No. 799,211. PATENTED SEPT. 12, 1905.

N. WEILER.

SWINGING STACKER.

APPLICATION FILED APR. 18, 1905.

Fig. 1.

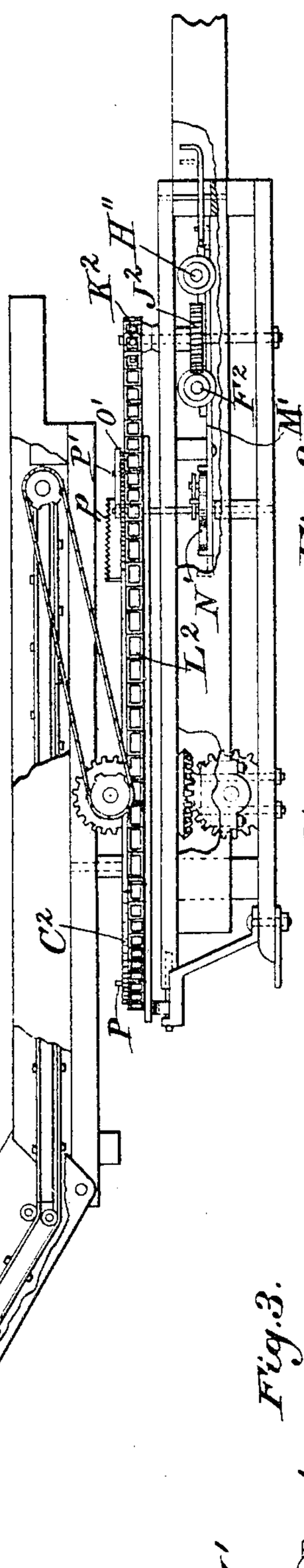

Fig. 2.

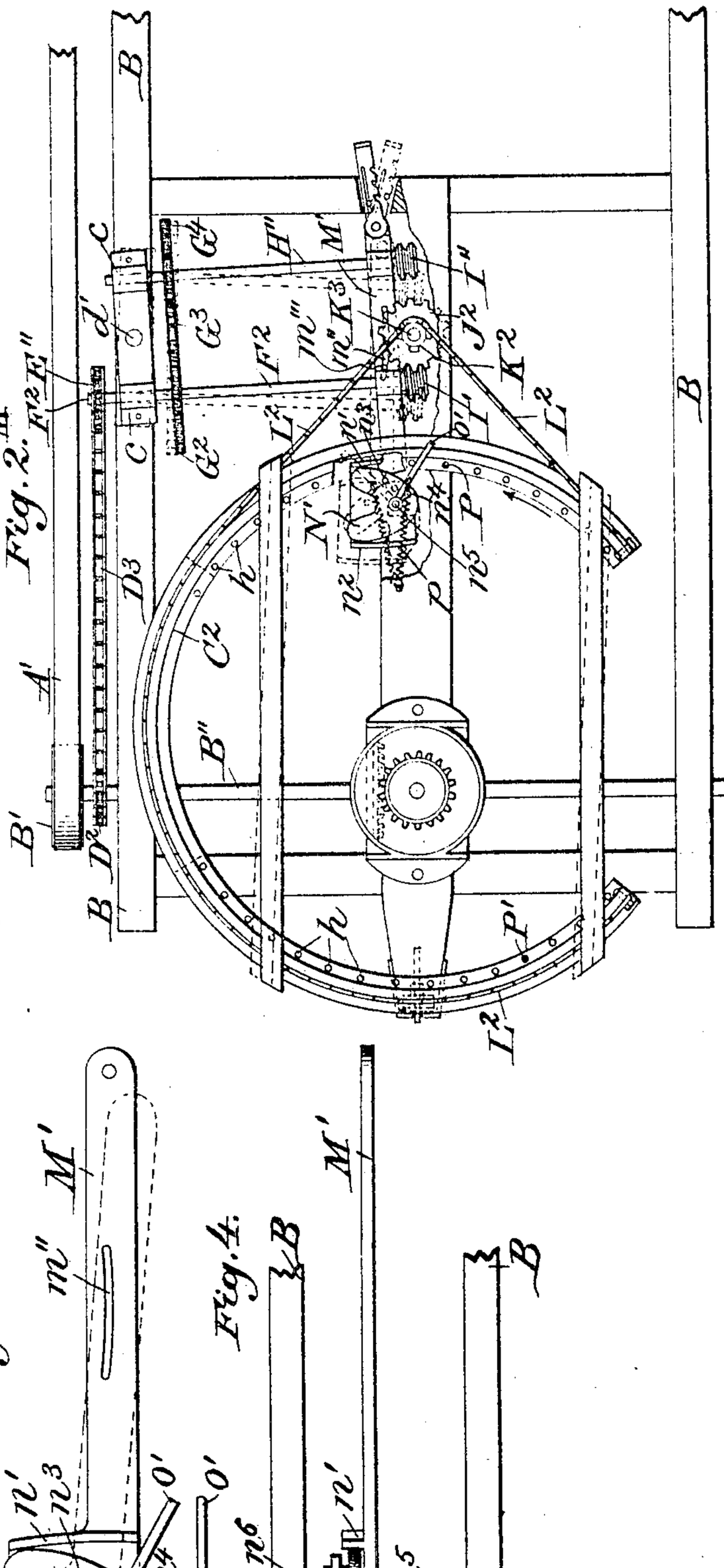

Fig. 3.

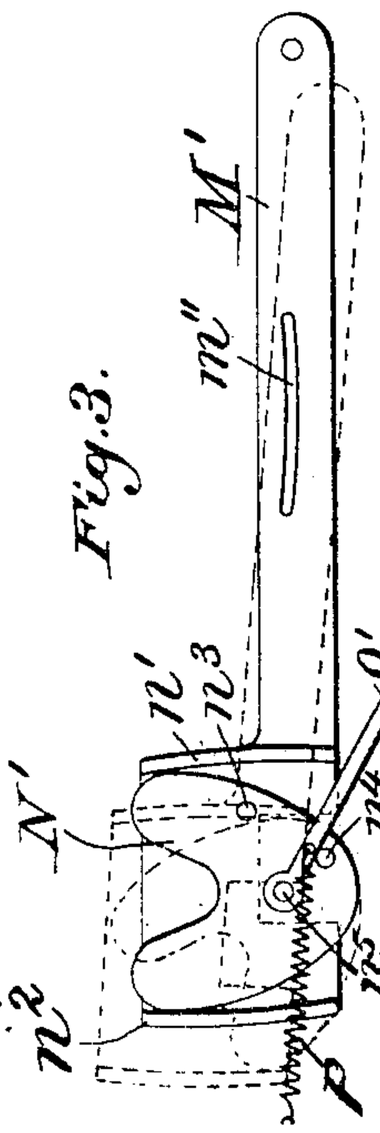

Fig. 4.

Witnesses:

L. J. Randolph,

D. C. Minnesang.

Inventor:

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UNITED STATES PATENT OFFICE.

NICK WEILER, OF SIOUX CITY, IOWA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-FOURTH TO CHARLES W. SWANSON AND ONE-FOURTH TO LYMAN J. RANDOLPH, OF SIOUX CITY, IOWA.

SWINGING STACKER.

No. 799,211. Specification of Letters Patent. Patented Sept. 12, 1905.

Application filed April 18, 1905. Serial No. 256,333.

To all whom it may concern:

Be it known that I, NICK WEILER, a citizen of the United States, residing at Sioux City, in the county of Woodbury and State of Iowa, have invented a new and useful Improvement in Swinging Stackers; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to swinging stackers for threshing-machines; and the object of the invention is to provide means for turning the stacker from side to side during its operation, as may be required for the disposition of the straw.

The invention consists in the novelty of construction and combination of parts, as will be more clearly described, and pointed out in the claims.

Reference is now had to the accompanying drawings, forming a part of the invention, in which—

Figure 1 is a side view of mechanism applied to swinging stacker. Fig. 2 is a plan view of the same with stacker removed. Fig. 3 is an enlarged detail view showing shifting bar and means for operating it. Fig. 4 is a view of the same in side elevation.

Referring now to the illustrations, in which like parts are designated by similar letters of reference, A′ is a belt connecting the operating part of the machine with a pulley B′, secured to a shaft B″, adapted to revolve in suitable bearings in the supporting-frame B. A sprocket-wheel D^2 is also secured to said shaft and connected, by means of the chain D^3, with a sprocket-wheel E″, which is secured to a shaft F^2. A sprocket-wheel G^2 is secured to the shaft F^2 and connected with a sprocket-wheel G^4, secured to the shaft H″ by means of a chain G^3. These shafts are parallel with each other, and the inner ends terminate in worm-wheels I′ and I″, respectively, the threads on the wheels running in the same direction. The shafts are adapted to revolve in bearings *c c*, secured pivotally to the frame by the bolt *d′* to permit a limited swing of the shafts as the worm-wheels are alternately operated. The worm-wheels are adapted to engage alternately the cogged wheel J^2, to which is connected, by means of a shaft K^3, a sprocket-wheel K^2. This wheel operates the sector C^2, having holes *h h* in the rim for the insertion of pins P and P′, by means of the chain L^2, the ends of which are secured to the open ends of the sector. The inner ends of the shafts F^2 and H″ are adapted to revolve in bearings on the shifting-bar M′, which is supported by the frame. A slot *m″* in the bar permits a lateral movement by a pin *m‴*, secured in the frame and extending through the slot. The head of the bar has cam projections *n′* and n^2, which inclose a heart-shaped device N′, which is pivotally secured to the frame by a bolt n^5, and has a limited lateral movement, as indicated by the dotted lines in Fig. 3. To the heart-shaped device are secured pins n^3 and n^4, and a rod *o′* is firmly secured at its inner end to the bolt n^5, the axis of the heart-shaped device, while the outer end of the rod extends over the sector. Another rod n^6 is freely secured to the axis of the heart-shaped device and extends in the same direction as the rod *o′* directly underneath the latter and between the pins n^3 and n^4. A spring *p* is secured at one end to the frame and at its opposite end to about the middle of the rod *o′*.

If the stacker is in operation and the sector turning in the direction indicated by the arrow, the worm-wheel I′ will be engaged. When the pin P strikes the rod *o′*, it will force the rod n^6 against the pin n^3 and turn the heart-shaped device to the left, causing the left side of the device to strike the cam n^2 and push the shifting bar to the left, thus disengaging the worm-wheel I′ and bringing the worm-wheel I″ into engagement. This will cause a reversal of the movement until the pin P′ on the opposite side of the sector strikes the rod *o′*, when the movement is again reversed. The spring holds the rod firmly in whatever position it assumes when either worm-wheel is in engagement.

A slot m^3 in the shifting bar permits a movement of the bar on the bolt n^5.

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

1. In a swinging stacker, the combination of parallel shafts adapted to revolve in bearings pivotally secured to the frame, means connected with the operating machinery for operating said shafts, worm-wheels with threads running in the same direction secured to the ends of said shafts, a cogged wheel having

teeth adapted to be alternately engaged by said worm-wheels, a sector to which the stacker is pivotally attached pivotally secured to a frame and having holes in the rim for the insertion of pins, means connecting said sector with said cogged wheel whereby both are turned in the same direction, a bar connecting said worm-wheels and adapted to slide laterally upon the frame, a heart-shaped device at the end of said bar pivotally secured to the frame and having pins extending upward therefrom, cams on said bar inclosing the heart-shaped device, a rod secured at right angles to the pivot of said device and extending over the sector and adapted to come in contact with the pins in the sector, a spring for holding said rod in position, and a rod secured to the pivot of the device and extending between the pins therein, substantially as described.

2. In a swinging stacker, the combination of parallel shafts adapted to revolve in bearings pivotally secured to the frame, means for operating said shafts, worm-wheels secured to said shafts, a cogged wheel adapted to be alternately engaged by said worm-wheels, a sector to which the stacker is attached pivotally secured to a supporting-frame, means for connecting said sector with said cogged wheel whereby both are turned in the same direction, and means for causing said worm-wheels to alternately engage said cogged wheel, substantially as described.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

NICK WEILER.

Witnesses:
W. C. HUTCHINS,
H. C. GARDINER.