

Feb. 7, 1928.

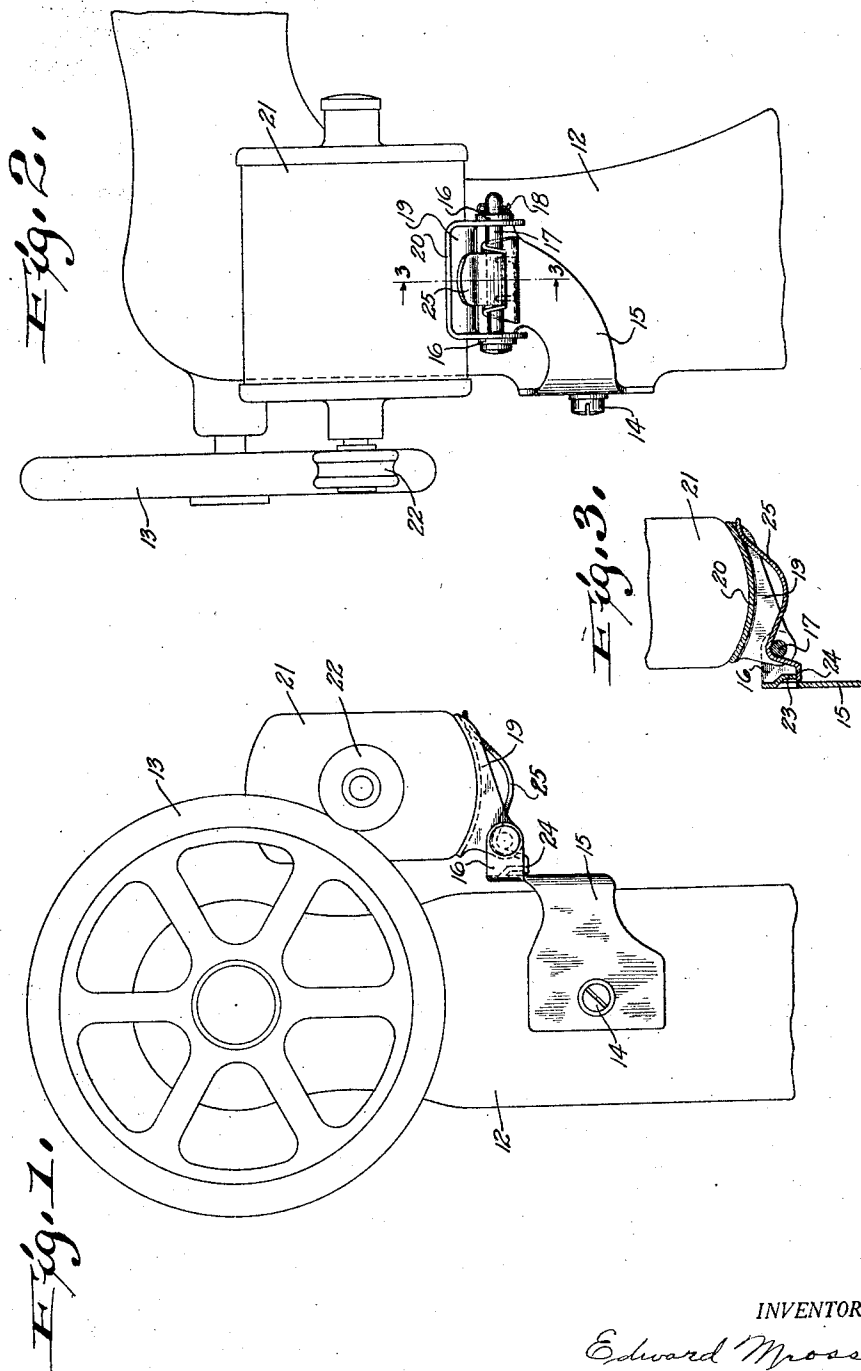
1,658,458

E. MROSS

MOTOR MOUNTING

Filed May 5, 1926

2 Sheets-Sheet 1



INVENTOR.

Edward Mross.

BY

Mossell Keeney Mossell
ATTORNEYS

Feb. 7, 1928.

1,658,458

E. MROSS

MOTOR MOUNTING

Filed May 5, 1926

2 Sheets-Sheet 2

Fig. 8.

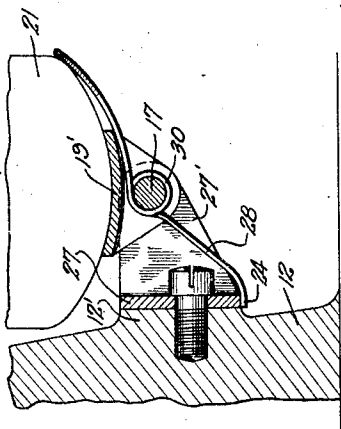


Fig. 9.

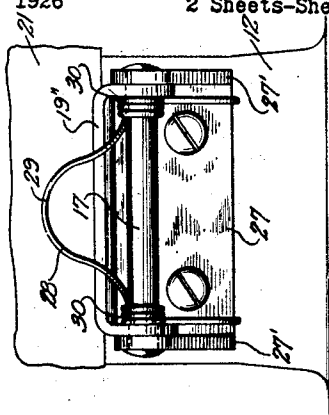


Fig. 5.

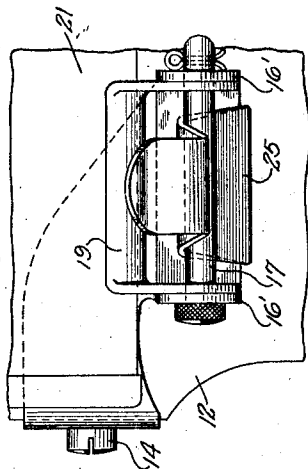


Fig. 7.

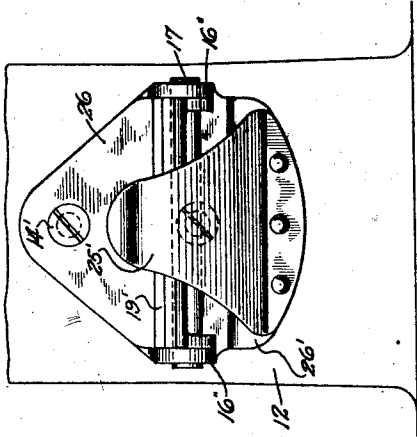


Fig. 4.

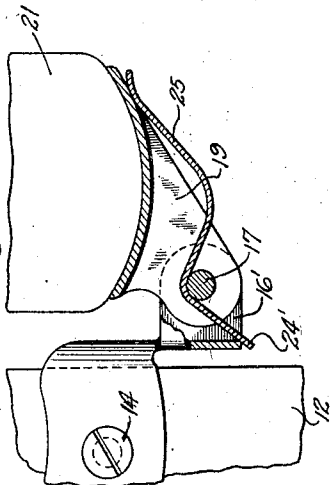
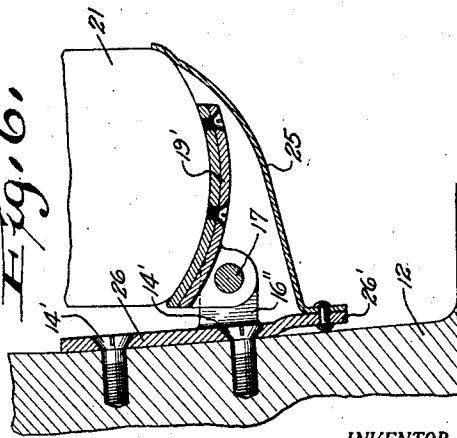


Fig. 6.



INVENTOR.

Edward Mross.
BY
Morsell Kueny Morsell.
ATTORNEYS.

Patented Feb. 7, 1928.

1,658,458

UNITED STATES PATENT OFFICE.

EDWARD MROSS, OF RACINE, WISCONSIN, ASSIGNOR TO HAMILTON BEACH MFG. CO.,
OF RACINE, WISCONSIN, A CORPORATION OF WISCONSIN.

MOTOR MOUNTING.

Application filed May 5, 1926. Serial No. 106,980.

This invention relates to improvements in motor mountings, adapted for attaching flat type motors to sewing machine heads.

It is one of the objects of the present invention to provide a motor mounting for sewing machines to yieldingly hold the pulley wheel of the motor in frictional engagement with the machine hand wheel.

A further object of the invention is to provide a motor mounting constructed so that the motor and mounting may be manually pivoted away from the hand wheel, the pivotal movement being against the tension of a spring whereby when the mounting is released it will automatically return so that the pulley wheel is again in hand wheel engaging position.

A further object of the invention is to provide a motor mounting of the class described which gives mounting on the end of the sewing machine head, which is desirable in view of the arrangements of some types of sewing machines.

A further object of the invention is to provide a motor mounting which is of very simple construction, is strong and durable, and is well adapted for the purposes set forth.

With the above and other objects in view, the invention consists of the improved motor mounting, and its parts and combinations as set forth in the claims, and all equivalents thereof.

In the accompanying drawings in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is an end view of a sewing machine head showing the mounting and a motor held thereby in position;

Fig. 2 is a side view thereof;

Fig. 3 is a sectional view taken on line 3-3 of Fig. 2;

Fig. 4 is a fragmentary sectional view of a modified form of mounting;

Fig. 5 is a front view thereof;

Fig. 6 is a fragmentary cross-sectional view showing a second modified form of motor mounting;

Fig. 7 is a front view thereof;

Fig. 8 is a fragmentary cross-sectional view of a further modified form of mounting; and

Fig. 9 is a front view thereof.

Referring now more particularly to the form of the invention shown in Figs. 1, 2

and 3, of the drawing, it will appear that the numeral 12 indicates the head portion of a sewing machine, revolubly carrying a hand wheel 13 of ordinary construction.

Secured to the end of the head by means of a screw 14 is a bracket member 15 bent substantially at right angles parallel with the side of the head and formed with a pair of offset apertured ears 16. A headed pivot bolt 17 is extended through said ears and held in position by a cotter pin 18.

Pivotaly mounted on the bolt 17 is a saddle member 19 in the upper portion 20 of which is seated and secured a small flat type electric motor 21. The motor has the usual pulley or drive wheel 22 which is normally in frictional engagement with the hand wheel 13 to propel the same.

Struck out from the medial portion of the bracket 15 is a downwardly projecting lip 23. A plate spring member 25, shaped as shown in Figs. 2 and 3, engages medially the top of the bolt 17 and its inner end portion engages under the lip, as at 24. The outer end portion of the spring member yieldingly bears under the outer edge portion of the saddle seat 20.

In use, if it is desired to disengage the motor from the hand wheel, the saddle member is pivoted outwardly. Upon its being released, the spring will return it to normal engaging position.

In the form of motor mounting shown in Figs. 4 and 5, the bracket member 15', secured to the end of the head 12 by a screw 14, is bent at right angles and offset downwardly, a pivot bolt 17 being mounted through the apertured ears 16' projecting from the offset portion. The saddle member 19 is similar to that shown in the preferred form of the invention and a flat plate spring member 25 is similarly arranged, the inner end of the same, however, engaging under the lower edge of the offset portion of the bracket, as at 24'.

Figs. 6 and 7 illustrate a motor mounting adapted for securement to the side of the head 12. A plate member 26 having a lower struck out portion 26' is secured to the head by screws 14' and is provided with medial, outwardly projecting apertured ears 16'' to receive the pivot rod 17. The saddle member 19' carrying the motor 21, is pivotaly mounted on said rod in the usual manner and is yieldingly maintained in normal engaging

position by a spring 25' shaped as shown in Fig. 7. The spring, however, does not engage the pivot rod, but is maintained in position by being riveted to the struck-out portion 26' of the plate 26.

The form of mounting shown in Figs. 8 and 9 requires a flat portion 12' to be cast and milled on the side of the sewing machine head. A flat bracket 27 is secured thereto and the pivot bolt 17 extends through the projecting ears 27', the saddle 19'' being pivotally mounted on the bolt. The spring 28 employed is of a different character than that shown in the other forms of the invention. As clearly shown in Fig. 9 the spring is formed of wire and bent to form a medial engaging portion 29. The spring is also coiled about the bolt, as at 30, and the inner ends thereof are held under the lower edge of the bracket, as at 24.

From the foregoing description it will be seen that the improved motor mountings for sewing machine heads are of very simple and novel construction, and are well adapted for the purposes set forth.

What is claimed as the invention is:

1. In combination, a sewing machine head having a hand wheel, a bracket member rigidly secured to the end of the head, said bracket member having a right angular off-set portion adjacent the side of the head, bearing ears projecting from said off-set por-

tion, a pivot bolt extending therethrough, a saddle member pivotally mounted on said bolt, a motor carried by said saddle member, the pulley wheel of said motor normally being in engagement with said hand wheel, and a curved plate spring member medially supported by and engaging said bolt and engaging at its inner end the off-set portion of the bracket and yieldingly engaging at its outer end portion the outer portion of said saddle, said spring serving to yieldingly maintain the motor in a hand wheel engaging position.

2. In combination, a sewing machine head having a hand wheel, a bracket member rigidly secured to said head, said bracket member having an angularly off-set portion adjacent the side of the head, bearing ears projecting from said off-set portion, a pivot bolt extending therethrough, a saddle member pivotally mounted on said bolt, a motor carried by said saddle member, the pulley wheel of said motor normally being in engagement with said hand wheel, and a spring member engaging at its inner end the off-set portion of the bracket and yieldingly engaging at its outer end portion the outer portion of the saddle, said spring serving to yieldingly maintain the motor in a hand wheel engaging position.

In testimony whereof, I affix my signature.
EDWARD MROSS.