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65 20 63 Jeg.9 62 62 66 56 ig.8 INVENTOR Grank L. Glick Dre it Clement & Jordon ATTORNEYS

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# United States Patent Office

### **3,504,379** Patented Apr. 7, 1970

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3,504,379 GLOVE Frank L. Glick, 1216 S. Western Ave., Park Ridge, Ill. 60068 Filed Feb. 7, 1969, Ser. No. 797,388 Int. Cl. A41d 19/00

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7 Claims

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#### ABSTRACT OF THE DISCLOSURE

An athletic glove in which the back of the glove is open to expose the knuckles of the hand and in which attachment flaps connected to the opposite sides of the glove at the base of the finger stalls and at the wrist 15 of the glove extend across the open back in overlapping relation and may be fastened together to subject the glove to lateral tension to maintain the palm of the glove tightly against the hand to reduce slippage between the hand and the glove. In addition a releasable 20 selectively adhering type of material such as Velcro attached to the gripping surface of the glove cooperates with a mating piece on the shaft to assist in retention of the shaft being gripped.

#### BACKGROUND

In many sports, the grip on shaft such as a golf club or a ski pole should be firm and the hand should 30 not slip on the shaft. Flexible gloves are often used to facilitate and to aid in the gripping of such shafts.

The purpose of such gloves is to inhibit slippage between the hand and the shaft, this being particularly important in golf where relative motion between the hand <sup>35</sup> and the shaft during a golf swing results in inconsistence and poor results. In addition retention of the shaft in the grip is also important and added friction between the glove and shaft is helpful for this purpose.

Although many gloves may be fitted tightly around <sup>40</sup> the hand when the hand is open, as the hand is closed to form a fist, such as when gripping a shaft, the palm section of the glove is distorted and stretched, and after repeated use, the material becomes loose and floppy. As a result the glove no longer performs one of its primary functions, enhancing the grasp of the shaft and preventing relative motion between the hand and the shaft being held.

#### GENERAL DESCRIPTION

In accordance with the present invention, there is provided a glove in which the palm section of the glove is retained tightly against the palm of the hand to prevent relative movement and slippage between the hand and the shaft being grasped and further provided with means for retaining the shaft being grasped to prevent its inadvertent release.

In accordance with the present invention there is provided a glove in which the palm section of the glove is retained tightly against the palm of the hand even when the hand is formed into a fist to grasp a shaft and in which there is provided on the gripping surface of the glove means to assist in retention of the shaft within the grasp of the glove wearer. (5)

The glove is retained tightly around the hand by preventing stretching of the glove over the knuckles as the hand is repetitively formed into a fist clasping the shaft. The maintenance of the tight fit of the palm section of the glove on the hand is effected by forming the glove  $_{70}$ with an open back to expose the knuckles of the hand. In this way the back of the glove is not stretched over 2

the knuckles when a shaft is grasped thereby preventing stretching of the material.

The glove is retained tightly on the hand by the use of attachment flaps attached to the sides of the glove between the base of the finger stalls and the wrist portion. The fastening means utilized in conjunction with these flaps are such as to apply lateral tension along the sides of the glove and therefore across the palm, to pull the palm of the glove tightly against the hand.

In one embodiment, this is effected by using an attachment flap which is triangular in shape with the base of the triangle connected to the side of the glove between the wrist portion and finger stalls. The flap may be connected to the glove by stretchable material such as elastic which provides additional tension when the respective attachment members are interconnected. In this manner lateral tension is applied at least at points at the base of the finger stalls and adjacent to the wrist portion of the glove.

To effect this tension, a flexible gripping means is utilized, such as Velcro nylon hook and pile tape described, for example, in DeMestral Patent No. 3,114,951 and sold by American Thread Company. One of the attachment members would have the Velcro nylon pile tape and the other would have the nylon hook tape. By pulling the two attachment flaps transversely and pressing them together, the palm of the glove is subjected to lateral tension and when the hand is formed into a fist to grasp a shaft the open back of the glove exposes the knuckles to prevent distortion and stretching of the glove, thereby allowing the palm of the hand. The glove fitting tightly against the hand inhibits slippage between the hand and the shaft being clasped.

Additionally, in order that the glove itself may be retained in position on the shaft a piece of releasable, selectively adhering material, such as the aforementioned Velcro tape, either the hook tape or the pile tape, can be formed as a part of the gripping portion of the glove, for example, at the heel of the glove. The corresponding mating portion can then be applied to the shaft so that a glove encased hand applied properly to the shaft, such as a ski pole or golf club will cause the Velcro portions to adhere to each other thereby assisting in retention of the shaft in the hand.

Numerous other advantages and features of the present invention will become readily apparent from the following detailed description of the invention and of one embodiment thereof, from the claims and from the accompanying drawings in which each and every detail shown is fully and completely disclosed as a part of this specification, in which like numerals refer to like parts.

FIGURE 1 is a perspective view of a prior art glove on a hand;

FIGURE 2 is a diagrammatic view of the glove of the present invention in which the palm section is maintained in smooth and tight contact with the hand;

FIGURE 3 is a view of the back of the glove with the 60 hand open;

FIGURE 4 is a view of the back of the glove with the hand formed into a fist;

FIGURE 5 is a view of the back of one embodiment of the glove showing the arrangement of the attachment flaps;

FIGURE 6 is an alternative embodiment;

FIGURE 7 is a view of the palm of the glove showing the incorporation of grip assisting means; and

FIGURES 8 and 9 are perspective views showing the relationship of the grip assisting means and the shaft being held.

Referring more particularly to the drawings, there is shown in FIGURE 1 the typical result of the use of a prior art glove 11, such as a golf glove, in which the palm section 13 becomes loose and sloppy as a result of it being repeatedly stretched over the knuckles of the hand.

In FIGURE 2 there is shown a glove 20 in accordance with the present invention in which the palm section 22 is retained tightly against the palm of the hand to inhibit relative motion between the hand and the glove 20, and therefore, between the hand and a shaft being grasped. 10 The glove 20 is made of a pliable material and includes the palm section 22, a plurality of finger stalls 24, 26, 28, 30, a thumb stall 32 and a generally open back 34 cut to expose the knuckles 36 of a hand 38 inserted therein (see FIGURE 4). 15

The glove 20 is secured to the hand by a pair of attachment flaps 40, 42 which may be generally triangular in shape. The base of the flap 40 is shown connected to one side 43 of the glove 20 extending from the base 44 of the forefinger stall 24 down to the wrist portion 46 of the 20 glove 20. The other flap 42 is shown connected to the opposite side 47 at the base 48 of the little finger stall 30 and at the wrist portion 46. In this way, when the attachment straps are pulled over the open back and fastened to each other, lateral tension is applied across the entire glove resulting in tightening of the palm section of the glove against the palm of the hand. The desired tension is effected by utilizing fastening means between the attachment straps 40, 42 which is designed to apply tension in any direction, such as, for example, Velcro pile 30 tape 50 on strap 40 and hook tape 52 on strap 42.

As shown in FIGURES 3, 4 and 5, the attachment straps 40, 42 may conveniently be secured to the sides of the glove by means of stretchable material, such as elastic, which facilitates maintenance of the desired tension. Such an elastic member may take the form of a continuous strip 54 extending from the base of the finger stall 24 to the wrist portion 46 or may take the form of a pair of angularly disposed elastic bands 56, 58 terminating at the flap 42. Alternatively, as seen in FIGURE 6, the attachment straps 40, 42 may be connected directly to the sides 43, 47, respectively of the glove 20.

In order to facilitate the maintenance of the gripping position on the shaft, the gripping portion of the glove 20, such as the heel 60 of the palm section 22 or the area 61 around the forefinger stall 24 and thumb stall 32, may be provided with suitable releasable, selectively adhering grip retention means, such as a piece of Velcro hook tape 62 or 63 which is designed to cooperate with a matching piece of pile tape 64 or 65, respectively, attached to a shaft 66 to be gripped, as seen in FIGURES 8 and 9. The coaction between the two Velcro pieces assists in retention of the shaft within the grip of the hand and in addition maintains the desired position of the hand on the shaft.

Although the grip assisting means is shown as a small piece 60 at the heel of the glove, suitable for use on a golf club to allow ready removal of the hand when desired, and is at the piece 61 for use with ski poles, it can take any convenient configuration to effect the desired purpose.

From the foregoing, it will be observed that numerous variations and modifications may be effected without departing from the true spirit and scope of the novel concept of the invention. What is claimed is:

1. A glove comprising a palm section, a plurality of finger stalls, a thumb stall, and an open back exposing the knuckles of a hand inserted therein to prevent stretching of the glove over the knuckles, a first attachment member extending across said open back and connected to one side of the glove at points adjacent to the wrist portion and the base of the little finger stall, a second attachment member extending across said open back and connected to the other side of the glove adjacent to the wrist portion and the base of the forefinger stall, each of said attachment members having fastening means adapted to coact with each other to pull the sides of said glove together across said open back whereby the palm section is subjected to lateral tension to maintain the palm section tightly against a hand inserted into the glove.

2. The glove of claim 1 in which one of said attachment members is connected to the glove along one side from the base of the respective finger stall to the wrist portion thereof.

3. The glove of claim 1 in which at least one of said attachment members is generally triangular in shape and in which said attachment members extend in overlapping relation with respect to each other with the apex of said triangular member overlapping the other member.

4. The glove of claim 1 in which a stretchable material interconnects at least one of said attachment member to the glove.

5. The glove of claim 1 in which said fastening means includes Velcro hook tape and Velcor pile tape on opposed surfaces of said attachment members.

6. The glove of claim 1 in which at least a portion of the gripping surface of said glove includes an area of releasable, selectively adhering material adapted to coact with a complementary releasable, selectively adhering material on a shaft to be gripped to assist in retention of said shaft.

7. A glove comprising a palm section, a plurality of finger stalls including a thumb stall, and an open back, a pair of attachment flaps extending in overlapping relationship across said open back and connected to opposite sides of the glove, said attachment flaps having generally flexible fastening means adapted to coact with each other and simultaneously apply lateral tension to said opposite

45 sides at least at points adjacent to the base of said finger stalls and adjacent to the wrist portion of the glove to pull the glove tightly across the palm of a hand inserted therein with the knuckles of the hand exposed through said open back without stretching the glove over the knuckles.

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