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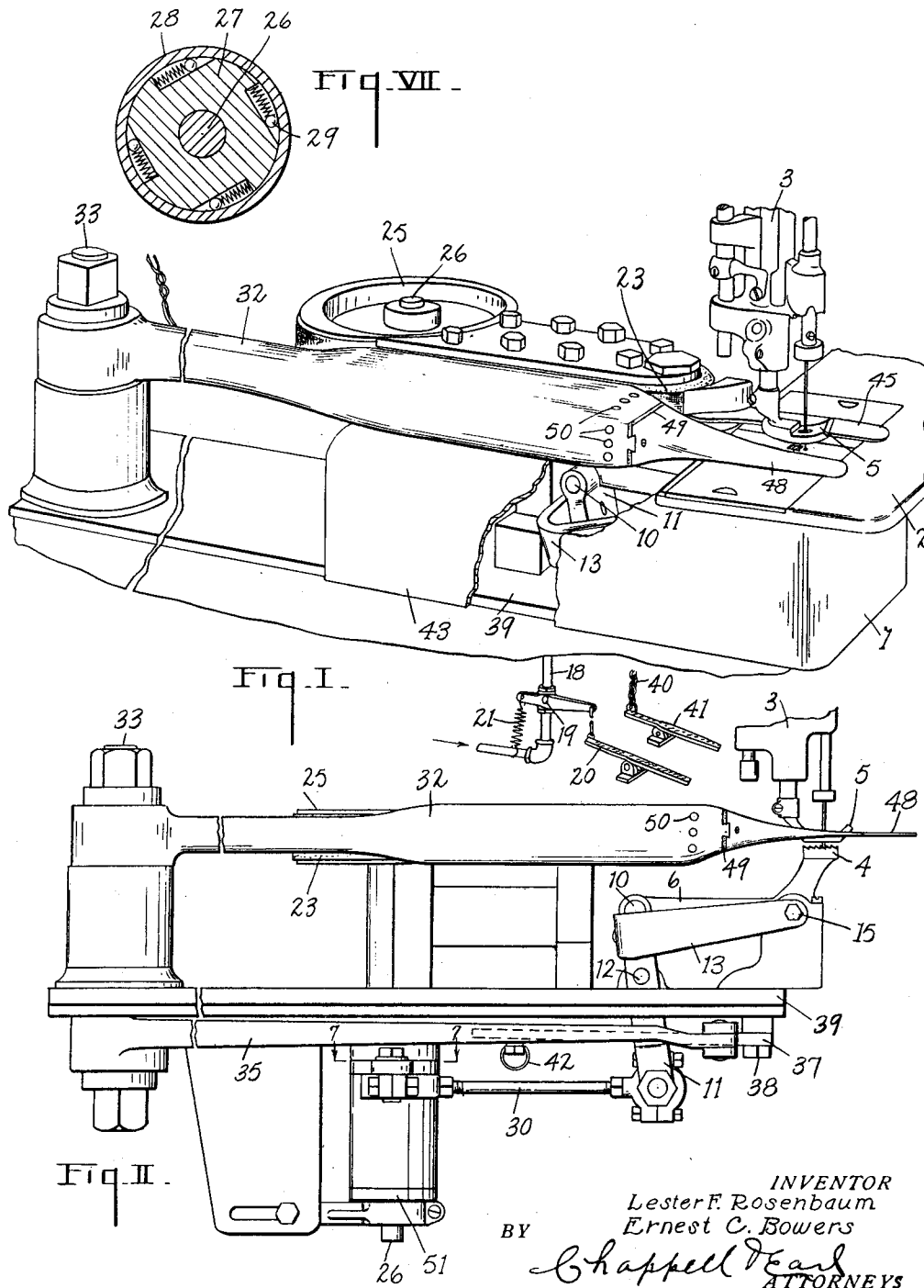
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PRESSING MACHINE

Filed May 14, 1925

2 Sheets-Sheet 1



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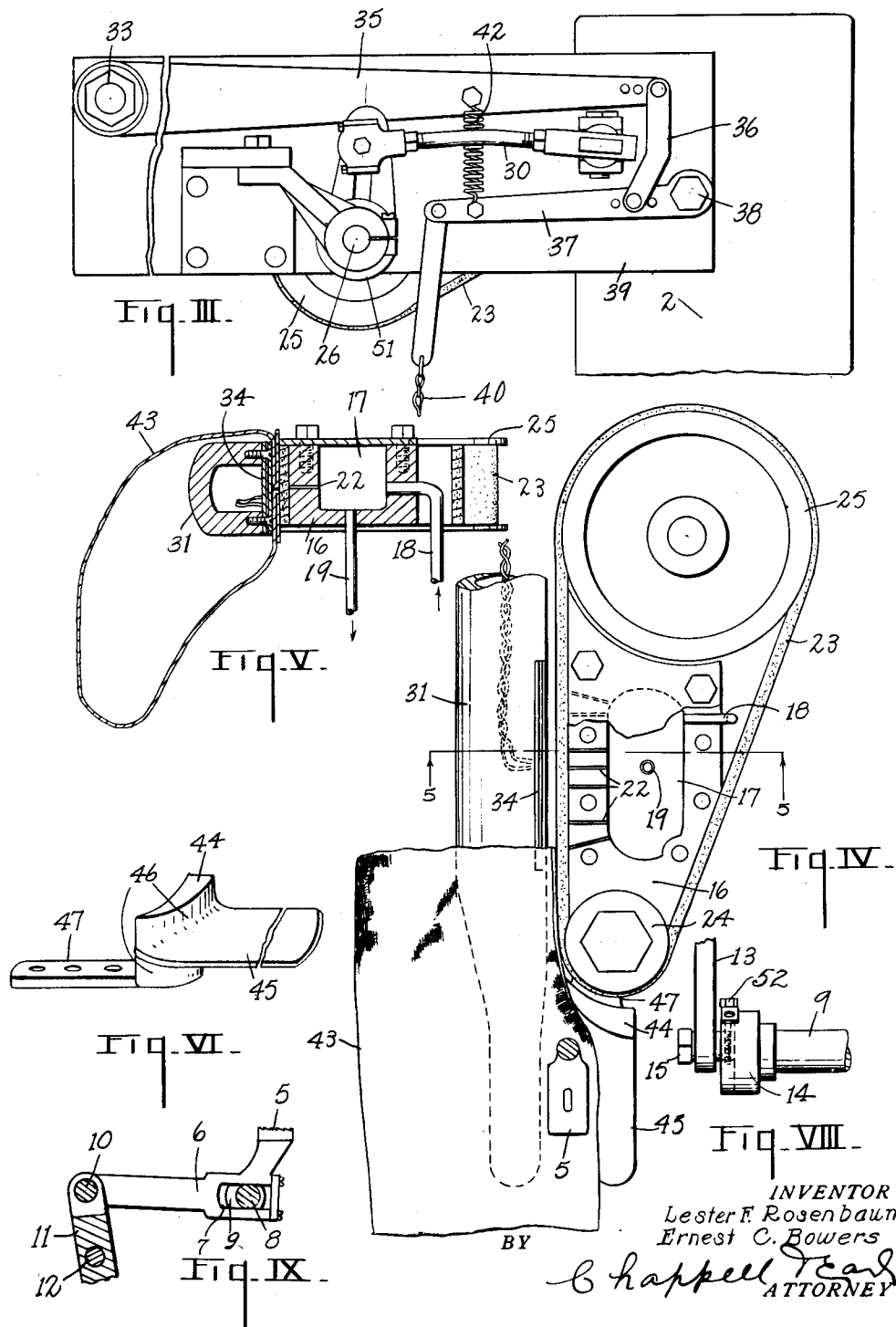
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2 Sheets-Sheet 2



UNITED STATES PATENT OFFICE.

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PRESSING MACHINE.

Application filed May 14, 1925. Serial No. 30,276.

This invention relates to a pressing machine for sewing machines.

The main objects of this invention are:

First, to provide an improved sewing mechanism with means for pressing the seam as formed.

Second, to provide an improved seam pressing mechanism having these advantages which is very compact and may be readily applied to sewing machines of standard type.

Third, to provide an improved seam pressing mechanism which is well adapted for pressing the seams of trouser legs and the like as sewed.

Fourth, to provide a machine embodying these advantages which is simple and easy to operate.

Objects pertaining to details and economies of construction and operation of our invention will definitely appear from the detailed description to follow.

We accomplish the objects of our invention by the devices and means described in the following specification. The invention is clearly defined and pointed out in the claims.

A structure embodying the features of our invention is clearly illustrated in the accompanying drawing forming a part of this application, in which:

Fig. I is a fragmentary perspective view of a sewing machine showing an embodiment of our invention, parts being shown conventionally.

Fig. II is a fragmentary side elevation of the structure shown in Fig. I.

Fig. III is an inverted fragmentary view of parts of the mechanism shown in Figs. I and II.

Fig. IV is a fragmentary plan view.

Fig. V is a fragmentary view partially in section on a line corresponding to line 5—5 of Fig. IV.

Fig. VI is a perspective view of the seam opening and work guiding member partially broken away.

Fig. VII is a horizontal section through the driving ratchet on a line corresponding to line 7—7 of Fig. II.

Fig. VIII is a detail view of parts of the feed mechanism.

Fig. IX is a detail sectional view showing

further details of the sewing machine feed mechanism.

In the drawing the sectional views are taken looking in the direction of the little arrows at the ends of the section lines and similar numerals of reference indicate similar parts throughout the several views.

Referring to the drawing, 1 represents the frame of a sewing machine and 2 the bed plate thereof. Only such parts of the sewing mechanism 3 are shown as seem necessary to illustrate an adaptation of our improvements.

The sewing mechanism includes a feed member 4 which is operatively associated with the presser foot 5. The feed member 4 is carried by the support 6 having a slot 7 therein engaging the eccentric pin 8 on the shaft 9. The outer end of this support 6 is pivoted at 10 upon the upper end of the lever 11, the lever being pivoted at 12.

This lever 11 has an arm 13 connected to the crank 14 of the shaft 9 by means of the wrist pin 15. This wrist pin is adjustably connected to the crank disk by the screw 52 to vary the stroke of the lever. The details of this connection are not illustrated as suitable structures are well known in the art.

At the rear of the sewing mechanism I mount a pressing mechanism comprising the bed member 16 having a steam chamber 17 therein provided with an inlet 18 and a discharge 19. The inlet 18 has a valve 19 connected to the pedal 20, the valve being held normally closed by the spring 21. The steam chamber has ports 22 opening to the face of the bed member.

The belt 23 of felt or other suitable material is mounted on the pulleys 24 and 25 arranged at the ends of the bed member so that the rearwardly traveling reach of the belt is supported by the face of the bed member and over the steam ports 22 so that steam is discharged through the belt.

The pulley 25 is a driven pulley, the shaft 26 of the pulley having secured thereto a driven ratchet member 27 which is surrounded by the driving sleeve 28. Clutch balls 29 are disposed between the driving and driven members as shown in Fig. VII.

The driven ratchet member 28 is connected by the link 30 to the lower end of the

lever 11 so that as the lever is oscillated in actuating the sewing mechanism feed member the belt 23 is driven in synchronism with a step by step movement.

5 The pressing member 31 is carried by the arm 32 mounted on the pivot 33. The pressing member 31 has a heating element 34, preferably an electric heating element, the pressing member 31 being adapted to coact
10 with the bed member 16 in pressing the work as the work is carried along by the belt 23.

The supporting pivot 33 has a long arm 35 secured to the lower end thereof and connected by the link 36 to a lever 37 pivoted
15 at 38 on the under side of the bed plate 39, the lever being connected by the chain 40 to a pedal 41. The spring 42 connecting the arm 35 with the lever 37 acts to normally lift the pedal. The work is indicated
20 at 43 with the press closed thereon.

To assist in opening the seam and guiding the work to the pressing means, we provide a seam opening and guiding member
25 designated generally by the numeral 44 and comprising a forwardly projecting plate 45 with turning surfaces 46 at the rear end thereof. This opening and guiding member is provided with a supporting arm 47
30 which is secured on the under side of the bed member 16.

The seam opening plate 45 projects forwardly at the rear of the presser foot 5 so that the operator can easily start the
35 work with one edge of the seam on each side of the plate and as it is carried rearwardly the seam is opened and directed to the belt 23 as shown in Fig. IV.

To assist in guiding the work to the pressing member 31, that member is provided
40 with a forwardly projecting finger 48 which is preferably of non-heat conducting material such as hard fiber and is insulated from the pressing member 31 at 49. The pressing
45 member 31 is also preferably provided with a series of holes 50 at its front end to further protect the guiding finger.

The supporting arm 32 for the pressing member 31 is of such length that the work,
50 such for instance as a trouser leg, may be supported thereby until completed, the pressing member being allowed to swing open for the removal of the work.

To insure movement of the belt 23 in
55 one direction only, we provide a holding ratchet 51 for the shaft 26, the holding ratchet being substantially the same as the driving ratchet except that it is reversed.

We have not attempted to illustrate various adaptations and embodiments of our improvements which we contemplate as we believe the disclosure made will enable the
60 embodiment or adaptation thereof as may be desired.

65 Our improvements may be readily embod-

ied in various types of sewing machines and result in a great saving of time and labor as the seams are effectively opened and pressed as the work proceeds, such seam pressing having heretofore, so far as we
70 are aware, required a separate operation.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:

1. An apparatus of the class described
75 comprising a bed member provided with a steam chamber and having a steam delivery opening in the face thereof, a driven feed belt, belt supporting and driving pulleys
80 disposed at the ends of the bed member so that said feed belt travels across the face thereof, a seam opening and guiding member disposed to open the seam and guide the work to said feed belt, a pressing member
85 provided with a heating unit, a pivotally mounted supporting arm for said pressing member whereby it is supported in coacting relation to said bed member, said supporting arm constituting a work support, a guiding
90 finger projecting forwardly from said pressing member and heat insulated therefrom, and pedally operated actuating means for said pressing member.

2. An apparatus of the class described
95 comprising a bed member provided with a steam chamber and having a steam delivery opening in the face thereof, a driven feed belt, belt supporting and driving pulleys disposed at the ends of the bed member so that
100 said feed belt travels across the face thereof, a pressing member provided with a heating unit, a pivotally mounted supporting arm for said pressing member whereby it is supported in coacting relation to said bed
105 member, said supporting arm constituting a work support, a guiding finger projecting forwardly from said pressing member and heat insulated therefrom, and pedally operated actuating means for said pressing member.
110

3. In a pressing machine, the combination
of a bed member provided with a steam chamber and having a steam delivery opening in the face thereof, a feed belt supported
115 to travel across the face of said bed member, a pressing member provided with a heating unit, a pivotally mounted supporting arm for said pressing member whereby it is supported in coacting relation to said bed
120 member, said supporting arm constituting a work support, a work guiding finger projecting forwardly from said pressing member and heat insulated therefrom, and pedally operated actuating means for said pressing member.
125

4. In a pressing machine, the combination
of a bed member provided with a steam chamber and having a steam delivery opening in the face thereof, a feed belt supported
130 to travel across the face of said bed mem-

ber, a pressing member provided with a heating unit, a pivotally mounted supporting arm for said pressing member whereby it is supported in coacting relation to said bed member, said supporting arm constituting a work support, and pedally operated actuating means for said pressing member.

5 5. A seam pressing means comprising a bed member provided with a heating means, 10 a driven belt adapted to travel over said member, a coacting pressing member, a pivoted arm by which said pressing member is carried, said arm being adapted as a support for the work, a seam opening and guide 15 member means disposed in front of said belt

to spread the seam and guide the same thereto, and means for actuating said pressing member.

6. A seam pressing means comprising a bed member provided with a heating means, 20 a driven belt adapted to travel over said bed member, a coacting pressing member, a pivoted arm by which said pressing member is carried, said arm being adapted as a support for the work, and means for actuating 25 said pressing member.

In witness whereof we have hereunto set our hands.

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