# United States Patent

[11] 3,595,575


[72] Inventor **William E. Gooch**
**113 Willow Lane, Woodbridge, Va. 22191**



[21] Appl No **542,849**
[22] Filed **Apr. 15, 1966**
[45] Patented **July 27, 1971**


[54] **BOWLER'S FINGER SUPPORT AND BALL CONTROL DEVICE**
**2 Claims, 7 Drawing Figs.**


[52] **U.S. Cl.** ..... **273/54 B,** 2/161 A, 294/25
[51] **Int. Cl.** ..... **A63b 71/14**
[50] **Field of Search** ..... 273/54 B; 2/161 A; 294/25



[56] **References Cited**

UNITED STATES PATENTS

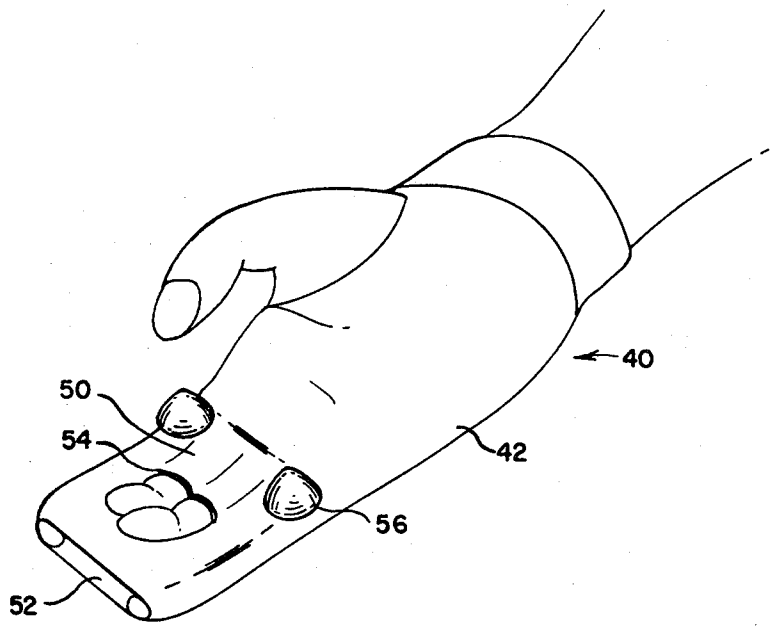
| | | | |
|---|---|---|---|
| 1,887,278 | 11/1932 | Auster | 273/54 B UX |
| 3,398,951 | 8/1968 | Disko | 273/54 B |
| 2,242,318 | 5/1941 | Mosier | 2/161 A UX |
| 3,224,012 | 12/1965 | Hamm | 273/54 B X |
| 3,328,029 | 6/1967 | Paige | 273/54 B |
| 3,333,850 | 8/1967 | Miller | 273/54 B |



*Primary Examiner*—Anton O. Oechsle
*Attorney*—James Creighton Wray



**ABSTRACT:** This invention concerns bowling accessories, particularly finger supports and glove attachments which aid in the holding, controlling and releasing of bowling balls for improving performance. Supports for fingers inserted in bowling balls increase control and accuracy, avoid overtaxing hand and arm muscles, and augment gripping power of infirm persons. Knobs attached to the glove ensure proper grip to fully benefit from control provided by finger supports.

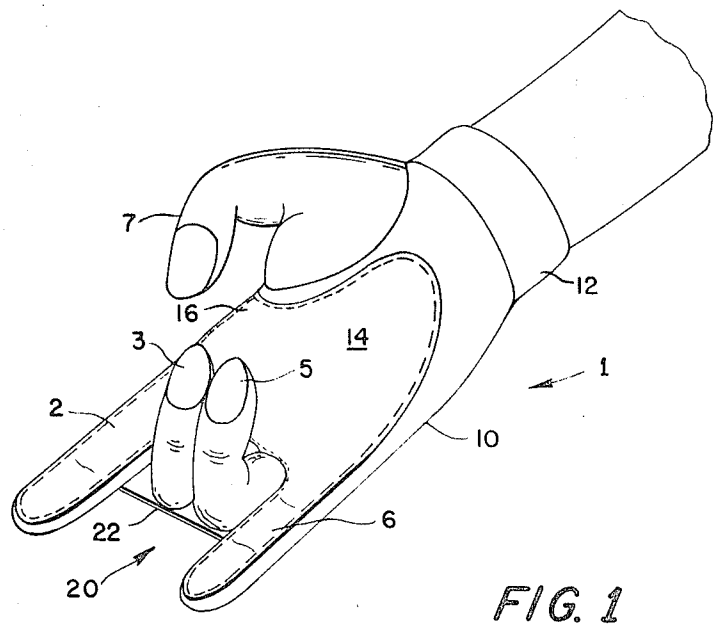



FIG. 1

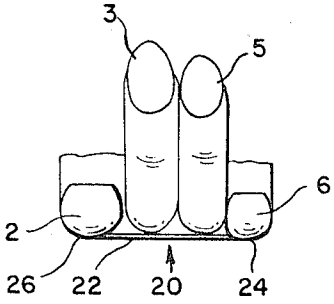



FIG. 2

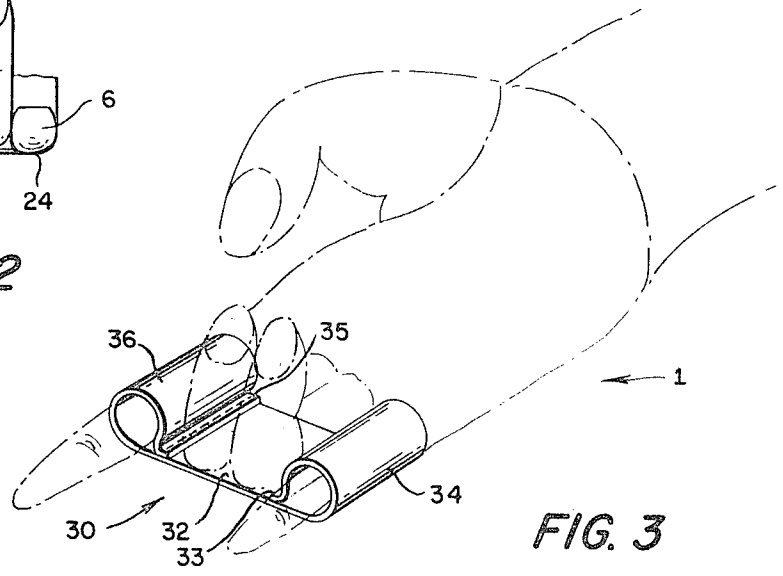



FIG. 3

INVENTOR
WILLIAM E. GOOCH

BY James C. Wray
ATTORNEY

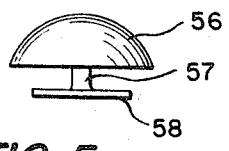



FIG. 5




FIG. 4

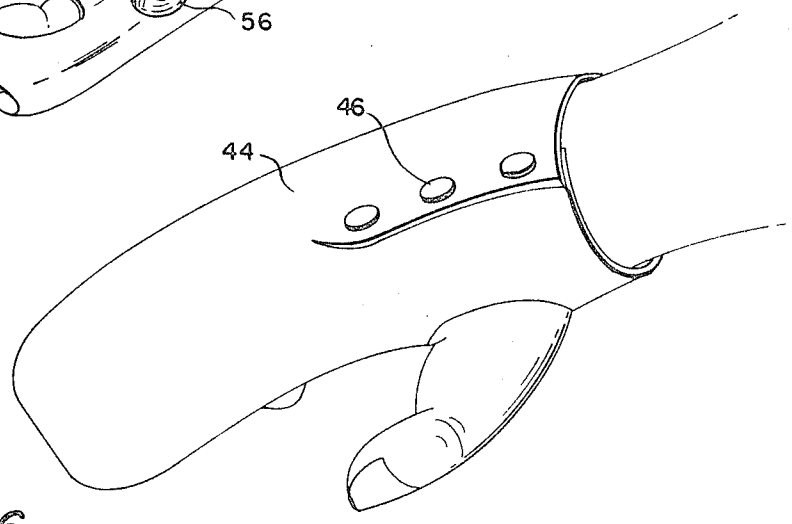



FIG. 6

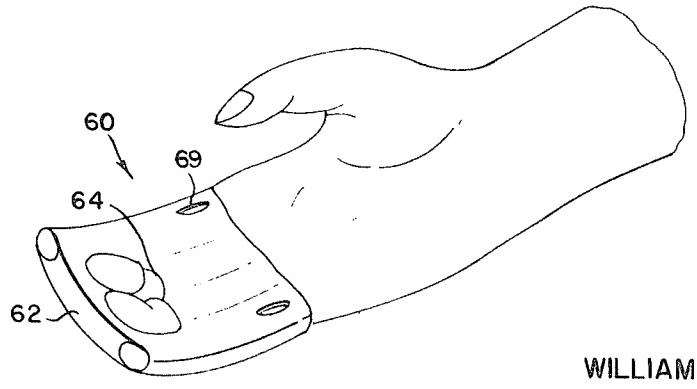



FIG. 7

INVENTOR
WILLIAM E. GOOCH

BY James C. Wray
ATTORNEY

# BOWLER'S FINGER SUPPORT AND BALL CONTROL DEVICE

One of the most important aspects of good bowling is the control of a ball throughout its release. At that last point of control it is important that the line of travel of a ball remain unaffected while the ball rolls out of the hand in a smooth and uniform manner. FIngers must be maintained in a ball until proper time for their withdrawal, and their withdrawal must be uniform to impart a predictable amount of spin to the ball. Premature or jerky release by intentionally or unintentionally withdrawing gripping fingers causes the ball to follow an unpredictable path.

In order to provide controlled and uniform release, it is imperative that a ball be precisely positioned in a hand throughout its swing. Slight displacement of a ball from its normal position in a hand can cause one or the other fingers to be partially withdrawn before release time, which subsequently may affect adversely roll of the ball.

The present invention presents two devices which cooperate together to aid in a uniform controlled delivery of a bowling ball. Knobs facing the inside of hands allow bowlers to feel positions of balls. Comparing pressure on opposite knobs enables bowlers to sense when balls are in position. The knobs center balls on the fingers, keeping balls in proper delivery position.

FInger supports span backs of the first joints of middle and ring fingers, keeping them in bowling balls until the balls roll from bowlers' hands. Supports guard against premature release and enable the relaxing of arm muscles which hold the balls, improving control over those muscles and rendering them less subject to involuntary movements. Finger supports are particularly useful in preventing local muscular fatigue when bowling over long periods of time. The straps allow those with weak muscles or arthritic joints to enjoy good bowling, since less finger-holding stress is required. One objective of this invention is the provision of supports for middle and ring fingers.

A second objective of this invention is the provision of straps to support first joints of fingers projecting into bowling balls.

Another objective of this invention is the provision of bowling gloves having means to support the middle fingers and nonslip ball-gripping surfaces.

This invention has as a further objective the provision of control knobs for maintaining the position of bowling balls with respect to bowlers' hands.

These and further objectives of this invention will be apparent form the specification and from the drawings in which:

FIG. 1 is a perspective view of a preferred embodiment of the invention, a glove having a middle-finger- and ring-finger-supporting strap and having a nonslip palm and finger section;

FIG. 2 is a front sectional detail of the glove taken along line 2–2 of FIG. 1;

FIG. 3 is an elementary embodiment of the invention in which an elastic support anchored to the index and little fingers supports the middle and ring fingers of a hand;

FIG. 4 is another embodiment of the invention comprising a mitt which has openings to expose a thumb and two ball-penetrating fingers, and which has two ball-centering and position-indicating knobs;

FIG. 5 is a detail of knobs used with this invention;

FIG. 6 illustrates the back of the mitt shown in FIG. 4;

FIG. 7 illustrates an alternate form of the mitt in which only the finger-covering section is employed.

Referring to the FIGS. 1 and 2, a hand is generally indicated by the numeral 1, while 10 designates a bowling glove. Glove 10 includes a wrist portion 12 and a back portion covering mainly the back of hand 1 and the back of index and little fingers 2 and 6. A nonslip palm welt 14 and integral finer surfaces 16 are stitched or bonded to the glove base 12.



Support strap 20 has first and second remote end portions 26 and 24, which are respectively anchored to the index finger and to the little finger. End portions 24 and 26 may surround the fingers or the portions may be stitched, bonded or integrally formed with the glove. Elastic intermediate section 22 of strap 20 supports the back of the first joints of middle finger 3 and of ring finger 5.

A second embodiment of the support is shown in FIG. 3. A 1-inch elastic strip 30 is looped at opposite ends to provide index and little finger receiving portions 36 and 34. Intermediate portion 32 supports the back of both middle and ring fingers, urging the fingers into a ball. In the example shown, a single piece of common elastic is bent upon itself at opposite ends, and the ends are stitched 33 and 35 to center section 32.

In FIG. 4 a preformed flexible and elastic mitt is generally indicated by numeral 40. A nonslip section covers the palm and back of a hand, leaving a wrist hole for inserting a bowler's hand and defining a thumb hole for extending a thumb as shown. Integrally formed finger-covering section 50 may have an open end 52 for comfort. Central opening 54 permits extension of middle and ring fingers out of mitt 40 and into a bowling ball.

Knobs 56 extend from finger section 50 of mitt 40 at points near lateral extremities of the palm, in order to center a ball on the mitt and to allow a bowler to sense a lateral displacement of a ball in his hand. Undue pressure on either of the knobs reports that a ball is displaced.

FIG. 5 illustrates the construction of the knobs which may be inserted in or withdrawn from the mitt. Crown 56 rests on the surface of the glove, stem 57 projects into the glove, and base 58 is held between the glove and fingers.

The back of mitt 40 is shown in FIG. 6. Snaps 46 ensure a trim fit.

An alternate form of the mitt is finger mitt 60, which terminates in open end 62. Slot 64 permits the terminal positions of middle and index fingers to engage a ball. Slits 69 receive position knobs 56 in FIG. 5.

As in the case of mitt 40, the elastic material stretched between index and little fingers and covering middle and ring fingers supports the latter two fingers, holding them in a bowling ball until it rolls from a hand. Knobs 56 augment the effect of the elastic support by ensuring that the ball is centered on the fingers throughout its delivery.

Although the invention has been described by specific embodiments, several other applications of the invention will be obvious to those skilled in the art. The present invention is not defined by the foregoing description; rather, limits of the invention are precisely defined only in the appended claims.

I claim:

1. A bowler's finger support and ball control device comprising an element having laterally remote end portions adapted to encircle a bowler's hand, an elastic intermediate portion adapted to be disposed rearwardly of the ring and middle fingers in supporting engagement therewith, and isolated knobs extending forwardly from each end portion at positions which would locate said knobs at positions overlying little and index fingers of a bowlers's hand, said knobs being of substantially identical size and shape.

2. A bowler's finger support and ball control device comprising an element having laterally displaced remote end portions adapted to encircle the index and little fingers of a bowler's hand, an elastic intermediate portion adapted to be disposed rearwardly of the ring and middle fingers in supporting engagement therewith, and an isolated knob extending forwardly from each end portion at a position which would locate said knobs at lateral extremities of the palm of a wearer, said knobs being of substantially identical size and shape.