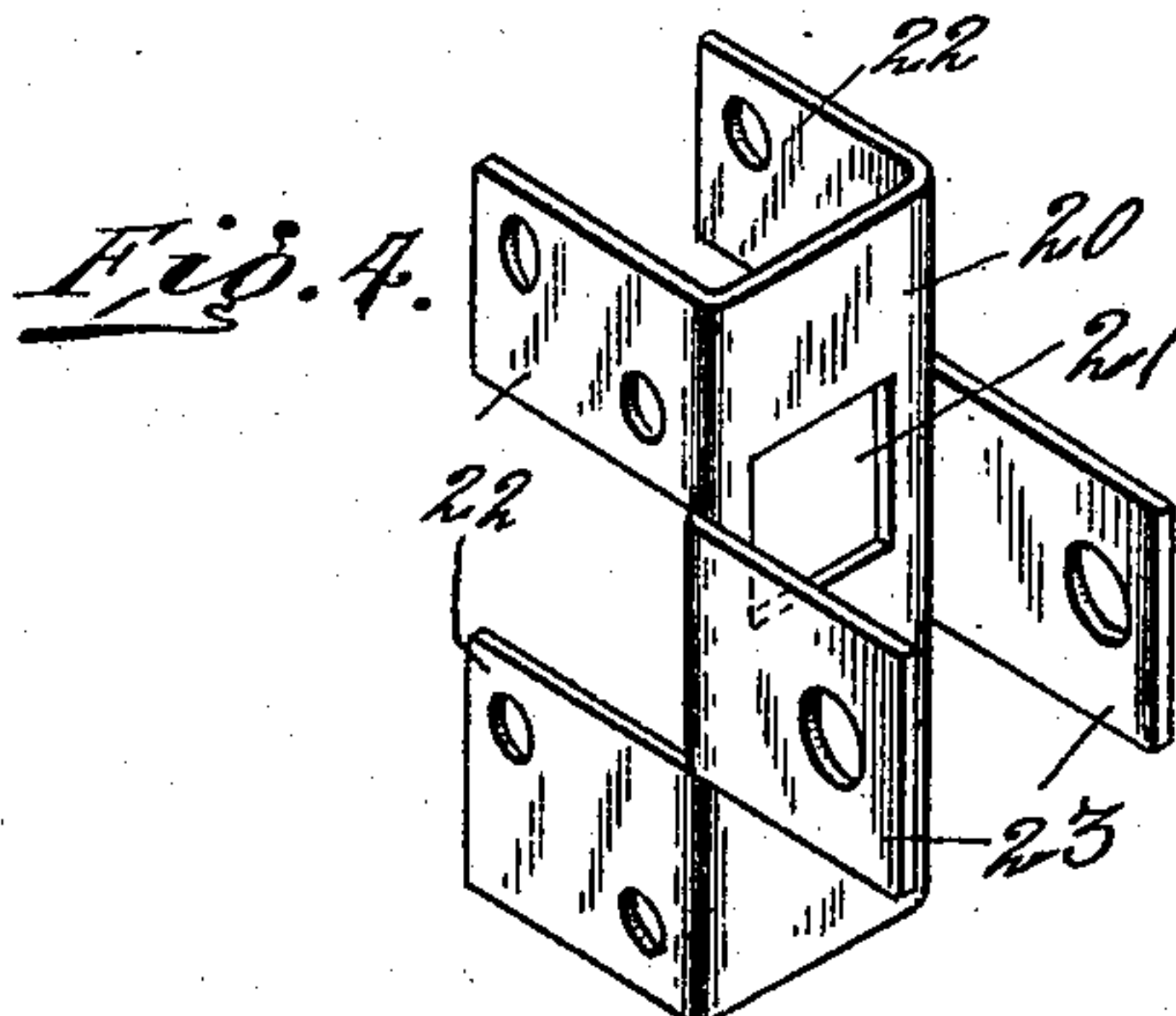
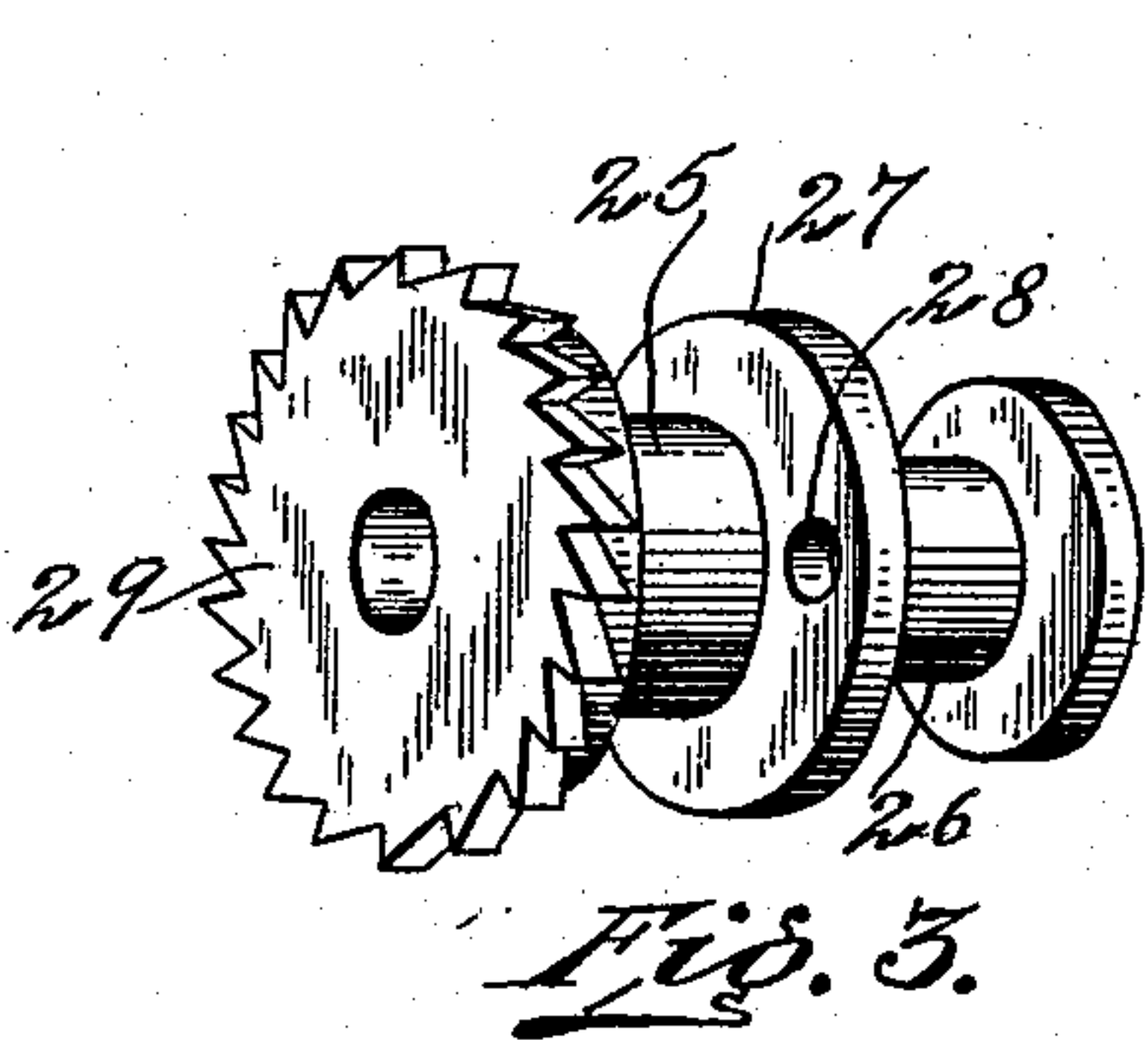
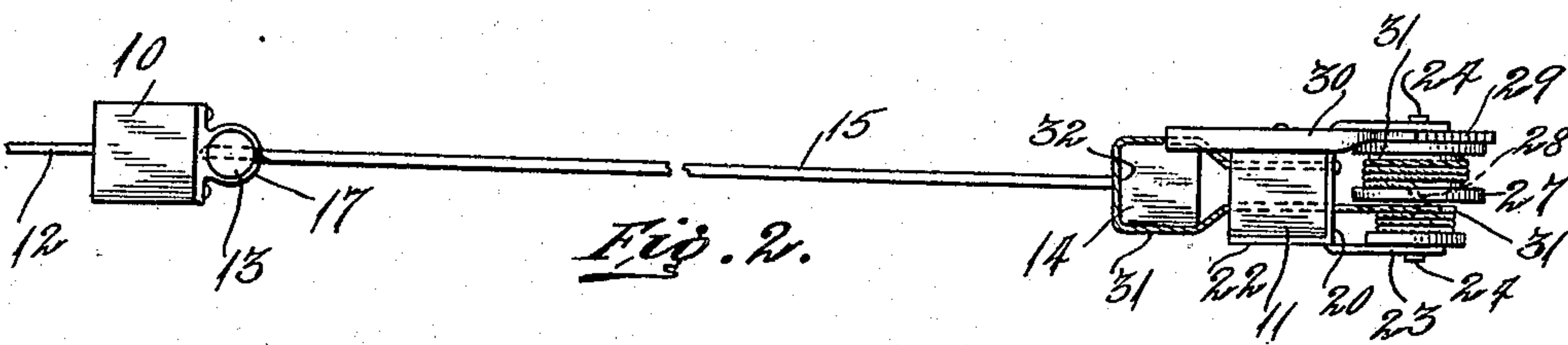
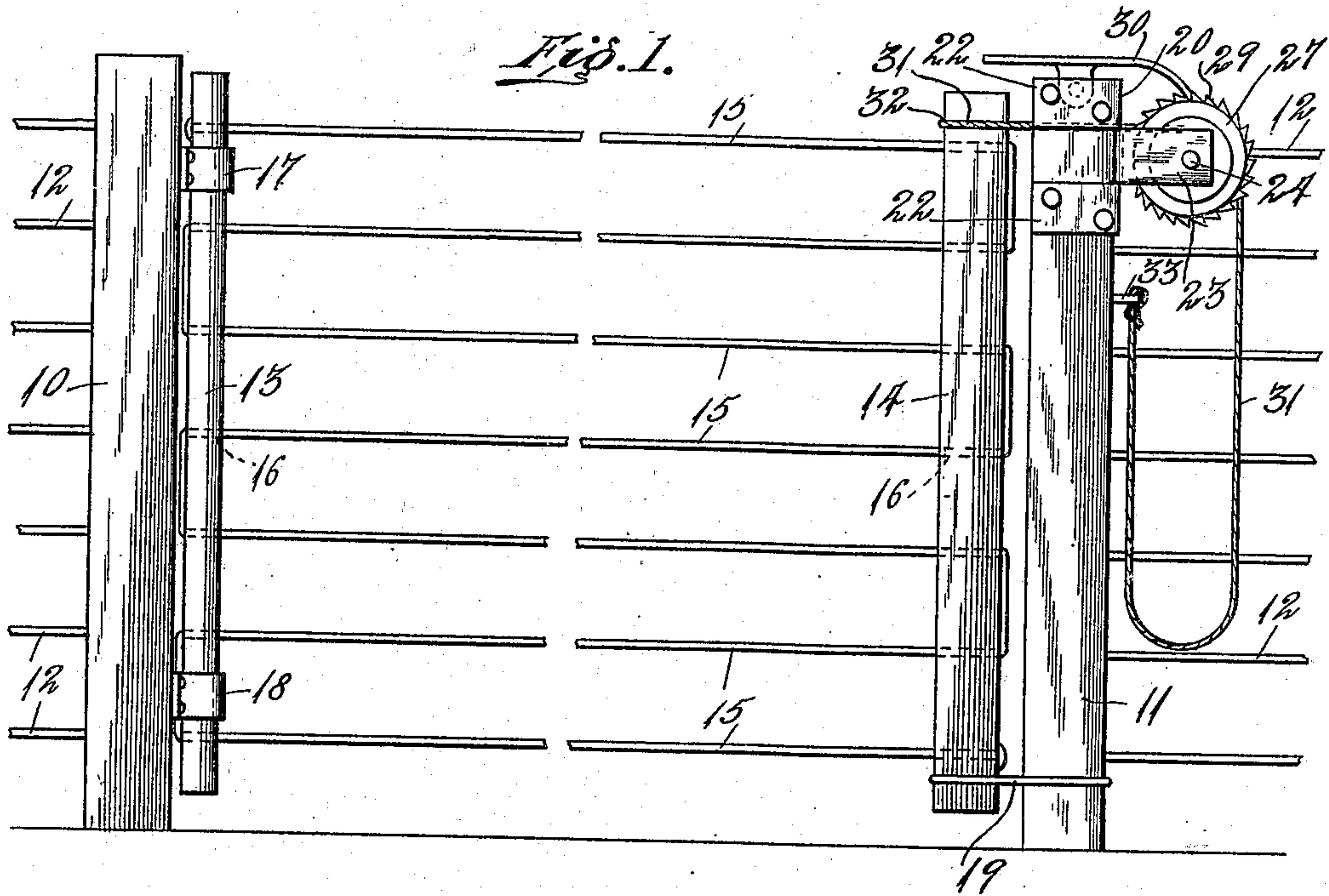


A. EDWARDS.
WIRE GATE FASTENER.
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ABLE EDWARDS, OF PUEBLO, COLORADO.

WIRE-GATE FASTENER.

No. 919,705.

Specification of Letters Patent.

Patented April 27, 1909.

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To all whom it may concern:

Be it known that I, ABLE EDWARDS, a citizen of the United States, residing at Pueblo, in the county of Pueblo, State of Colorado, have invented certain new and useful Improvements in Wire-Gate Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to gate structures, more particularly to the class known as "flexible" or "frameless" gates, and has for one of its objects to simplify and improve the construction and increase the efficiency and utility of devices of this character.

With this and other objects in view the invention consists in certain novel features of construction as hereafter shown and described and then specifically pointed out in the claims, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a side elevation of the improved device with the gate in closed position. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view, enlarged, of the double drum detached. Fig. 4 is a perspective view of the drum bracket detached.

The improved device may be located in connection with any of the various forms of fences, but is more particularly adapted for use in connection with farm fences, and may be employed with an ordinary wire fence, or other forms of fences, as may be preferred.

The improved gate is designed to be arranged between two posts 10—11 spaced apart at the sides of the gateway opening in the usual manner, the fence material, such as the strand wires 12 being connected to the posts, as shown.

The gate portion of the improved device comprises two rigid end members 13—14 coupled by spaced flexible members 15. The flexible members are preferably formed in one single piece laced back and forth between the rigid end members, the end members having spaced apertures indicated at 16 to receive the flexible members.

Attached to the posts 10 are hanger devices or keepers 17—18 in which the rigid member 13 is supported. Connected to the post 11 is a link 19 into which the lower end of the rigid member 14 is adapted to be

stepped, while the upper end of the post receives the straining mechanism or device by which the gate is supported in position, and the means whereby this strain is applied constitutes the principal portion of the invention.

Connected to the upper portion of the post 10 is a bracket formed from a single sheet of metal 20 having a relatively large central opening 21 and with spaced clefts in its side edges, whereby a plurality of tongues are released and adapted to be bent at right angles to the body of the plate, the tongues 22 at the ends bent to bear upon opposite sides of the post 11, while the tongues 23 are bent away from the post and form bearings for a shaft 24.

Mounted upon the shaft 24 is a drum formed with two faces 25—26 of different diameters, the two portions of the drum separated by an annular flange 27, the latter provided with a transverse aperture 28.

Formed upon or connected to the double drum is a ratchet wheel 29, and swinging upon the post 11 is a pawl 30 adapted to engage with the ratchet wheel. The post 11 is provided with a transverse aperture opposite the opening 21 of the bracket, and extending through this opening is a cable 31. One end of the cable is connected to the post 11 and the cable is then carried around the rigid gate member 14, as shown at 32, and then carried around the smaller drum portion 26 and then through the aperture 28 and around the larger drum portion 25, and the other terminal of the cable connected at 33 to the post 11. By this simple means it will be obvious that when a pulling force is applied to the portion of the cable leading from the larger drum portion, the double drum will be rotated and the cable wound thereon and the strain applied to the rigid member 14 of the gate at its upper end, and this strain communicated to the flexible members 15. The differences in size of the drum portions give a material advantage to the operation of the cable, the difference in leverage between the drum portions being in favor of the operator, who is thus enabled to apply a relatively strong strain upon the gate structure, the ratchet wheel and pawl holding the strain after it is once secured.

The improved device is simple in construction, can be inexpensively manufactured,

and applied to gates of various sizes, and to gates employed in connection with various forms of fences.

What is claimed, is:—

- 5 1. In a structure of the class described, spaced fence posts, a gate including a movable post, means for detachably connecting said movable post to one of said spaced posts, a drum having two faces of different diameters, means for mounting said drum
10 for rotation upon one of said spaced posts, a cable connected at one end to said last mentioned spaced post and passing thence around the movable gate post and thence
15 around the smaller of said drum surfaces and thence around the larger drum surface, and means for holding said drum from movement in one direction.
2. In a structure of the class described,
20 spaced posts, a gate including a movable end member, means for connecting said movable gate member to one of said spaced posts, a drum having two surfaces of different diameters and separated by an intermediate flange,
25 means for mounting said drum for rotation upon said last mentioned spaced post, a cable connected at one end to one of said spaced posts and extending around the movable gate post, and thence around the smaller
30 drum face and around the larger drum face and means for holding said drum from movement in one direction.

3. A structure of the class described comprising spaced posts, a gate formed with rigid end members and flexible longitudinal
members, means for connecting one of said rigid members to one of said spaced posts, a bracket formed from a sheet of metal having a central aperture and a plurality of spaced
clefts in its sides whereby a plurality of ears
are produced and bent in opposite directions,
one set of said ears being engaged with one of
said spaced posts, a shaft mounted for rotation through the other set of said ears, a
drum carried by said shaft and having two
surfaces of different diameters, said drum
having an annular flange between its surfaces and provided with a transverse aperture, a cable passing through said flange aperture and wound respectively around said
drum surfaces in opposite directions, said
cable leading from the smaller drum surface
and around the movable gate member and
connected at its terminal to the adjacent
spaced post, and a cable extending from the
larger drum surface and constituting a pull
cable, and means for holding said drum from
movement in one direction.

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

ABLE EDWARDS.

Witnesses:

JOHN BYRNES,
C. HORLBOG.