W. M. BRAUN.

APPARATUS FOR FINISHING GLOVES.

APPLICATION FILED AUG. 29, 1917.

1,292,240.

Patented Jan. 21, 1919.

2 SHEETS—SHEET 1.

Fig. 1.

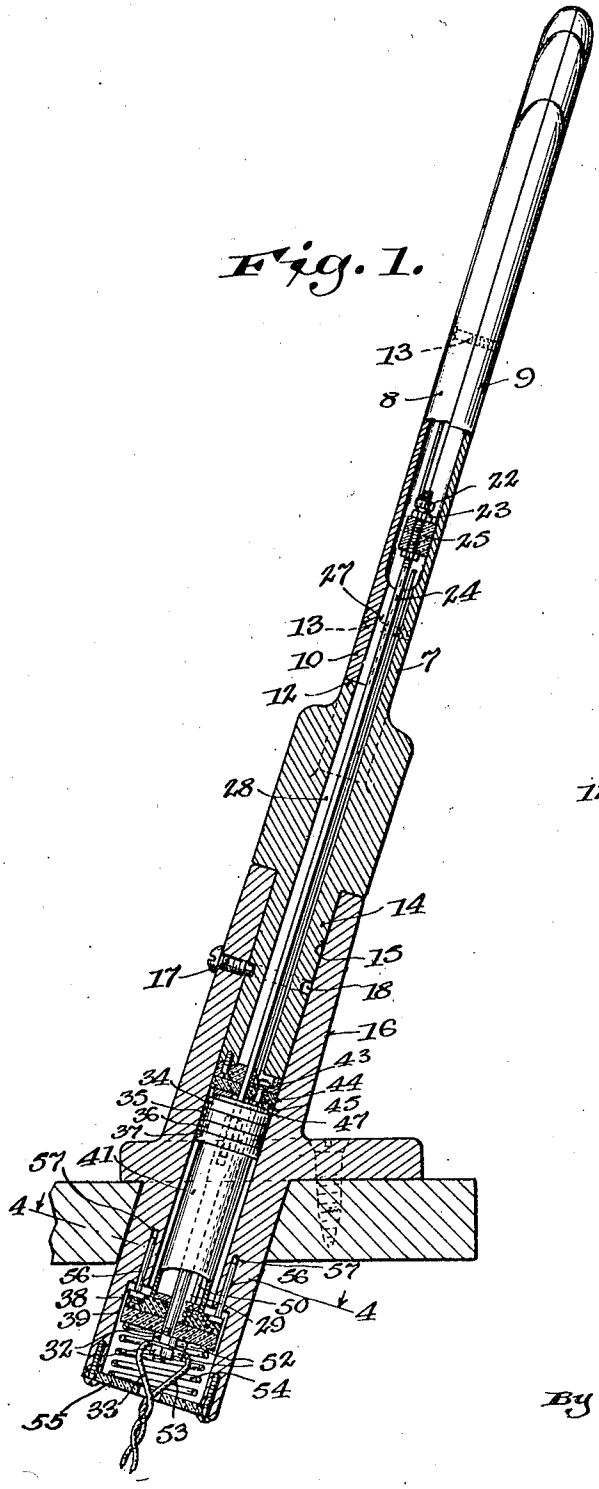
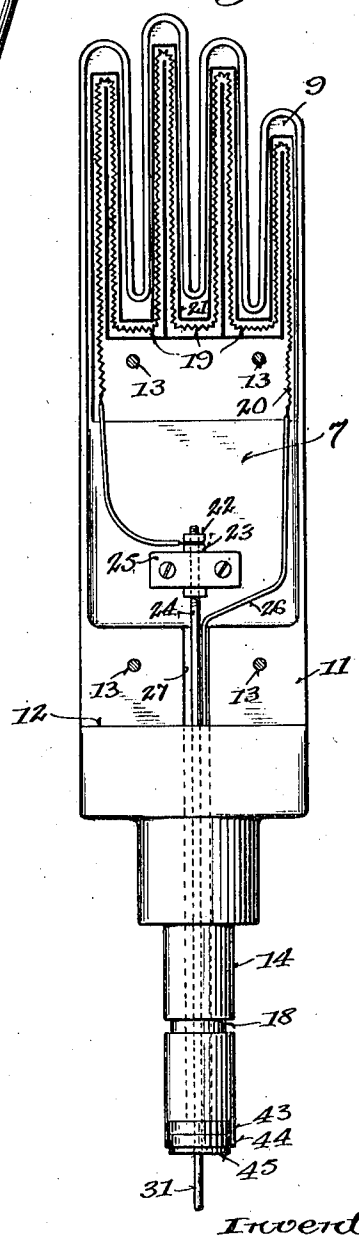


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

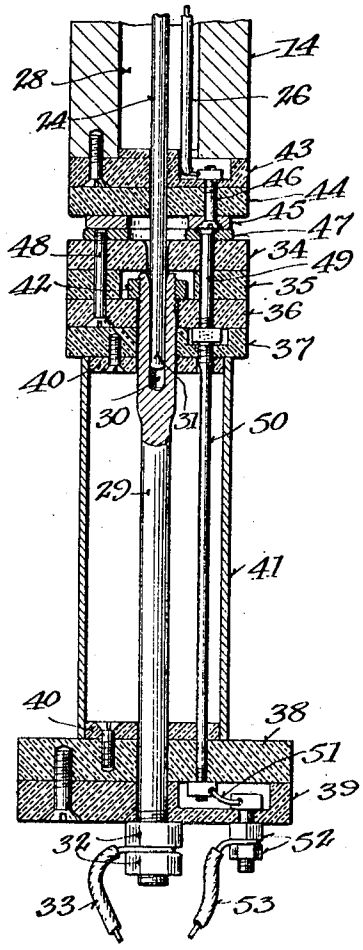


Fig. 5.

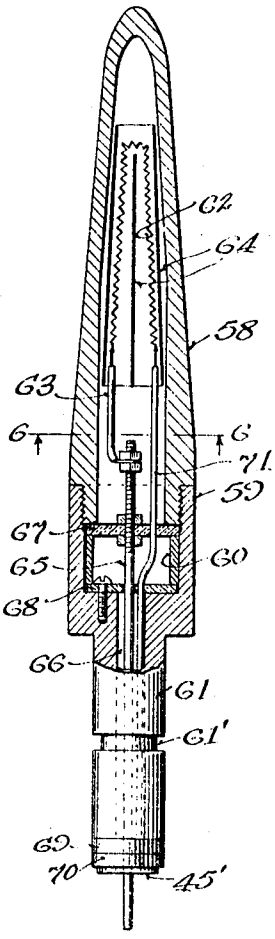


Fig. 4.

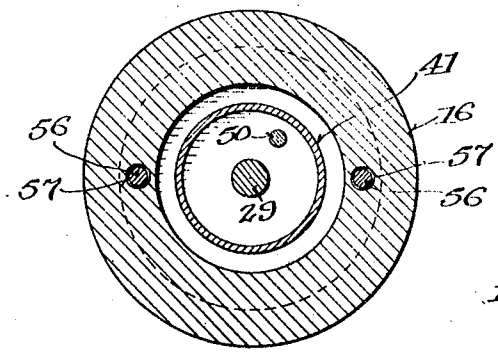
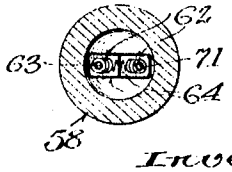


Fig. 6.



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UNITED STATES PATENT OFFICE.

WALTER M. BRAUN, OF MILWAUKEE, WISCONSIN.

APPARATUS FOR FINISHING GLOVES.

1,292,240. Specification of Letters Patent. Patented Jan. 21, 1919.

Application filed August 29, 1917. Serial No. 188,722.

To all whom it may concern:

Be it known that I, WALTER M. BRAUN, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Apparatus for Finishing Gloves, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

The invention relates to an apparatus for laying off or finishing gloves, shoes, stockings and the like.

The invention is more particularly designed to provide a form for the article such as a glove or stocking to be finished which is heated so as to take out the wrinkles from the product and leave it in a finished state.

Heretofore apparatus of this kind has been heated by steam but the use of steam is expensive because of the necessity for a steam generator and to obviate this difficulty I have devised my apparatus which is heated by electricity.

The invention further consists in the several features hereinafter set forth.

While I have shown the invention in connection with an apparatus for finishing gloves it will also be understood that it could be used for finishing stockings and the like.

In the drawings:

Figure 1 is an end view of the finger finishing device, parts being broken away and parts being shown in section;

Fig. 2 is a side view of the device, part of the form being removed;

Fig. 3 is an enlarged sectional view of the swivel joint and electrical connections shown in Fig. 1;

Fig. 4 is a section taken on the line 4—4 of Fig. 1;

Fig. 5 is a sectional view of the thumb finishing device;

Fig. 6 is a section taken on the line 6—6 of Fig. 5.

The apparatus as a whole consists of a finger-finishing device and a thumb finishing device.

The finger finishing device consists of a hand form made up of two members 7 and 8, and electrical means for heating the interior of the form.

The member 7 is hollowed out at the fingers 9 and for a distance below them as is likewise the member 8, said parts registering with each other to provide a form with a hollow interior, the lower portion 10 of the member 8 fitting up against a reinforced portion 11 adjacent a shoulder 12 of the member 7, the members being secured together by screws 13 or other suitable fastening means to form a strong construction. The member 7 has a tubular shank portion 14 which fits into a bore 15 of a bracket 16 inclined to permit ready manipulation of the glove upon the form, the shank 14 being revolubly mounted in said bracket and being detachably secured therein by means of a set screw 17 in the bracket engaging in an annular groove 18 in the shank 14, the form being revolubly mounted in the bracket as during the process of finishing the glove it is necessary to turn the same.

The electrical means for heating the hollow interior of the form comprises heating coils 19 formed by a conductor wire 20 inclosed in mica strips 21 within the hollow of the form, one end of the wire being connected to a binding post formed by nuts 22 and 23 mounted on a conductor rod 24 secured at one end in the hollow interior of the form to an insulating block 25. This rod 24 and the other end 26 of the wire 20 extends down through a channel 27 between the members 7 and 8 and a channel 28 in the member 7.

In order that the coils may be constantly heated even though the form is turned, a special connection is provided. This consists of a conductor rod 29 secured in a shell and having a bore 30 therein for receiving the end 31 of the rod 24 to permit it to turn therein and carrying nuts 32 to secure one of the line conductors 33. The shell consists of rings 34, 35, 36, 37 of insulating material connected together to form one end, rings 38, 39 of insulating material connected together to form the other end, and a barrel 41 positioned on insulating rings 40 and which is clamped between the ends of the shell by a nut 42 at one end of the rod 29 engaging the ring 36 and the inner nut 32 on the other end of the rod engaging the ring 39. The shank 14 carries insulating blocks 43 and 44 and a flat conductor ring 45 is secured to the block 44 by a screw bolt 46 to which end 26 of the wire 20 is secured. A flat conductor ring 47 is secured to the shell by a screw 48 and a screw bolt 49 which is also connected to a conductor rod 50

which in turn is connected by a wire 51 to a binding post 52 to which the other line conductor 53 is secured, the conductors 33 and 53 being connected up to a suitable source of current.

The shell above described is slidably mounted in the bore 15 of the bracket 16 and the conductor rings 45 and 47 are held in contact with each other by means of a coiled spring 54 interposed between the lower head of the shell and an end plate 55 secured to the bracket. The shell is also held in proper alinement by means of rods 56 which fit in guide holes 57 in the lower portion of the bracket 16.

With this construction the current passes from the conductor 33 through rods 29 and 24 to the wire 20, thence through contact rings 45 and 47 to rod 50, wire 51 to the conductor 53. When the form is revolved the contact between the rods 24 and 29 will always be maintained as the end of one is mounted in the other and the contact between the rings 45 and 47 will always be maintained as the spring 54 holds said rings in contact with each other.

The thumb form consists of a hollow member 58 having threaded engagement with a member 59 provided with a recess 60 communicating with the hollow of the member 58 and with a shank portion 61 provided with an annular groove 61′, said thumb form being interchangeable with the finger form for support in the bracket 16.

The electrical means for heating the hollow interior of the thumb form comprises a heating coil 62 formed by a conductor wire 63 inclosed in mica strips 64 within the hollow of the form, one end of the wire being connected to the upper end of a conductor rod 65 secured in the form and extending down through a channel 66 therein, and insulated therefrom by insulating disks 67, 68, 69 and 70. The other end 71 of the wire 63 is secured, in a manner similar to the end 26 of the wire 20, to a conductor ring 45′ similar to the ring 45. The end of the conductor rod 65 projects beyond the form and is adapted to be inserted in the bore 30 of the rod 29 when the form is secured in the bracket 16 under which conditions the conductor ring 45′ is yieldingly held in contact with the ring 47 in the manner previously described. If desired the thumb form may be mounted on its own bracket and have its own connections with a source of current and it is not as necessary to provide for a turning of this form as in the case of the finger form.

With the construction above described, the current is turned on and the four fingers of the glove are worked over the finger form and left for a certain length of time to remove the wrinkles. Then the glove is removed from the finger form and the finger form replaced by the thumb form and the thumb of the glove treated or the glove may be removed and treated on the thumb form secured in another bracket.

I am aware that the details of construction herein shown and described are capable of some modification and change and I therefore desire it to be understood that such changes as come within the scope of the appended claims I deem to be within the spirit of my invention.

What I claim as my invention is:

1. The combination, with a support, of a form revolubly mounted thereon and fitting the article of manufacture to be treated, said form having a hollow interior, electric heating coils within said interior, a conductor rod forming a line terminal and provided with a bore, another conductor rod connected to one end of the coils and revolubly mounted in the bore of and contacting with said first named conductor, a contact ring connected to the other end of the coils, a contact ring connected to a line terminal, and means for holding said contact rings in contact with each other.

2. The combination, with a support, of a form revolubly mounted thereon and fitting the article of manufacture to be treated, said form having a hollow interior, electric coils within said interior, a conductor rod connected to one end of said coils and a contact ring to the other, a terminal carrving member provided with a conductor rod having a bore to receive the end of said first named conductor rod and a contact ring adapted to contact with said first named conductor ring, and means yieldingly pressing upon said member to hold the rings in contact with each other.

3. The combination, with a fixed support, of a form revolubly mounted on the support and fitting the article of manufacture to be treated, said form having a hollow interior portion, electric heating coils within the hollow of said form, a conductor rod connected to one end of said coils and a contact ring to the other, a sliding terminal carrying member provided with a conductor rod adapted to contact with the first named conductor rod and a contact ring adapted to contact with said first named conductor ring, and a spring for moving the terminal carrying member to bring the rings in contact with each other and said rods in contact with each other and maintain said parts in contact.

4. The combination, with a support having a tubular bore, of a form having a tubular end revolubly mounted within the bore and fitting the article of manufacture to be treated, said form having a hollow interior and an electric heating coil in said interior, a terminal carrying member slidably but non-rotatably mounted within said bore,

contacts connected to the coil and contacts carried by the terminal member revolubly movable with respect to each other, and means for maintaining said contacts in engagement with each other.

5. The combination, with a support, of a form revolubly mounted on said support and fitting the article to be treated, said form having a hollow interior, an electric heating coil in said hollow interior and electrical connections for said coil insulated from said form and said support, a terminal carrying member, electrical contacts carried by said member and insulated from said support and from said form, and means for maintaining said contacts on said member in engagement with the electrical connections for the coil and for permitting turning of the form with respect to said member.

In testimony whereof, I affix my signature.

WALTER M. BRAUN.