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GLOVE WITH PLIABLE FINGERS FOR SPORTSMEN

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2 Sheets-Sheet 2

Fig. 8

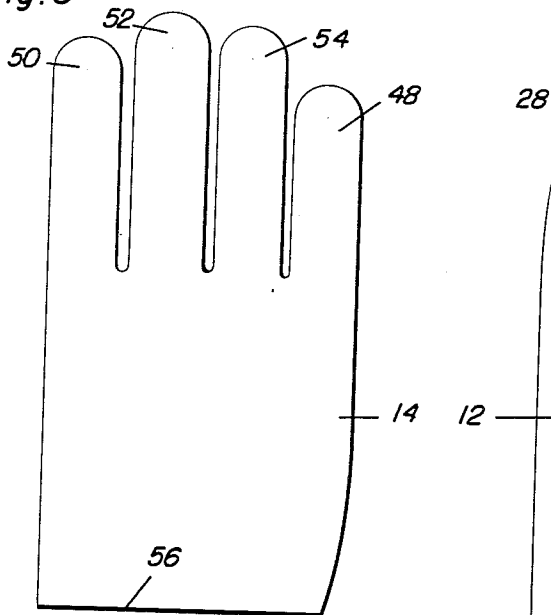


Fig. 9

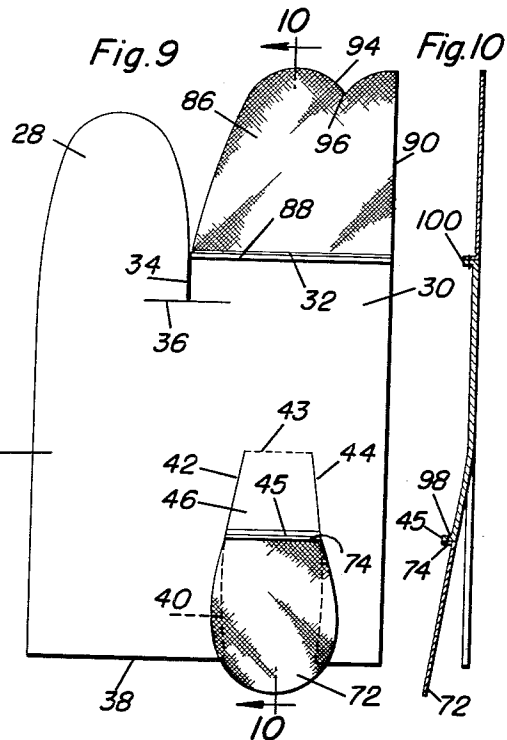
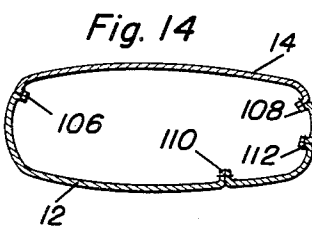
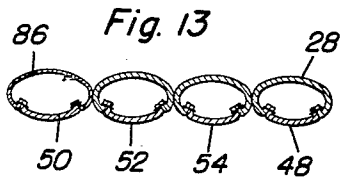
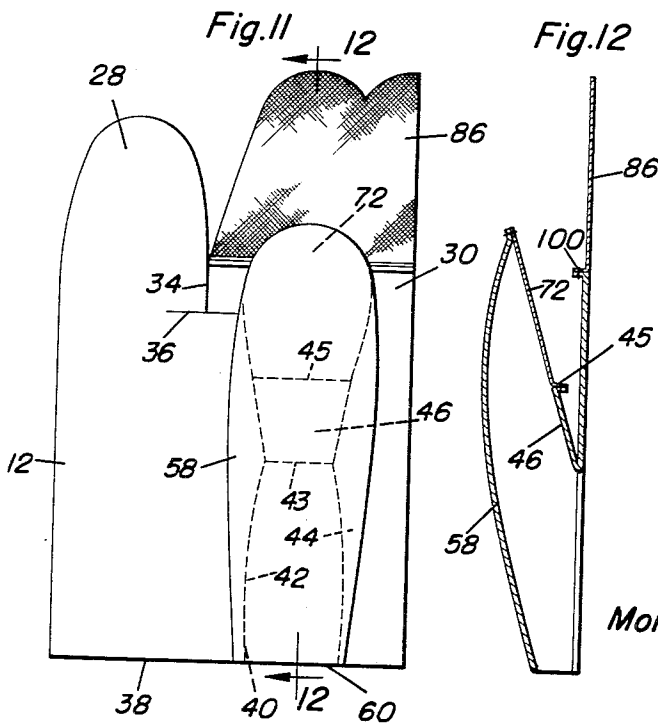


Fig. 10



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GLOVE WITH PLIABLE FINGERS FOR SPORTSMEN

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4 Claims. (Cl. 2—167)

This invention comprises novel and useful improvements in a glove with exceptionally pliable fingers for sportsmen, and more specifically relates to a novel and improved construction of glove especially adapted for use by hunters, soldiers, workmen and other persons requiring the services of a heavy or a warm glove, and also further requiring a glove which will permit the wearer to have a more complete control and use of the forefinger and thumb and a more sensitive feeling for those fingers while encased in the glove.

Previous efforts to provide gloves or hand coverings to meet the above requirements of the wearer have been made including, for example, the cutting of holes in the mitten or glove whereby the forefinger, or in some instances, the whole hand, may be extruded from the interior of the glove.

However, such previous efforts have in general been unsatisfactory and not acceptable to the public in general, since the addition of a separate finger represents an expensive feature in manufacturing and exploiting the glove, and moreover, is usually clumsy and awkward in use. Moreover, the extra finger is usually so bulky and in general is of such thick material, in order to give the necessary warmth and protection, that in many instances, it seriously interferes with the sensitivity of feeling of the finger, thereby preventing, for example, the convenient use of that finger to fit into the trigger guard of a rifle or for other similar purposes. As will be readily appreciated, especially in cold climates, or under arduous working conditions, the sensitivity of feel of the finger and the ease of manipulating the same are often essential and vital requirements.

The glove in accordance with this invention obtains to a greater degree than heretofore possible the very important desiderata of warmth and protection for all of the fingers, combined with an unusual sensitivity of feel and ease of maneuvering one or more fingers of the glove.

It is therefore the primary object of this invention to provide a glove which in general shall be of a conventional character and which shall have a forefinger and thumb portion so constructed as to be resilient and soft, whereby the wearer may perform functions requiring sensitivity of feel, skill and dexterity while wearing a heavy glove and one which is warm for the entire hand.

A further specific object of this invention is to provide an improved glove construction which shall be sufficiently warm and durable to function as a conventional glove and yet have such a sensitivity of feel and ease of movement of certain fingers as to be especially adapted for use by hunters, fishermen, soldiers and workers.

Yet another specific object of the present invention is to provide a conventional glove in accordance with the preceding objects in which the inner face of the thumb and forefinger of the glove shall be of a lighter and softer material than customary in order to improve the sensitivity of feel of the glove.

A still further specific object of this invention is to

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provide a glove which shall include a single piece of pliable material which is lighter than the rest of the glove and which shall form the inner face of the thumb and forefinger of the glove.

Another important specific object of the invention is to provide a glove construction wherein the main body of the glove shall be of conventional and economical design but wherein a lighter piece of material which is soft and water repellent may be provided for the inner face of the thumb and forefinger to improve the sensitivity of those fingers when the glove is worn.

Yet another important object of this invention is to provide an improved glove construction in accordance with the preceding objects together with an improved series of blanks forming the glove and an advantageous method of assembling the various elements into the completed glove.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is an elevational view of a conventional form of glove constructed in accordance with the principles of this invention, the view being of the palm of the glove, the glove illustrated being of the Gunn type;

Figure 2 is a plan view of the back side of the glove of Figure 1;

Figure 3 is a plan view of a blank of the palm portion of the glove;

Figure 4 is an elevational view of the blank forming a part of the thumb portion, this blank being shown in position in Figure 9;

Figure 5 is a blank of the Gunn of the glove;

Figure 6 is a blank of a portion of the thumb of the glove;

Figure 7 is a blank of a portion of the forefinger of the glove;

Figure 8 is an elevational view of the blank forming the back portion of the glove, and which is to be united to the palm blank of Figure 3 after the latter has been assembled into the subassembly of Figures 11 and 12;

Figure 9 is an elevational view showing the manner in which the forefinger and thumb portions of Figures 7 and 4 are attached to the blank of Figure 3 during the process of assembling the glove;

Figure 10 is a sectional view taken substantially upon the plane indicated by the section line 10—10 of Figure 9 and particularly illustrating the manner in which the blanks of Figures 4 and 7 are seamed to the blank of Figure 3;

Figure 11 is an elevational view showing the manner in which the thumb portion of Figure 6 is secured to the subassembly of Figure 9;

Figure 12 is a sectional view taken substantially upon the plane indicated by the section line 12—12 of Figure 11, and showing in particular the manner in which the seams are formed by which the blank of Figure 6 is secured to the blank of Figures 3 and 9;

Figure 13 is a transverse sectional detail view taken substantially upon the plane indicated by the section line 13—13 of Figure 2 and particularly illustrating the location of the seams of the finger stalls of the glove; and,

Figure 14 is a transverse sectional view taken substantially upon the plane indicated by the section line 14—14 of Figure 1 and in particular illustrating the location of the seams by which the palm and back portions of the gloves are assembled and by which the thumb portion of Figure 6 is secured thereto.

In the accompanying drawings and in the following

specification, the principles of this invention have been disclosed as applied to a glove of the Gunn type. It will, however, be readily apparent that the principles may also be employed in gloves of other constructions, such as for example a glove of the Clute type. However, since the principles of construction are generally the same as those disclosed in this particular type of glove, a further explanation and description of the same appears to be unnecessary.

At the outset, it should be understood that this glove may be constructed of any suitable and conventional material, and preferably of a material of appropriate weight and warmth for the particular purposes and conditions for which the glove is intended. In order to impart greater sensitivity of feel and greater ease of manipulating the forefinger and thumb of the wearer, the inner face of these fingers is provided with a material of considerably lesser weight and thickness in order to give the desired sensitivity of feel and ease of flexing to the inner faces of the thumb and forefinger while detracting as little as possible from the over-all warmth of the glove at those fingers. This construction, therefore, embodies the use of a much more expensive material at these two places where greater sensitivity of feel and greater ease of flexing are required, but uses a less expensive but warmer material for all other portions of the glove.

Referring now more specifically to the accompanying drawings, it will be seen that in Figures 1 and 2, the numeral 10 designates the glove in its entirety, Figure 1 showing the palm of the same while Figure 2 shows the back of the glove. This glove includes a palm portion 12 and a back portion 14 seamed together at the two side edges thereof as set forth hereinafter, the palm portion being provided with a Gunn indicated at 16, and a knitted or other circular wrist portion 18 being secured to the inner ends of the palm and back portions 12 and 14. All the glove parts as so far described may be made of the same warm and heavy material except for the wrist band 18 which may be of any suitable and elastic material.

Upon the palm portion, the little finger is provided with a leather tip 20, while similar leather tips 22 and 24 are secured to the second and third fingers of the Gunn 16. A further wear surface is provided across the entire palm 12, being indicated in the form of a leather strip or the like as at 26. In the completed glove, the inner faces of the forefinger and thumb are composed of two pieces of a much thinner and more pliable material, as set forth in detail hereinafter.

While various materials may be utilized to permit the desired sensitivity of feel and ease of maneuvering the thumb and forefinger, it has been found to be extremely satisfactory, for the purposes of this invention, to employ a material known as Byrd cloth and which is lined with milium. This material, while relatively expensive, combines the utmost lightness in weight and thinness of material with satisfactory characteristics or qualities of warmth and protection for the fingers.

The complete glove is composed of six separate blanks or elements, shown in Figures 3-8, inclusive, and which are so shaped as to facilitate their joining together by seams which are positioned to cause as little inconvenience as possible, and by a novel and improved method of forming the glove.

When it is desired to form a glove of the Clute rather than of the Gunn type, the blank of Figure 5 may be omitted and the palm section of the glove, the blank of Figure 3, will then be provided with four finger portions in accordance with the back section of the glove, as in accordance with the blank of Figure 8.

The blank 12 forming the palm of the glove consists of a single piece of material having an elongated projection 28 extending from one end of the same for forming the front surface of the little finger of the glove. The blank is further provided with a projection 30 adjacent the little finger projection 28 but much shorter

than the same and terminating in a straight edge 32 extending transversely of the glove. A longitudinal slot 34 extends downwardly from the inside portion of the edge 32 between the same and the little finger portion 28, and intersects the mid portion of a transverse slot 36. The palm section 12 at the wrist section of the same terminates in a straight transverse edge 38 which is provided with an inwardly extending notch 40 to define the thumb opening, the two edges of the notch 40 being curved inwardly and towards each other and terminating in slots 42 and 44 between which lies a tab 46.

Referring now to the blank 14 of Figure 8 which constitutes the back surface of the glove, it will be seen that the same consists of a single unitary piece of material, preferably of the same character as that of the palm portion 12, this blank having finger projections extending from the end of the same, these being the projections 48 adapted to be secured to the extension 28 of the palm portion to form the little finger; the forefinger projection 50 and the two middle finger projections 52 and 54. At its wrist end this back section 14 terminates in a transverse straight edge 56 which together with the edge 38 of the palm portion is adapted to be secured to the wrist band 18.

The blank 58 shown in Figure 6 is formed of the same material as the palm and back portions of the glove, and is adapted to form the outside surface of the thumb. For that purpose, this blank has a transverse straight edge 60 at its base which likewise is adapted to be secured to the wrist band 18, as will be apparent from Figure 1. From the straight edge 60 at the base of the blank 58, the thumb portion has divergent side edges 62 and 64 which diverge to their point of maximum width as at 66 and 68, respectively, and thence curve inwardly to a rounded end portion 70 opposite the transverse straight edge 60. The blank 58 as above mentioned, constitutes the outside surface of the thumb of the glove, and the inside surface of the end of the thumb portion is provided by the blank 72 of Figure 4. This blank 72 is, as previously mentioned, fabricated of a very thin and pliable and yet warm material, such as Byrd cloth lined with milium. The inside surface of blank 72 has a flat transverse edge 74 and a pair of diverging side edges 76 and 78 extending therefrom and which are joined by a rounded edge 80 at the opposite end of the blank from the edge 74. The Gunn of the glove is formed by the blank 82 of Figure 5 and likewise is of the same material as the palm and back sections of the glove. This blank has a curving edge and is of a lengthened ellipsoidal shape, being provided with a transverse notch 84 intermediate one side of the same and extending to the center of the blank.

The inner face of the finger tip is formed of a blank 86, as shown in Figure 7, this blank likewise being constructed of Byrd cloth lined with milium in the same manner as the blank 72 of Figure 4. The forefinger blank 86 has a transverse straight edge 88 with a perpendicular straight edge 90 from one end of the same, and an opposite side edge 92 at the other end of the edge 88 and converging towards the edge 90, the blank opposite the edge 88 having a curving portion 94 with a V-shaped notch 96 intermediate its ends.

The six elements of the glove are assembled together in the following manner, and preferably by the following method and operation in order to form the complete glove.

In the first operation in the assembling of the elements into the complete glove, the forefinger front surface blank 86 is sewed to the projection 30 of the palm section by placing the edges 88 and 32 upon each other and stitching the same together. When so stitched, the parts are in the position shown in Figure 9. In the next operation, the tab portion 46 is folded upwardly upon the palm section 12 above the slots 42 and 44, and the straight edge 74 of the inside face of the thumb blank 72 is then placed

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upon the same with the edge 74 of the thumb blank resting upon the corresponding edge 45 of the tab 46, and these edges are then sewn together by a seam 98 as will be better apparent from Figure 10. Also shown in Figure 10 is the seam 100 by which the edges 88 and 32 are secured together.

At the upper ends of the slots 42 and 44 which separate the tab 46 from the palm portion 12 of the glove, the tab is bent upwardly upon the palm portion along a transverse dotted line 43. The tab 46 and the inside surface of the thumb formed by the blank 72 secured thereto are thus bent upwardly upon the palm as a unit about the dotted line 43 and form the complete inside surface of the thumb.

Reference is now made to Figure 11 for an exposition of the next operation in the assembling of the blanks into the glove. With the tab 46 and the attached blank 72 folded upwardly about the edge 43, as shown in dotted lines in Figure 11, the thumb blank 58 is then applied to the palm portion with the edge 60 of this blank lying along the edge 38 of the palm section. The blank 58 thus overlies the portions 46 and 72 as shown in full lines in Figure 7. With the blanks in the position shown in Figure 11, the edges 62 and 64 are then sewed to the slots 42 and 44, and the rounded upper edge 70 is in turn sewed to the side edges of the tab 46 and the side edges of the tab 72 until the complete thumb of the glove is formed.

The next, and fourth, operation of the fabrication of the glove consists in sewing in the Gunn 82 of Figure 5 to the two middle finger portions 52 and 54 of the blank 14 constituting the back of the glove. For this purpose, the inner end 102 of the transverse slot 84 of the Gunn 82 is applied to the mid portion of the edge 32 and then the two opposite edges of the slot 84 are laid out along the edge 32 in opposite directions from the center of the same and are sewed thereto by a continuous seam. The two halves of the Gunn 82 on opposite sides of the slot 84 are then folded about the longitudinal axis of the Gunn and form the two palm or inner surfaces of the two fingers.

In the fifth operation, the palm section, as previously described, is sewed to the back section, a continuous seam or stitching being employed for this purpose. This seam will start at one edge of the palm and back sections of the glove at the wrist band edge 38 and 56 thereof, to extend up one side as about the little finger portions 48 and 28 thereof then joining the edges of the two middle finger portions of the Gunn blank to the middle fingers of the back section of the glove, and finally, joining the forefinger portion 86 of the front panel with the forefinger 50 of the rear panel, and thence down the other side of the glove to the wrist band portion. The latter is then sewed upon the glove, completing the same.

As will be readily understood, the palm section 12 has the finger portions wider than those of the back section 14 in order to position the seams inside the finger stalls of the completed glove, as shown in Figure 13, while the seams joining the side edges of the palm and back sections 12 and 14 to each other are likewise disposed on the inside of the glove, as shown by the seams 106 and 108 of Figure 14, while the seams joining the edges 62 and 64 of the thumb panel 58 to the edges 42 and 44 of the palm section 12 are likewise disposed inside of the glove by the seams 110 and 112 in Figure 14.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the in-

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vention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. A sportsman's glove adapted to provide both maximum warmth for the hand and maximum sensitivity and ease of flexing of the thumb and forefinger, comprising palm and back sections joined together, the major portions of said sections being of a relatively thick, stiff and warm material, said palm section having a notch therein constituting a thumb opening, a tab on said palm section extending into said notch, an outer thumb covering having its edges secured to said palm section along the edges of said notch, the side edges of said tab being secured to the edges of said outer thumb covering and forming the base portion of the inner thumb covering, a piece of a relatively thinner, warmer and more pliable material than that of said palm and back sections comprising the tip portion of the inner thumb covering and being secured to the end of said tab and to the edges of the outer thumb covering.

2. In a glove having improved characteristics of feel and movement in its thumb and forefinger together with maximum warmth in its remaining portions, a palm section of a relatively heavy material, said palm section having slots extending inwardly from the wrist end of the section to provide a notch therebetween constituting a thumb opening, the slots extending inwardly into the palm section beyond the inner end of said notch to provide a tab disposed between said slits, a piece of a relatively thinner and more pliable material than that of the palm section secured to the end of the tab and forming an extension thereof, said tab being folded back upon the palm section along a line extending between the inner ends of said slots, said tab and extension comprising the inner or palm face of the thumb, a piece of a relatively heavy material comprising the outer face of the thumb and having its edges joined to the edges of said notch and to the edges of said tab and extension, whereby to provide a surface of increased sensitivity upon the ball portion of the thumb.

3. The combination of claim 1 including a second piece of a relatively thinner and more pliable material than that of said palm and back sections, said second piece comprising a portion of the palm surface of the forefinger of the glove whereby the thinner material of the thumb and forefinger of the glove will afford greater sensitivity of feel and greater ease of flexing for the thumb and forefinger of the user.

4. The combination of claim 2 including a second piece of a relatively thinner and more pliable material than that of said palm and back sections, said second piece comprising a portion of the palm surface of the forefinger of the glove whereby the thinner material of the thumb and forefinger of the glove will afford greater sensitivity of feel and greater ease of flexing for the thumb and forefinger of the user.

References Cited in the file of this patent

UNITED STATES PATENTS

499,601	Smellie	June 13, 1893
1,875,441	Gillian	Sept. 6, 1932
2,074,893	Dunn	Mar. 23, 1937

FOREIGN PATENTS

254,538	Great Britain	July 8, 1926
365,528	Great Britain	Jan. 18, 1932
598,045	France	Dec. 4, 1925