

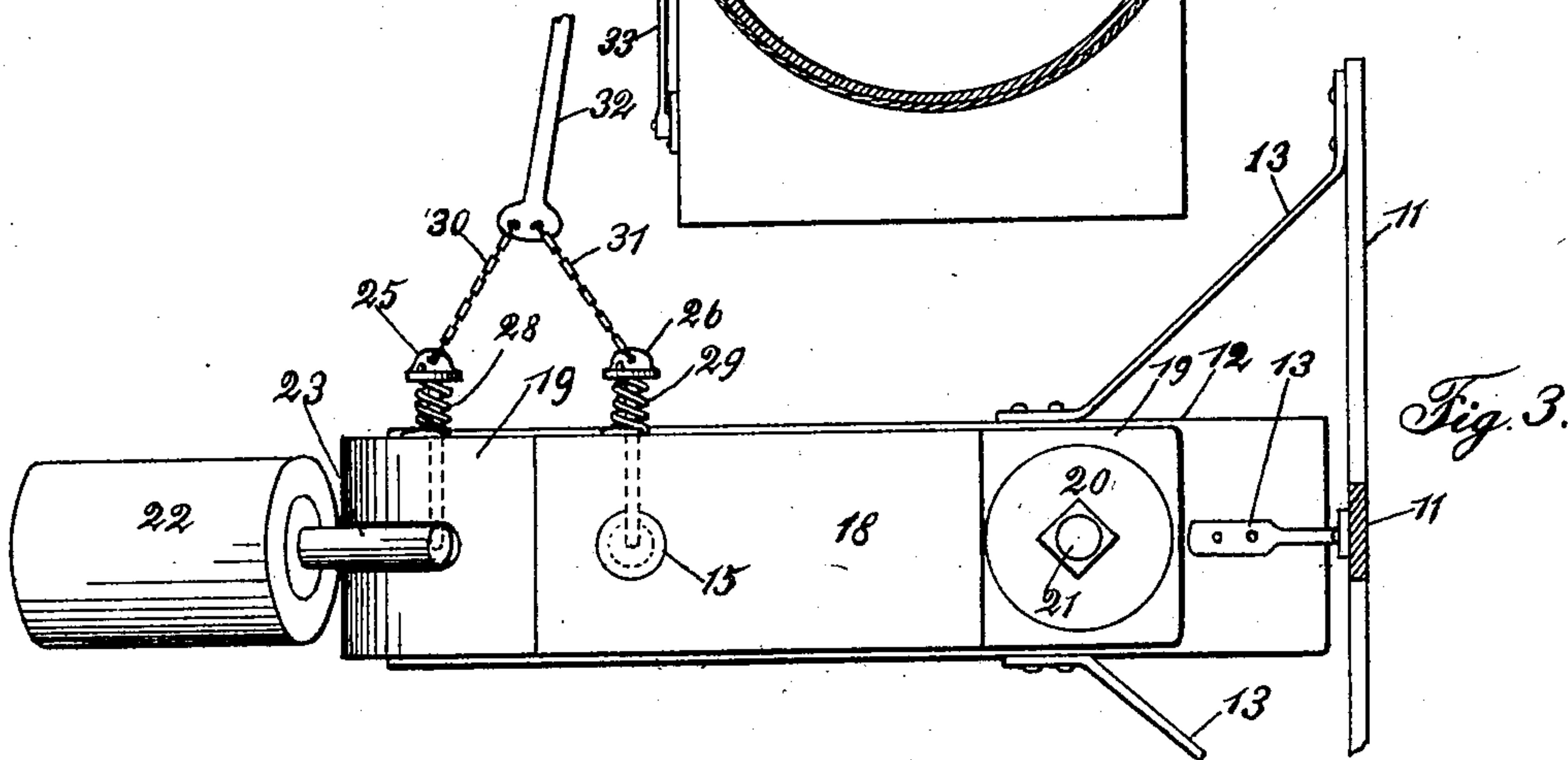
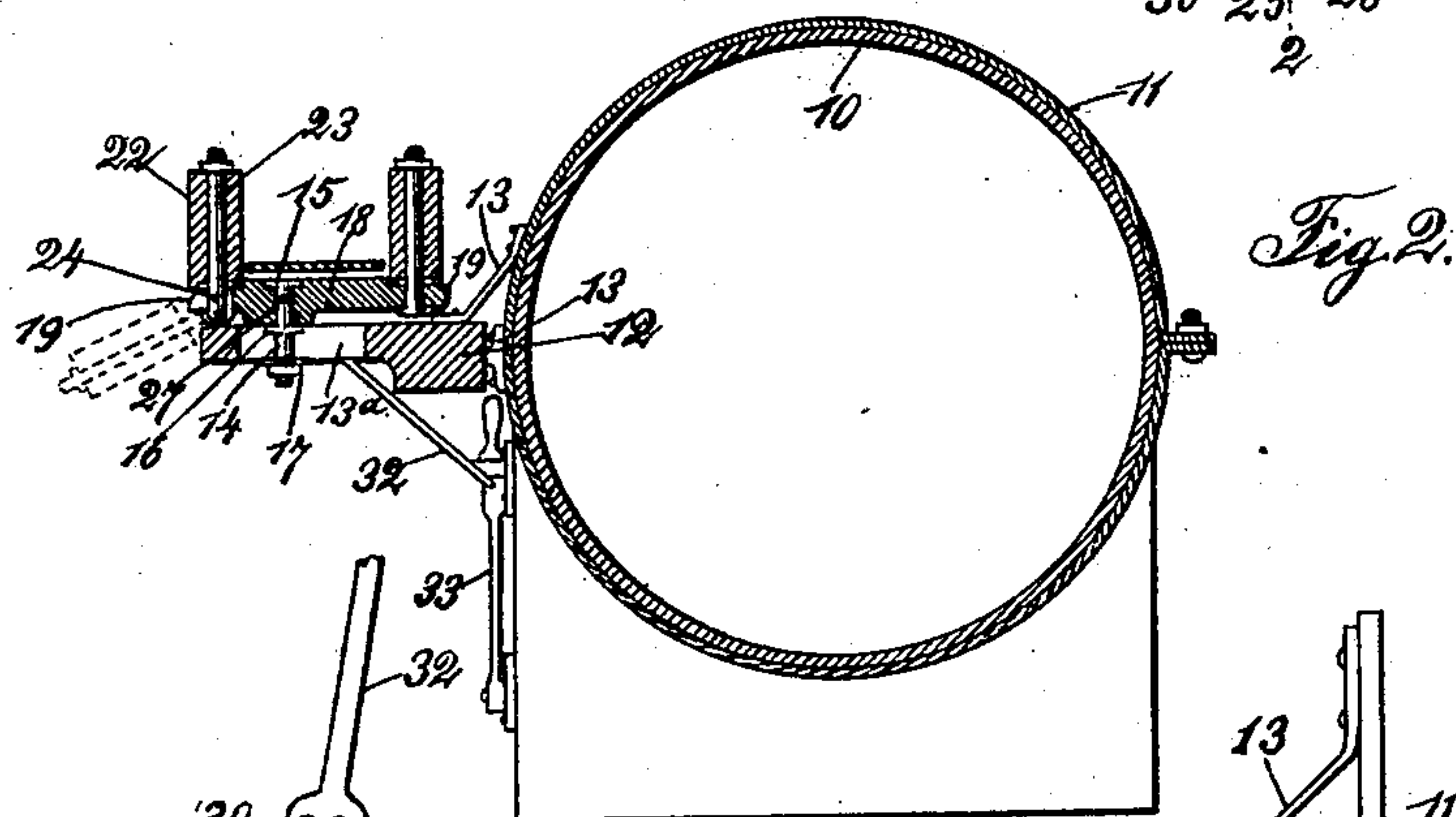
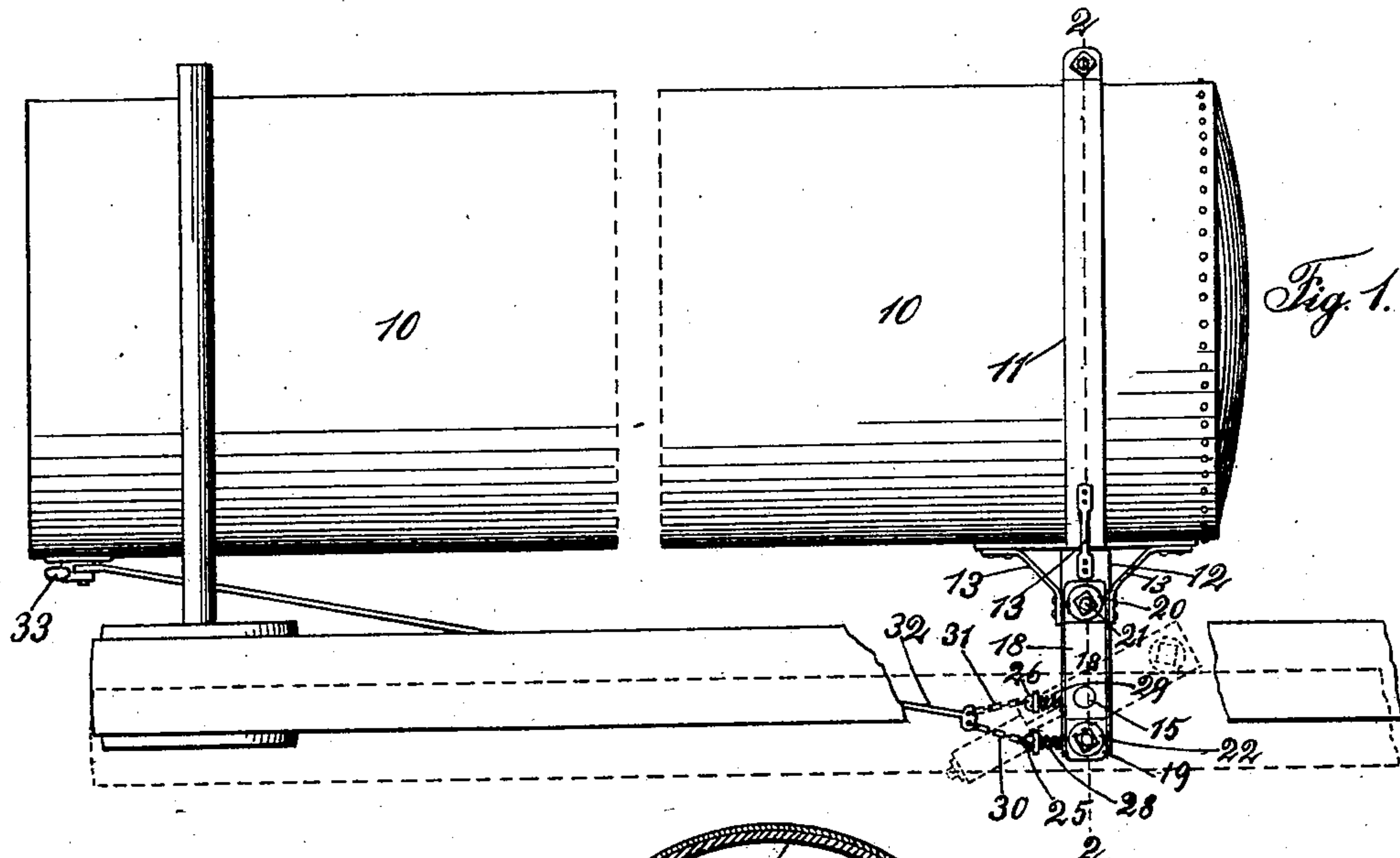
No. 730,902.

PATENTED JUNE 16, 1903.

W. H. GEORGE.
BELT GUIDE FOR TRACTION ENGINES.

APPLICATION FILED APR. 7, 1902.

NO MODEL



Witnesses:
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R. E. Brwig.

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UNITED STATES PATENT OFFICE.

WILLIAM H. GEORGE, OF DEXTER, IOWA.

BELT-GUIDE FOR TRACTION-ENGINES.

SPECIFICATION forming part of Letters Patent No. 730,902, dated June 16, 1903.

Application filed April 7, 1902. Serial No. 101,677. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GEORGE, a citizen of the United States, residing at Dexter, in the county of Dallas and State of Iowa, have invented certain new and useful Improvements in Belt-Guides for Traction-Engines, of which the following is a specification.

When traction-engines are used for operating threshing-machines, it is customary to place the engine a considerable distance from the threshing-machine, and when this is done a comparatively long belt must be employed for connecting the engine and the threshing-machine, and it has been found that the wind frequently exerts such pressure on the belts as to throw them from the pulleys.

The objects of my invention are to provide a belt-guide that may be quickly and easily attached to any ordinary traction-engine and to provide means whereby the belt is prevented from moving laterally on account of wind-pressure or any other reason, so that the belt is firmly held to the pulleys.

A further object is to provide means whereby the belt-guide may be operated by the engineer in such manner as to throw the belt from the pulley.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a top or plan view of a portion of the boiler of a traction-engine with my improved belt-guide applied thereto as in practical use and by dotted lines showing the position the parts would assume when the belt-guide is moved to throw the belt. Fig. 2 shows a vertical central sectional view of the belt-guide and by the dotted lines showing the lowered position of the hinged roller, and Fig. 3 shows a top or plan view of the body portion of the belt-guide.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate that portion of the boiler shown.

The numeral 11 indicates a metal strap or belt to encircle the boiler, and 12 indicates a block to serve as a base for the belt-guide,

said block being connected at one end with the strap 11 by means of the legs 13. The outer end portion of the block 12 is provided with a longitudinal slot 13^a, vertically arranged. Passed through this slot 13^a is a bolt 14, having a head 15, and beneath the head 15 having an integral collar 16, which collar rests in a recess on top of the block 12, and on the lower end of the bolt is a nut 17, by which the bolt may be clamped in position on the block 12 and may be adjusted longitudinally of the block by manipulating the nut 17.

The belt-guide proper is composed of a block 18, resting on top of the block 12 and having the bolt 14 passed through it, whereby the block 18 is pivotally connected to the block 12. At the end portions of the block 18 are the depressions 19 at the top thereof, and mounted in one of said depressions is the upright roller 20, supported on the bolt 21, and on the other depression is an upright roller 22, supported upon a pivoted bolt 23. This bolt is provided with an opening 24, and the top of the block beneath the roller 22 is cut away on a segment, entering at the pivotal point of the bolt 23, so that the roller 22 may swing outwardly and downwardly upon the pivoted bolt.

The reference-numeral 25 indicates a latch mounted in the end of the block 18 and extended horizontally and capable in one position of passing through the opening 24 in the bolt 23. The numeral 26 indicates a similar latch in the block 18 and capable in one position of passing through an opening 27 in the bolt 14. Each of these latches is normally held inwardly in their locked position by means of the contractile coil-springs 28 and 29, and these latches are each provided with a short chain 30 and 31, and these chains are connected with a rod 32, which is attached to a lever 33, located in some position conveniently accessible by the engineer.

In practical use I attach my improvement to a traction-engine by placing the belt or strap around the engine and secure it thereto. Then the rollers are made to engage the edges of a belt on the belt-wheel of the traction-engine by adjusting the bolt 14 longitudinally of the block 12. When this is done, the latches 25 and 26 are made to enter at open-

ings in the bolts 23 and 14, and then both the rollers 20 and 22 are in position to prevent the belt from moving laterally. Assuming that it is desired to throw the belt, the operator simply pulls upon the lever 33, which has the effect, first, of drawing the latches 25 and 26 from engagement with the bolts 23 and 14. This leaves the roller 22 free to swing outwardly, and it also leaves the block 18 free to swing in a horizontal plane on the block 12. Then, obviously, a further pull upon the rod 32 will cause the block 18 to rotate, and the roller 20 will be made to engage one edge of the belt and to force it laterally. This movement will cause the other edge of the belt to press upon the other roller 22, with the effect of forcing it outwardly and downwardly. Then further movement of the block 18 will have the effect of throwing the belt from its pulley, all of which may be accomplished without touching the belt and with perfect safety. Of course in order to again apply the belt it is necessary to set the guide by hand.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. An improved belt-guide comprising in combination a block, means for connecting the block with the boiler of a traction-engine, a second block pivotally mounted on top of the first to swing in a horizontal plane, an upright roller at one end of the upper block, a roller at the other end of the upper block pivoted to swing from a vertical position outwardly and downwardly, and means for securing said pivoted roller in its upright position.

2. An improved belt-guide comprising in

combination a block pivoted to swing in a horizontal plane, a roller in an upright position at one end of the block, a pivoted roller at the other end of the block capable of swinging from a vertical position outwardly and downwardly, a spring-actuated latch for normally holding said roller in its upright position, and means for withdrawing said bolt to release the roller and at the same time to turn the block laterally to throw a belt, for the purposes stated.

3. An improved belt guide and shifter comprising in combination a block, means for detachably securing said block to a traction-engine boiler, said block having a longitudinal slot in its outer end vertically arranged, a second block on top of the first, a bolt adjustably clamped in the said slot and having an opening in its upper end portion, a second block pivoted to said bolt to swing in a horizontal plane, an upright roller mounted on one end of said pivoted block, a pivoted roller at the other end of the pivoted block capable of swinging from a vertical position outwardly and downwardly, a spring-actuated latch to normally lock the pivoted roller in its upright position, a second spring-actuated latch mounted in the pivoted block to enter the opening in the said bolt, and means for withdrawing these latches simultaneously and for turning the pivoted block in such manner as to cause the upright roller to throw a belt, substantially as and for the purposes stated.

WILLIAM H. GEORGE.

Witnesses:

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