

No. 612,271.

Patented Oct. 11, 1898.

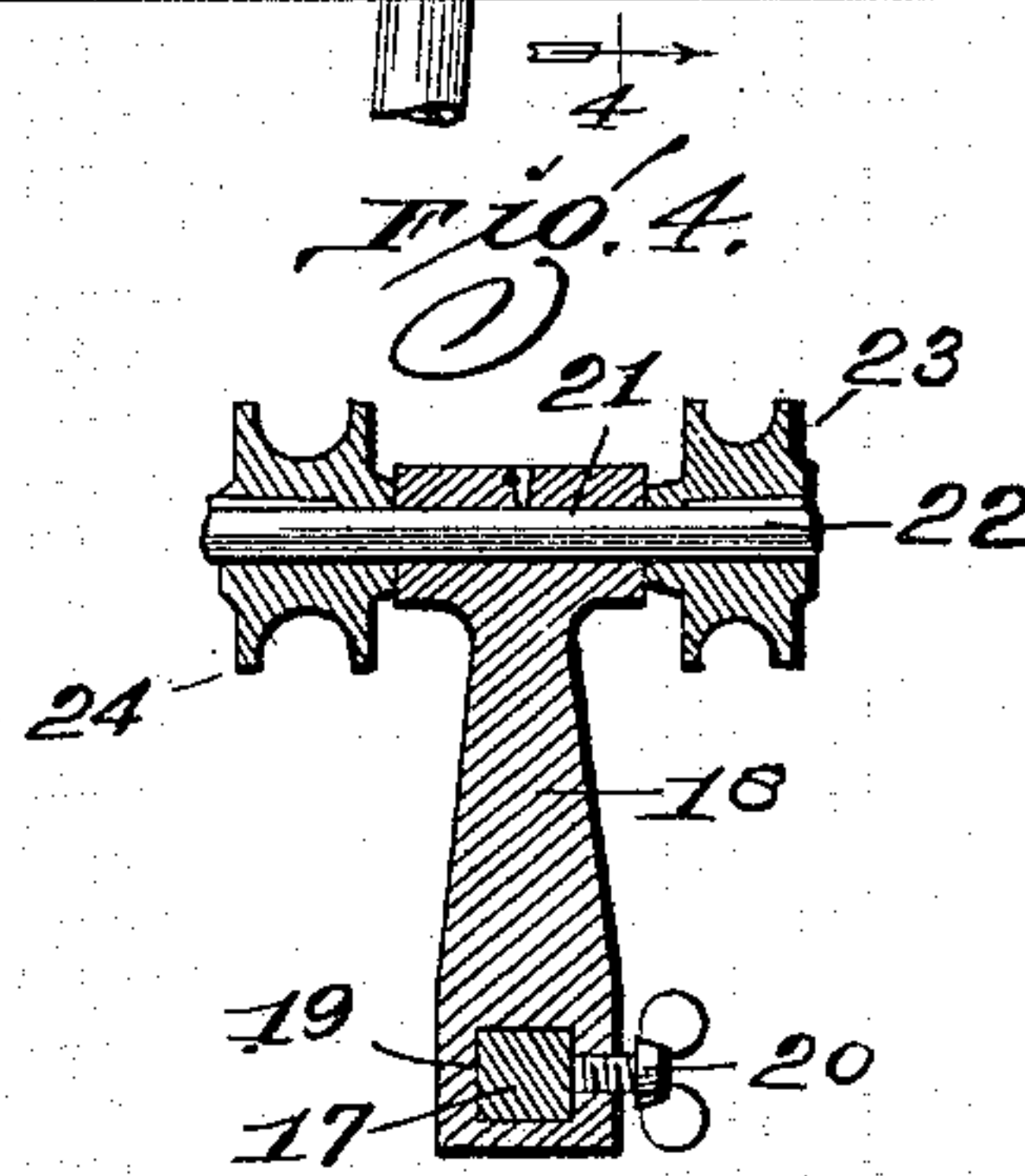
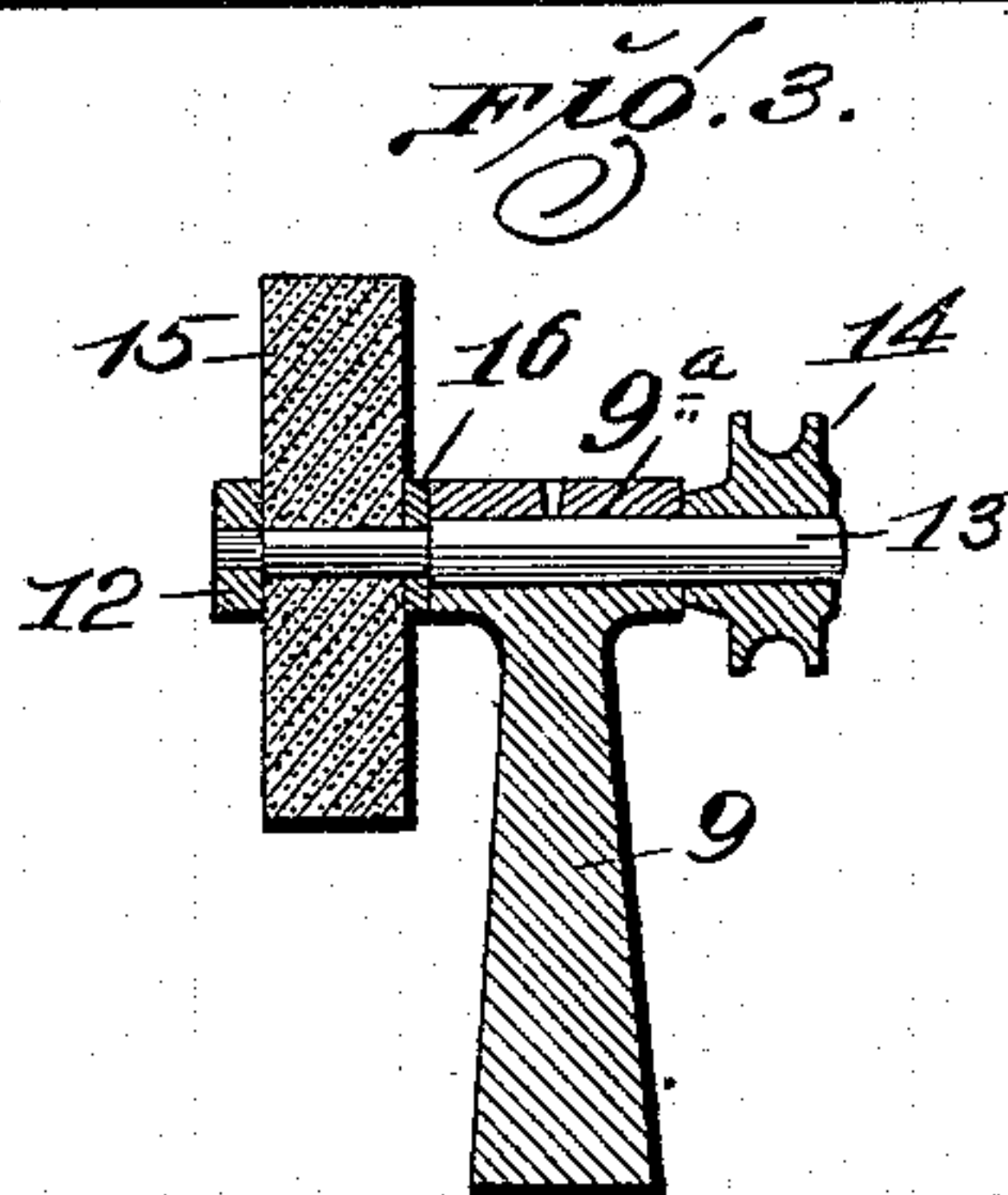
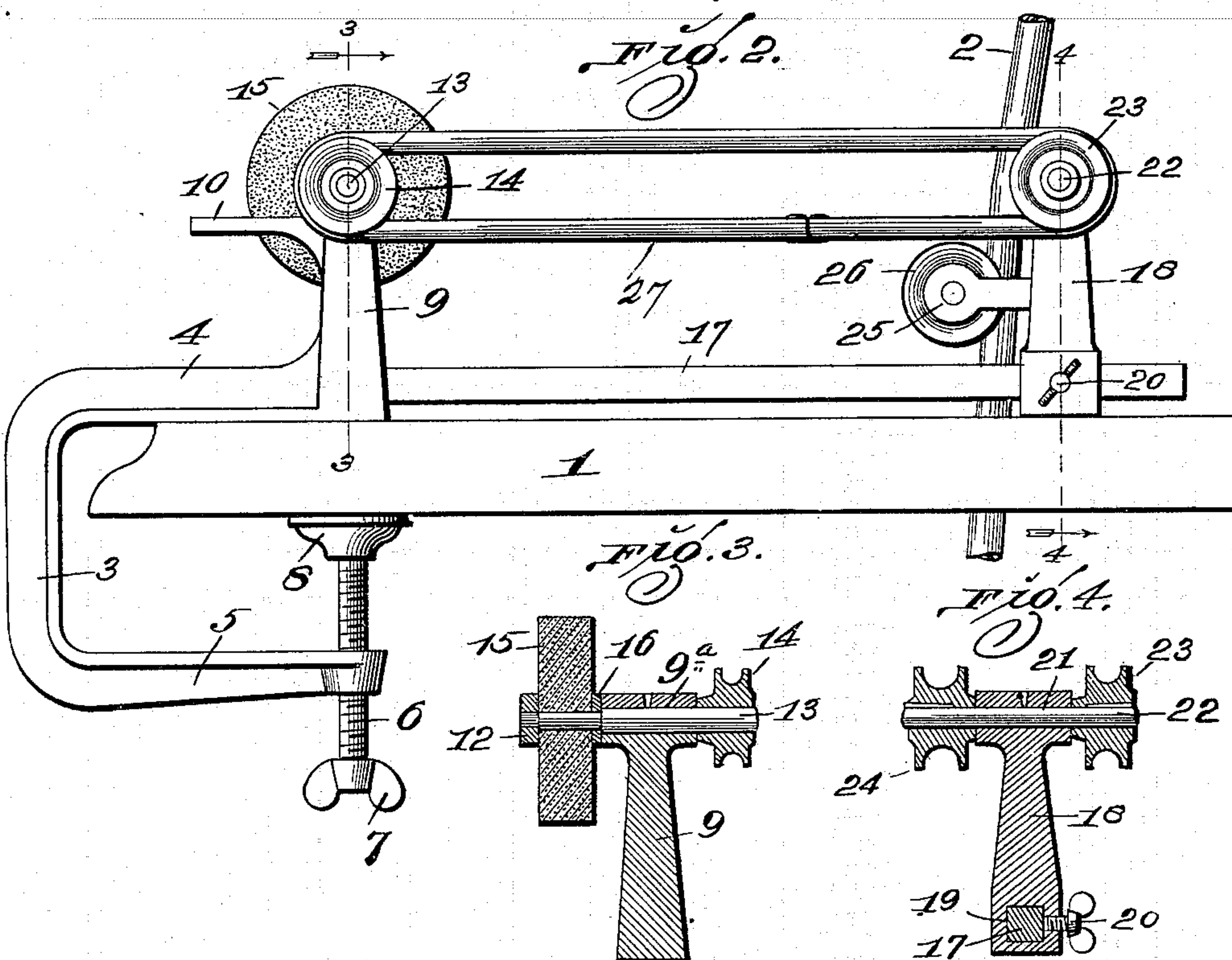
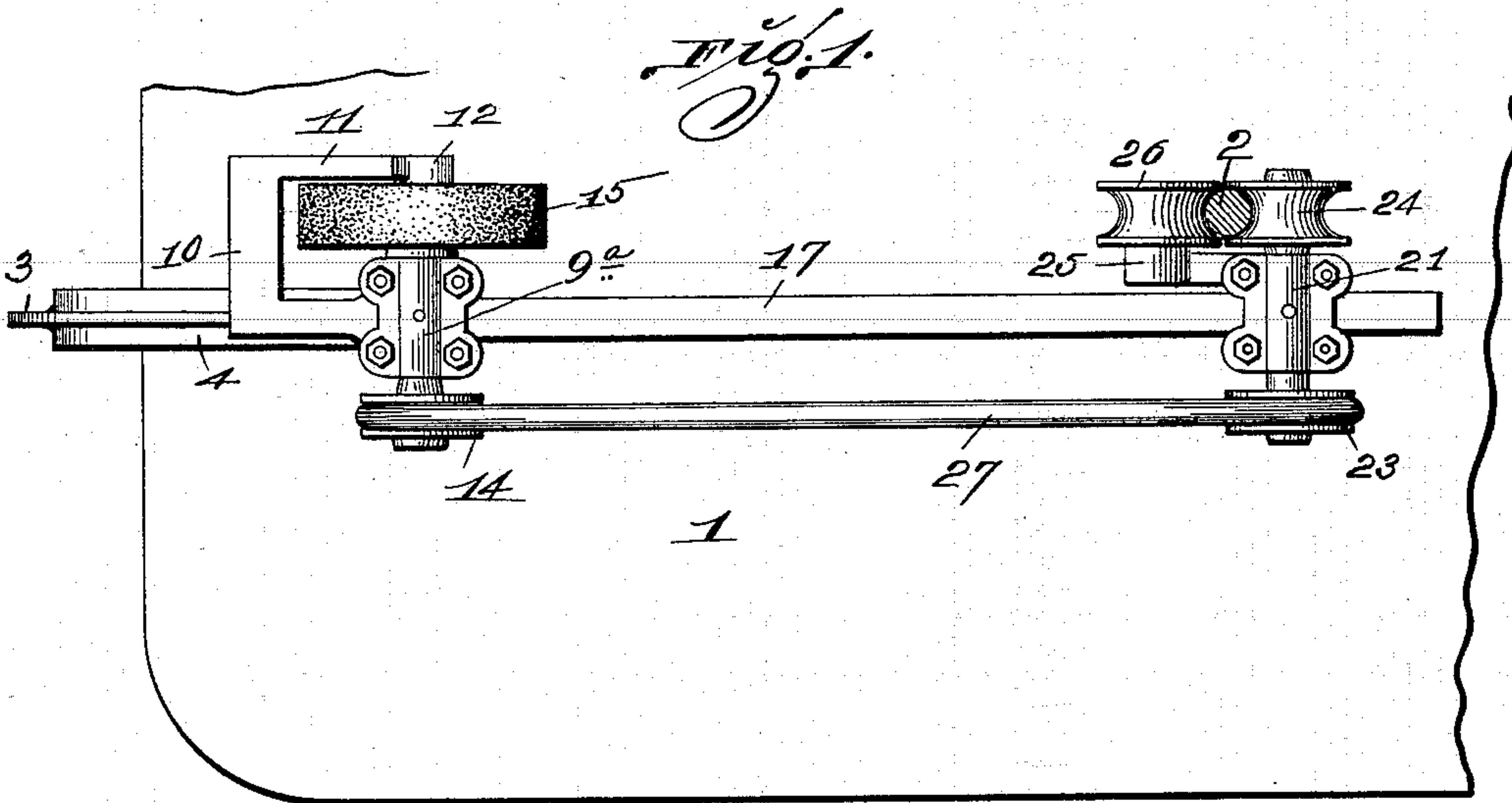
A. C. PICKETT.

EMERY WHEEL ATTACHMENT FOR SEWING MACHINES.

(Application filed Dec. 14, 1897.)

(No Model.)

2 Sheets—Sheet 1.



Attest  
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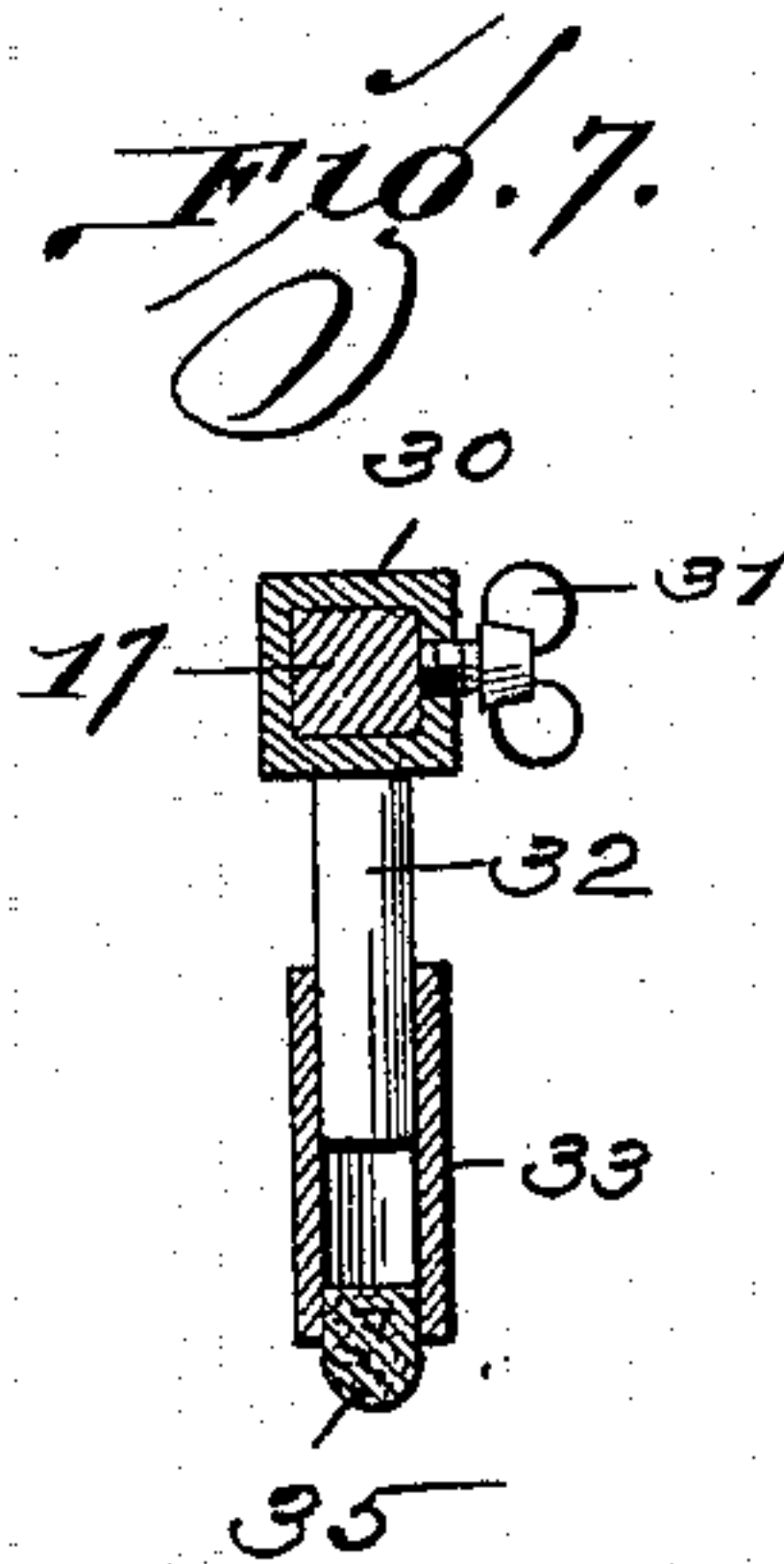
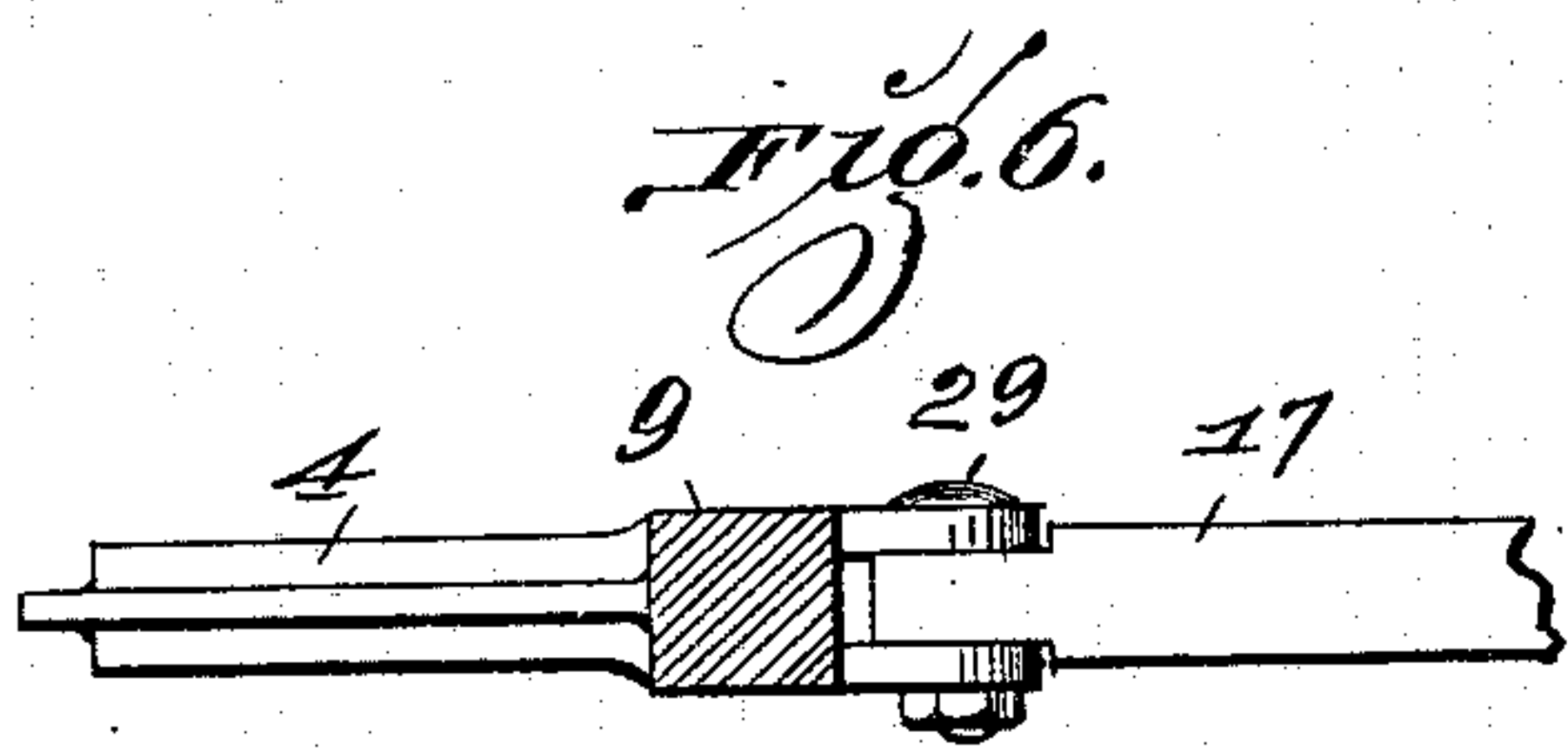
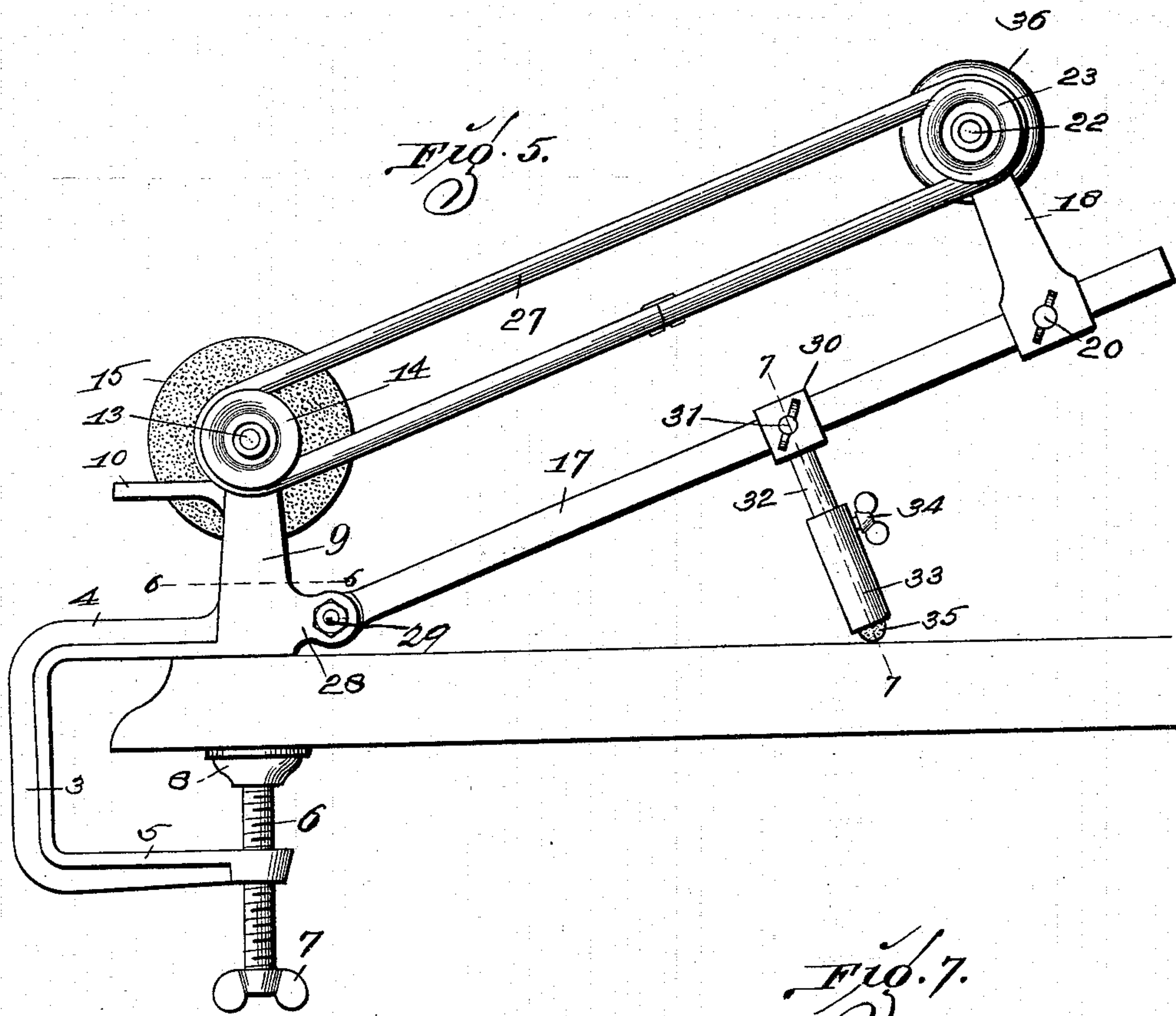
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# UNITED STATES PATENT OFFICE.

AMBRIS C. PICKETT, OF ST. LOUIS, MISSOURI.

## EMERY-WHEEL ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 612,271, dated October 11, 1898.

Application filed December 14, 1897. Serial No. 661,875. (No model.)

*To all whom it may concern:*

Be it known that I, AMBRIS C. PICKETT, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Emery-Wheel Attachments for Sewing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to emery-wheel attachments for sewing-machines; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

Figure 1 is a plan view of the end of a sewing-machine table, showing my improved emery-wheel attachment in position thereon. Fig. 2 is a side elevation of the attachment as applied to the sewing-machine table. Fig. 3 is a vertical sectional view taken approximately on the line 3 3 of Fig. 2. Fig. 4 is a vertical sectional view taken approximately on the line 4 4 of Fig. 2. Fig. 5 is a side elevation of a modified form of my improved attachment. Fig. 6 is a horizontal sectional view taken approximately on the line 6 6 of Fig. 5. Fig. 7 is a vertical sectional view taken approximately on the line 7 7 of Fig. 5.

Referring by numerals to the accompanying drawings, 1 indicates the sewing-machine table, and 2 the belt running from the pedal-wheel through the table to the belt-wheel of the sewing-machine mechanism, which is ordinarily located on top of the table.

In the construction of my improved attachment the metal bar 3 is provided at its lower and upper ends with the horizontally-arranged arms 4 and 5, and passing vertically through the ends of the arm 5 is a screw-threaded shaft 6, provided on its lower end with the winged head 7 and on its upper end with the plate 8. The arm 4 is intended to rest upon the top of the table, and by screwing the shaft 6 through the end of the arm 5 the plate 8 is engaged against the under side of the table and the attachment is rigidly located upon the table. Formed integral with the end of the arm 4 is a vertical post 9, in the upper end of which is formed a transverse bearing 9<sup>a</sup>. A horizontal bracket 10 is formed integral with the front face of the post 9, extends forwardly a slight distance from said

post, and thence laterally, and an arm 11 is formed integral with the end of the lateral portion of said bracket, in the end of which arm 11 is formed a bearing 12, which is in direct alinement with the bearing 9<sup>a</sup>.

The shaft 13 is arranged for rotation in the bearing 9<sup>a</sup>, one end of which shaft operates in the bearing 12, the opposite end of said shaft projecting a slight distance from the bearing 9<sup>a</sup> and being provided with the grooved pulley 14. Rearwardly fixed upon the shaft 13 between the bearing 9<sup>a</sup> and the bearing 12 is wheel 15, of emery or analogous material, there being a washer 16 interposed between said wheel and the bearing 9<sup>a</sup>.

Formed integral with the rear face of the post 9 at a point near the lower end thereof is a rearwardly-extending bar 17, the same being rectangular in cross-section. A post 18 is provided at its lower end with the horizontally-arranged rectangular aperture 19, through which aperture passes the bar 17, and in this manner said post 18 is moved longitudinally upon said bar 17. A set-screw 20, passing through the lower end of the post 18 and engaging against the under side of the bar 17, rigidly holds said post 18 at any desired point.

Formed in the upper end of the post 18 is a transverse bearing 21, in which is arranged for rotation a shaft 22. The ends of said shaft 22 project from the bearing 21, and on one end of said shaft is fixed a grooved pulley 23, which is in direct alinement with the pulley 14. Upon the opposite end of the shaft 22 is fixed a grooved pulley 24.

Formed integral with the front side of the post 18 and extending forwardly therefrom is a bracket 25, to the outside of the end of which is journaled a grooved pulley 26, the same occupying a position slightly below and in front of the grooved pulley 24. A belt 27 operates upon and connects the grooved pulleys 14 and 23.

In the modification shown in Figs. 5, 6, and 7 the construction is very similar to that just described, with the exception that the bar 17 is not formed integral with the post 9, but is pivoted or hinged thereto by forming a pair of ears 28 integral with the rear side of the post 9, locating the forward end of the bar 17 between said ears, and passing a bolt 29 through



said ears and through said forward end of the bar 17. Arranged to slide upon the bar 17 is a rectangular collar 30, which is provided with a set-screw 31 for rigidly fixing said collar upon said bar, and said collar 30 is provided with a downwardly-extending pin 32, which is adapted to enter the sleeve 33, through the upper end of which sleeve passes a set-screw 34, whereby said sleeve is held in a rigid position upon said pin, and located in the lower end of said sleeve 33 is a rubber-faced foot 35. In this modified form the grooved pulley 26 is entirely dispensed with, while the grooved pulley 24 is replaced by a rubber-faced friction-wheel 36.

In the operation of the preferred form of my improved attachment the entire device is rigidly fixed upon the sewing-machine table by screwing the shaft 6 upwardly until the plate 8 clamps against the under side of said table, the device being so positioned as that the belt 2 of the sewing-machine frictionally engages the grooved pulley 24. To attain the best results with my improved device, it is essential that the belt 2 bear with some force upon the grooved pulley 24, and to accomplish this after the belt 2 has been located in the grooved wheel 24 the entire device is pulled forwardly before it is rigidly fixed. By locating the wheel 26 immediately in front and below the grooved pulley 24 and allowing the belt 2 to run in said grooved wheel 26 said belt 2 will not rub or strike against the table as it passes from the opening in said table. The belt 2 frictionally engaging the grooved pulley 24 will rotate the shaft 22, and the rotary motion thus obtained will be imparted to the shaft 13 through the pulleys 23 and 14, over which passes the belt 27. The emery-wheel 15 will thus be rotated and a pair of shears or a knife or any article it is desired to sharpen or grind down may be located upon the rest formed by the bracket 10 and arm 11 and brought into contact with the periphery of said emery-wheel.

The modified form of my improved device is intended for use where the wheel of the sewing-machine does not extend wholly above the table or where it is not practical to utilize the movement of the belt to impart a rotary motion to the emery-wheel. In this modified construction the entire device is so located

upon the table of the sewing-machine as that the rubber-faced wheel 36 frictionally engages the periphery of the belt-wheel of the sewing-machine that is above or partly above the sewing-machine table. By adjusting the sleeve 33 upon the pin 32 and adjusting the collar 30 upon the bar 17 the proper altitude for the friction-wheel 36 is obtained.

When the device is not in use, it can be entirely removed from the sewing-machine, and thus in no way interfere with the operator or the work being done on the sewing-machine.

An attachment of my improved construction is simple, easily applied to or removed from the table, is simple in adjustment, and very efficient in use.

I claim—

1. In a device of the class described, a suitable frame, means for rigidly clamping said frame to a sewing-machine table, a shaft mounted for rotation in said frame, an emery-wheel carried by said shaft, a rest formed integral with the frame in front of said emery-wheel, a second shaft adjustably located and held for rotation on said frame, a grooved wheel carried by said shaft for engaging the belt of the sewing-machine, and suitable connections from the last-mentioned shaft to the first-mentioned shaft for imparting rotary motion, substantially as specified.

2. An attachment for a sewing-machine constructed with a suitable frame, means for clamping said frame to the sewing-machine table, a shaft mounted for rotation in said frame, an emery-wheel carried by said shaft, a rest formed integral with the frame in front of said emery-wheel, a bar extending rearwardly from the frame, a post adjustably carried by said bar, a shaft mounted for rotation in the upper end of said post, a grooved wheel carried by said shaft for frictionally engaging the belt of the sewing-machine, and means for imparting a rotary motion from the last-mentioned shaft to the first-mentioned shaft, substantially as specified.

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

AMBRIS C. PICKETT.

Witnesses:

EDWARD E. LONGAN,  
ALBERT J. MCCAULEY.