

[54] **BOWLING GLOVE**
 [76] Inventor: **James Duggins**, 1745 Acreview Ln., Cincinnati, Ohio 45240

3,704,994	5/1972	Krzewinski.....	2/161 A X
3,728,738	4/1973	Andollino	2/161 A
3,772,706	11/1973	Brigidi	2/161 A

[22] Filed: **Aug. 29, 1973**

Primary Examiner—Geo. V. Larkin

[21] Appl. No.: **392,567**

Attorney, Agent, or Firm—John G. Schenk

[52] U.S. Cl..... **2/161 A**
 [51] Int. Cl..... **A41d 19/00**
 [58] Field of Search..... 2/159, 160, 161 A, 161 R, 2/16; 273/54 B

[57]

ABSTRACT

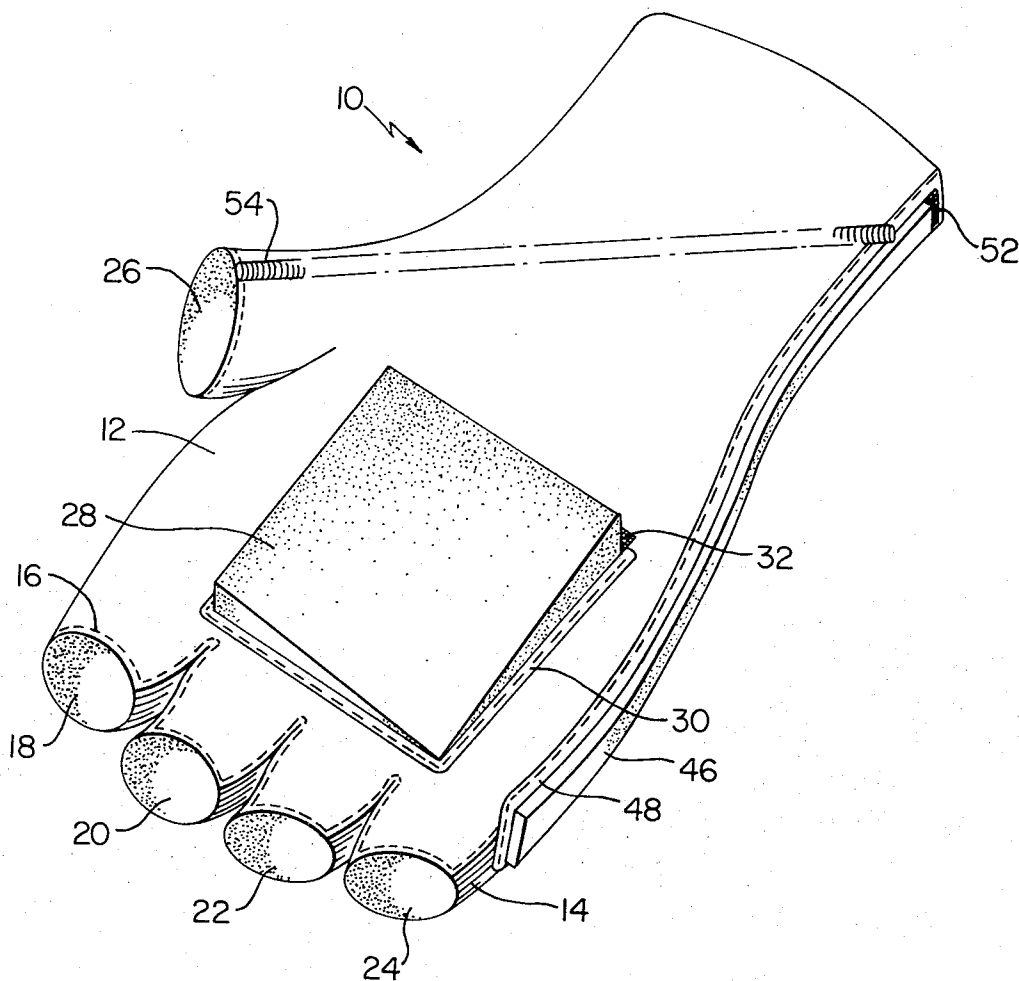
A bowler's glove is provided with a fitted pocket to receive a wedge insert. The wedge insert permits the bowler to vary the amount of spin of the ball depending on the orientation of the wedge. A spring steel insert along one edge of the glove provides stiffening to assist in keeping the wrist straight, as well as providing added lift during the release of the ball. A coil spring aligned with the thumb stall assists in reminding the bowler to remove the thumb first during release of the ball.

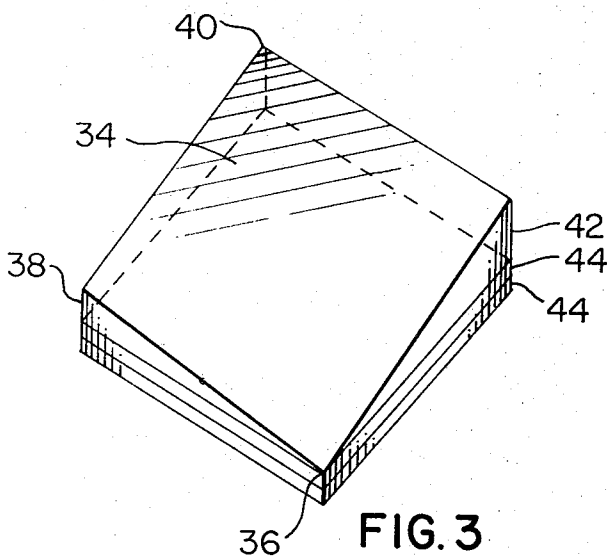
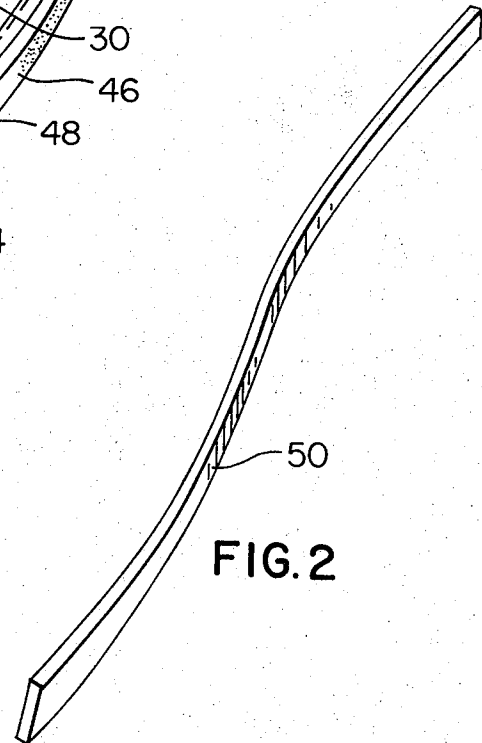
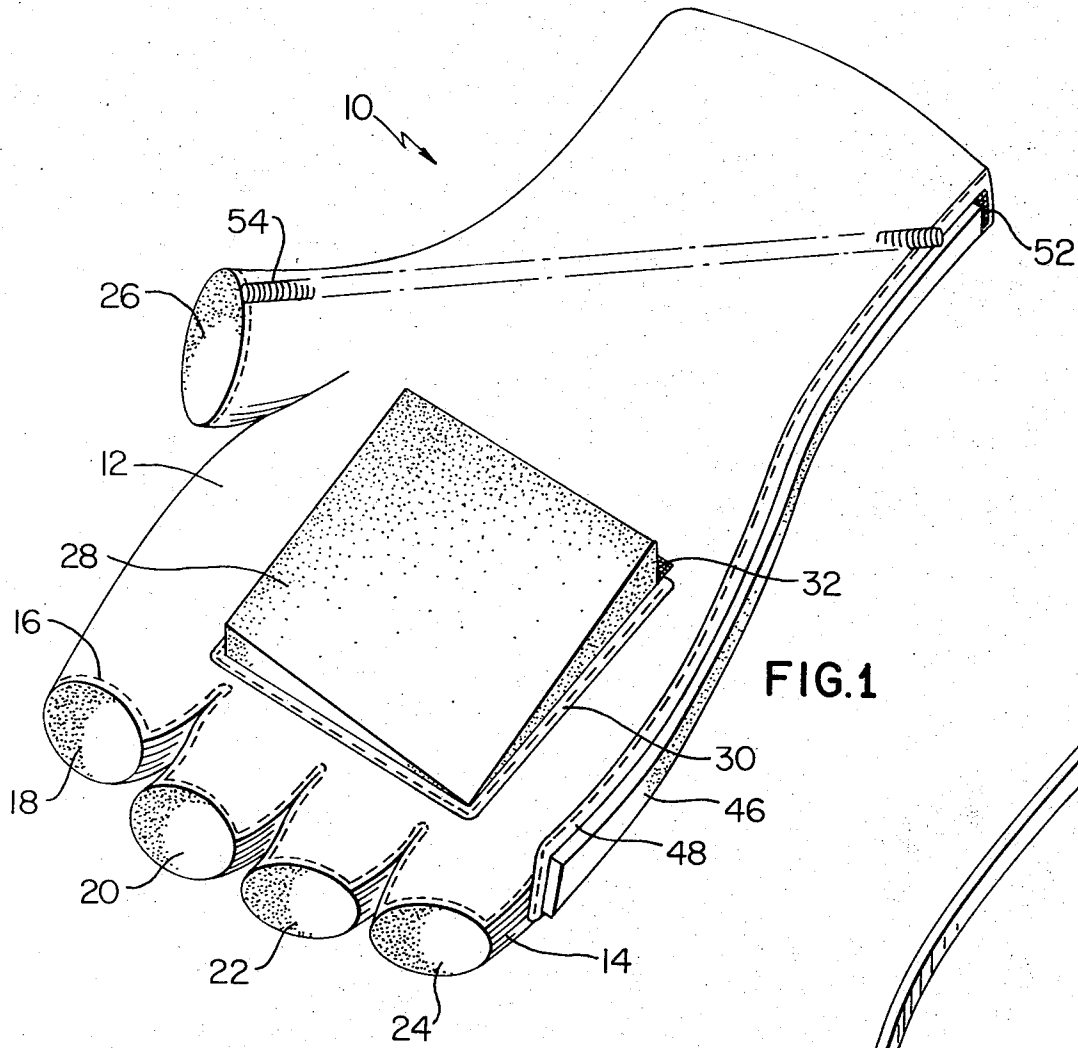
[56] References Cited

UNITED STATES PATENTS

3,031,680	5/1962	Compiano.....	2/161 A
3,123,832	3/1964	Kubik	2/161 A
3,421,160	1/1969	Domenico.....	2/159
3,564,613	2/1971	Fowler	2/159
3,583,704	6/1971	Callanan	2/161 A X

5 Claims, 3 Drawing Figures





BOWLING GLOVE

BACKGROUND OF THE INVENTION

This invention relates generally to a game glove and more particularly to a bowling glove of the type used as an aid in achieving a better grip on the ball for improved control during its delivery in bowling.

Numerous bowlers aids and bowling gloves are known and all have the main purpose for assisting the bowler in improving his game. Examples of such devices are shown in U.S. Pat. Nos. to Tureaud 2,738,190; Compiano 3,031,680; Kubik 3,123,832; and Domenico 3,421,160. Such bowling aids as have heretofore been devised, however, are deficient in various respects, as a consequence of which they have enjoyed only limited acceptance by the bowling public. Many of these prior art devices are only concerned with aiding in one particular phase of bowling. In addition, many of these devices are complex in their structure, are costly and do not provide a single glove which will assist and correct many deficiencies for the average bowler.

Accordingly, it is a principal object of this invention to provide a bowling glove which will enable the bowler to obtain a much more secure grip on the bowling ball, and will greatly facilitate and improve the accuracy of the bowler by perfecting his control of the ball.

A further object of this invention is to provide a bowling glove which will provide a resilient stiffening action along one side thereof to assist in keeping the wrist straight during delivery, as well as providing added lift during the upswing and release of the bowling ball.

A still further object of this invention is to provide a bowling glove having a wedge insert which may be oriented therein to provide different spins to the bowling ball.

And yet another object of this invention is to provide a bowling glove having means to assist the bowler in insuring that the thumb will leave the bowling ball first.

Yet another object of this invention is to provide a form fitting bowling glove which will enable the bowler to obtain a secure grip on the ball and yet will allow complete freedom of movement of the hand and fingers of the bowler during the delivery of the ball.

SUMMARY OF THE INVENTION

This invention provides a bowling glove having a fitted pocket on the palm side for receiving a wedge insert. Orientation of the wedge insert in one position will provide a top spin on the bowling ball while orientation in a second position will provide a bottom spin to the bowling ball. A resilient insert along one edge of the glove provides stiffening for the control of the wrist, as well as an added lifting force during delivery of the ball. Means associated with the thumb stall assist in insuring that the thumb is retracted from the bowling ball before the fingers at the time of release.

Other objects, details, uses and advantages of this invention will become apparent as the following description of the exemplary embodiment hereof presented in the accompanying drawings proceeds.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings show a present exemplary embodiment of this invention in which:

FIG. 1 is a palm view of the bowling glove of this invention;

FIG. 2 is a perspective view of the resilient insert used in the bowling glove of FIG. 1; and

FIG. 3 is a perspective view of the wedge insert and buildup inserts which are used with the bowling glove of this invention.

DESCRIPTION OF THE ILLUSTRATED EMBODIMENT

Reference is now made to the drawings in which the bowling glove of the present invention is illustrated and designated generally by the reference numeral 10. The bowling glove 10 of this invention is an abbreviated type of glove consisting of a palm and back section 12 and 14 suitably secured together as by seams or the like, generally shown as 16. The sections may be of any suitable pliable material which will comfortably receive the hand of the bowler and permit freedom of flexing of his fingers. As an example, the palm section 12 may be of a soft pliable leather material. To provide a form fitting glove, the back section 14 may be made of an elastic or resilient material capable of a two-way stretch so as to cause the glove to inherently tend to contract upon the hand of the user and, thus, snugly fit the same. The elastic material may be seen on the back sides of each of the finger stalls 18, 20, 22 and 24. The finger stalls 18-24 and the thumb stall 26 are all abbreviated and cut away to substantially completely expose the bowler's fingers, the stalls providing merely enough material to securely position the glove 10 upon the bowler's hand. The elastic material 14 is sufficient to provide a tight fit about the wrist area. However, if desirable, other wrist fastening means such as hooks or the like may be employed.

As seen in FIG. 1, the palm section 12 has a fitted pocket 28 secured thereto by suitable stitching 30. The pocket 28 is provided at one end with a closure flap 32 such that a wedge insert 34 (FIG. 3) may be inserted and removed therefrom. The flap 32 may be secured by any suitable means to close the pocket, a preferable means is to use a pressure-sensitive adhesive means associated with the flap 32 and cooperating portion of the palm 12. To this end, the adhesive means preferably comprises cooperating strips of woven "Nylon" fabric having different physical characteristics and which adhere tenaciously to each other when pressed together. Such fabric strips are sold under the trade name Velcro by American Thread Co., New York, New York, and Chicago, Illinois. One of the "Velcro" strips has a soft, wool-like surface and is termed "fleece strip." The other strip has a comparatively rough and hard surface comprised of rows of loop hooks extending outwardly of the fabric body or the base of the strip is termed the "burr strip." The respective strips may be secured to the flap and palm by any suitable means such as adhesive or by sewing.

Referring particularly to FIG. 3, it is seen that the insert 34 is generally in the shape of a wedge and is preferably 2 inches square. The insert 34 tapers down to a substantially zero thickness at one corner 36. Corner 38 of the insert 34 is approximately one-half the thickness of the thickness of the corners 40 and 42. As an

example, a suitable 2 inch square insert may have a corner height at 38 of $\frac{1}{4}$ inch and corner heights at 40 and 42 of $\frac{1}{2}$ inch. The insert 34 may be of any suitable material having relatively stiff composition, such as leather, cork or the like. Flat inserts 44 having a uniform thickness may be placed under the insert 34 to build up the insert 34 to give a proper fitting and engagement with the ball depending on the respective bowler's features and desires.

The insert 34 may be reversibly interchanged in 28 to compensate for different alley conditions. In other words, depending on whether the alley is fast or slow, the bowler will want his ball to either have top spin or bottom spin. As shown in FIG. 1, the insert 34 has been placed within the pocket 28 such that the low thickness corner is nearest the little finger finger stall 24. This position of the insert 34 will impart, under a normal delivery, a top spin to the bowling ball to compensate for a "fast" alley. If the alley is "slow," the insert 34 is reversed such that the high corner 40 would be nearest the little finger finger stall 24 so as to impart a bottom spin to the bowling ball. As mentioned above, any number of the flat inserts 44 may be used in order to build up the insert 34 to meet the ball.

An elongated pocket 46 is suitably secured such as by stitching 48 along the edge of the glove 10. The pocket 46 extends from adjacent the little finger joint area beyond the wrist part way up the lower forearm portion of the glove. The glove 10 is formed to extend approximately 3 inches beyond the wrist area. A resilient member 50, as seen in FIG. 2, is inserted in the procket 46 and secured therein by a suitable flap 52 of the Velcro type hereinabove described. The insert 50 will conform to the curvature of the hand and wrist. The resilient insert 50 should have sufficient stiffness to assist in keeping the wrist relatively straight during the delivery process and should have sufficient resiliency to spring back to its original shape if it has been bent. A suitable material for the insert 50 would be a $\frac{1}{8}$ inch spring steel member.

A common problem for many bowlers is that the bowler will not keep the wrist straight during delivery. For most bowlers, the wrist will flex or break on the downward swing of the delivery. The use of the spring steel insert 50 will assist the bowler in keeping the wrist relatively straight during his delivery. However, should the bowler bend or break his wrist on the downward swing of his delivery, the spring steel insert 50 will be deflected and a tension will be imparted thereto. During the upward swing just prior to release of the ball, the spring steel insert 50 will spring back to its original shape thereby giving an assist to the bowler in providing an added lift to the ball during the upswing and release portion of the bowler's delivery.

A further problem with many bowlers is that they will tend to release the ball such that the thumb and fingers are withdrawn from the ball at the same time, when, in fact, the thumb should exit from the bowling ball prior to the fingers. To assist in overcoming this problem, a coil spring 54 is secured to the palm side of the glove 10. The coil spring 54 extends diagonally across the glove from the first thumb knuckle to the wrist joint. The spring 54 will apply a slight spring tension to the thumb while grasping the bowling ball to remind the bowler to extract the thumb first. In addition, the spring 54 will be under tension while the bowler is grasping the bowling ball and will thus be exerting slight outward

force on the thumb which will assist in the proper removal of the thumb.

It can be seen that the bowling glove of this invention will assist the bowler in overcoming many problems. While the above description has shown that the glove helps correct for breaking of the wrist, improper thumb removal, provides better support and holding of the ball and permits the bowler to compensate for different alley conditions, it is also obvious that the glove of this invention will improve the game of the bowler who throws a back-up or a straight ball. Accordingly, the objectives hereinabove set forth have been accomplished.

While a present exemplary embodiment of this invention has been illustrated and described, it will be recognized that this invention may be otherwise variously embodied and practiced by those skilled in the art.

What is claimed is:

1. A bowler's glove comprising a palm section and a back section joined together to receive the hand of the bowler therein, a fitted pocket secured to the palm section of said glove, said pocket having securing means cooperating with the palm section to provide an opening into said pocket, control means in said pocket, said control means being an insert member having a generally wedge shape, one corner of said member having a substantially zero thickness and the opposite corner of said member having the greatest thickness, and one intermediate corner having a thickness midway between said zero thickness and said maximum thickness, and elongated fitted pocket secured to said joined sections from adjacent the little finger joint area to beyond the wrist area, said elongated pocket having securing means cooperating therewith to provide an opening into said pocket, an elongated resilient member secured in said elongated pocket, said member having sufficient resiliency to return to its original shape after being flexed out of shape and conforming to the curvature of the hand and wrist to overcome the effect of the bowler breaking the wrist on the downward swing of the delivery.

2. The bowler's glove as set forth in claim 1 in which said resilient member is spring steel wherein said spring steel member can be flexed out of shape if a bowler breaks his wrist on the downward swing and whereby said spring steel member will return to its original shape on the upward swing of the delivery, thereby assisting the bowler in imparting added lift to the ball prior to release of the ball.

3. The bowler's glove as set forth in claim 2 further comprising a coil spring secured to the palm section of said glove and extending from the first thumb knuckle diagonally across said glove to the wrist joint area of the glove.

4. The bowler's glove as set forth in claim 3 in which said back section is an elastic material thereby providing a form fitting glove, said glove further comprising truncated finger stalls and in which said spin control means is a wedge shaped insert and said receiving means is a fitted pocket in which said wedge insert is held, and further comprising substantially flat insert members of the same size as said wedge insert wherein said flat insert members may be inserted in said pocket to build up said wedge insert so as to meet the bowling ball.

5. A bowler's glove comprising a glove having a palm section and an elastic back section joined together to

5

provide a form fitting glove to receive the hand of the bowler therein, said glove having truncated finger stalls, a pocket secured to said palm section, a control insert held within said pocket, a second pocket secured

6

along one edge of said glove from adjacent the little finger joint area to beyond the wrist area, and a spring member held within said elongated pocket.

* * * * *

5

10

15

20

25

30

35

40

45

50

55

60

65