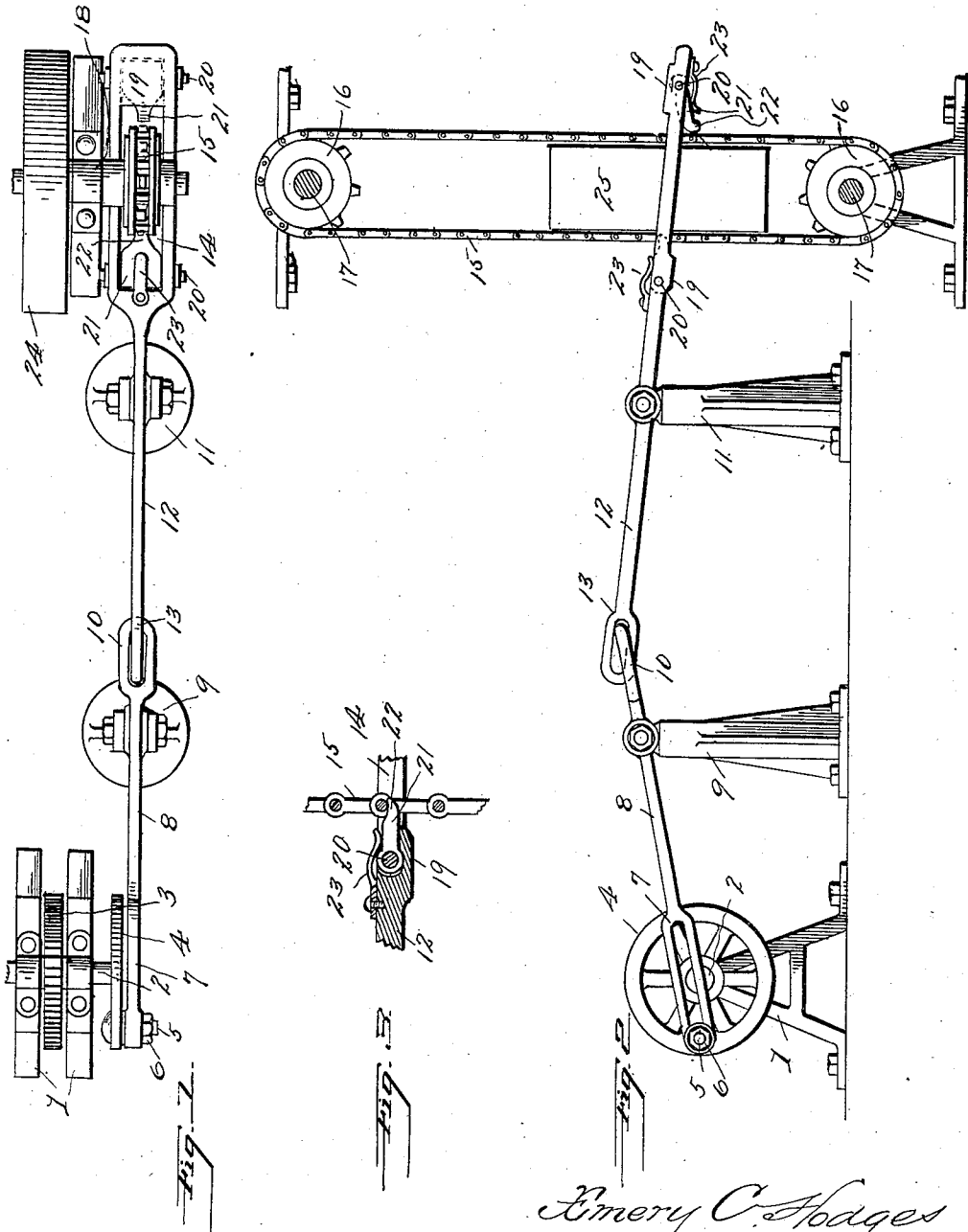


No. 856,258.

PATENTED JUNE 11, 1907.

E. C. HODGES.
POWER MECHANISM.
APPLICATION FILED MAY 3, 1906.



Emery C. Hodges

Witnesses.

Chas. K. Davis

M. E. Moore

Inventor.

by M. E. Moore

Attorney

UNITED STATES PATENT OFFICE.

EMERY C. HODGES, OF BLOOMINGTON, ILLINOIS.

POWER MECHANISM.

No. 856,258.

Specification of Letters Patent.

Patented June 11, 1907.

Application filed May 3, 1906. Serial No. 315,080.

To all whom it may concern:

Be it known that I, EMERY C. HODGES, a citizen of the United States, residing at Bloomington, in the county of McLean and State of Illinois, have invented certain new and useful Improvements in Power Mechanism, of which the following is a specification.

My invention relates to improvements in power mechanism, and has for its object, the provision of a device of this character which may be used for driving the line shafting in factories and similar places, and which will be simple and durable in construction and will perform its functions in a practical and efficient manner.

With these and other objects in view my invention consists of a power mechanism embodying certain novel features of construction, combination and arrangement of parts substantially as herein disclosed.

Figure 1, is a top plan view of my improved machine. Fig. 2, is a side elevation thereof, and Fig. 3, is a detail view partly in section to illustrate the dog and connection with the sprocket chain.

Referring to the drawings in detail: The numeral 1, designates a pair of bearing standards in which is mounted a shaft 2, provided with the fly wheel 3, and having secured on its end, the crank disk or wheel 4. This shaft is the driven shaft and may be connected with any suitable source of power. A crank pin 5, is carried by the crank disk, and is provided with the securing nut 6, and engaging said crank pin, is the slotted yoke 7, of the lever arm 8. This lever arm is pivotally mounted in the pedestal 9, and at its opposite end, is formed with the slotted extension 10, which is on a plane at right angles to the slot in the opposite end of the lever. This connection with the driven crank disk gives the lever a long-arm leverage movement. Pivotaly mounted in a similar pedestal 11, is a lever 12, the slotted long-arm 13, of which, engages the slotted short-arm 10, of the lever arm 8. The forward end of the lever 12, is broadened and formed with a longitudinal opening or slot 14, through which the sprocket chain 15, passes. This sprocket chain is carried by the sprocket wheels 16, mounted on the shafts 17, suitably supported in bearings 18, and said bearings may be mounted in the individual floors

of the building so as to operate the machinery on the separate floors. The edges of the opening 14, are oppositely shouldered as at 19, and pivoted in the recessed portion thus formed, by means of the pins 20, are the pawls 21, having the pointed and hooked ends 22, to engage the sprocket chain. These pawls are held in operative engagement with the chain by means of the springs 23, and one of the pawls engages the chain on the downward stroke and the other on the upward stroke of the lever so that the chain is given a constant motion. A fly wheel 24, may be mounted on the shaft carrying the sprocket wheel to govern the speed of the same. A spacing block 25, is mounted between the sprocket chain to prevent the same from sagging and moving out of engagement with the pawls.

From this description taken in connection with the drawings, the operation and advantages of my improved mechanism will be readily appreciated, and it will be seen that it may be applied to a variety of purposes.

I claim:

1. In a power mechanism, the combination with a driven crank, and a slotted lever operated thereby, of a second lever having sliding connection with the first lever, a sprocket chain and wheels, said second lever being provided with pawls having connection with the sprocket chain.

2. The combination with a driven crank, of a lever having sliding connection therewith, a second lever having sliding connection with the first lever, a sprocket chain and sprocket wheels, pawls carried by the second lever to engage said sprocket chain and means for spacing the opposite sides of the chain.

3. The combination with a driven crank, of a slotted lever in connection therewith, a second lever having sliding connection with the first lever, a sprocket chain passing through an opening in the second lever, and pawls in the lever adjacent said opening adapted to engage opposite sides of the chain to operate the sprocket chain.

4. The combination with a driven crank disk, a slotted lever having its long arm connected thereto, the short arm of said lever formed with a loop, a second lever having its long arm formed with a corresponding loop

in engagement with said first loop, the oppo-
site end of the second lever having a longi-
tudinal opening near the end thereof, there
being recesses on the upper and lower faces at
5 the opposite ends of the openings, pawls piv-
oted in said recesses, springs engaging the
upper faces of said pawls, a sprocket chain
passing through the opening and engaged by

said pawls, and a spacing block between the
opposite sides of said chain. 10

In testimony whereof I affix my signature
in presence of two witnesses.

EMERY C. HODGES.

Witnesses:

W. M. HOFFMAN,
WM. N. MOORE.