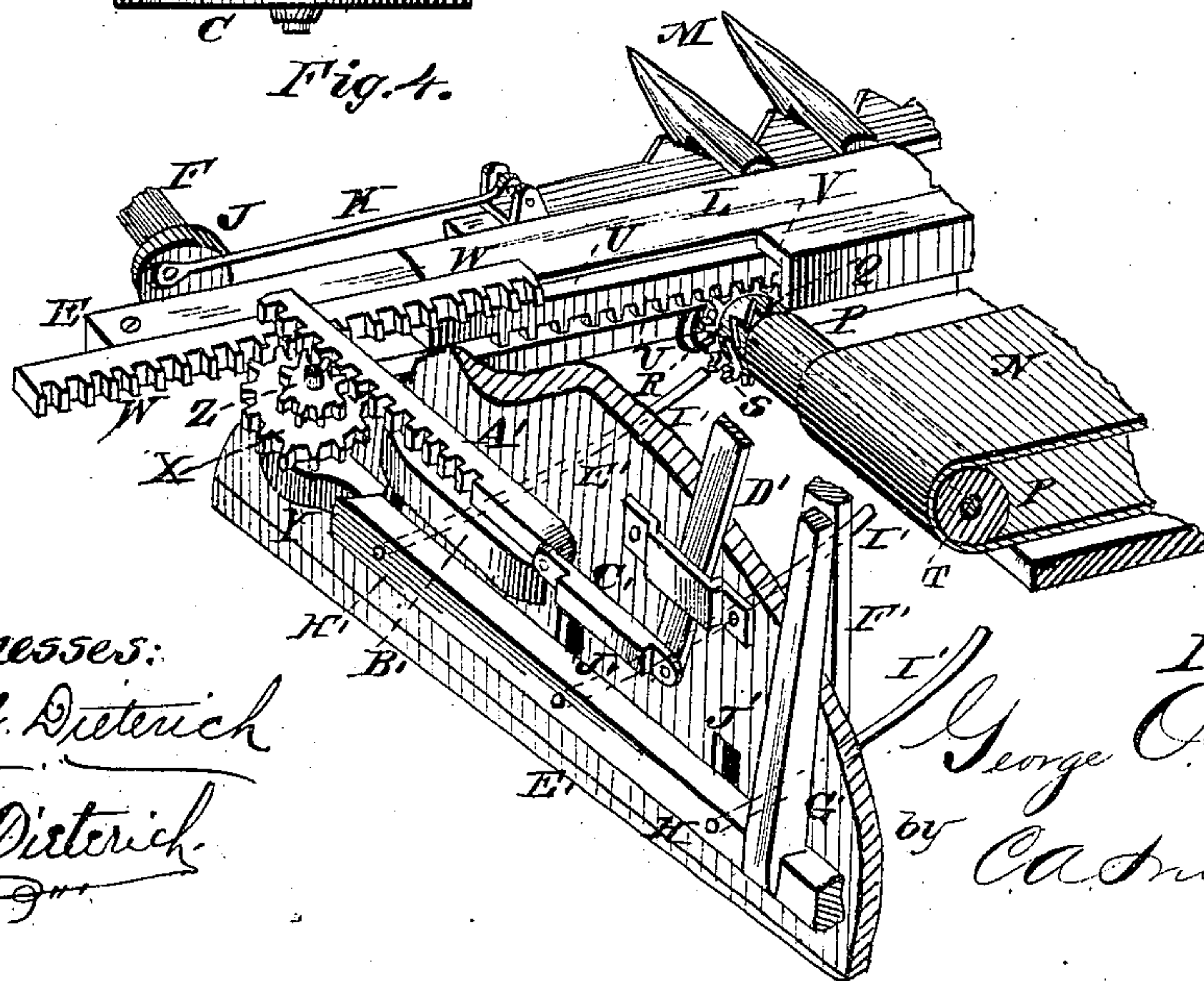
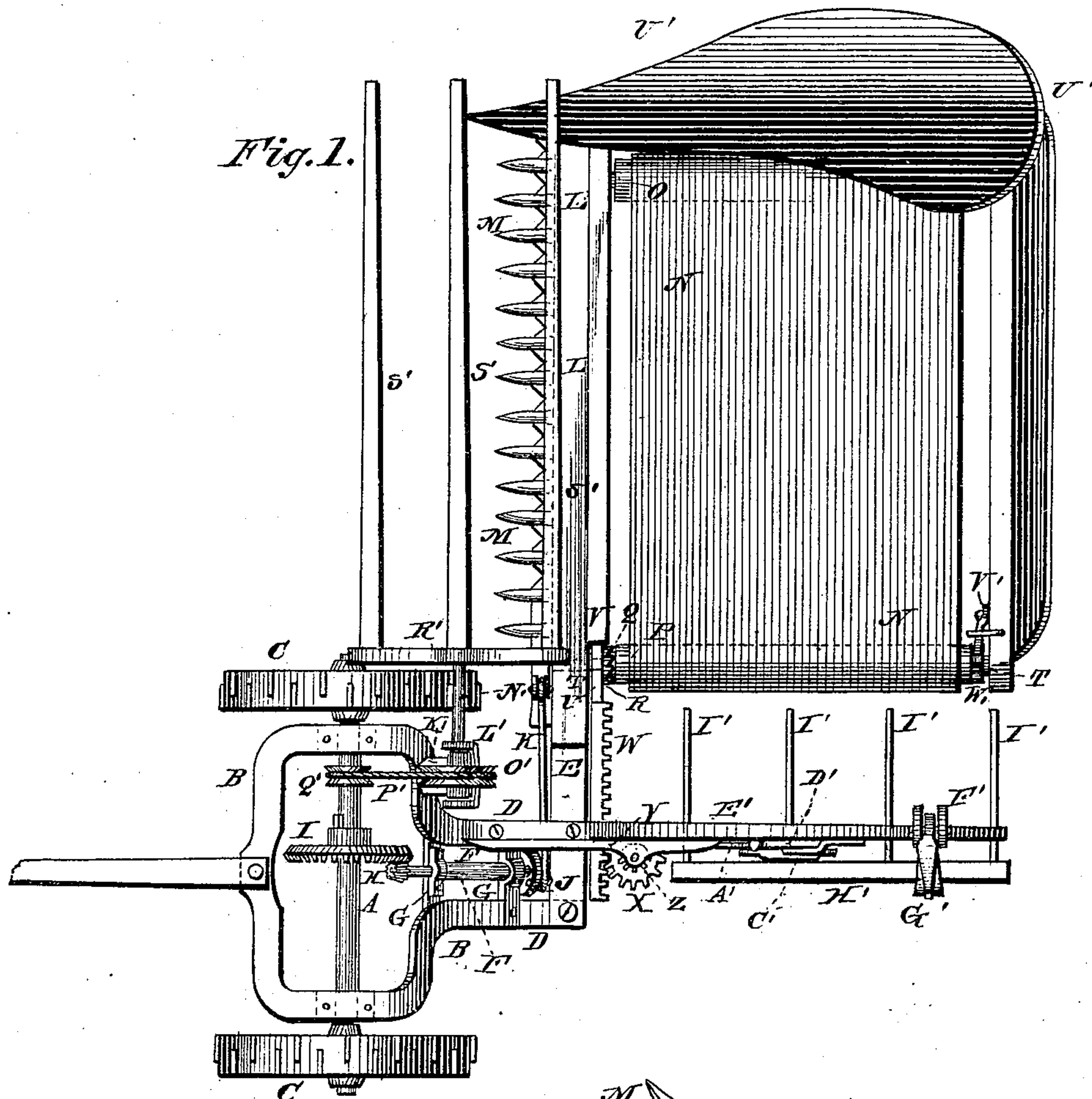


(Model.)

2 Sheets—Sheet 1.

G. O. PROPER.
Combined Reaper and Mower.
No. 241,237. Patented May 10, 1881.



Witnesses:
Fred. G. Dieterich
P. C. Dieterich

Inventor:
George O. Proper,
by C. A. Snow & Co.
ATTORNEYS

(Model.)

2 Sheets—Sheet 2.

G. O. PROPER.
Combined Reaper and Mower.
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Fig. 2.

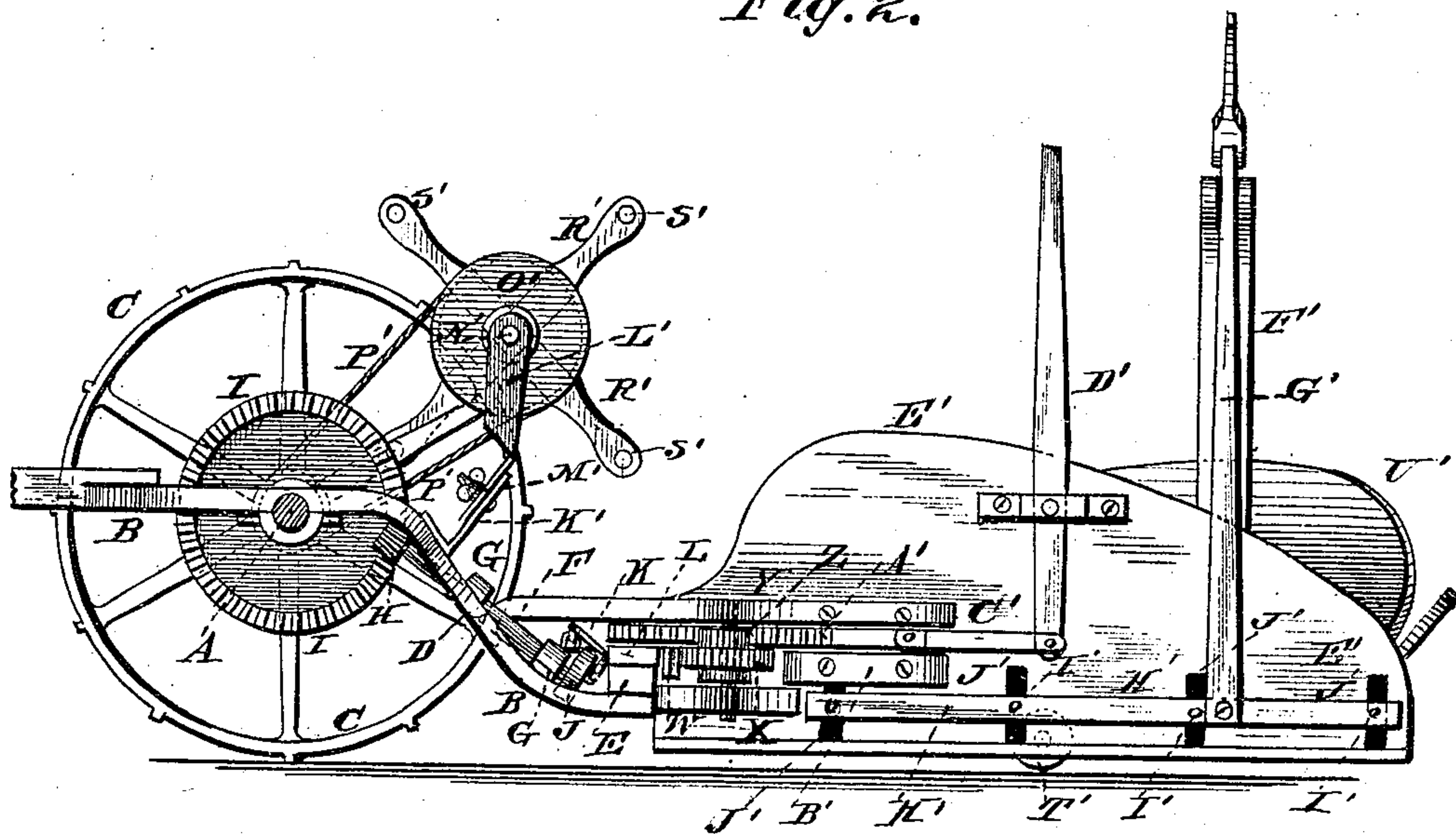
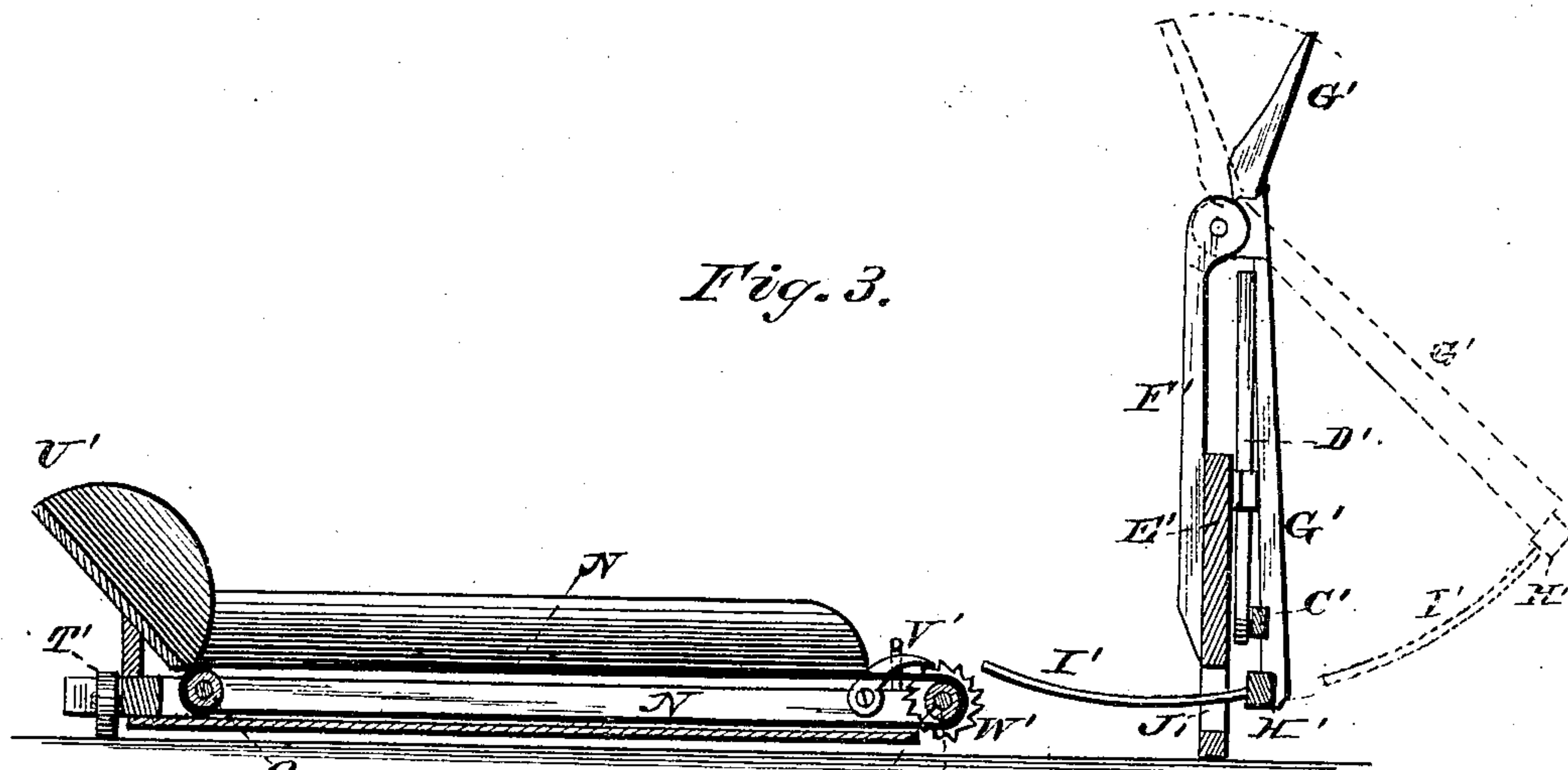


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE O. PROPER, OF AUBURN, NEW YORK.

COMBINED REAPER AND MOWER.

SPECIFICATION forming part of Letters Patent No. 241,237, dated May 10, 1881.

Application filed January 28, 1881. (Model.)

To all whom it may concern:

Be it known that I, GEORGE O. PROPER, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Combined Reaper and Mower; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a top plan. Fig. 2 is a side elevation. Fig. 3 is a transverse vertical sectional view; and Fig. 4 is a detail view, in perspective, of the grain-dropping mechanism and the mechanism for conveying the cut grain to the same.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to harvesting-machines; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A represents the axle, which is mounted in the frame or saddle B, and supported upon the wheels C C. The rear side of the frame is formed or provided with two downward-projecting arms, D D, to the lower rear ends of which the front beam, E, of the platform is firmly bolted or otherwise secured.

F is a shaft journaled upon cross-bars G G, connecting the arms D of frame B, and provided at its upper end with a bevel-pinion, H, engaging a bevel-wheel, I, keyed or otherwise secured upon the axle. The lower end of shaft F carries a disk, J, eccentrically, upon the face of which is pivoted one end of a pitman or connecting-rod, K, the other end of which is pivoted to the cutter-bar, to which a reciprocating motion is thus imparted from the axle A. The cutter-bar works, in the usual manner, in the guards M of the finger-bar L, which latter is bolted or otherwise secured upon the front beam of the platform.

N is an endless apron fitted around rollers O P at the ends of the platform. The roller P, which is nearest the frame of the machine, is provided with a clutch, Q, engaging a cor-

responding clutch, R, formed upon a pinion, S, which is capable of sliding upon the shaft T of the said roller P. The pinion S engages a rack-bar, U, sliding in a suitable groove, V, in the platform-beam E. Upon the side of said rack-bar is formed a vertical rack, W, engaging a horizontal cog-wheel, X, journaled in the frame Y of the machine. Upon the same shaft as the wheel X is secured a pinion, Z, engaging a rack, A', sliding between suitable guides B' upon the frame, and connected, by a rod or pitman, C', with the lower end of a lever, D', pivoted to the side of the frame in such a position that its upper end or handle shall be convenient to the driver, whose seat may be located in any suitable position over the frame.

The frame Y, which consists mainly of a vertical board, E', is provided with an upright or standard, F', to which is pivoted a lever, G', carrying at its lower end a cross-piece, H', provided with teeth or fingers I', extending through slots J' in the frame and reaching to the platform-roller P. By operating the lever G' the teeth I' may be thrown out from the frame, as shown in dotted lines in Fig. 3 of the drawings, thus permitting grain which has been deposited upon said fingers to drop. The upper end of the lever G' may be weighted to cause it to return automatically to its normal position.

The rear side of the frame or saddle B is provided with an upright, K', carrying a bracket, L'. A shaft, N', journaled in suitable bearings in the bracket L', is provided with a band-wheel, O', connected by means of a belt or band, P', with a pulley, Q', keyed or otherwise secured upon the axle A.

Secured upon the outer end of shaft N' is the cross-head R' of the reel, which consists of fingers S', secured to and extending laterally from the arms of said cross-head.

Suitable rollers or casters T' are arranged under the frame and platform, and the latter is provided at its outer end with a swath-board or separator, U'. A pawl or dog, V', is arranged upon the rear beam of the platform to engage a ratchet, W', upon the rear end of the roller P, for the purpose of preventing reverse motion of the latter.

The operation of my improved harvester will be readily understood from the foregoing de-

scription, taken in connection with the drawings hereto annexed.

The mechanism for operating the cutter-bar is simple and not liable to get out of order.

5 When a sufficient quantity of cut grain has accumulated upon the platform the lever D' is operated by the driver, thus rotating (through the intermediate mechanism which has been above described) the roller P and causing the
10 endless apron N to deposit the grain upon the fingers I' of lever G', by operating which latter the gavel is dropped upon the ground, ready to be bound.

Having thus described my invention, I claim
15 and desire to secure by Letters Patent of the United States.

The combination, in a harvesting-machine, of the endless apron N, rollers O P, the latter provided with a clutch, Q, sliding pinion S, having clutch R, horizontal rack-bar U, hav- 20 ing vertical rack W, cog-wheel X, pinion Z, rack A', connecting-rod C', lever D', and a pawl and ratchet for preventing reverse motion of the roller P, all arranged and operating substantially as and for the purpose set forth. 25

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE OSTEN PROPER.

Witnesses:

PATRICK FREDRICK DEERING,
MILTON BENJAMIN MOSHER.