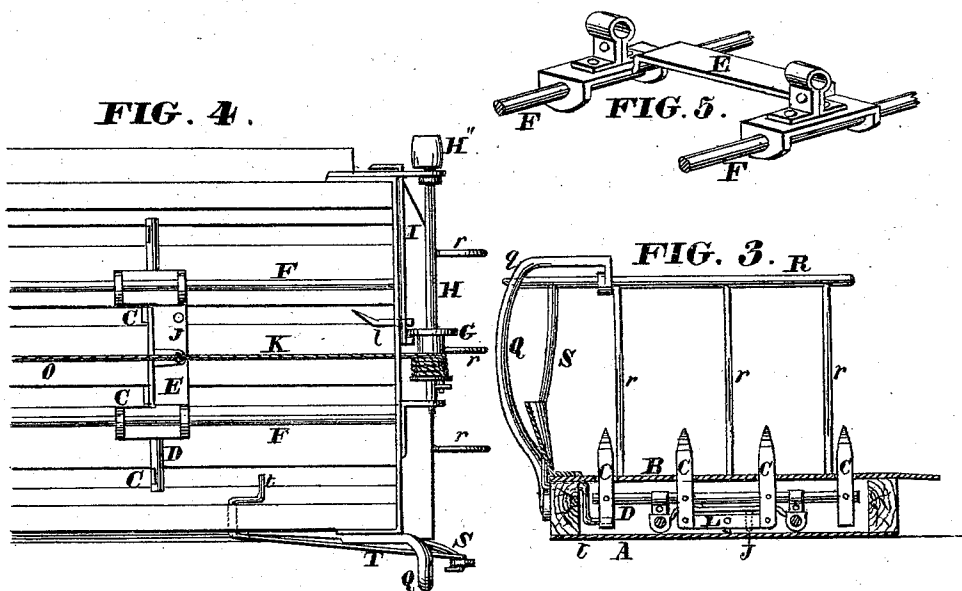
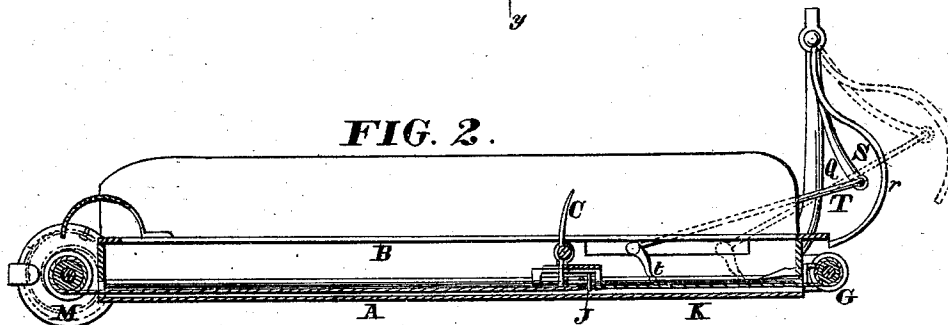
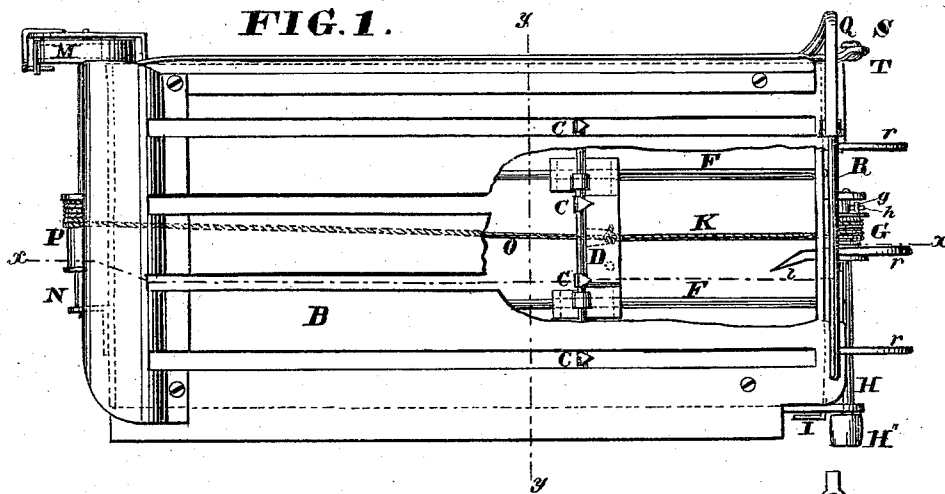


W. L. GEBBY.
Harvester-Rakes.

No. 149,739.

Patented April 14, 1874.



WITNESSES,
Walter Allen
W. H. Pearce

INVENTOR,
William L. Gebby
By Knight & Co. Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM L. GEBBY, OF NEW RICHLAND, ASSIGNOR TO HIMSELF, CHARLES MANES AND ISAAC N. McBETH, OF BELLEFONTAINE, OHIO.

IMPROVEMENT IN HARVESTER-RAKES.

Specification forming part of Letters Patent No. **149,739**, dated April 14, 1874; application filed March 4, 1874.

To all whom it may concern:

Be it known that I, WILLIAM L. GEBBY, of New Richland, in the county of Logan and State of Ohio, have invented certain Improvements in Harvester-Rakes, of which the following is a specification:

This invention belongs to that class of reaping-harvesters which are known as self-rakers, and to those automatic rakes in which the platform has longitudinal slots, in which the rake-teeth work in their effective stroke.

The present invention consists in the combination of a shaft-clutch, loose pulley, and drum at one end of the platform to draw the teeth forward, and a shaft-drum and coiled spring to retract the teeth, the two shafts being connected together by cords. It also consists in a suitable dropper, which is supported and operated by means hereinafter more fully set forth.

In the accompanying drawing, Figure 1 is a plan view of the device, part of the platform being removed. Fig. 2 is a transverse section on the line *x x*, Fig. 1. Fig. 3 is a section on the line *y y*, Fig. 1. Fig. 4 is an under-side view of part of the device. Fig. 5 is a perspective view of the teeth-carriage, the teeth not being shown.

The platform is composed of a bottom part, A, and top part B. The top part B is slotted to receive the teeth of the rake in their effective stroke. The teeth C are attached to a bar, D, supported by a carriage, E, which runs on the guide-rods F. G is a loose pulley on the shaft H. Said pulley has a projection, *g*, at one end, which engages, when it is desired, with a projection, *h*, on the shaft H. The pulley G is thrown in and out of gear with the shaft by means of the handle-lever I, or automatically by the projection J on the carriage coming against the cam-shaped projection *i* on the lever I. A drum or pulley, H', receives a band to convey motion to the shaft and pulley. One end of a cord, K, is attached to a cross-bar, L, on the lower ends of the rake-teeth, and the other end is applied to the loose pulley G. The teeth are retracted, after their advance stroke, by means of a coiled spring, M, on the shaft N. The shaft and rake-teeth are connected by a rope, O, which is wound on a drum, P, on the said shaft N. Q

represents a vertical post or standard attached to one corner of the platform, and bent at right angles at *g*, to form a support for the dropper, which is composed of a rod, R, which is provided with teeth *r*, of the curved form shown in Fig. 2. The dropper is operated by means of the arm S, secured to the rod T, which is bent, as shown in Figs. 2 and 3, the end *t* coming in contact with the bottom of a rake-tooth in its effective stroke.

When sufficient grain has fallen on the platform to make a sheaf, power having been applied to the pulley H, the projections *g* and *h* are made to engage by means of the lever I, which causes the pulley G to wind up the rope K, and thus draw forward the teeth, which, as soon as strain is brought upon them, rise to a vertical position, and project through the slots in the platform and move forward, carrying the grain with them and coiling up the spring M. The grain is prevented from continuing to drop from the platform, and is bunched by the dropper-teeth until the lower end of the rake-tooth comes in contact with the part *t* of the rod T and slides it forward, which raises the dropper and allows the grain to pass off. The projection J now comes in contact with the cam projection *i* on the lever I, and throws the pulley G out of gear with the shaft H, when the coiled spring turns the drum P, which winds up the rope O, and thus retracts the teeth in their backward movement. The teeth are below the top of the platform, and thus do not disturb the grain until the next advance stroke.

I claim as my invention—

1. In a harvester-rake, the combination of the shafts H and N, drums H', loose pulley G, drum P, clutch *g h*, ropes K and O, coiled spring M, and carriage E, all arranged as herein set forth, and operating substantially as described, for the purpose set forth.

2. The combination of the support Q, dropper R *r*, arm S, rod T *t*, and carriage E, all arranged and operating as herein set forth, for the purpose designated.

WILLIAM L. GEBBY.

Witnesses:

JNO. C. PORTER,
JAMES S. PULLOCK,
WILLIAM EDMISTON.