Dec. 21, 1948. E. M. LA MONT ET AL 2,456,959

LATHE AND MOTOR BASE FOR WATCHMAKER'S LATHES

Filed Dec. 15, 1947 2 Sheets-Sheet 1

Fig. 1.

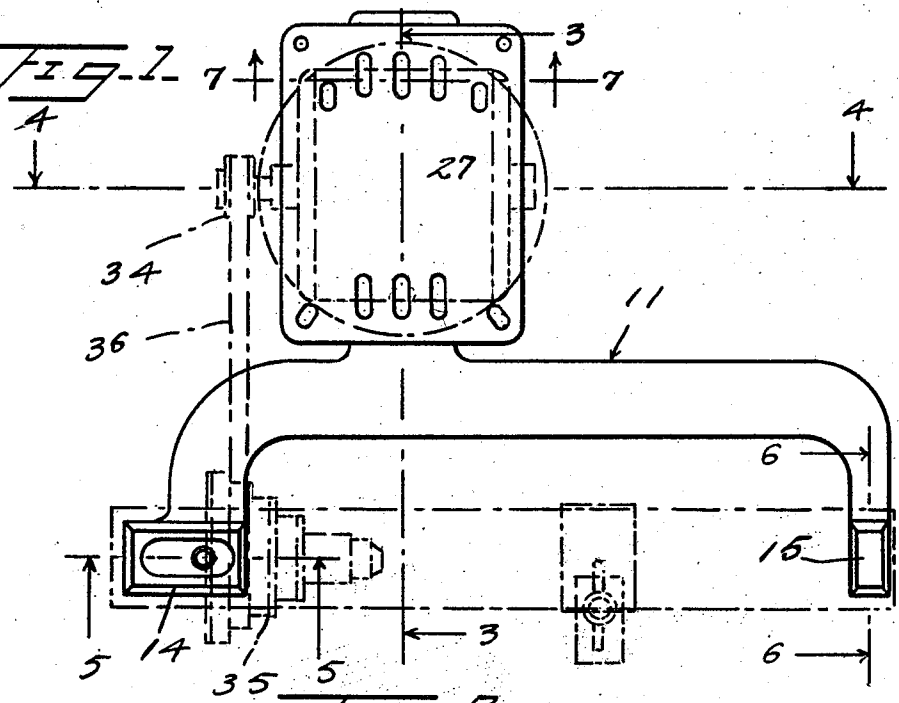


Fig. 2.

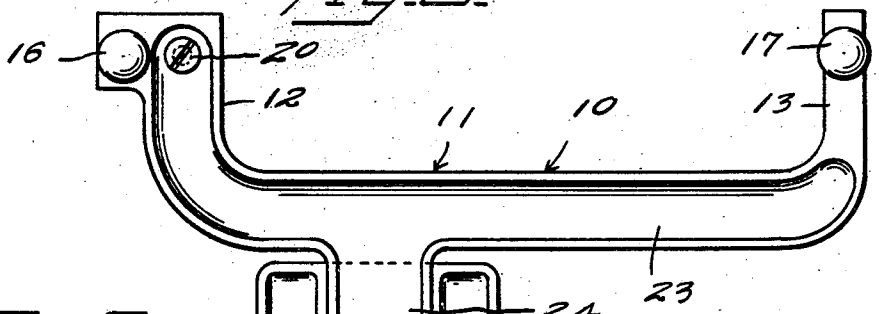
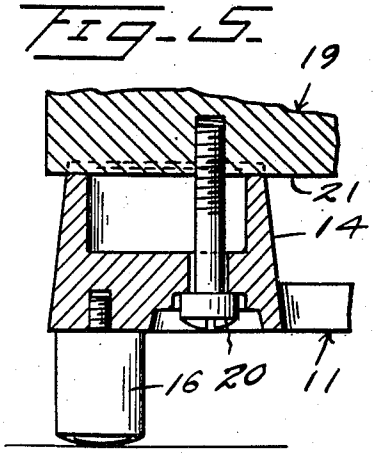
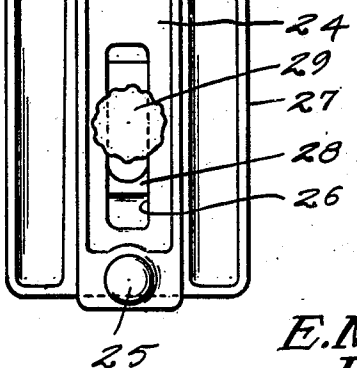


Fig. 5.





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LATHE AND MOTOR BASE FOR WATCHMAKER'S LATHES

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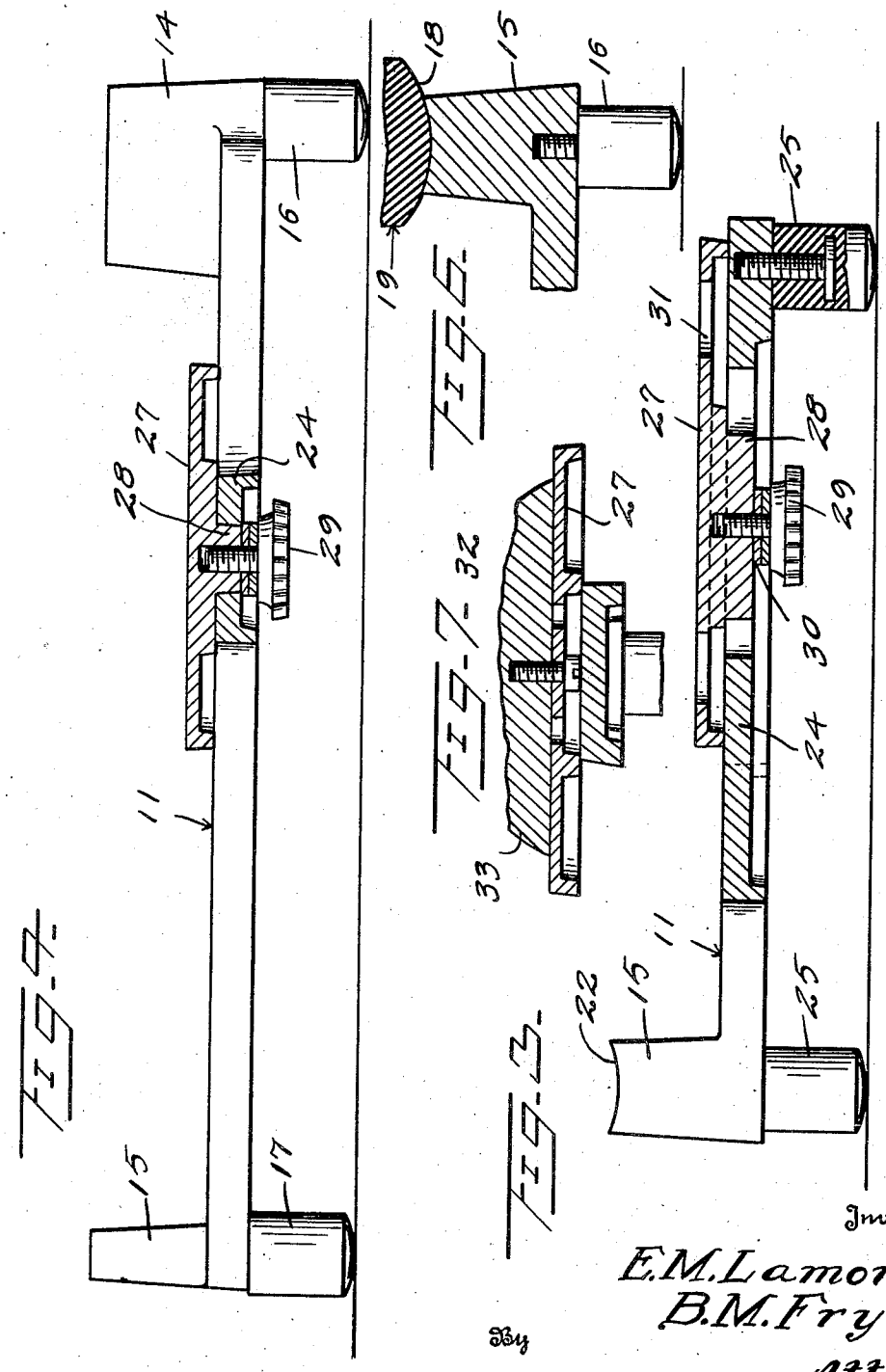


FIG-4-

FIG-5-

FIG-7-

FIG-6-

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LATHE AND MOTOR BASE FOR WATCHMAKERS' LATHES

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Application December 15, 1947, Serial No. 791,792

3 Claims. (Cl. 248—23)

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This invention relates to a base or mounting for watchmakers' lathes and motors.

An object of this invention is to provide an improved mounting for a watchmaker's lathe and motor which will permit the firm mounting for the lathe and an adjustable mounting for the motor so that the position of the motor relative to the lathe can be adjusted to provide for different lathe speeds.

Another object of this invention is to provide a mounting of this kind which includes a U-shaped base having a rearwardly extending arm extending from the bight thereof, the opposite side of the U-member having upstanding saddles on which the lathe is adapted to be firmly mounted, and the readwardly extending arm having a motor base plate disposed thereon and adjustable lengthwise thereof so that the belt between the motor and lathe may be tightened or loosened.

A further object of this invention is to provide a mounting of this kind which can be formed from cast material and will require a minimum of machine work so that the device can be produced at relatively small cost.

To the foregoing objects, and others which may hereinafter more fully appear, the invention consists of the novel construction, combination and arrangement of parts, as will be more specifically referred to and illustrated in the accompanying drawings, but it is to be understood that changes, variations, and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawings:

Figure 1 is a top plan view of a base for watchmakers' lathes and motors constructed according to an embodiment of this invention.

Figure 2 is a bottom plan view of the device.

Figure 3 is a sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a sectional view taken on the line 4—4 of Figure 1.

Figure 5 is a fragmentary sectional view taken on the line 5—5 of Figure 1.

Figure 6 is a fragmentary sectional view taken on the line 6—6 of Figure 1.

Figure 7 is a fragmentary sectional view taken on the line 7—7 of Figure 1.

Referring to the drawings, the numeral 10 designates generally a base structure which is formed of a U-shaped lathe support 11 provided at the forward ends of the parallel legs 12 and 13 thereof with upstanding lathe bed supporting lugs 14 and 15, respectively. The U-shaped member 11

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has secured to the lower side thereof rubber supporting feet 16 and 17 which are secured to the legs 12 and 13 adjacent the forward ends of the latter. The bed supporting lugs 14 and 15 are adapted to engage the lower convex side 18 of a lathe bed 19 and the bed 19 is secured to the lugs 14 and 15 by means of at least one securing bolt 20 which extends through the upstanding lug 14 as shown in Figure 5. The lug 14 engages beneath the headstock of the lathe bed 19 and the upper end of the lug 14 is formed with a concave upper surface 21 forming a seat for the convex surface 18 of the bed 19.

The tailstock lug 15 is also formed with a concave seat 22 on which the tailstock end of the bed 19 is adapted to snugly engage. It will be understood that if desired or considered necessary a second bolt such as bolt 20 may be extended upwardly through the lug 15 for firmly securing the bed 19 on the lug 15. The bight 23 of the U-shaped member 11 has extending rearwardly therefrom a motor supporting arm or base 24. The arm or base 24 has secured to the rear end thereof a supporting foot 25 and the arm 24 is also formed with a lengthwise extending slot 26.

A base plate 27 which constitutes a motor base engages on the upper side of the arm 24 and the plate 27 is formed with a downwardly extending lug 28 which slidably engages in the slot 24 and holds the plate 27 against lateral or turning movement.

A clamping bolt 29 is threaded into the lug 28 and one or more washers 30 may be interposed between the bolt 30 and the lower side of the lug 28. The plate 27 is formed with a series of elongated pairs of slots 31 within selected pairs of which motor securing bolts 32 are adapted to engage so that the motor base 33 may be firmly secured to the base plate 27 in a selected position for aligning the driving pulley 34 with a selected groove of a headstock pulley 35. The two pulleys 34 and 35 are connected together for operation by means of a belt 36. The provision of the elongated slots 31 not only permits lateral adjustment of the motor base 33 and the motor but also provides for rearward or forward adjustment of the motor to maintain the belt 36 in the desired tight position.

The mounting hereinbefore described can be formed out of cast material such as aluminium or the like so that the mounting will be relatively light in weight. By providing the rubber feet 16, 17 and 25 a three point mounting is provided so that the motor and lathe will be firmly supported on a plane surface such as the top of a bench or

the like. This mounting being formed out of cast material can be constructed at a relatively low cost and the mounting will provide a firm base construction for both the lathe and the motor in order that precision work may be done on the lathe.

We claim:

1. A combined watchmakers' lathe and motor mounting comprising a U-shaped base member, said member being formed with a relatively long bight and relatively short legs, rubber foot members carried by the forward ends of said legs, an upstanding lathe bed supporting lug carried by the forward ends of said legs, means engaging at least one lug for securing the lathe bed on said lugs, an arm extending rearwardly from said bight, a rubber foot carried by said arm, a motor supporting plate, and means securing said plate on said arm.

2. A combined watchmakers' lathe and motor mounting comprising a U-shaped base member, said member being formed with a relatively long bight and relatively short legs, rubber foot members carried by the forward ends of said legs, an upstanding lathe bed supporting lug carried by the forward ends of said legs, means engaging at least one lug for securing the lathe bed on said lugs, an arm extending rearwardly from said bight, a rubber foot carried by said arm, said arm having a lengthwise slot therein, a motor supporting plate, an elongated lug carried by said plate engaging in said slot and adjustable lengthwise thereof, and a clamping bolt threaded into said latter lug for clamping said plate in adjusted position.

3. A combined watchmakers' lathe and motor mounting comprising a U-shaped base member, said member being formed with a relatively long bight and relatively short legs, rubber foot members carried by the forward ends of said legs, an upstanding lathe bed supporting lug carried by the forward ends of said legs, each lug on the upper end thereof being formed with a concave seat on which the lathe bed is adopted to engage, means engaging at least one lug for securing the lathe bed on said lugs, an arm extending rearwardly from said bight, a rubber foot carried by said arm, a motor supporting plate, and means securing said plate on said arm.

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No references cited.