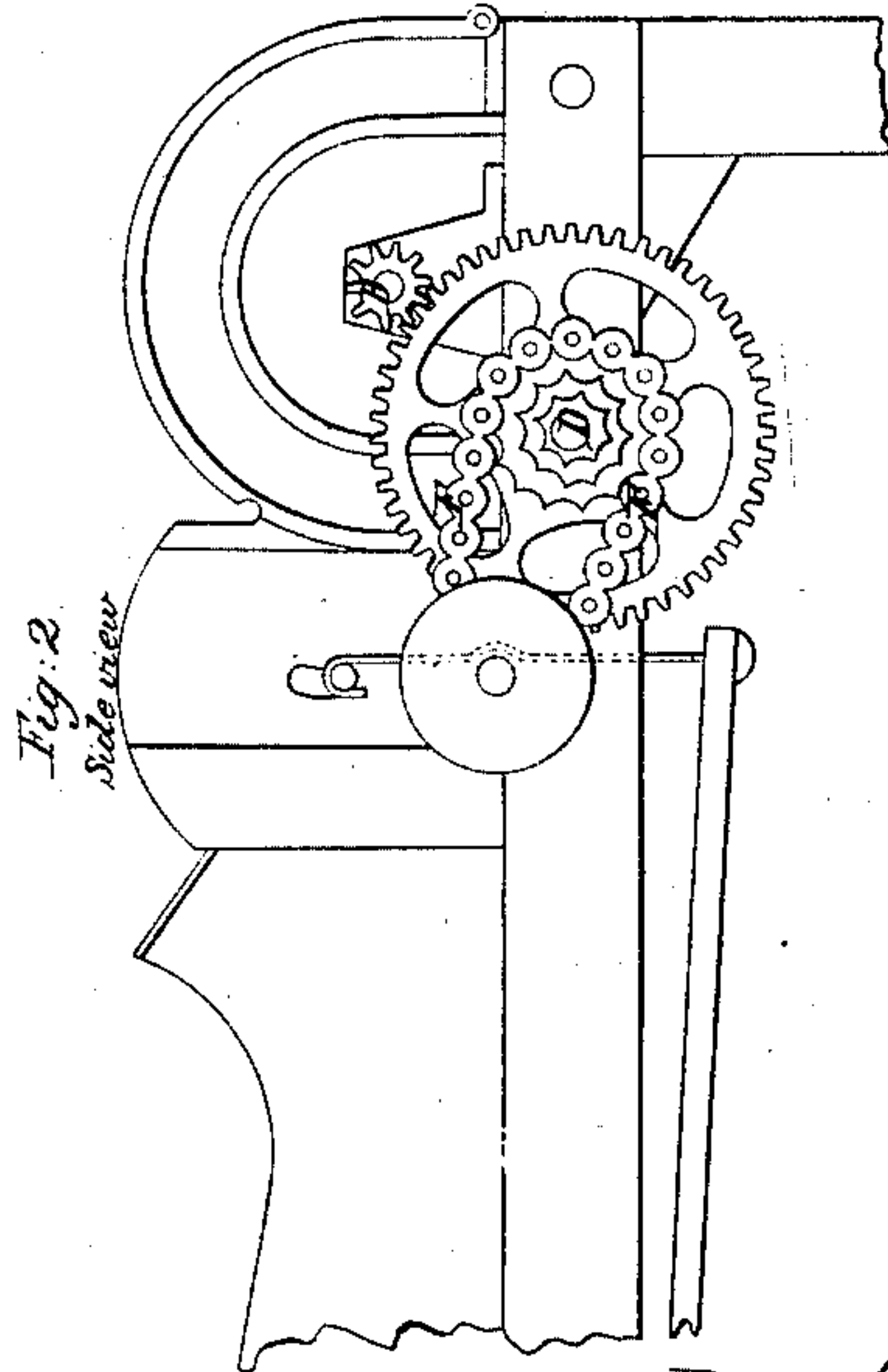
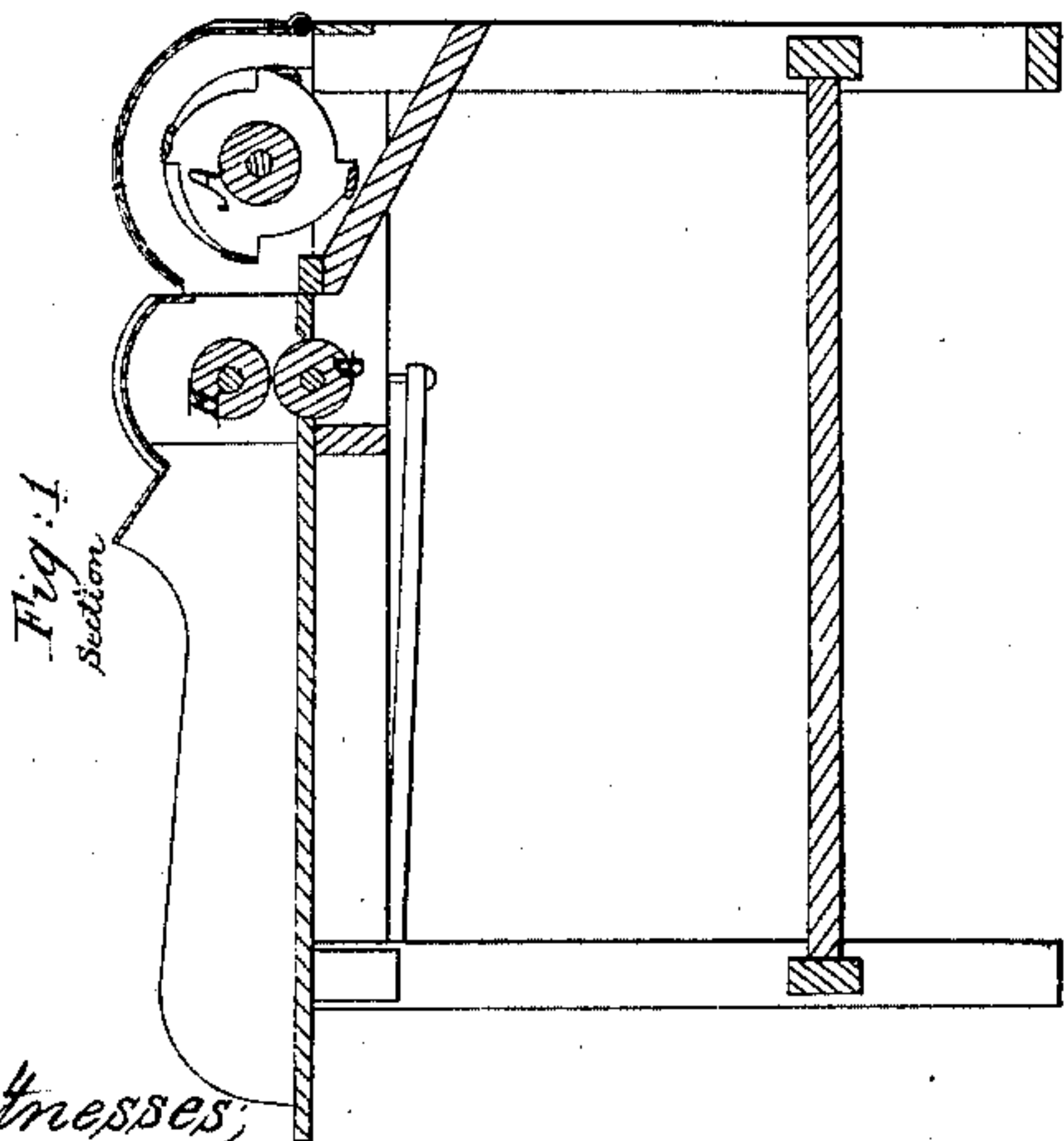
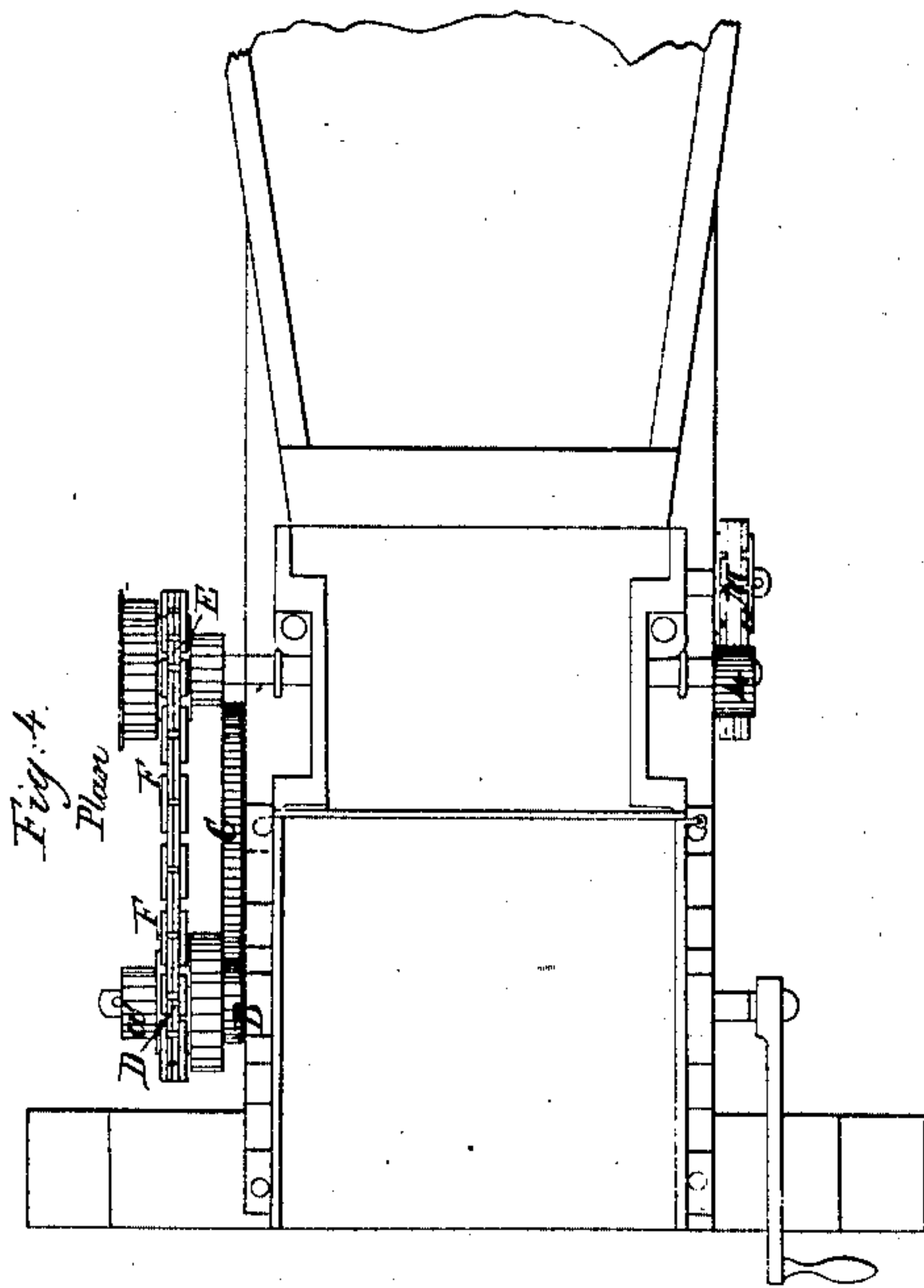
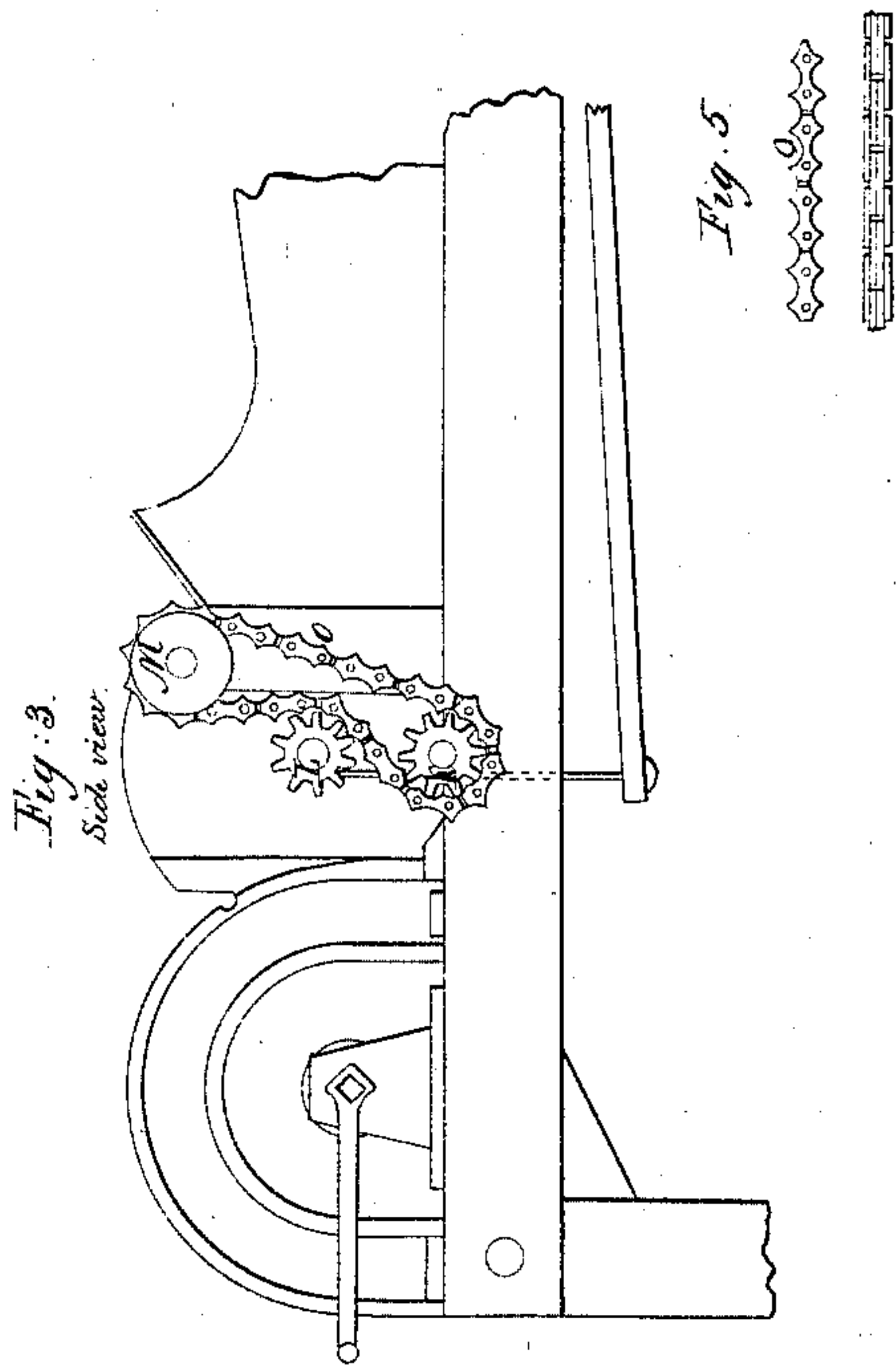


A. R. Reese.

Straw Cutter.

N^o 30,697.

Patented Nov. 20, 1860.



Witnesses;
J. E. Merrill
J. D. Baquet

Inventor;
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UNITED STATES PATENT OFFICE.

ADAM R. REESE, OF PHILLIPSBURG, NEW JERSEY.

FODDER-CUTTER.

Specification of Letters Patent No. 30,697, dated November 20, 1860.

To all whom it may concern:

Be it known that I, ADAM R. REESE, of Phillipsburg, New Jersey, have made a certain new and useful Improvement in the Construction of Fodder-Cutters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, in which—

10 Figure 1 represents a section through the machine; Figs. 2 and 3, the two side views; Fig. 4, a top view; Fig. 5, is a detached view of the chain O.

15 Hitherto it has been impossible from the construction of fodder-cutters to vary the speed of the feeding rollers without changing the wheels.

The nature of my improvement consists, 1st, in so gearing the cutting-roller and the feeding-rollers by means of an endless chain that their relative velocity may be varied as desired, and different lengths of fodder cut by the same machine; 2nd, in so gearing the lower or permanent roller with the upper or adjustable feed-roller by means of an endless chain, that they will always run at the same speed.

20 A is the cutter; B, the pinion on the cutter shaft working into a cog-wheel, C; on the shaft of this cog-wheel is a nest of cog-wheels. D is the smallest one pointing outward. Upon the shaft of the lower or permanent feed-roller is a corresponding nest of cog-wheels E but pointing in an opposite direction. F, F, is the endless chain connecting these two sets or nests of cog-wheels.

G, and H, are the feed-rollers.

40 The upper feed-roller H, is movable up and down so as to accommodate itself to the amount of fodder passing between it and the lower roller G.

K, and L, are two small pinions, one on the end of the shaft of each feed-roller.

M, is a small pinion placed above the upper roller and so arranged that the chain O connecting it with the pinion K, will press against the side of the pinion L, as shown in the drawing and thus cause the upper roller to revolve. The upper roller is made movable as in the machine at present in use. 45 50

The mode of operating this machine is as follows: The knife is revolved either by a crank or belt. This causes the wheel C, to revolve. The chain F, communicates this motion to the feed-rollers. By moving the endless chain F, upon the different cog-wheels forming the nests D and C, different rates of speed are given to the feed-rollers, and the fodder can thus be cut by the one machine of different lengths. 55 60

The chain O, passing over the pinion L, causes the roller H, to revolve at the same speed as the roller G. The chain O is also peculiar in its construction, being so constructed that it will act by its outer surface upon the wheel L. This is effected by making the cogs upon both sides of the chain. An endless chain thus constructed possesses many advantages, among which is, that either the outside or inside of the chain can be used to communicate motion. 65 70

Having thus described my improvement, what I claim as my invention and desire to secure by Letters Patent is— 75

The combination of the feed-rollers G and H the endless chains F and O arranged as herein described for the purpose of varying the speed of the rollers and for the purpose of causing the two rollers to revolve at different rates of speed, substantially as above set forth. 80

ADAM R. REESE.

Witnesses:

J. G. MINICHILD,
F. D. BAQUET.