

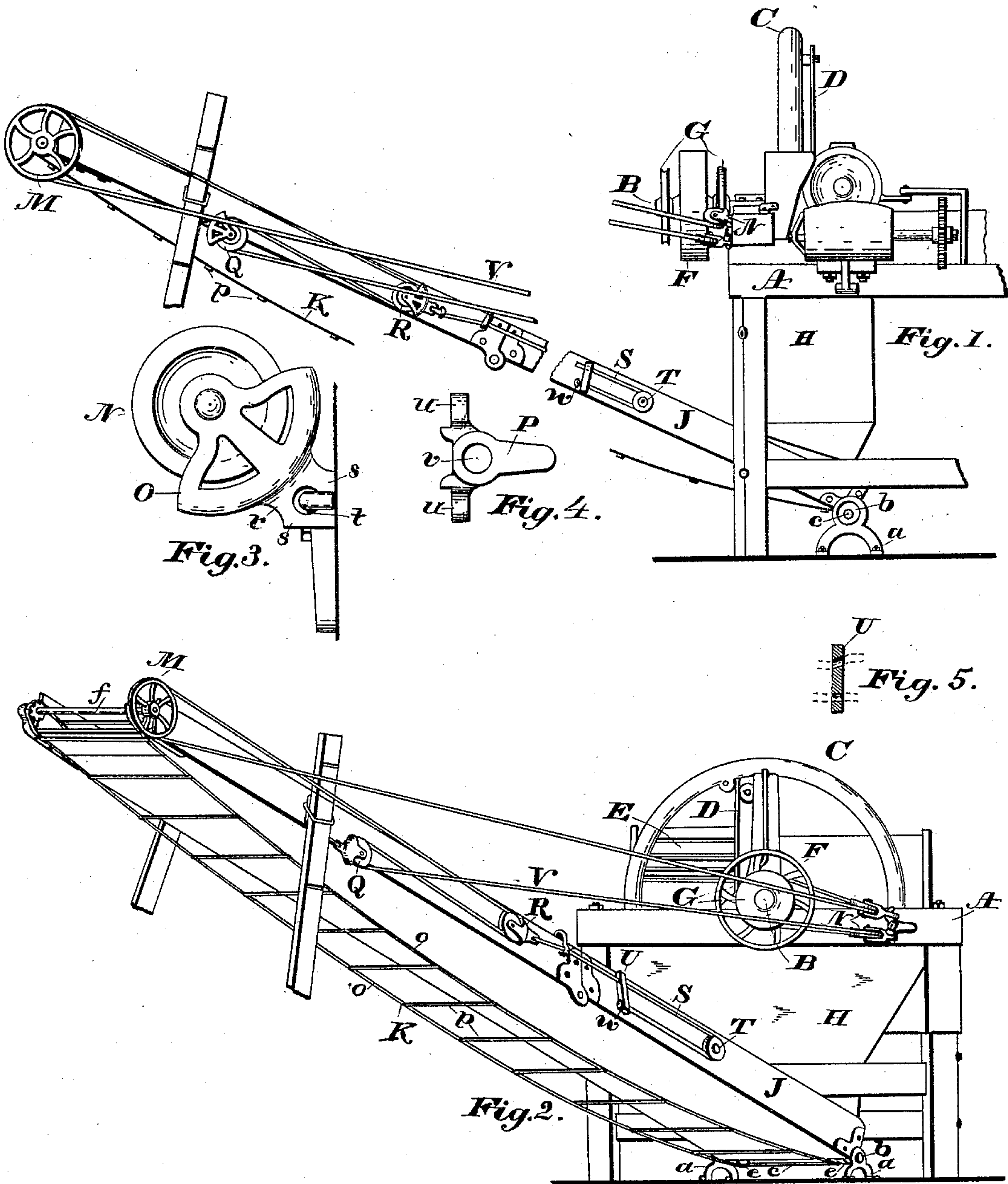
(No Model.)

J. DICK.

DRIVING MECHANISM FOR ENDLESS CARRIERS.

No. 401,777.

Patented Apr. 23, 1889.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH DICK, OF CANTON, OHIO.

DRIVING MECHANISM FOR ENDLESS CARRIERS.

SPECIFICATION forming part of Letters Patent No. 401,777, dated April 23, 1889.

Application filed July 9, 1888. Serial No. 279,477. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH DICK, a citizen of the United States, and a resident of Canton, county of Stark, State of Ohio, have invented a new and useful Improvement in Driving Mechanism for Endless Carriers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to improvements in fodder-cutters, and relates particularly to improved means for conducting the cut fodder or ensilage to the silo or other receptacle, whereby an endless driving-rope may be efficiently employed and adjusted to any position in which the carrier may be placed.

With these ends in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a fodder cutter and carrier embodying my invention, portions of the fodder cutter and carrier being broken away. Fig. 2 shows the fodder-cutter in front elevation and the carrier turned to one side and represented in perspective. Fig. 3 is a plan view of one of the sheaves and its support. Fig. 4 shows the sheave-support in elevation. Fig. 5 is a longitudinal section of the rope-clamp.

A represents the cutter-frame; B, the cutter-supporting shaft; C, a fly-wheel; D, a cutter-knife; E, feed-rollers, and F a driving-pulley, all of which parts may be constructed in any well-known and approved manner. On the shaft B the sheave-pulleys G are secured, one on each side of the drive-pulley F. An endless carrier-frame, J, is pivoted at its lower end (in position to receive the cut fodder from hopper H) to suitable supports, *a*, which are capable of being shifted and bolted to the floor in different positions to give the carrier-frame its various angular adjustments laterally. The frame J is conveniently pivoted on journal-boxes *b*, and an endless-belt carrier, K, is mounted on shafts *c* and *f* at the base and outer ends of the frame, respectively. A sheave-pulley, M, is secured on the shaft *f* at the outer end of the carrier-frame, and a fixed

pulley, Q, is secured to the carrier-frame a short distance from the outer end, one-fourth the length of the carrier; more or less. A movable pulley, R, is located between the pulley Q and the foot of the carrier, and two sheave-pulleys, N, are attached to the frame A of the fodder-cutter in a manner which will hereinafter more particularly appear. An endless rope, V, extends from the top of the inner sheave, G, around the upper sheave, N, thence around the sheave M at the outer end of the carrier-frame, thence around the movable pulley R, thence around the fixed pulley Q, thence around the lower sheave, N, and thence under and around the inner sheave-pulley, G, to the place of beginning. A take-up device is provided, consisting in the present instance of a rope, S, fastened at one end to the frame of the movable pulley R, and extending thence around a fixed pulley, T, and thence back to the end *w* of a clamp, U, through the opposite end of which the rope S passes on its way to the pulley T. Thus, as the elevator is adjusted to the right or left or up or down, the endless rope V may be taken up by moving the clamp U along the rope S and the proper tension readily and quickly secured without stopping or in any way interfering with the operation of the machine.

Each of the holders O of the sheaves N is provided with a shank, *r*, said shank having wings *s*, turned at right angles to the shank, and a centrally-located perforation, *t*. A clasp, P, has outwardly-projected hooks *u* and a perforation, *v*. The hooks *u* are adapted to engage the perforations *t* in the shanks *r*, and a bolt passed through the perforation *v* and into the frame A serves to hold the sheave-holder O in position. The object of the wing portions *s* is to afford an extended bearing for the holder against the frame A, and thus allow the sheaves N to swing up and down as the carrier is raised and lowered.

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

1. The combination, with the driving-shaft B and sheave G, of sheaves N and sheave-holders O, terminating in shanks *r*, having extending bearing portions *s*, about which the sheaves may swing, substantially as set forth.

2. In combination, the sheave G, sheaves N,
arranged at one side of the sheave G, sheave-
holders O, having bearing portions *s*, and a
clasp, P, having oppositely-projected fingers
5 *u*, by which said holders and sheaves are spaced
apart, one above the other and free to swing
vertically, substantially as set forth.

3. The combination of the sheaves G and N,
sheaves M and Q on the carrier-frame, endless
10 rope V, movable sheave R, and a take-up de-

vice in connection with the movable sheave R,
for adjusting the endless rope V to different
positions of the carrier, substantially as set
forth.

In testimony whereof I have hereunto set 15
my hand this 3d day of July, A. D. 1888.

JOSEPH DICK.

Witnesses:

W. K. MILLER,

CHAS. R. MILLER.