

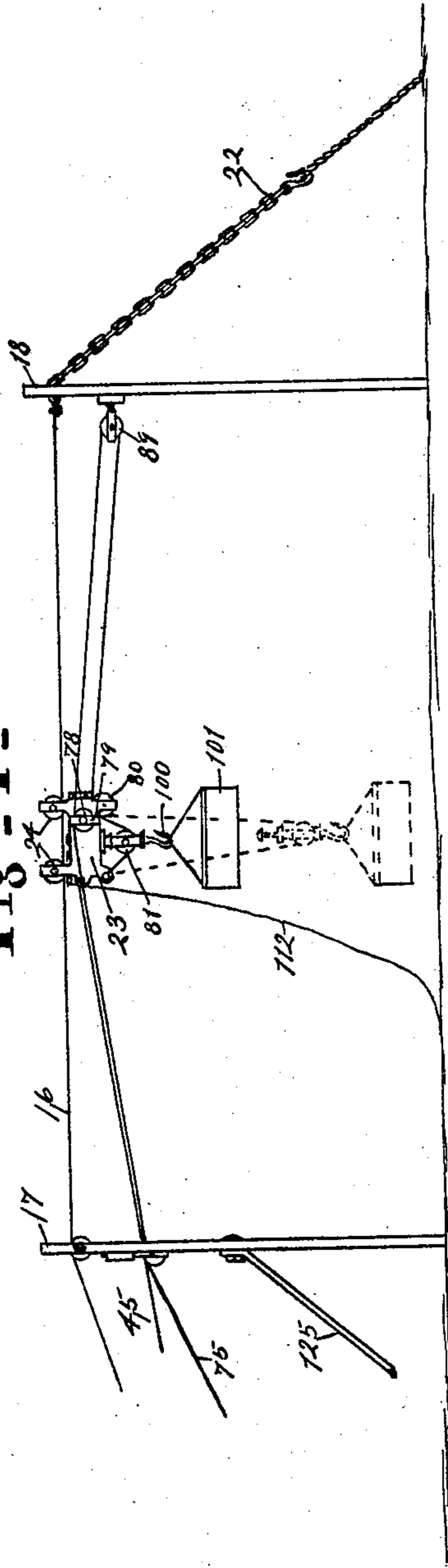
No. 865,778.

PATENTED SEPT. 10, 1907.

A. & J. M. HALL.
CONVEYING APPARATUS.
APPLICATION FILED MAR. 9, 1907.

2 SHEETS—SHEET 1.

Fig. 1-



WITNESSES:
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Fig. 3-

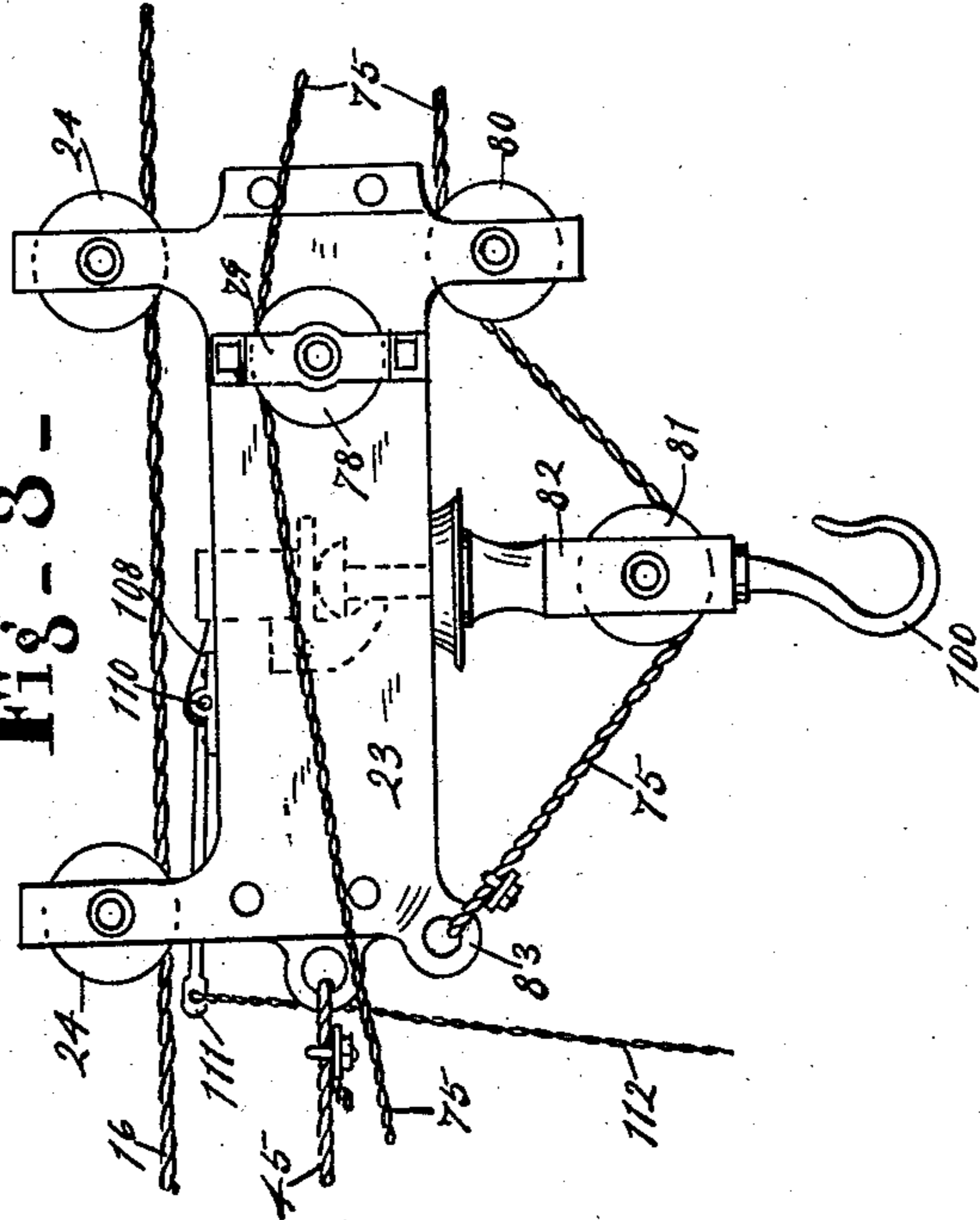
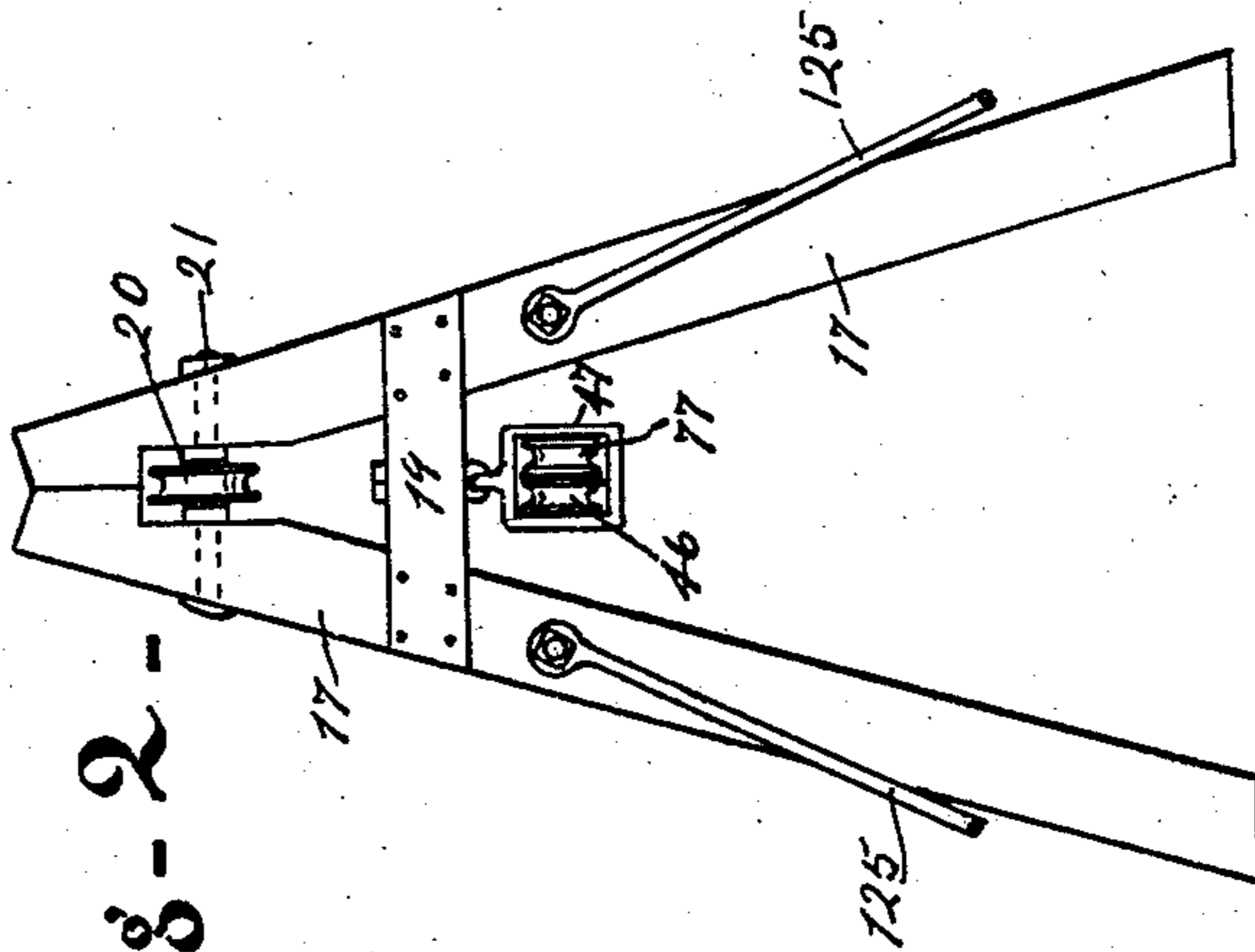


Fig. 2-



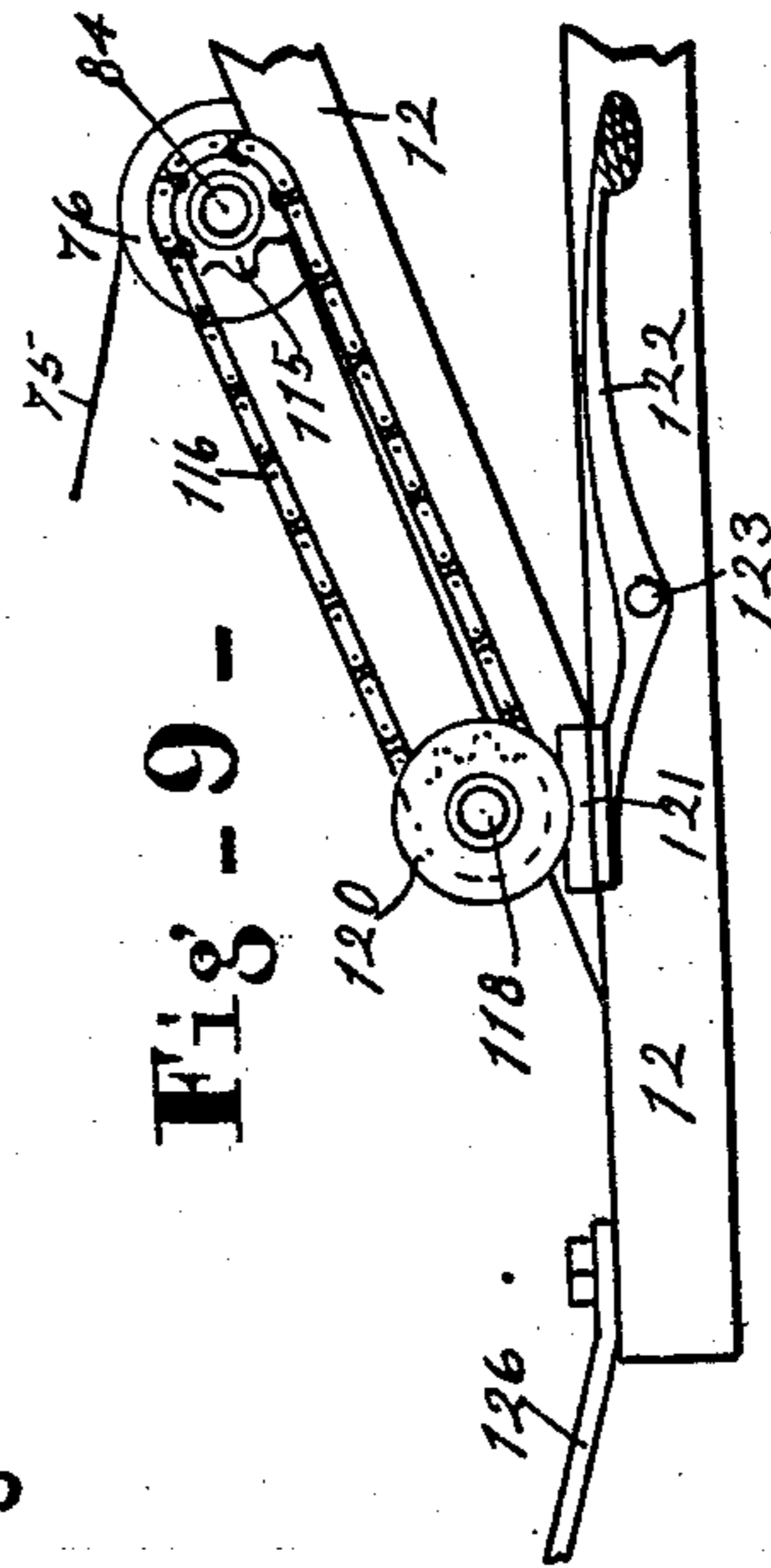
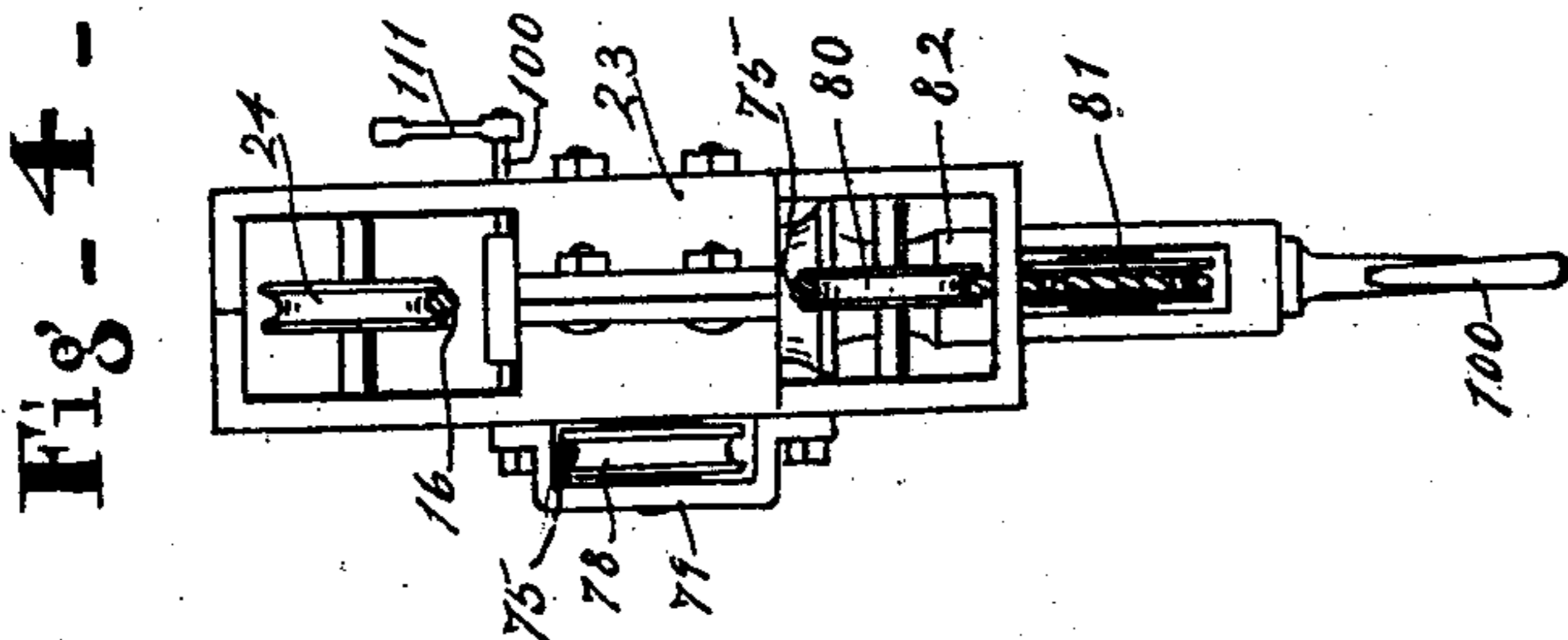
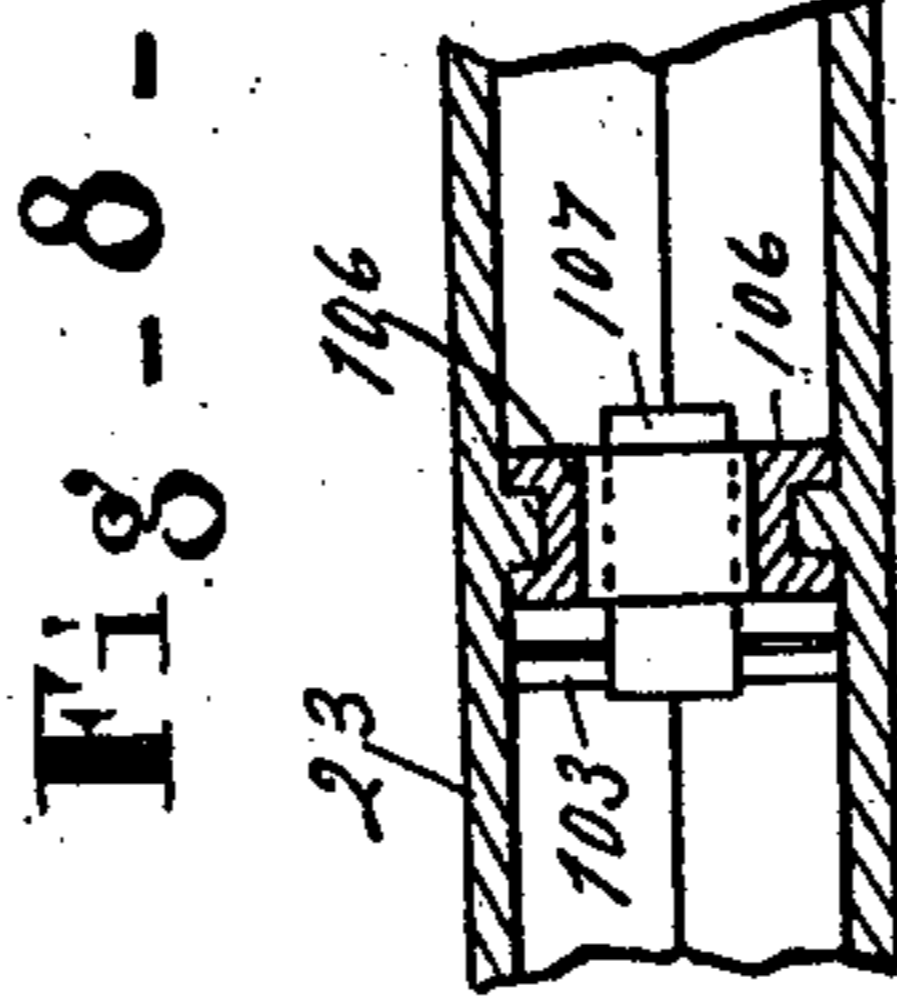
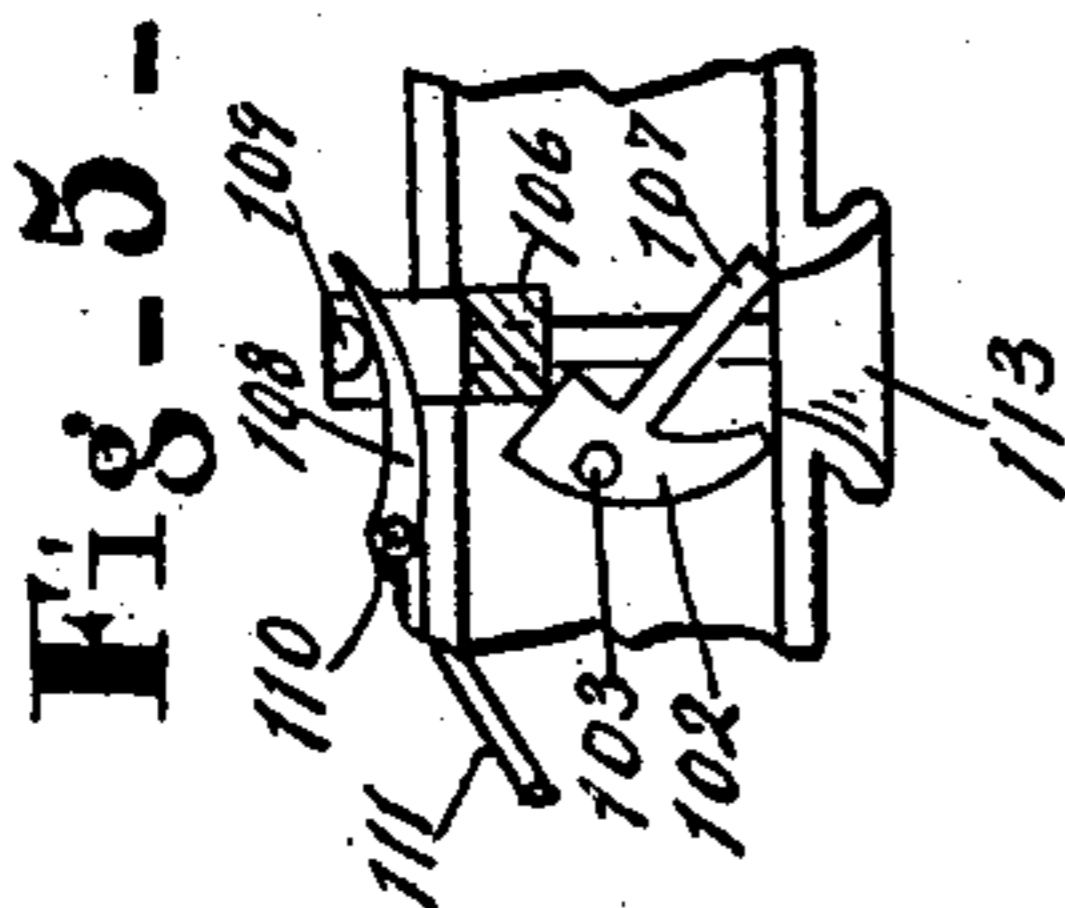
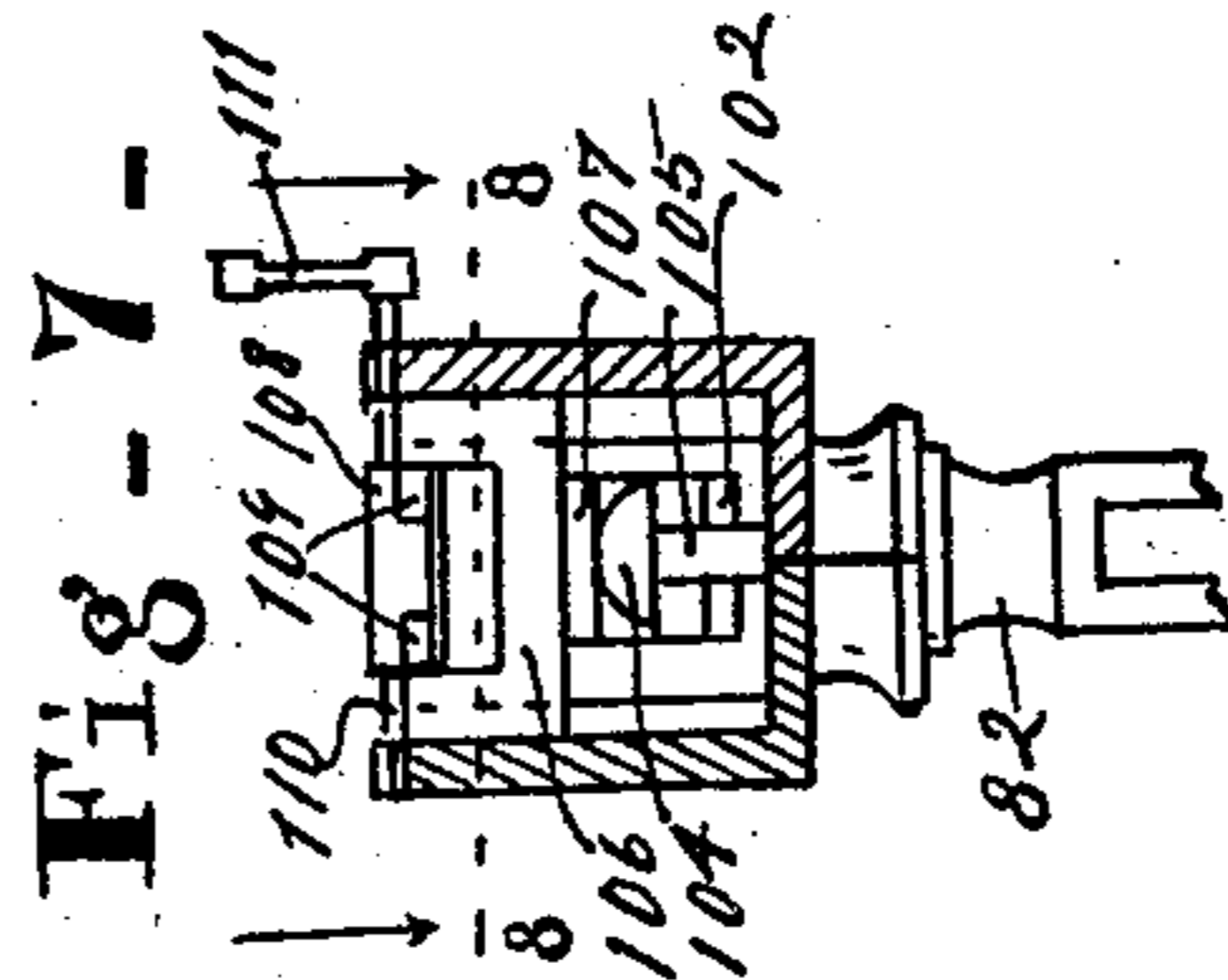
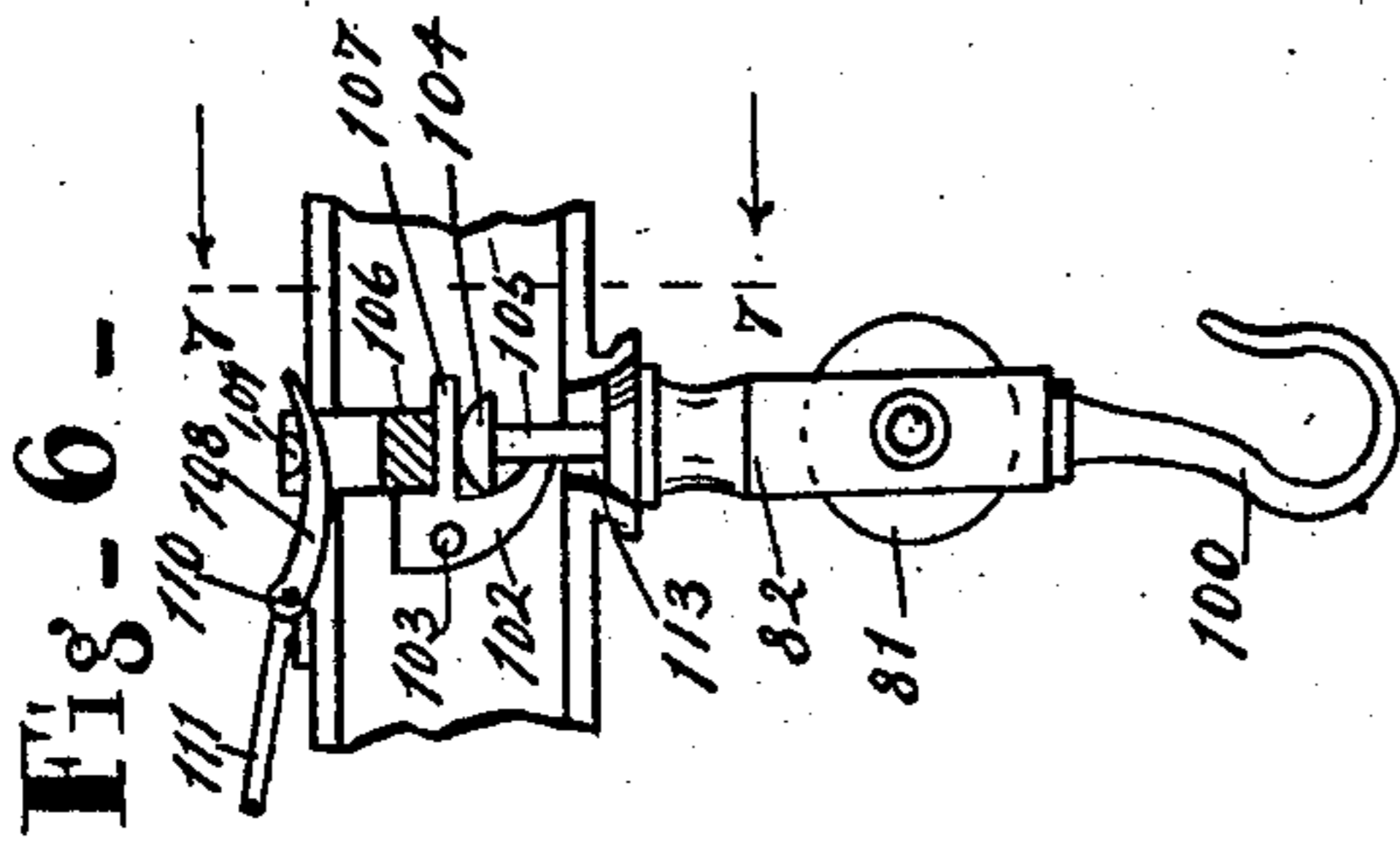
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

ADRIAN HALL AND JOHN M. HALL, OF GREENFIELD, INDIANA.

CONVEYING APPARATUS.

No. 865,778.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Original application filed December 20, 1906, Serial No. 348,760. Divided and this application filed March 9, 1907. Serial No. 361,616.

To all whom it may concern:

Be it known that we, ADRIAN HALL and JOHN M. HALL, of Greenfield, county of Hancock, and State of Indiana, have invented a certain new and useful Con-
veying Apparatus; and we do hereby declare that the
following is a full, clear, and exact description thereof,
reference being had to the accompanying drawings, in
which like letters refer to like parts.

This application is divided out of a former applica-
tion filed by us for a conveying apparatus, Dec. 20,
1906, Ser. No. 348,760.

The object of this invention relates to improvements
in conveying means whereby the load may be both
conveyed horizontally and vertically, and a means op-
erated by a single cable for accomplishing these two
functions.

The nature of this invention will be understood from
the accompanying drawings and the following descrip-
tion and claims.

In the drawings Figure 1 is a side elevation of the
apparatus with the lowered position of the load shown
in dotted lines. Fig. 2 is a front elevation of one of the
cable-carrying frames and braces therefor, parts being
in section. Fig. 3 is a side elevation of the carrier on
an enlarged scale, parts of the cables being broken
away. Fig. 4 is an elevation of the right-hand end of
said carrier with the cables in section. Fig. 5 is a cen-
tral vertical section longitudinally through the middle
portion of the carrier parts being broken away to show
the position of the parts when the load-hanger has been
lowered away from the carrier. Fig. 6 is the same with
the load-carrier in its elevated and locked position.
Fig. 7 is a transverse section on the line 7—7 of Fig. 6.
Fig. 8 is a horizontal section on the line 8—8 of Fig. 7.
Fig. 9 is a side elevation of the brake mechanism.

In detail an operating cable 16 is stretched over the
frames 17 and 18. These frames are A-shaped, being
formed of two inclined side bars connected at the upper
end by a cross bar 19. The frame 17 carries a loose pul-
ley 20 on a rod 21 over which the supporting cable 16
extends. The frame 18 is held in position against the
pull of the cable 16 by a stay 22. The cable 16 sup-
ports a load-carrier 23 by means of a pair of pulleys 24
that travel on said cable. It is moved in one direction
by cable 45, which at one end is secured to said carrier
and passes over the pulley 46 in the pulley block 47
that is suspended from the cross bar 19 of the frame 17,
as seen in Figs. 1 and 2. While said load-carrier is
moved in one direction by said cable 45 as it is drawn
by suitable means, the carrier is moved in an opposite
direction by the cable 75 which extends from the drum
76. It passes over the pulley 77, seen in Fig. 2 and
over the pulley 78 mounted in bearing 79 at the side
of the carrier 23, as shown in Figs. 3 and 4; and thence
about the pulley 89 mounted in connection with the
frame 18 and returning, said cable 75 passes over pulley

80 mounted in the lower right-hand corner of the car-
rier 23, as shown in Fig. 3, under the pulley 81 mounted
in the hanger 82, and then is secured at 83 to the lower
left-hand corner of the carrier 23, as appears in Figs. 1 and 3.

The lower hanger 82 has a hook 100 on its lower end
to which a load 101, shown by full and dotted lines in
Fig. 1, may be attached. Said load hanger is locked
in its upper position by means of a hammer-shaped
catch 102 that is fulcrumed at 103 to the carrier in
such manner that the lower-projecting end thereof will
extend below the head 104 on the rod 105 extending
upward from the upper end of said hanger. Said
hammer-like catch 102 is locked in its engaging posi-
tion by a locking block 106 that drops down upon a bar
107 which projects horizontally from the catch 102 and
in line with its fulcrum so that said block 106 will resist
any lateral movement of the head or upper end of the
catch 102.

While the load hanger is in its upper and locked
position, as shown in Figs. 1, 3 and 6, the load may be
transported to the desired position of discharge or de-
posit. At that point it may be unloaded by releasing
the lock 106 and catch 102 and then releasing the actu-
ating cable 75, so that the weight of the load will carry
it down to the dotted line position shown in Fig. 1.
Said lock 106 is moved from its locking position by a
finger 108 that extends under lugs 109 projecting in-
wardly from the two side plates of said lock 106, and
said finger being fulcrumed on a shaft 110 which car-
ries on its outer end a lever 111, from which a rope 112
is suspended, whereby said lever may be drawn
down, which will cause the finger 108 to elevate the
block 106 above and out of engagement of the catch
102. When this happens the load may be lowered by
releasing the cable 75. In this connection it is noticed
that the carrier 23 is formed of two connected side
bars, as shown in Figs. 7 and 8. And it has a flaring
opening at 113 that permits a rounded head 104 to en-
ter the space between the side plates of the carrier to
the position shown in Fig. 6, to be again locked. This
upper or return movement of the hanger is caused by
tightening the cable 75.

From the foregoing it is seen we have a com-
paratively simple and economical device for con-
veying merchandise or other articles from boats or other
conveyances or from one place to another and deposit-
ing where desired. The depositing of the load is ac-
complished by controlling the means which actuates
cable 75, that being a drum 76 on a shaft 84 mounted
on a frame 12, provided with means for being actuated,
which means are not here shown. In order to stop the
load or hold it at a desired elevation it is necessary
that an effective brake mechanism be provided. To
this end we provide sprocket wheel 115 on the end of
the shaft 84 of the drum 76 with a chain 116 running

therefrom over the sprocket wheel on a shaft 118. A friction wheel 120 is rigidly secured on said shaft 118 so as to be engaged by the brake shoe 121, on the shaft end of a pedal 122 that is fulcrumed at 123 to the side of the frame, as shown in Fig. 9. 125 and 126 are brace rods to hold the posts in place.

What we claim as our invention and desire to secure by Letters Patent is:

1. In a conveying apparatus, a carrier, means upon which said carrier is supported and moved, cables for moving said carrier to and fro, and a load hanger supported by one of said carrier-moving cables, whereby said cable has the double function of moving the carrier horizontally and causing the vertical movement of the load hanger.
2. In a conveying apparatus, a carrier, means upon which said carrier is supported and moved, a cable for moving the carrier in one direction, a cable for moving the car-

rier in an opposite direction, a pulley on said carrier over which one of said cables passes, a load-hanger, a pulley in said load hanger riding upon the portion of said cable lying between said pulley on the carrier and the point at which said pulley is fastened to the carrier, means on the carrier for catching and holding said load hanger in its elevated position, a lock for engaging and locking said means so that it will hold said locking means in its elevated position, and a lever for removing said locking means from its locking position whereby said load hanger may be drawn downward.

In witness whereof, we have hereunto affixed our signature in the presence of the witnesses herein named.

ADRIAN HALL.
JOHN M. HALL.

Witnesses:

N. ALLEMONG,
OLIVE BREEDEN.