Nov. 15, 1955 H. E. WALLER 2,723,399

REVERSIBLE GLOVE AND METHOD OF MAKING SAME

Filed April 30, 1953 3 Sheets-Sheet 1

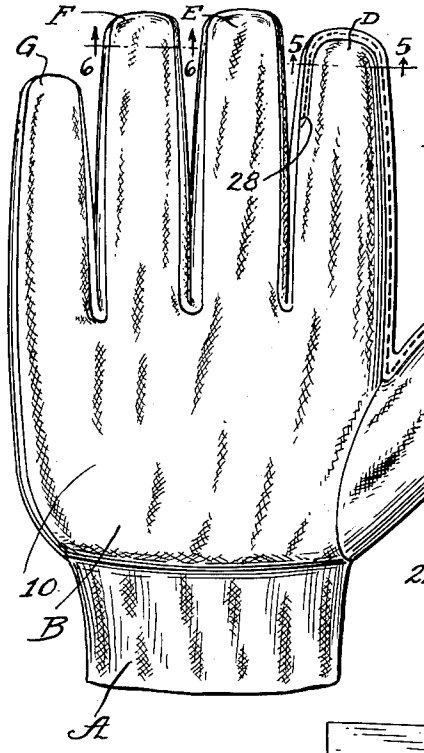


Fig. 1.

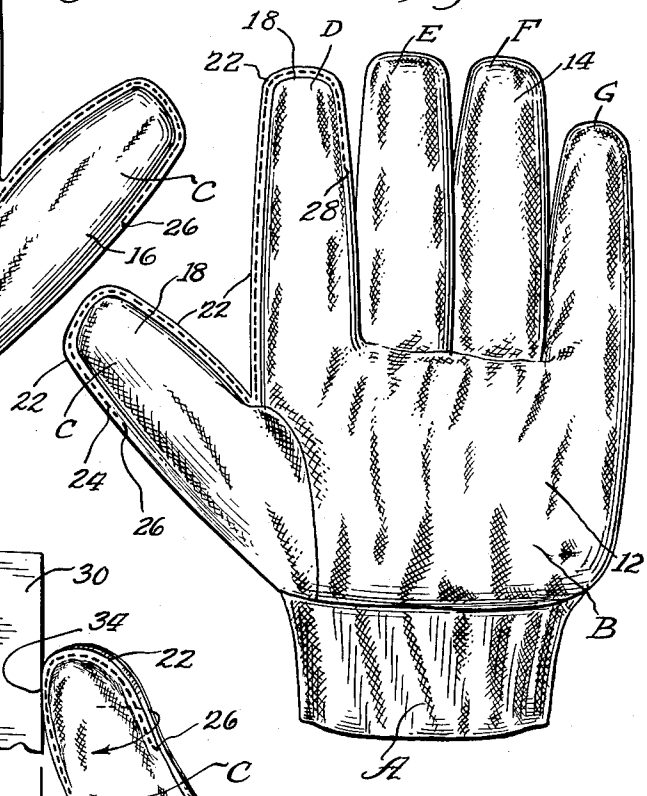


Fig. 2.

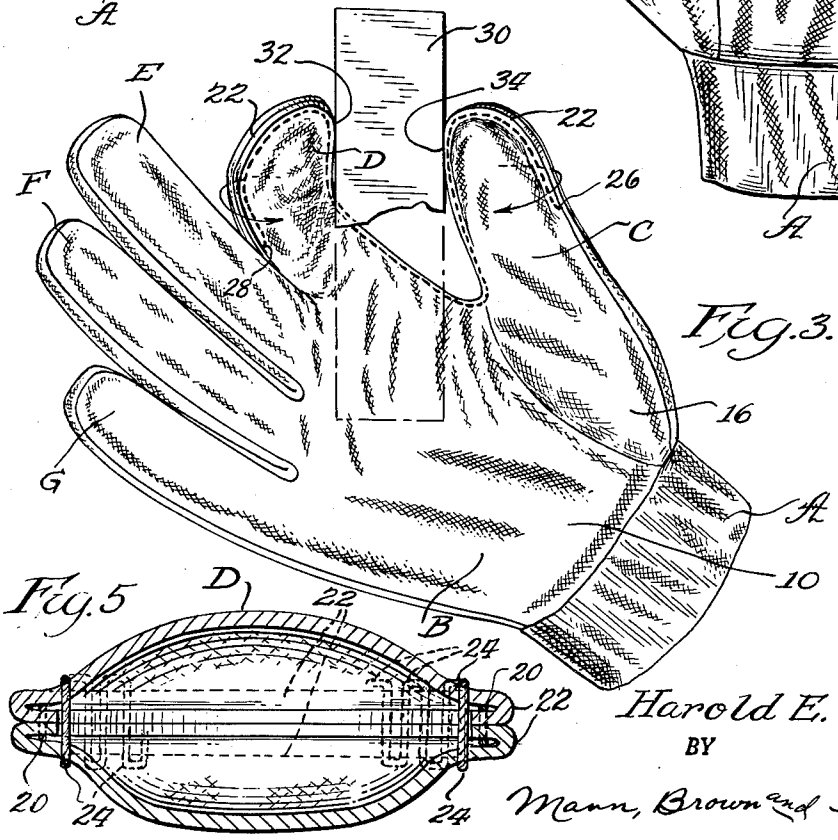


Fig. 3.

Fig. 5

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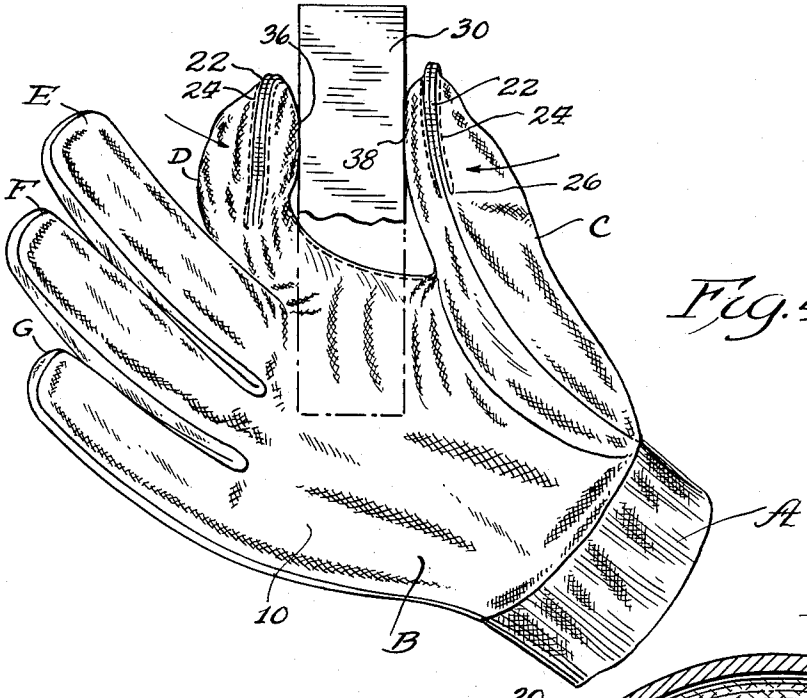


Fig. 4.

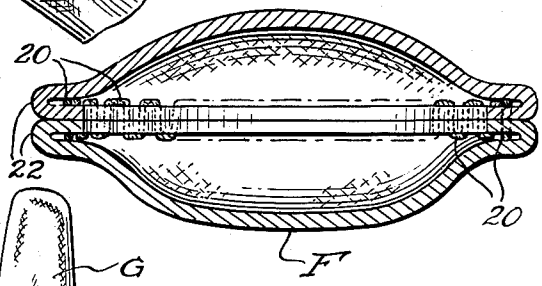


Fig. 6.

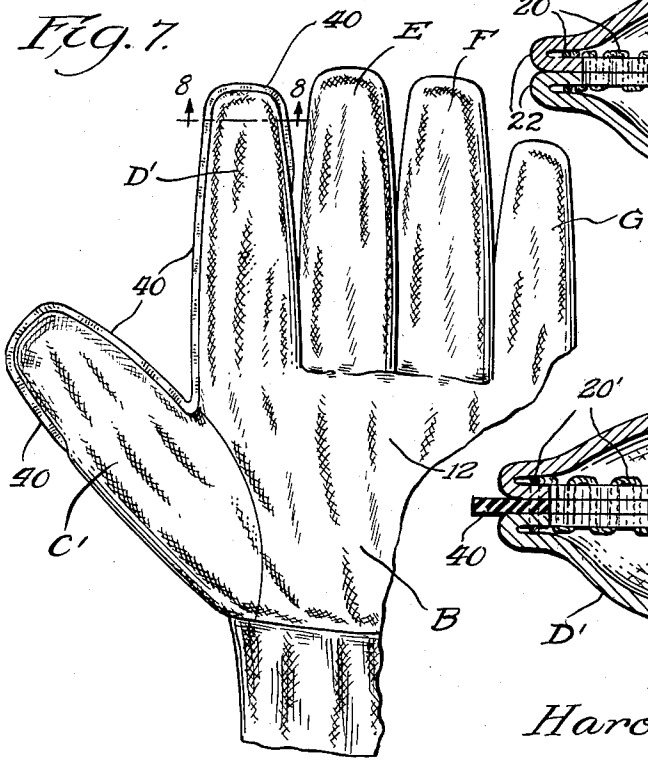


Fig. 7.

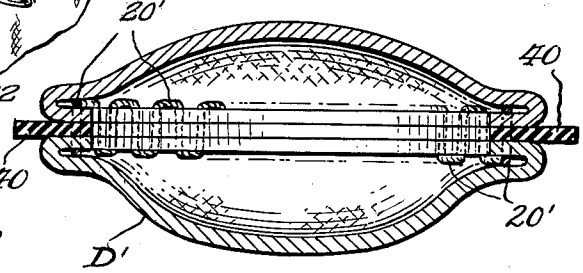


Fig. 8.

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Filed April 30, 1953 3 Sheets-Sheet 3

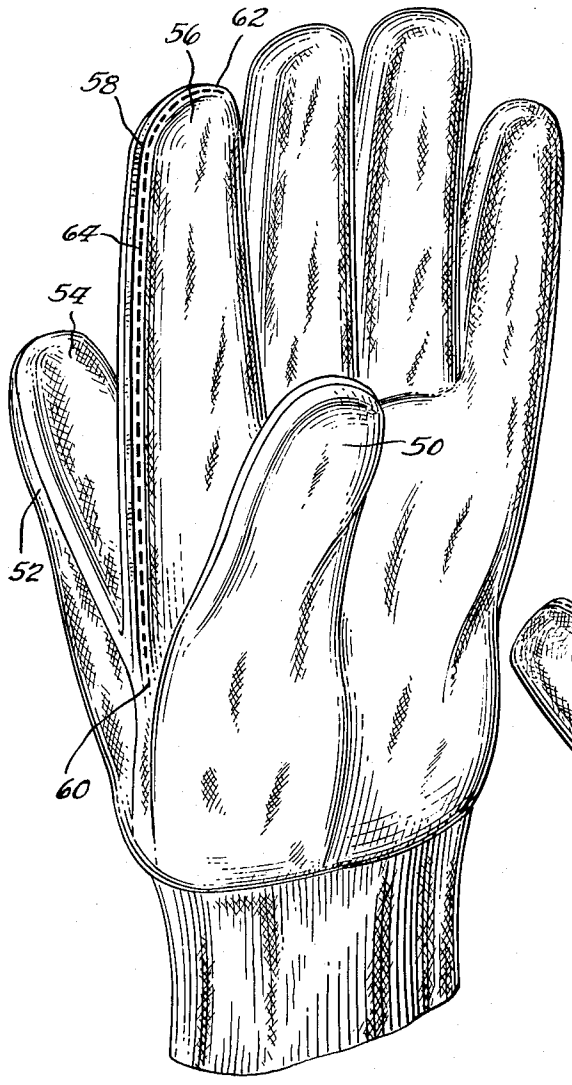


Fig. 9.

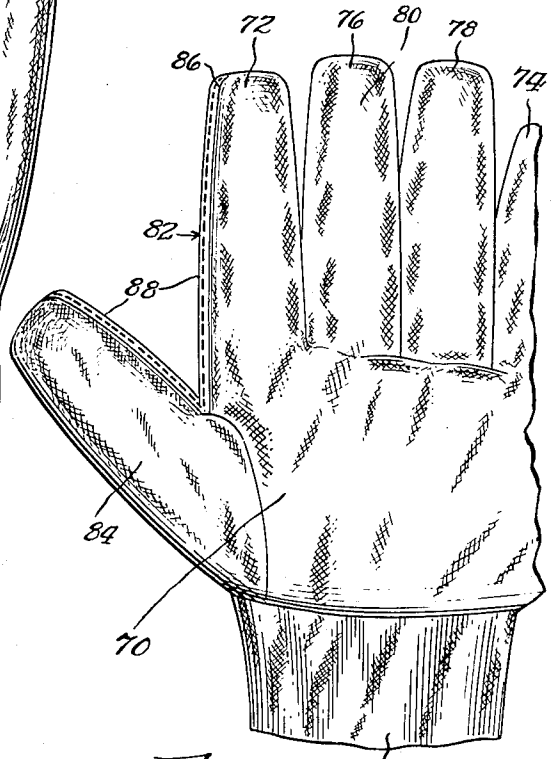


Fig. 10.

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United States Patent Office

2,723,399

Patented Nov. 15, 1955

2,723,399

REVERSIBLE GLOVE AND METHOD OF MAKING SAME

Harold E. Waller, Kewanee, Ill., assignor to The Boss Manufacturing Company, Kewanee, Ill., a corporation of Illinois

Application April 30, 1953, Serial No. 352,203

2 Claims. (Cl. 2—165)

My invention relates to a reversible glove and method of making same.

For many years manufacturers of work gloves have made and sold gloves which can be used on either hand. When such a glove is worn on the right hand one side of the glove will constitute the palm, whereas when the glove is worn on the left hand the other side of the glove will constitute the palm. Such gloves are known in the trade as reversible gloves, and the primary purpose of such gloves has been to prolong wear and reduce the cost of gloves to workmen and other users.

Such reversible gloves have been satisfactory for certain purposes, but have not proved satisfactory where the workman is continually gripping articles between the thumb and fingers. In such use the principal wear occurs on opposed areas adjacent the end of the thumb and the end of the index finger. While these opposed areas are somewhat different when different sides of the glove are utilized as the palm, the two sets of opposed areas have portions in common, and, when these common portions are worn through, the glove becomes useless and its life cannot be extended by reversing it, i. e., by shifting it from one hand to the other.

The foregoing disadvantage of reversible gloves has long been recognized, and numerous attempts have been made over a period of many years in an effort to overcome or eliminate this difficulty. Such efforts have been unsuccessful and no one has heretofore produced a satisfactory and inexpensive reversible glove which does not have the foregoing disadvantage.

An object of my invention is to provide an inexpensive, comfortable, convenient, and altogether satisfactory reversible glove which avoids this difficulty of the prior art.

Another object of my invention is to provide a new and improved method of making such a glove.

Other objects and advantages will become apparent as the description proceeds.

In the drawings:

Fig. 1 is a plan view of one side of a reversible glove embodying my invention;

Fig. 2 is a view similar to Fig. 1, but showing the other side of the glove of Fig. 1;

Figs. 3 and 4 show successive stages in the act of gripping a small article between the thumb and index finger;

Fig. 5 is a transverse sectional view of the index finger taken on the line 5—5 of Fig. 1;

Fig. 6 is a transverse sectional view of the ring finger taken on the line 6—6 of Fig. 1;

Fig. 7 is a view similar to Fig. 1, but showing a modified form of my invention;

Fig. 8 is a transverse sectional view of the index finger taken on the line 8—8 of Fig. 7;

Fig. 9 is a perspective view of a reversible glove of the two-thumb type to which my invention has been applied; and

Fig. 10 is a view similar to Fig. 1 but showing another modified form of my invention.

While the purpose of a reversible glove is to provide a glove in which either side may be used as the palm or face of the glove, it will be convenient for purposes of description to describe one side of the glove as the face and the other side as the back, and this procedure will be adopted in this application. It is to be expressly understood, however, that both sides of the glove are adapted to be used as the face and that it is my intention that both sides of the glove are to be so used.

In Figs. 1 to 6 I have illustrated a glove comprising wrist portion A, hand portion B, thumb C, and fingers D, E, F and G. In the particular embodiment shown, the wrist A is formed of knitted material, but it is to be understood that this portion of the glove may be formed of any other suitable material and may be long or short, tight-fitting or loose-fitting, or of any other desired construction.

The hand portion B of the glove is illustrated as being formed of two pieces of fabric **10** and **12**. For convenience, the side of the glove formed by the fabric piece **10** will be referred to as the back, and the side of the glove formed by the fabric piece **12** will be referred to as the face. The fabric piece **10** also forms the back of the fingers G, F, E and D, whereas the fabric piece **12** forms the front part of fingers D and G only. The front portions of fingers E and F are formed by a separate fabric piece **14**.

The thumb C is formed of fabric pieces **16** and **18**. While I have referred to the several pieces **10**, **12**, **14**, **16** and **18** as being composed of fabric, it is to be understood that some or all of these pieces may be made of leather, or any other suitable material or combinations of different materials.

The pieces of fabric or other suitable material forming the glove may be of any usual or suitable shape and cut, and it is to be understood that my invention is not limited to a gunn type of finger construction or to any other particular type of finger construction, or number, shape, or arrangement of the various parts of the glove. However, it is desirable to have those pieces of fabric or other material which form the thumb C and index finger D so shaped and cut as to provide a slightly wider thumb and index finger than those provided by the conventional glove. The various pieces of fabric may be secured together by conventional stitching like that indicated by reference numeral **20** in Figs. 5 and 6.

After the glove has been otherwise completed, I form a welt or welt seam **22** around the ends of the thumb and index finger, and along the adjacent edges of the thumb and forefinger by a line of stitching **24** beginning at a point **26** on the outside edge of the thumb and continuing uninterruptedly around the end of the thumb, down the inside edge of the thumb, up the adjacent edge of the index finger D, around the end of this finger, and down the other side to the point **28**.

This welt **22** constitutes a novel, inexpensive, and satisfactory means for insuring that completely different areas of the glove will come in contact with an object when the glove is reversed. In Figs. 3 and 4 I have shown successive steps in the act of grasping an article **30** between the thumb and one or more fingers. In the initial contact illustrated in Fig. 3, the article **30** is being contacted by the welt **22** at points **32** and **34**. This initial engagement of the welt with the article turns or shifts the thumb and index finger parts of the glove so that as the gripping action is completed the article **30** is engaged by areas **36** and **38**. Both of these areas are wholly within what is then the face or palm side of the glove so that no wear occurs on the back of the glove. In Figs. 3 and 4 the object **30** is shown as being grasped only between the thumb and finger, but the same action takes place whether the grip on the

article is limited to the thumb and forefinger, or is extended to include one or more additional fingers as well as the palm of the hand.

Ordinarily, in a gripping action of this kind the areas **36** and **38** will become worn through before other portions of the glove. When either area **36** or **38** is worn through, the glove may be reversed to provide distinct and unworn areas for gripping articles, such as indicated at **30**. In this manner, my invention substantially doubles the life of a reversible glove when used by workmen who are constantly gripping articles between the thumb and fingers.

As previously stated, the pieces of which the thumb and forefinger are made are preferably cut so that these pieces have thumb and forefinger portions which are slightly wider than in a conventional glove. This extra width is to compensate for the reduction in the finger and thumb receiving space produced by the line of stitching **24**, so that the completed glove embodying my invention has the same space for accommodating the thumb and forefinger as does a conventional glove.

In Figs. 3 and 4 the action of the welt **22** is to turn the end portions of the thumb and forefinger of the glove in the directions indicated by the arrows. In Fig. 4 the end result is slightly exaggerated for purposes of illustration, it being only necessary that the welt **22** turn the end portions of the thumb and forefinger sufficiently so that one set of areas engages the workpiece **30** when one side of the glove is utilized as the face or palm, and a completely different set of areas engage the workpiece when the other side of the glove is utilized as the face or palm.

In Figs. 7 and 8 I have shown a modified form of my invention in which a rib or welt **40** of leather, relatively stiff fabric, or other suitable material, performs the function of the welt seam **22** of the previous embodiment. This welt **40** may be incorporated in the glove by securing an edge of this strip in the seam **20'** which connects the pieces of fabric forming the thumb and forefinger. The rib or welt **40** functions in the same manner as the seam type of welt **22** both providing outwardly extending flanges and no further description of this modification of my invention is deemed necessary.

In the embodiment of Fig. 9, I have illustrated my invention as being applied to a reversible glove of the two-thumb type. In this type of glove each thumb **50** and **52** has an area **54** adapted to engage workpieces gripped between the thumb and forefinger, whereas only a single index finger **56** is provided to cooperate with the two thumbs **50** and **52**. In order to insure that separate areas of the index finger **56** will cooperate with the two thumbs in gripping workpieces, the index finger is provided with a welt **58** which is illustrated as extending from a point **60** adjacent the base of the thumbs **50** and **52** to a point **62** at the end of the index finger.

The welt **58** may be either in the form of a welt seam like that of Figs. 1 to 6 inclusive, or in the form of a rib like that of Figs. 7 and 8, but is illustrated as being of the welt seam type and formed by a line of stitching **64**. While this line of stitching is illustrated as terminating at the point **62**, this stitching and the welt seam formed thereby could continue further down the other side of the index finger in the manner indicated in the previous embodiments, or could stop short of the point **62** in the manner indicated by the embodiment of Fig. 10.

It will be understood that the two-thumb reversible glove may be of any usual or suitable construction and composed of any conventional or suitable material or combinations of materials. In Fig. 10 I have shown

a further form of my invention applied to a reversible glove of the one-thumb type. In this form of my invention the glove is of the usual construction in which the piece of fabric **70** is folded upon itself to form the palm and back of the glove, the front of the index finger **72** and little finger **74**, and the backs of all four fingers **72**, **74**, **76** and **78**. The fronts of the middle fingers **76** and **78** are formed by a single piece of fabric **80**.

The piece of fabric **70** is folded along the line **82** and the opposite edges sewed together in accordance with conventional practice. The thumb **84** may be of the usual one-piece construction and the wrist **86** may be of the knitted type, or of any other suitable construction and configuration.

In this form of my invention a line of stitching **86** extends along the adjacent edges of the thumb and forefinger to form a welt or welt seam **88**. It will be noted that in this form of my invention the welt does not extend across the ends of the thumb and forefinger, as in the previous embodiments, since it is optional to terminate the welt adjacent the inner corners of the thumb and forefinger, or extend the welt therebeyond as in the previous embodiments.

While I have illustrated and described only a few embodiments of my invention, it is to be understood that my invention is not limited to the details shown or described, but includes all modifications, variations and equivalents coming within the scope of the appended claims.

I claim:

1. A reversible glove of the class described, comprising a hand portion, finger portions, and a thumb portion disposed in symmetrical relation to a plane passing through all of said finger portions to thereby impart reversibility to said glove, and flanges associated with and extending outwardly from the adjacent sides of the thumb portion and index finger portion in said plane dividing said thumb portion and index finger portion into sets of front and back working areas, said flanges being of a width sufficient to cause said sets of front or back working areas selectively, upon right or left-hand wear, to engage an article gripped between the thumb portion and the index finger portion.

2. A reversible glove of the class described, comprising hand portions, finger portions, and thumb portions disposed in symmetrical relation on opposite sides of a plane passing through all of said fingers to thereby impart reversibility to said glove, and a flange associated with and extending outwardly from the index finger in said plane and on the side of said index finger disposed away from the remaining finger portions dividing said index finger portion into front and back working areas, said flange being of a width sufficient to cause said front or back working area selectively, upon right or left-hand wear, to engage an article gripped between one of said thumb portions and said index finger portion.

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