

June 30, 1925.

1,543,837

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SPRING BAND CLASP

Filed May 16, 1922

2 Sheets-Sheet 1

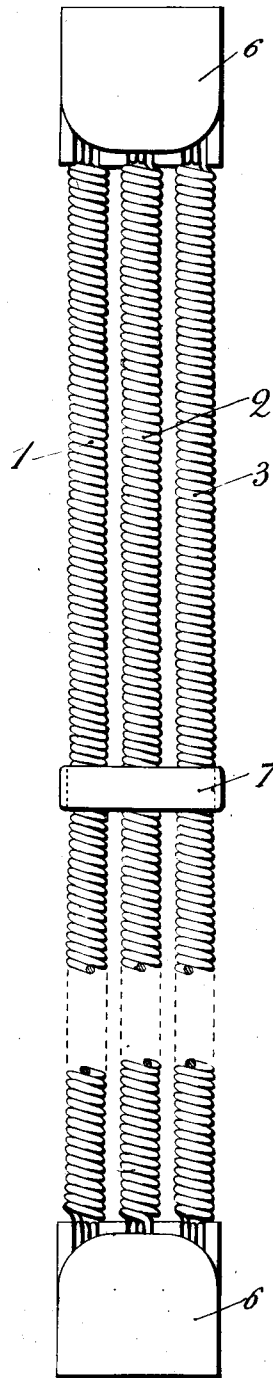


Fig. 1

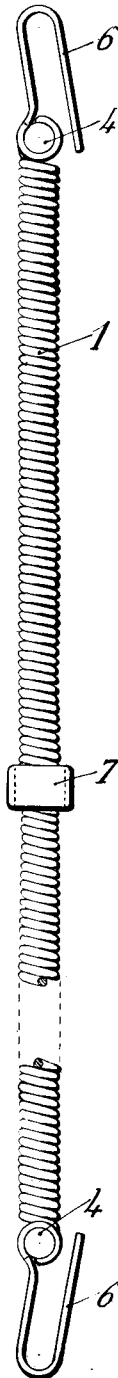


Fig. 2

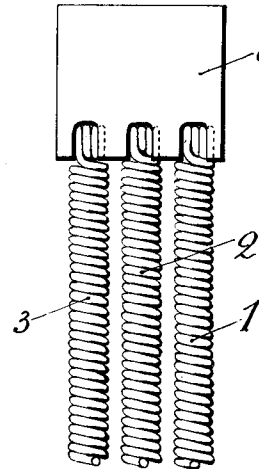


Fig. 3

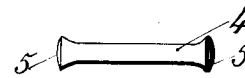


Fig. 4

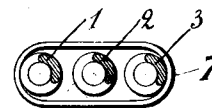


Fig. 5

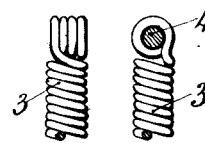


Fig. 6

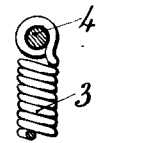


Fig. 7

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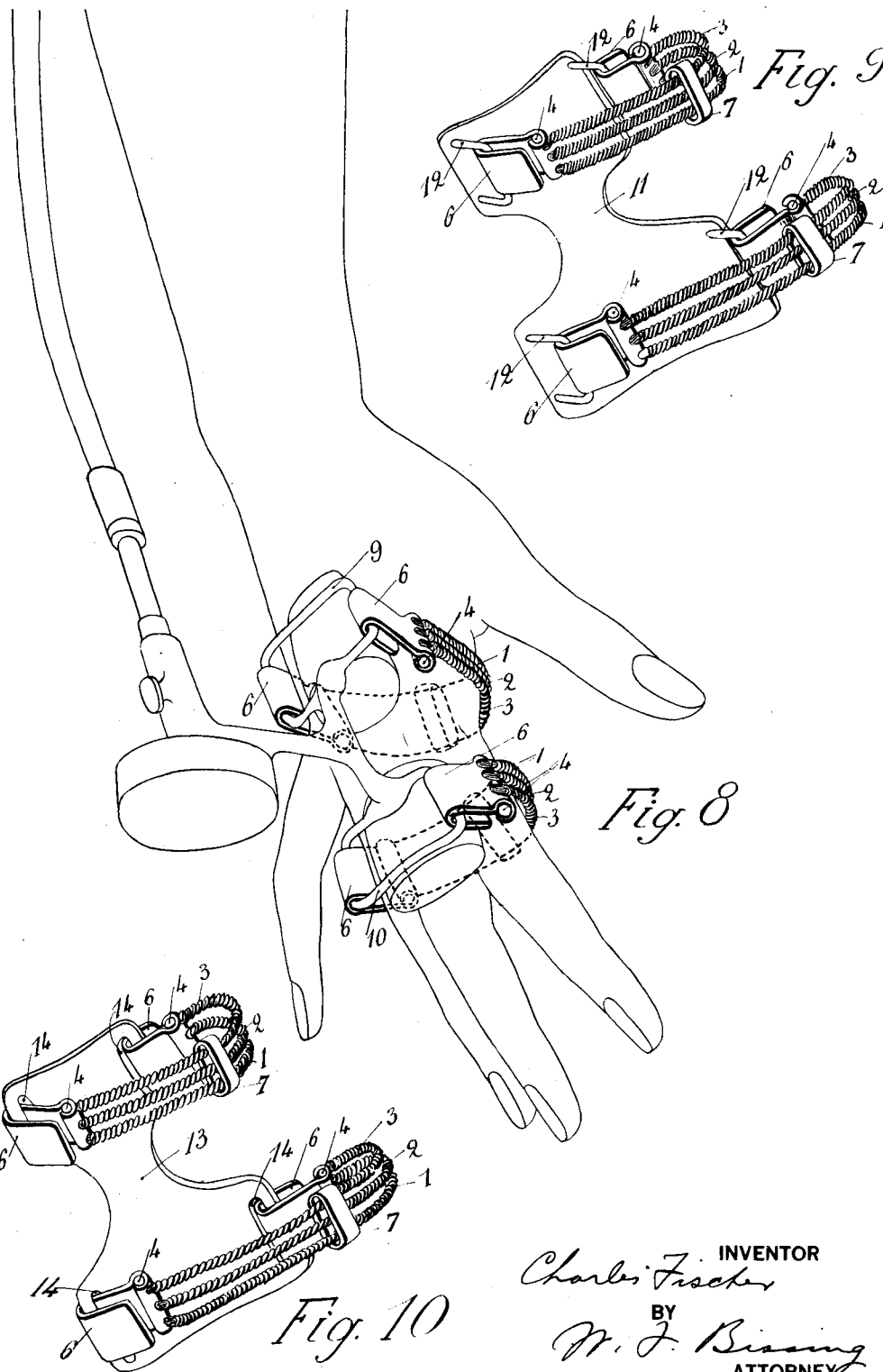
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

CHARLES FISCHER, OF NEW YORK, N. Y.

SPRING-BAND CLASP.

Application filed May 16, 1922. Serial No. 561,356.

To all whom it may concern:

Be it known that I, CHARLES FISCHER, a citizen of the United States, residing at 3657 Broadway, city, county, and State of New York, have invented certain new and useful Improvements in Spring-Band Clasps, of which the following is a specification.

My invention relates to clasps to be used in removably securing vibrating machines or massage machines to the hand of the barber or operator and is more particularly intended to provide a clasp which is sanitary and which can be used in connection with a number of different types of machines, which is readily applied to and removable from the hand, which is self-conforming to fit any size of hand, and which holds the machine upon the hand with a firm grip, at the same time permitting the free use of the fingers of the hand to transmit the vibration to the part being massaged.

In accordance with my invention, I provide a spring band preferably consisting of a plurality of spiral springs arranged side by side, whose ends are secured to clips which in turn engage parts carried by the vibrating machine, the band being arranged to form a loop.

With the above and other objects in view, my invention consists in the parts, improvements and combinations more fully pointed out hereinafter.

Referring now to the drawings:

Figure 1 is a plan view of the spring clasp when separated from the machine;

Fig. 2 is a side elevation of the band shown in Fig. 1;

Fig. 3 is a detail view of the end of the clasp looking at the opposite side from that shown in Fig. 1;

Fig. 4 illustrates a detail view of the cross pin to which the ends of the springs are connected;

Fig. 5 is a transverse section thru the retaining loop;

Figs. 6 and 7 illustrate the end of a spring, Fig. 6 being in elevation and Fig. 7 being partly in section;

Fig. 8 is a perspective view illustrating the clasp and a part of the vibrating machine in position on the hand;

Fig. 9 is a detail showing the application of the clasp to another type of bracket for a vibrating machine;

Fig. 10 is a detail showing the application of the clasp to a third type of bracket.

In the form of the invention illustrated, the spring band clasp comprises a plurality of extension metal springs 1, 2, 3 whose number may be varied, three being illustrated. A pin 4, one for each end of the clasp, unites the ends of the springs to suitable gripping devices. The heads of the pins may be enlarged as illustrated at 5 in order to prevent the pins from slipping out sideways.

The form of the gripping devices may be varied. In the embodiment of the invention illustrated, they take the form of clips 6 which may be made from sheet metal plates appropriately bent in the manner indicated upon the drawings, to form hooks. The ends of the springs are wound to form a series of convolutions or loops having a wide surface to preserve alignment and prevent side sway. These loop ends are fitted into slots of the metal plates and the plates and ends being hinged together by a rivet pin, the springs are held firmly in alignment and yet permit self-conformity. A sliding collar 7 may be provided to keep the body of the springs together.

The machine shown in Fig. 8 is provided with a pair of wire brackets 9, 10 so that the bands may be looped around portions of the hand and the hooks attached to the brackets as illustrated.

In the form of the invention illustrated in Fig. 9 the machine carries brackets 11 provided with wire loops 12 with which the hooks of the bands are adapted to engage.

In the form of bracket illustrated in Fig. 10, the bracket 13 is provided with slots 14 with which the hooks of the band engage.

It will be observed that my spring band clasp is adaptable to hook on several styles of brackets in order to attach the machine to the hand, without alteration of the machine. The springs are made of the proper tension and the band is self-conforming to fit any size hand, the spring bending transversely at different parts, throughout its length and being constructed to hold the machine with a good grip on the hand. The device is sanitary, for the entire clasp including all its parts, may be sterilized as by boiling if desired.

Having thus described my invention, its operation will be clear.

It will be understood that the invention is not limited to details and that numerous changes may be made in carrying it into ef-

fect without departing from the principle thereof.

What I claim and desire to secure by Letters Patent is:

1. A self-conforming spring band clasp for securing vibrating machines to the hand, comprising one or more spiral springs bending transversely throughout their length, a bent metal clip forming an open hook for
10 each end of the band, said metal clip being provided with one or more slots, into which the ends of the springs enter, and a pin securing the ends of the springs to the metal clip, the pin forming a hinged connection
15 between the metal clip and the ends of the springs.

2. A self-conforming spring band clasp for securing vibrating machines to the hand, comprising one or more transversely bendable spiral, metal springs, each consisting of a plurality of loops, the ends of the springs being formed with loops having a plurality of convolutions, a bent metal clip forming
25 an open hook for each end of the band, said metal clip being provided with one or more slots, into which the looped ends of the springs enter, the slotted portion of the clip being curved and a pin passing transversely thru the curved portion of the clip and thru the convolutions of the ends of the springs, thereby forming a hinged connection between the metal clip and the ends of the

springs, the springs being thus adapted to surround the hand and the clips securing the machine to the back of the hand.

3. A self-conforming spring band clasp for securing a vibrating machine to the hand, comprising an extensible and transversely bendable connecting member comprising a plurality of coiled springs, each
40 having loop ends, a pair of open-mouthed slotted U-shaped clips, one for each end of the springs, each adapted to slidably hook over a bracket of the machine and a pair of pins, one for each clip, for securing said
45 clips to the loop ends of said springs, said pins provided with enlarged heads so as to prevent the pins from slipping.

4. A self-conforming spring band clasp for securing a vibrating machine to the
50 hand, comprising a plurality of extensible and transversely bendable connecting springs, each having a pair of loop ends, a pair of metal plates, each having a portion bent so as to form an open hook adapted to
55 slidably hook over a bracket of the machine and slotted to receive the loop ends of the springs, thereby spacing the springs apart and pivoted means for connecting said
60 plates to the loop ends of said springs.

In testimony whereof, I have signed my name to this specification.

CHAS. FISCHER.