

No. 850,454.

PATENTED APR. 16, 1907.

O. M. WOLFE.  
BELT STRETCHER.

APPLICATION FILED DEC. 21, 1905.

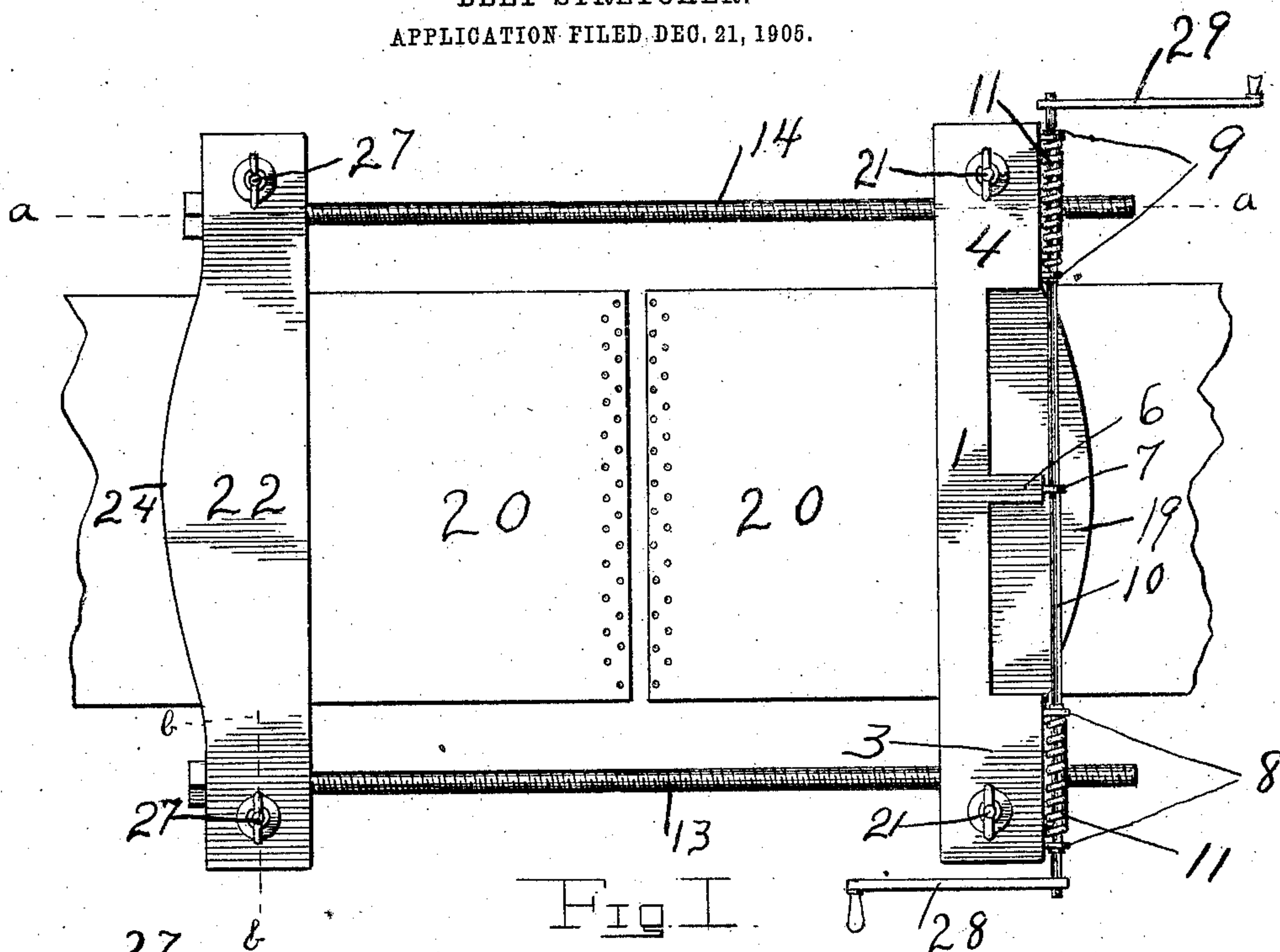


FIG. 1.

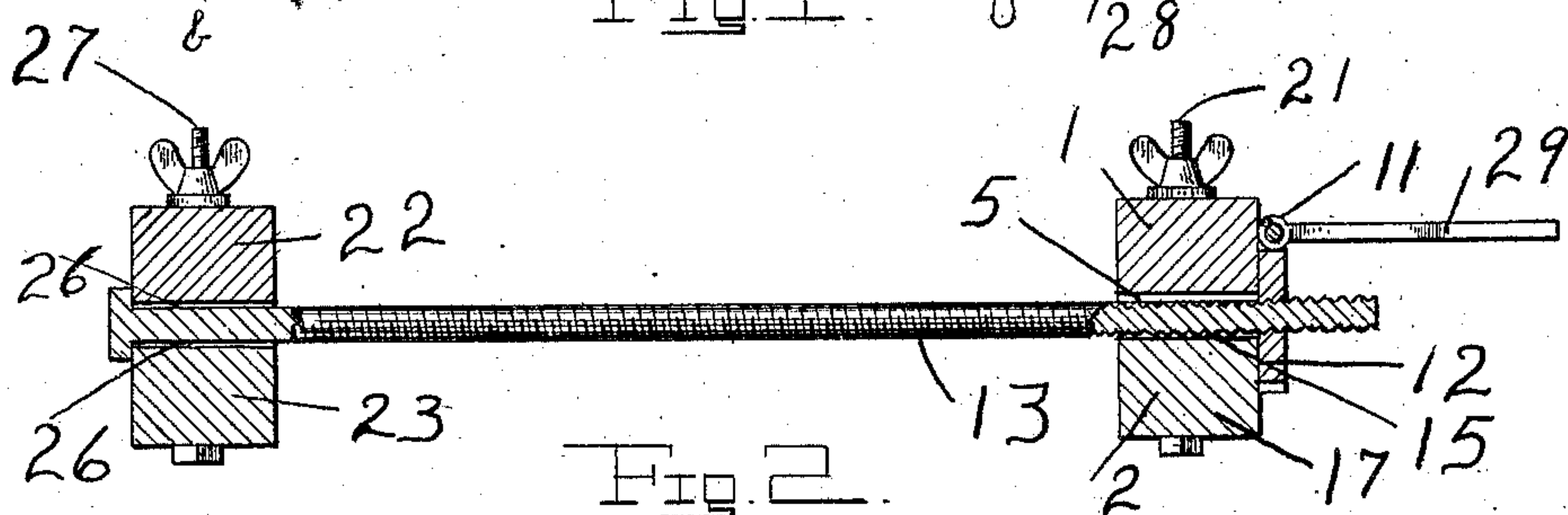


FIG. 2.

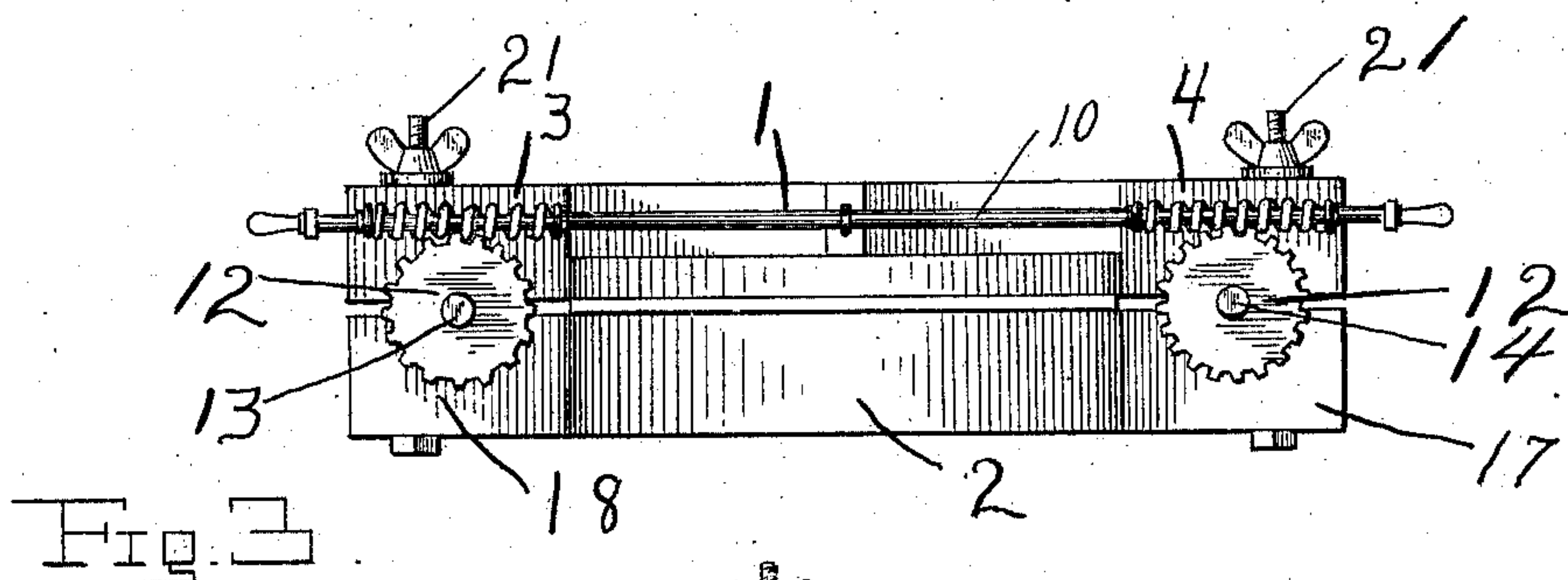


FIG. 3.

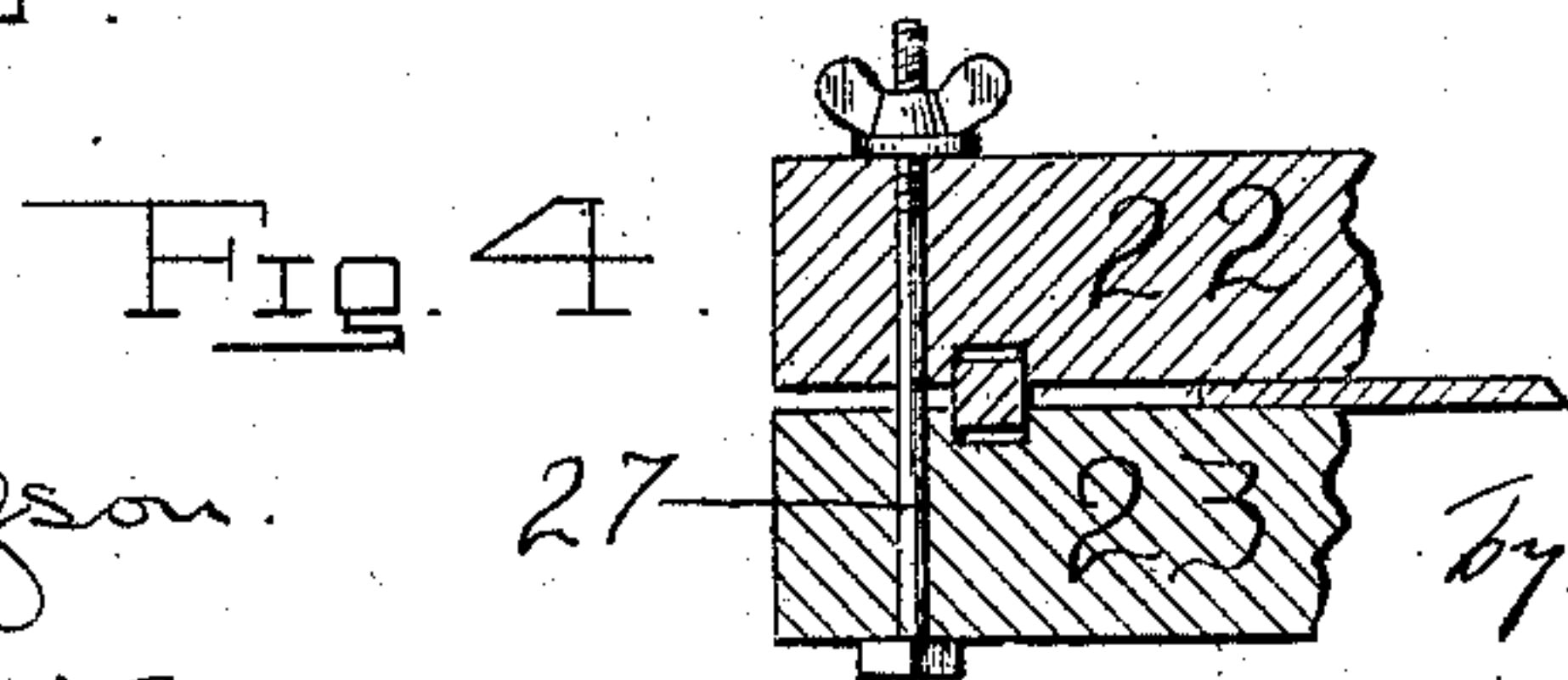


FIG. 4.

Witnesses  
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# UNITED STATES PATENT OFFICE.

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## BELT-STRETCHER.

No. 850,454.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed December 21, 1905. Serial No. 292,862.

*To all whom it may concern:*

Be it known that I, ORRIS M. WOLFE, a citizen of the United States, residing at Dubois, in the county of Clearfield, State of Pennsylvania, have invented certain new and useful Improvements in Belt-Stretchers; 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 belt-stretchers.

One object is to provide an exceedingly simple, inexpensive, durable, and efficient device of the character stated.

Another object of the invention resides in the provision of a frame having clamping parts constructed and arranged to present broad flat bearing-surfaces to the belt, so as to insure a tight clamping thereof within the frame during the stretching operation.

With the above and other objects in view the present invention consists in the combination or arrangement of parts, as will be hereinafter described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the present invention.

In the drawings, Figure 1 is a plan view of the invention. Fig. 2 is a sectional view on the line *a a* of Fig. 1. Fig. 3 is a front view. Fig. 4 is a section on line *b b* of Fig. 1.

Referring now more particularly to the accompanying drawings, the reference characters 1 and 2 indicate a pair of clamping members, the clamping member 1 having a head at each end, as designated by the reference characters 3 and 4, resulting in the body portion of the upper clamping member 1 being of less width than the said heads. There is a semicircular groove 5 formed in the under face of each head and transversely thereof for a purpose presently explained. Formed with the body portion of the clamping member 1 and intermediate the ends thereof is a projection 6, having an eye 7 in its outer face for alinement with the pairs of eyes 8 and 9, formed or secured to the outer face of each head 3 and 4. These alining eyes are designed to receive the shaft 10, provided near each end with a worm-gear 11, adapted to mesh with a gear 12, the said gear

12 being mounted at one end of each of the screw-rods 13 and 14. These screw-rods 13 and 14 are each mounted for rotation partly in the aforesaid semicircular grooves 5 of the heads 3 and 4 and also partly in the grooves 15 and 16 of the respective heads 17 and 18 of the lower clamping member 2, whose body portion is bulged or extended outwardly in bow form, as indicated by the reference character 19. The clamping members 1 and 2 are designed to receive between them one end portion of a belt 20, which is clamped therebetween by means of the bolts 21 passing through the respective heads of the clamping members. These bolts 21 also serve to secure and hold the screw-rods 13 and 14 in the grooves of the heads of said clamping members. Another pair of clamping members is indicated by the reference characters 22 and 23, each having an outwardly-directed bulged, curved, or bowed formation, as at 24 and 25, respectively, adapted to form broad flat bearing-surfaces for the clamping therebetween of one end portion of the belt 20. Formed in the adjacent faces of the clamping members 22 and 23 are semicircular grooves 26 for the rotatable reception of the aforesaid screw-rods 13 and 14. The last-named clamping members and the screw-rods are held in proper relation with respect to each other by means of suitable bolts 27, passed through the ends of the members.

In order to clamp the respective ends of the belt 20 between the corresponding clamping members, it is simply necessary to loosen the respective bolts 21 and 27 and insert the ends of the belt between the respective clamping elements. The said bolts are then operated to force the respective clamping elements together, and each pair of the latter are then brought toward or forced away from each other, as desired, through the instrumentality of the screw-rods 13 and 14 and the shaft 10, in communication with the rods through the medium of the worm and other gear wheels hereinbefore referred to, the shaft being rotated by means of either or both of the hand-levers 28 and 29, arranged one at each end of the shaft.

What is claimed is—

A belt-stretcher comprising spaced pairs of clamping members having broad, flat bearing-surfaces for engagement with the belt, one pair of clamping members having a head at each end, the upper member of said



pair having its front face cut away to form a  
projection intermediate the heads thereof,  
an eye secured to said projection and to the  
heads of said upper member, said eyes being  
5 disposed in alinement with each other,  
screw-rods connecting the spaced pairs of  
clamping members for moving them toward  
or from each other, gears secured to one end  
of said rods adjacent the heads formed on  
10 said first-mentioned pair of clamping mem-  
bers, a worm-shaft rotatably mounted in  
said eyes and having worm - sections for  
engagement with the corresponding gears,

means for holding the members of each pair  
of clamps together with respect to each other, 15  
and a lever at each end of said worm-shaft for  
actuating the latter to rotate said screw and  
move the pairs of clamping members toward  
or away from each other.

In testimony whereof I affix my signature 20  
in presence of two witnesses.

ORRIS M. WOLFE.

Witnesses:

JOSEPH DANIEL HAND,  
FRANK T. MILLER.