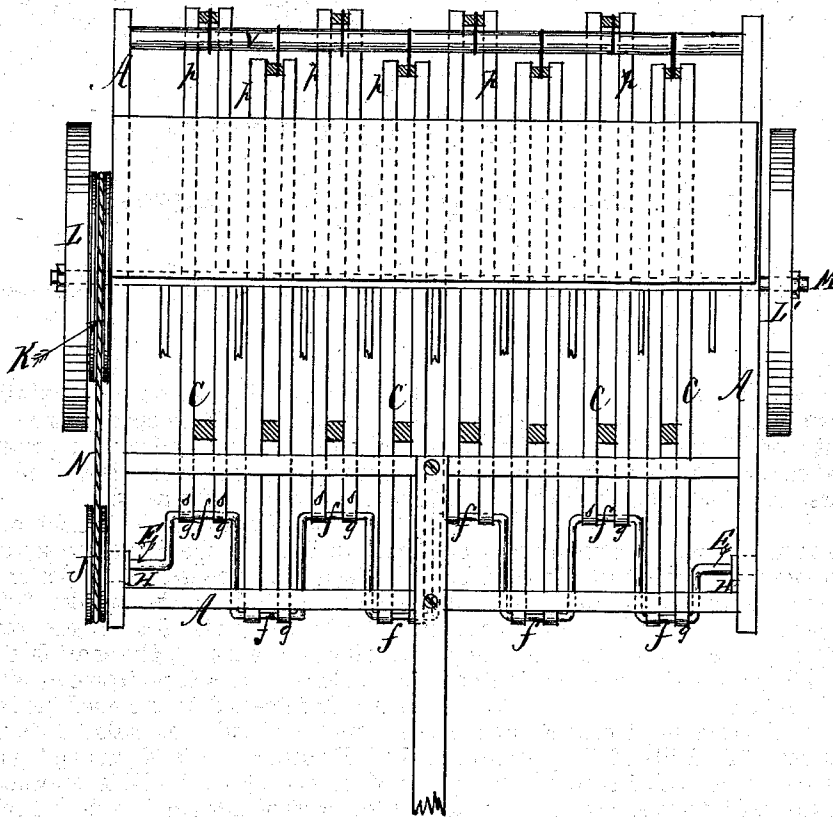
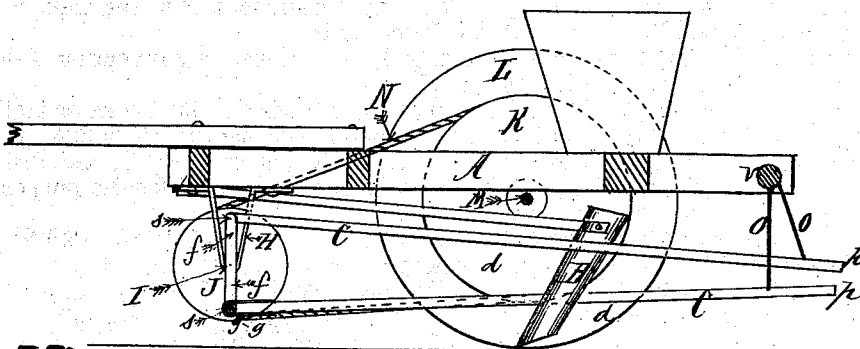


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JACOB H. BEAN, OF MACON, ILLINOIS.

IMPROVEMENT IN GRAIN-DRILL CLEANERS.

Specification forming part of Letters Patent No. **156,202**, dated October 27, 1874; application filed April 21, 1873.

To all whom it may concern:

Be it known that I, JACOB H. BEAN, of Macon, county of Macon, State of Illinois, have invented certain Improvements in Grain-Drill Cleaners, of which the following is a specification:

The object of my invention is to provide for certain attachments to grain-drill cleaners or cultivators, by aid of which all the trash and stubble will be removed as the drill passes along over the ground, said cleaners being applicable to all grain drills and cultivators provided with wheels.

My invention consists in placing a number of frames between the drills of the machine, in such a manner that each frame comes between two drills, said frames having two or more hooks or teeth attached to their lower sides. These frames are placed underneath the machine, and parallel to each other, and also to the frame of said machine, and worked back and forth by aid of cranks placed on a shaft, running crosswise and parallel to the front of the machine-frame, supported at each end in suitable journals placed in standards, and rotated by aid of a grooved pulley attached to one end of the shaft, having a belt or rope running over said grooved pulley to another grooved pulley placed inside of one of the wheels of the machine. The frames are supported to the back of the machine-frame by aid of ropes or chains, which allow the same to be moved back and forth.

In order to describe my invention more

fully, I refer to the accompanying drawing forming a part of this specification.

Figure I is a plan view of a grain-drill embodying my invention. Fig. II is a vertical sectional view of the same.

A is the frame of the machine; B B, the grain-drills; C C, the frames, to the lower sides of which are attached the hooks or teeth *d d*. E is the shaft, with the cranks *f f*, to which one end, *s s*, of the frames are attached in suitable journals *g g*. The shaft E is supported and held to the machine-frame by aid of standards H H fastened to the machine-frame, having on their ends journals I I, in which the shaft E rotates. J is a grooved pulley, fastened to the shaft E. K is another grooved pulley, cast or attached to the wheel L. L' is another wheel, placed on the other end of the axle opposite wheel L. N is the belt or rope, passed over the pulleys J and K. O O are the ropes or chains, attached to the back end V of the machine-frame, and to the ends *p p* of the frames C C.

Having thus described my invention, I desire to claim—

The movable frames C, with hooks or teeth *d*, in combination with the crank-shaft E, pulleys J and K, chains or ropes O, and drill-tubes B, substantially as and for the purpose set forth.

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Witnesses:

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