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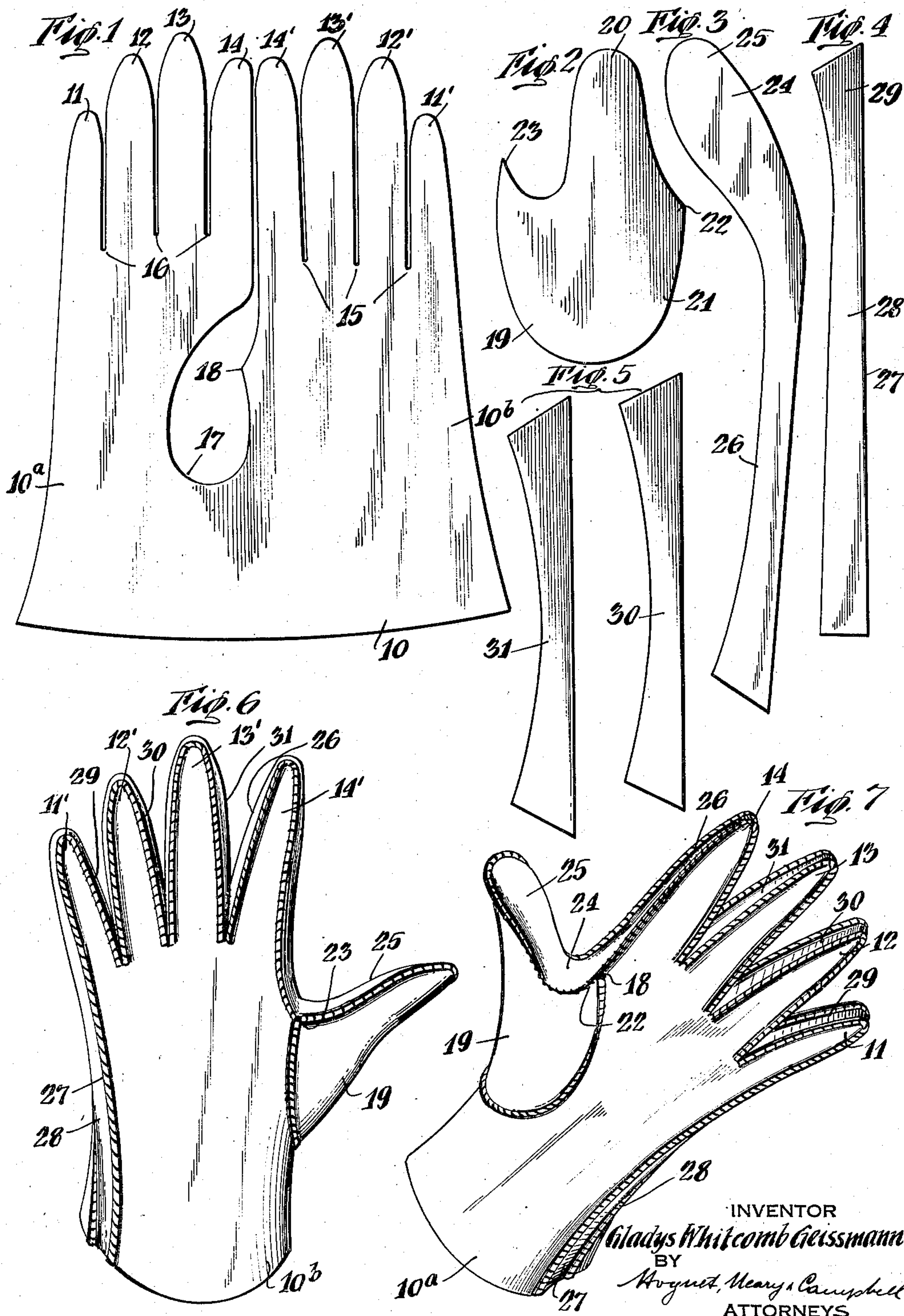
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2,125,673

GLOVE CONSTRUCTION

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2 Sheets-Sheet 1



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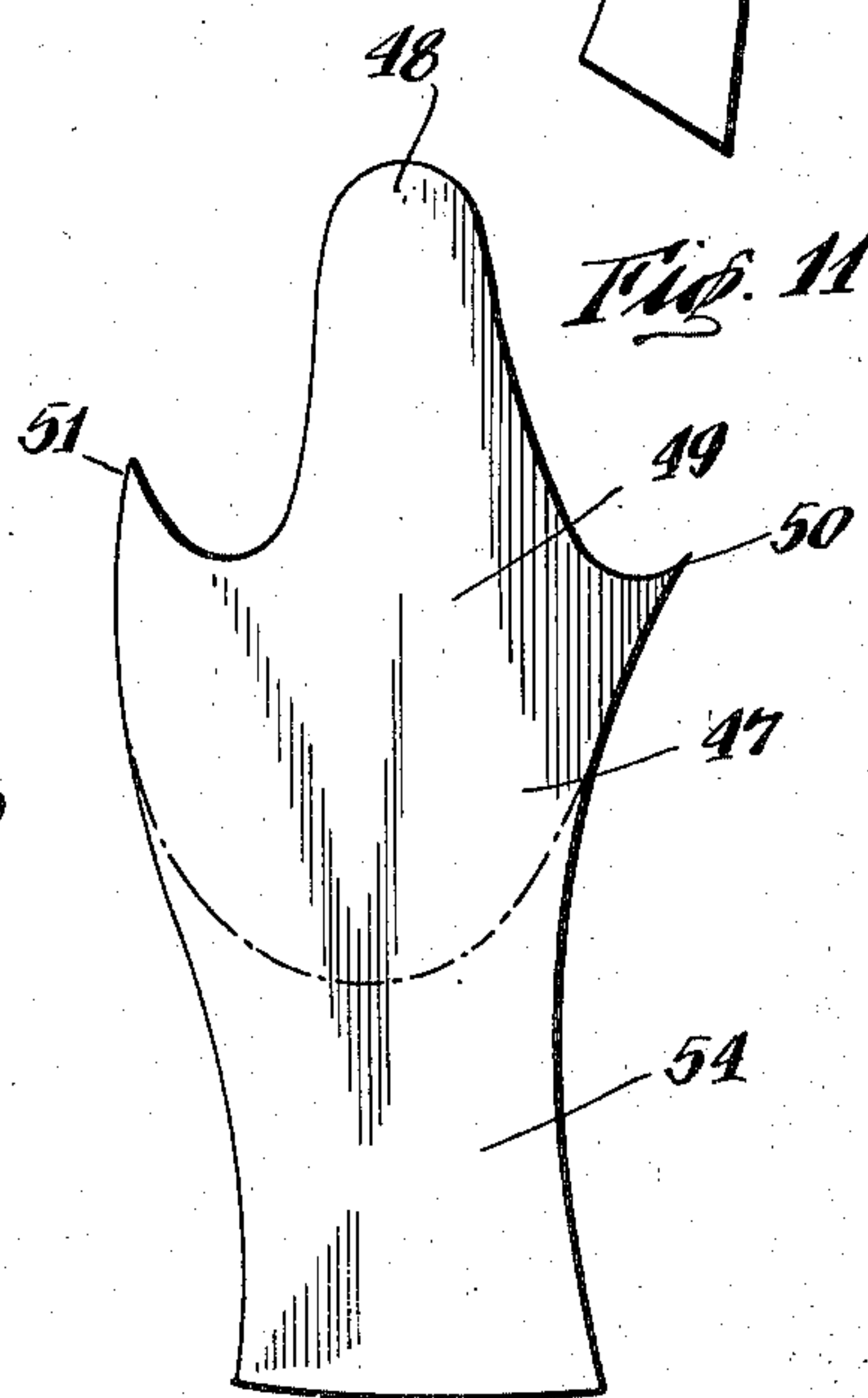
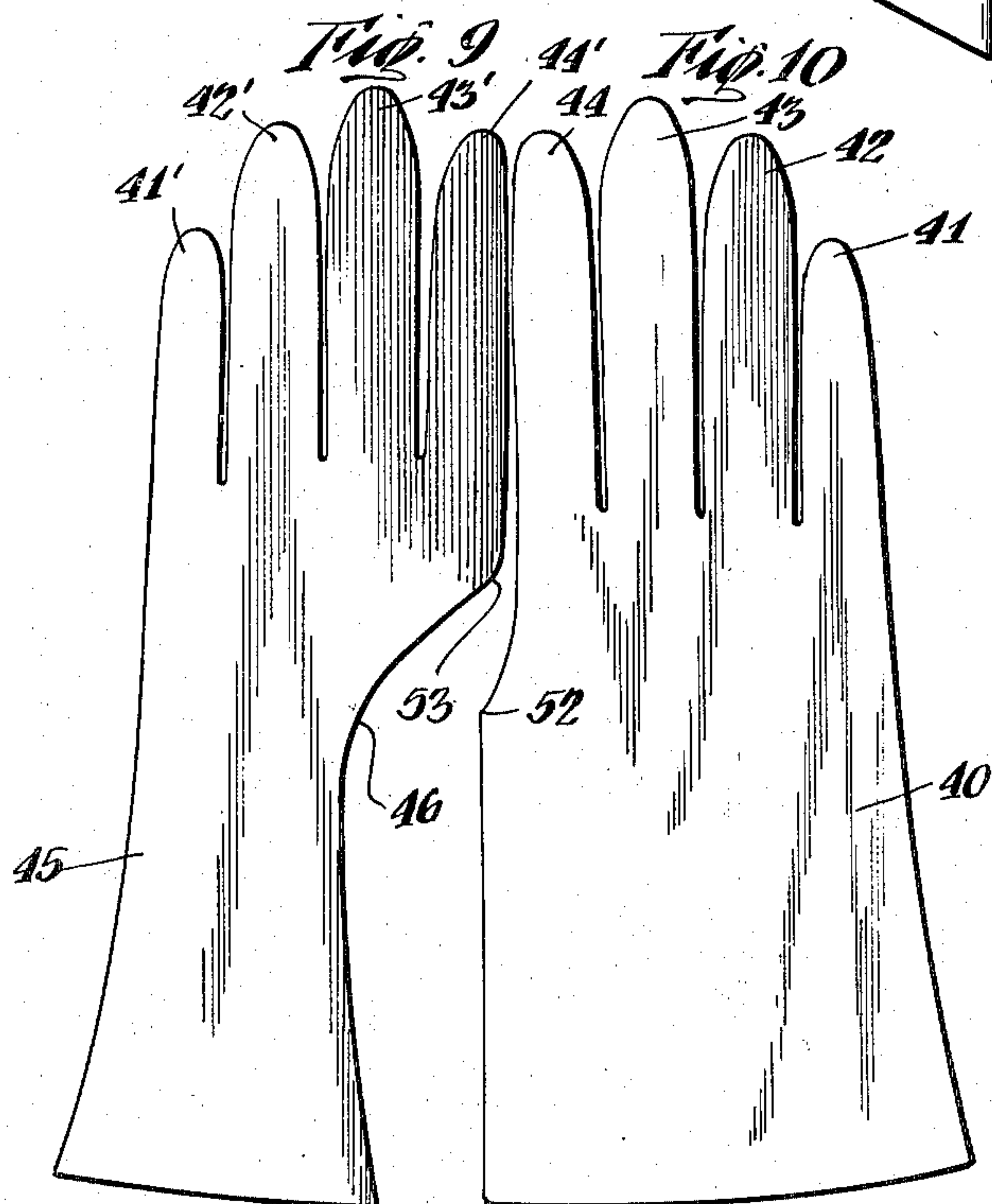
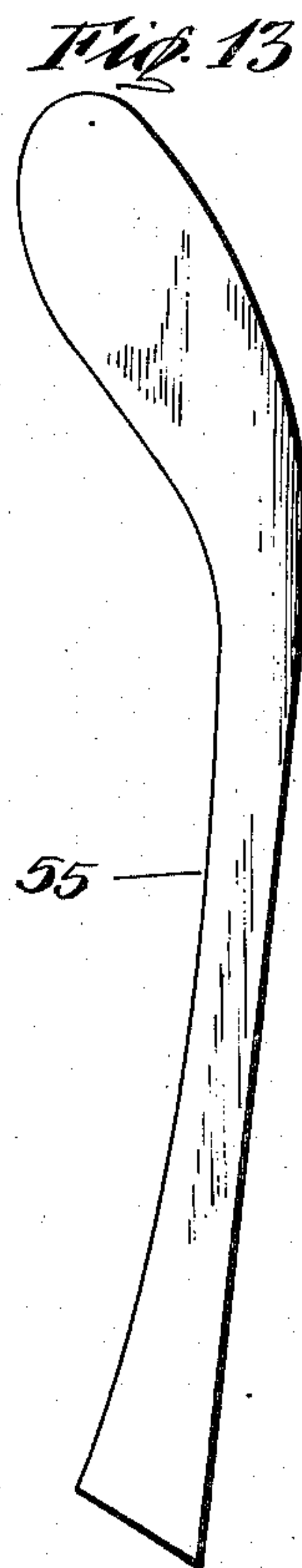
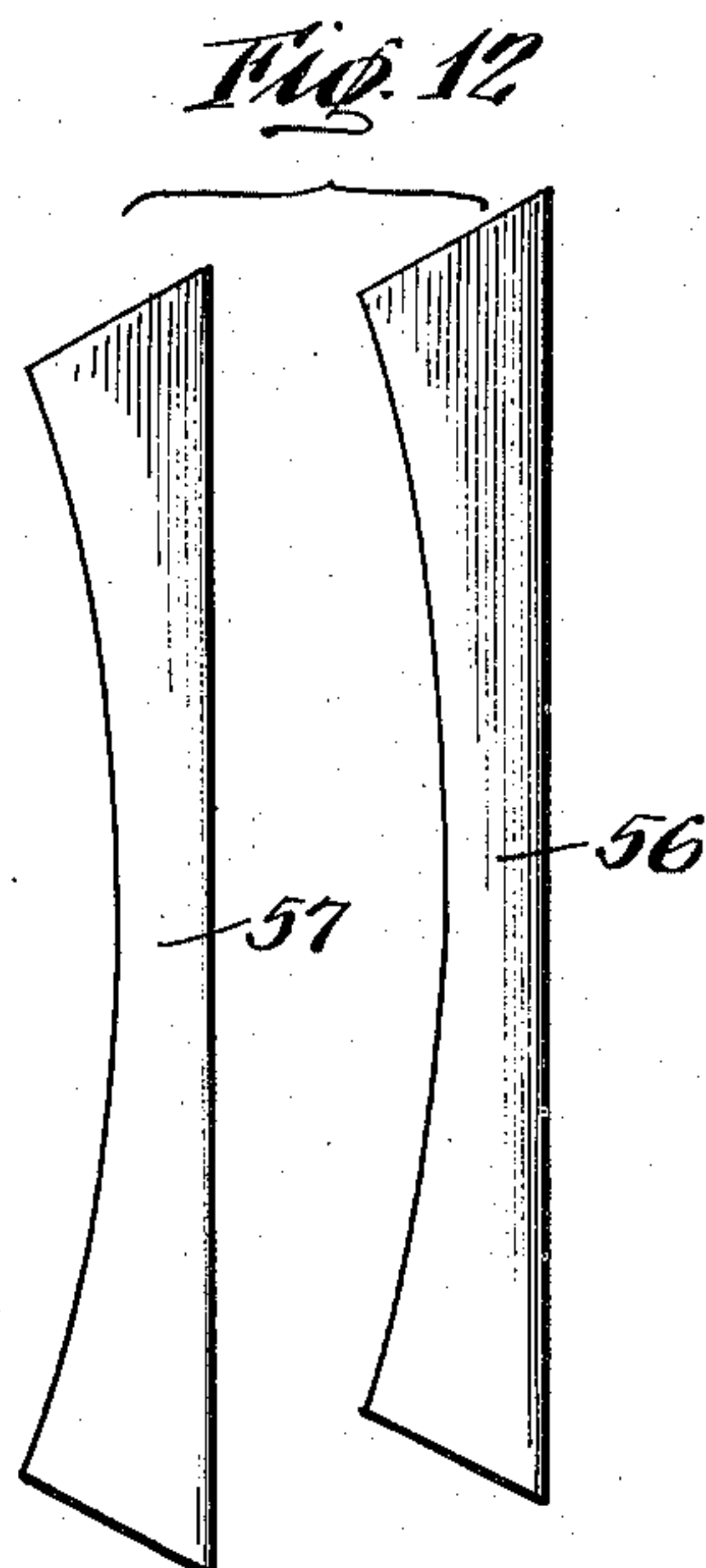
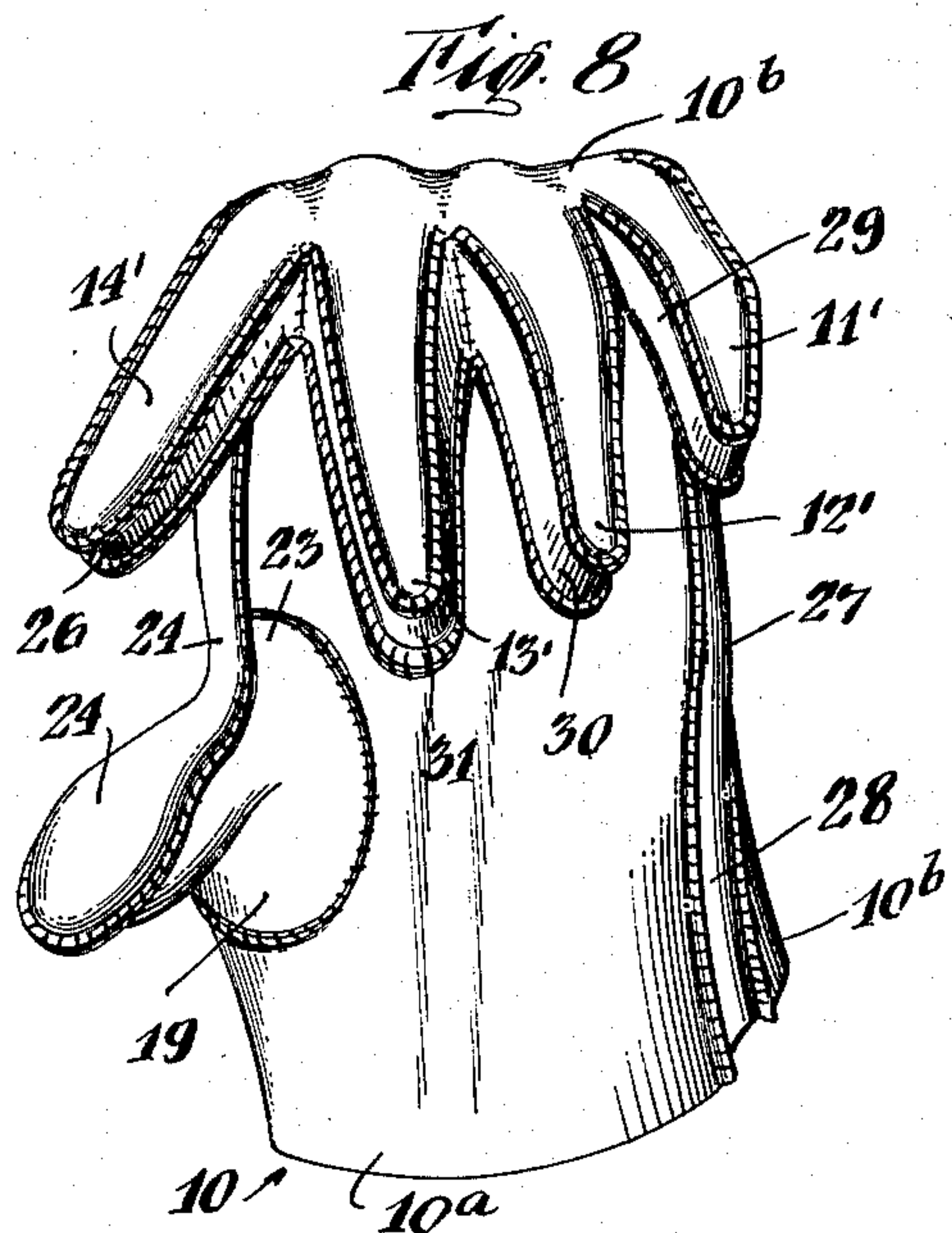
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GLOVE CONSTRUCTION

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2 Sheets-Sheet 2



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GLOVE CONSTRUCTION

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9 Claims. (Cl. 2—169)

This invention relates to gloves and particularly to finger and thumb constructions for sport, informal and dress gloves.

Gloves of the type now commonly manufactured have finger portions consisting of extensions from the back and palm portions of the gloves. The finger portions are joined by strips commonly known as fourchettes which extend from the crotch of the finger portions to the tips only. The fourchettes are cut substantially to points at the tips of the fingers and, therefore, when stitched or sewed into the finger portions, form somewhat pointed ends thereon. The seams connecting the fourchettes to the front and back strips of the finger portions also come together at the tips of the finger, thereby accentuating the pointed effect. This type of finger construction has several disadvantages, principally improper shape and fit, reduced flexibility and tendencies to rip when subjected to stresses making a difficult repair problem.

Few, if any, persons have pointed fingers which properly and closely fit in this type of glove. The four seams converging to a point at the ends of the fingers constrict the free action of the fingers and cause a pinched feeling at the ends of the fingers.

It has been suggested, as shown by the patent to Johanson, No. 1,864,439, patented June 21, 1932, that the manufacture of gloves can be simplified by using a single strip of material of uniform width as a continuous fourchette which extends around all of the fingers. This construction is mechanically simple but it also renders the shape of the finger portions of the gloves defective. As the width of the fourchette is constant, the distance between the front and the rear portions of the fingers of the glove does not taper as do the fingers. Also, any difference in size or diameter of the fingers must be provided for by varying the width of the finger portions on the palm or back side of the glove, thereby rendering the seams non-uniformly spaced apart on the fingers of the gloves. In addition, the crotch formed by the fourchette between the fingers is at substantially right angles to the front and back of the glove and not tapering toward the back as does the crotch between the fingers. These structural defects would be particularly noticeable in the comfort of any glove and as a result, the use of fourchettes of uniform width is restricted to gloves in which fit is no object.

An object of the present invention is to provide gloves in which continuous fourchettes for

each finger are used and which are properly shaped to provide accurately formed and properly fitting finger portions.

Another object of the invention is to provide gloves having continuous fourchettes for each finger extending around the end of each finger of the glove and, which produce rearwardly slanting crotches between the finger portions which fit closely and conform to the shape of the crotches between the fingers.

A further object of the invention is to provide gloves having fourchettes extending continuously from the tip of the thumb, where they form the inside half of the thumbs, to between the first and second fingers and which are shaped to produce extreme flexibility, in the thumb portion and adequate fullness to accommodate the thumb and thumb muscles.

Other objects of the invention will become apparent from the description of typical forms of gloves embodying the present invention.

Gloves made in accordance with my invention may consist of back and palm portions either formed separately or as a unit from any desired type of material such as, for example, leather or fabric, and which are provided with projecting finger portions of the proper shape and size to correspond to the size and shape of the hand of the individual who is to use the same.

Preferably, the finger portions of the gloves are of substantially uniform width throughout their length except adjacent the free ends thereof where they are rather sharply tapered to correspond to the change in shape of the end joint of the finger. The finger portions on the back portion of the gloves are made somewhat longer than the finger portions on the palm side of the gloves in order to properly fit from the base of the crotch to the end of the fingers. In other words, the slots between the finger portions on the back of the glove are longer than the corresponding slots on the palm portion of the glove.

The back and palm portions are sewed together along the body of the glove in any desired fashion, and fourchettes of a novel type are placed between and attached to the finger portions of the glove. Generally the fourchettes may consist of strips of matching leather or fabric, or, if it is desired to form multicolored or highly ornamental gloves, they may be of contrasting material or color. The fourchettes are characterized by having wider ends than center portions, thereby producing gradually tapering fingers when they are stitched between the finger portions of the palm and back of the glove.

The fourchettes extend entirely around the ends of the fingers, thereby allowing close and accurate control of the overall diameter of each finger portion.

As set forth above, the slots between the finger portions of the back and palm sides of the glove are of different depths and, accordingly, the ends of the fourchettes are cut at an acute angle in order to fit within and connect the bases of these slots. This construction provides a tapering or inclined base in the crotch which closely fits within the crotch between the fingers when the glove is worn. This construction also allows the tips of the fingers to be tapered slightly inwardly from the back toward the palm side, thereby more closely conforming to the shape of the human finger and providing a space for reception of the fingernails.

The glove may also include a novel thumb construction in which a separately formed outer thumb piece is attached in a suitable aperture in or space between the glove portions and extends to the edge of the cuff. The inner portion of the thumb may be formed from a portion of the fourchette which extends around the end of the first finger and down to the crotch between the first and second fingers. This construction avoids the usual transverse seams in the inner portion of the thumb and greatly increases the flexibility and wearing quality of the glove.

As indicated above, gloves may be made of contrasting or similar types of material, thereby producing a novel effect and allowing combinations of colors and decorative materials to be used to great advantage. The fourchettes and other separate portions of the glove may be attached by any desired means of stitching, depending upon the type of glove to be produced. For example, they may be provided with raw seams attached by cross stitching or roll stitching, or the gloves, if desired, may be provided with inturned seams to form smooth outer surfaces.

For a better understanding of the present invention, reference may be had to the accompanying drawings, in which:

Figure 1 is a plan view of one form of glove blank made in accordance with my invention;

Figure 2 is a view of a thumb piece for the glove;

Figure 3 is a plan view of a fourchette for completing the thumb portion of the glove and the first finger;

Figure 4 is a plan view of a fourchette for completing the little finger and the adjacent side of the glove;

Figure 5 is a plan view of two fourchettes used for the middle two fingers;

Figure 6 is a perspective view of the glove formed from the blanks in Figures 1 to 5, looking at the back portion of the glove;

Figure 7 is a perspective view of the glove, looking toward the palm side of the glove;

Figure 8 is a perspective view of the glove as shown in Figures 6 and 7, disclosing the finger construction;

Figure 9 is a plan view of a modified blank forming the palm portion of the glove;

Figure 10 is a plan view of a modified form of back portion of the glove;

Figure 11 is a plan view of the back portion of the thumb of the glove;

Figure 13 is a plan view of a fourchette used for completing the thumb and first finger of the glove; and

Figure 12 is a plan view of two fourchettes for other fingers of the glove.

The form of glove disclosed in Figures 6, 7 and 8 is formed from a blank 10 consisting of a unitary piece of material having finger portions 11, 12, 13, 14, 14', 13', 12' and 11' thereon. The finger portions 11, 12, 13 and 14 are formed on the palm side 10a of the glove blank and cooperate with finger portions 11', 12', 13' and 14' respectively, on the back portion 10b of the glove to form the fingers thereof. The slots 15 between the finger portions 11' to 14' are of greater length or depth than the slots 16 between the finger portions 11 to 14. The difference in the length of the slots 15 and 16 corresponds substantially to the difference in the depth of the crotch between the fingers at the front and back of the hand, whereby the fourchettes which are fitted therein will produce a tapering closed crotch accurately conforming to the shape of the crotches between the fingers.

A generally oval-shaped opening 17 is cut out of the palm portion of the blank 10 to provide an aperture for reception of the thumb piece 19 of the glove. The aperture 17 is provided with an inwardly projecting portion 18 which serves as a matching point for assembling the thumb piece 19 with the glove and also for properly shaping the thumb piece when it is placed on the glove. The thumb piece 19 which is best illustrated in Figure 2, consists of a blank having a narrow projecting portion 20 thereon forming the back of the thumb and an enlarged oval portion 21 which fits around the base of the thumb or the thumb muscle and within the aperture 17 in the blank 10. Between the elongated portion 20 is an angular portion 22 forming the matching point to be attached in alignment with the matching point 18 of the glove blank 10. Substantially opposite the matching point 22 is another matching point 23 which is brought into alignment with and attached to the glove blank 10 at the base of the forefinger portion 14, as best shown in Figure 6.

The thumb portion 19 when attached to the glove blank 10 may be completed by affixing thereto the fourchette 24 disclosed in Figure 3. The fourchette 24 consists generally of an elongated and curved end portion 25 generally of the configuration of the inner surface of the thumb which is connected at an angle to an elongated tapered portion 26 which forms the entire fourchette for the forefinger and serves to connect the inner and outer edges of the finger portions 14, 14', as best shown in Figures 6 and 7.

The little finger portion of the glove is formed by means of finger portions 11 and 11' and the fourchette 27 shown in Figure 4. The fourchette 27 consists of an elongated tapered strip 28 which is attached to and connects the outer edges of the glove blank 10 from the cuff to the end of the little finger and is turned inwardly so that the oppositely tapered portion 29 thereof forms the inner portion of the little finger portion 11, 11' of the glove. The second and third fingers of the glove are formed of finger portions 12, 12', and 13, 13' and fourchettes 30 and 31 disclosed in Figure 5. The fourchettes 30 and 31 are similarly shaped elements consisting of strips of material tapering from their ends toward the center portion in order to provide fingers which taper gradually from adjacent the body portions of the gloves to the ends of the fingers.

The fourchettes 24, 27, 30 and 31 are provided with inclined end portions of proper angularity

to extend to the bottoms of the slots 15 and 16 and to provide tapering crotches therebetween which conform closely to the tapering crotches between the fingers of a hand. It will be understood that two or more of the fourchettes may be joined end to end if desired and a fourchette capable of joining two or more pairs of finger portions may be produced. This construction causes the fingers of the gloves when completed to conform closely to the shape of the fingers and to the hand, thereby producing a very closely and accurately fitting glove.

In assembling the glove, the thumb piece 19 may be placed in the aperture 17 with matching point 22 at the matching point 18 on the glove blank 10 and stitched in place. The fourchette 24 is then placed with the enlarged oval portion 25 adjacent the elongated portion 20 of the thumb piece and the elongated tapered portion 26 of the fourchette covering the forefinger portions 14, 14' throughout their entire extent and downwardly into the crotch formed by the slots 15 and 16 and stitched in place. The fourchettes 30 and 31 are likewise joined to the finger portions 12, 12', 13, 13' and stitched in place to complete the fingers. The fourchette 27 completes the glove and extends from the crotch of the little finger portions 11, 11' to the edge of the gauntlet portion of the palm 10a and back portions 10b of the glove and is stitched in place, as best shown in Figures 6 and 7, thus completing the glove. It will be understood that the tapered ends of the fourchettes 24, 27, 30 and 31 are stitched together in the crotches between the finger portions to form a unitary glove construction.

The completed glove is thus provided with properly tapering fingers, inclined crotches between the fingers and a thumb portion in which there is no transverse seam to reduce the flexibility of the thumb. These structural features combine to form a very flexible and properly fitting glove.

In Figures 9 to 13 are disclosed various parts of a modified form of glove which may be combined to form a glove construction similar to that described above. The portions of the glove blank consist of a back portion 40 having finger portions 41, 42, 43 and 44 thereon separated by the usual slots. In Figure 9 is disclosed the palm portion 45 of the glove having finger portions 41', 42', 43' and 44' thereon and a recess 46 therein for receiving the thumb piece 47 which is shown in Figure 11. The thumb piece is provided with an elongated thumb back 48, a wider thumb portion 49 having matching points 50 and 51 thereon, to be joined to the glove back at matching point 52 and to the palm of the glove at matching point 53, respectively. An outwardly extending portion 54 is also provided which is joined between adjacent portions of the glove back 40 and the glove palm 45 with the lower edge of the thumb piece 47 in alignment with the lower edges of the back 40 and palm portion 45. In Figure 13 is disclosed a fourchette 55 which is substantially identical with the fourchette 24 described above and which is joined to the thumb piece 47, the back 40 and the palm portion 45 of the glove, as described above. A plurality of tapering fourchettes 56 and 57 are also provided for completing the fingers of the gloves in the manner described above. A fourchette similar to fourchette 27 (Figure 4) is also provided for joining the palm portion 45 to the back portion 40 and connecting the little finger portions 41 and 41'.

This form of glove is assembled in a manner similar to the glove construction disclosed in Figures 1 to 8, with the exception that the thumb piece 47 joins the palm portion 45 to the back portion 40 in the manner described above.

Gloves made in accordance with my invention may be ornamented in any desired way. For example, the fourchettes and connecting portions may be made of material of different type or different color from the front and back portions to produce highly ornamental constructions. Likewise, the wrist or gauntlet portions may be varied in shape in accordance with prevailing styles and may be ornamented with embroidery, stitches or coloring, if desired. It will be understood that the finger portions may be varied in taper in order to produce differently tapering fingers in accordance with the shape of the fingers of the person for whom they are to be made. My construction thus lends itself to the production of custom-made gloves with great facility and also provides a simple and economical way of producing ready-made gloves.

It will be understood that the shape and size of the parts of the glove may be varied as desired in order to produce gloves of proper configuration and, therefore, the embodiments disclosed should be considered as illustrative only and not as limiting the scope of the following claims.

I claim:

1. A glove comprising palm and back portions having fore, middle and little finger portions extending therefrom and fourchettes connecting corresponding finger portions on the palm and back portions, a thumb portion connected to adjacent edges of the palm and back portions from adjacent the base of the forefinger portions to the edges of the palm and back portions and having a projecting tab forming the back of the thumb, and a fourchette connected to the edges of the tab to form the front of the thumb and extending along the edges of the forefinger portions.

2. A glove comprising palm and back portions having finger portions separated by slots, the slots in the back portion being longer than the slots in the palm portion, and fourchettes connecting the corresponding finger portions of the palm and back portions, at least two of said fourchettes having joined inclined ends disposed at the inner ends of corresponding slots and forming an inclined crotch between said finger portions, said fourchettes extending over the ends of and connecting the edges of the finger portions in spaced apart relationship throughout.

3. A glove comprising palm and back portions having finger portions projecting therefrom and separated by slots, means connected to the palm and back portions and forming the back of the thumb and a fourchette having a rounded end portion connected to the edges of the means forming the back of the thumb and an elongated narrower portion connecting the inner and outer edges of the forefinger portions and extending into the slots between the forefinger and second finger portions.

4. A glove comprising palm and back portions having finger portions extending therefrom and separated by slots, the slots between the finger portions on the back portion being of greater length than the slots in the palm portion and defining inclined crotches; fourchettes connecting the finger portions to form completed glove fingers, one of said fourchettes consisting

of an elongated strip having an inclined end corresponding to the inclination of the crotch between the third and fourth fingers and extending from said crotch outwardly around the end of the fourth finger, along the outer portion of the fourth finger and connecting the edges of the palm and back portions of the glove, said fourchette decreasing in width from the end disposed in said crotch to a narrower portion of substantial width at the end of the fourth finger.

5. A glove comprising palm and back portions having finger portions projecting therefrom and separated by slots, the slots in the back portion being longer than the slots in the palm portion to define inclined crotches between said finger portions and finger portions on the back portion which project outwardly beyond the finger portions on the palm portion, at least one fourchette connecting corresponding finger portions of the palm and back portions and extending from the crotches entirely over the ends of the finger portions to space the finger portions apart throughout their entire extent, the portion of said fourchette disposed at the inner end of said slots being inclined complementarily to the crotches defined by the slots, whereby the crotches between the fingers of the gloves will conform to the shape of the crotches between the fingers of a hand and the ends of the fingers will be inclined inwardly toward the palm portions.

6. A fourchette adapted to connect the sides and end of finger portions of a glove comprising a strip of flexible material having a longitudinal edge, end edges inclined oppositely at an acute angle to said longitudinal edge, said strip tapering in width from adjacent the end edges inwardly to a narrower midportion.

7. A fourchette adapted to form a portion of a thumb and the sides and end of a finger of a glove comprising an elongated strip of flexible material having longitudinal edge portions converging from adjacent one end to a narrower portion spaced from one end, said one end having an end edge inclined at an acute angle to one of said longitudinal edges of the strip and the other end being offset and angularly disposed with relation to the strip and having a rounded end and converging curved edge portions merging into said strip.

8. In a glove the combination of palm and back portions having finger portions thereon, fourchette strips joining the edges of corresponding finger portions and extending from the bases of the finger portions continuously around the ends thereof, said strips being of substantial width at the ends of the finger portions and increasing in width in accordance with the increase in thickness of the fingers of a hand toward the bases of the finger portions, and being joined at the bases of the finger portions at angles corresponding to the inclination of the crotches between said fingers to form inclined crotches between the finger portions.

9. The glove set forth in claim 8 comprising a thumb back portion joined to the palm and back portions and forming the major portion of the thumb of the glove, and a strip having a rounded end portion conforming substantially in shape to the front of a thumb of a hand joined to the edges of the thumb back portion and extending along the sides of and joined to the edges of the corresponding finger portions adjacent the thumb back portion.

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