No. 647,220. Patented Apr. 10, 1900.

A. W. COURTNEY.

INDIAN CLUB.

(No Model.) (Application filed Sept. 5, 1899.)

Fig. 1.

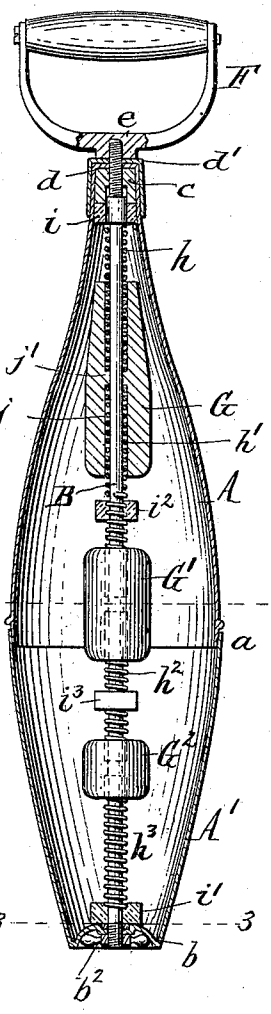


Fig. 2.

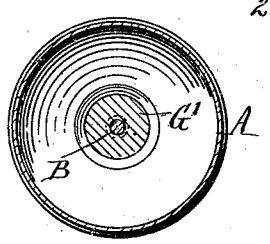


Fig. 4.

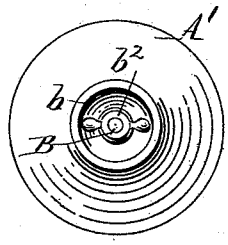


Fig. 5.

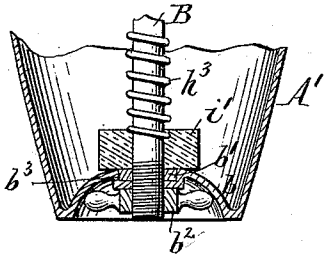
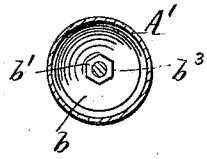


Fig. 3.



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UNITED STATES PATENT OFFICE.

ALBERT W. COURTNEY, OF BUFFALO, NEW YORK.

INDIAN CLUB.

SPECIFICATION forming part of Letters Patent No. 647,220, dated April 10, 1900.

Application filed September 5, 1899. Serial No. 729,472. (No model.)

To all whom it may concern:

Be it known that I, ALBERT W. COURTNEY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Indian Clubs, of which the following is a specification.

This invention relates to that class of exercising devices known as "Indian clubs," and more particularly to hollow clubs of this kind containing cushioned weights which can be varied in number for rendering the club lighter or heavier, as desired.

The objects of my invention are to improve the construction of the weights, with a view of permitting the use of comparatively-long cushioning-springs, and to render the casing or hollow body of the club readily detachable for changing the weights.

In the accompanying drawings, Figure 1 is a sectional elevation of my improved Indian club. Figs. 2 and 3 are cross-sections thereof in line 2 2 and 3 3, Fig. 1. Fig. 4 is a bottom plan view of the club. Fig. 5 is a fragmentary longitudinal section of the lower portion of the club on an enlarged scale.

Like letters of reference refer to like parts in the several figures.

The hollow body of the club is preferably constructed of light sheet metal, as aluminium, and composed of upper and lower sections A A′, which are separately connected together by any suitable joint, such as an ordinary slip-joint *a*, as shown in the drawings.

B is a longitudinal supporting or guide rod arranged centrally in the shell of the club and securely held against movement therein.

The lower portion of this rod passes through an opening formed in the closed bottom *b* of the club and is provided on the inner side of the club-body with a nut or stop *b′*, which bears against the inner side of said bottom, and on the outer side of the club with a nut b^2, preferably a thumb-nut, which is clamped against the under side of said bottom. The bottom *b* is provided at its upper side with a seat or depression b^3 for the stop-nut *b′*, which seat corresponds to the form of the nut, so as to hold the same against turning. The under side of the bottom is depressed or dished to receive the thumb-nut b^2 and enable the club to stand upright. The rod B is provided near its upper end with a removable plug or stop *c*, which is arranged in the contracted neck of the upper club-section A and against the flat top of which the closed head *d* of said section bears. The plug *c* is provided with an internally-screw-threaded opening which engages with an external thread of the guide-rod B. The upper portion of the rod B passes through openings formed centrally in the head *d* and in the head of a ferrule *d′*, and the projecting end of the rod is screw-threaded and receives a clamping-nut *e*, which bears against the head of said ferrule. Upon tightening the nuts b^2 and *e* at the upper and lower ends of the rod B the sections A A′ of the shell or body are tightly drawn together and firmly secured to the rod.

F is the handle of the club, which may be of any convenient or well-known form. That shown in the drawings is of the spade form; but, if desired, the club may be provided with the usual straight handle. The handle is preferably arranged on the upper nut *e*, so as to form a handle for the nut as well as the club.

G G′ G^2 represent longitudinally-movable weights mounted loosely on the guide-rod B and adapted to slide thereon, and *h*, *h′*, h^2, and h^3 are spiral springs, which surround said rod above and below the several weights, so as to form spring-cushions, which allow the weights to play or float lengthwise on the rod in swinging the club. A greater or less number of such weights may be employed, according to the strength of the user and for the purpose of giving variety to the exercise. I prefer to use three weights of different sizes weighing, say, half a pound, one pound, and two pounds, respectively. The uppermost spring *h* is interposed between the upper weight G and a rubber block or buffer *i*, which bears against the lower end of the stationary plug *c*. The spring *h′* is arranged between the upper weight G and the intermediate weight G′, the spring h^2 between the intermediate weight and the lower weight G^2, and the spring h^3 between the lower weight and a rubber block or buffer *i′*, which rests against the bottom of the club-body. Similar buffer-blocks i^2 i^3 are interposed between the intermediate weight and the upper and lower weights and loosely surround the springs *h′* h^2. These several buffer-

blocks receive the impact of the weights and deaden the noise which would otherwise be produced by the contact of the weights with one another and with the top and bottom of the club-body.

In order to permit the use of longer and more resilient springs, each of the weights is provided with a bore or recess *j*, of sufficiently-larger diameter than the guide-rod B to receive the springs. This bore extends from opposite ends of the weight nearly to the middle thereof, so as to leave internal stops or shoulders *j'*, against which the inner ends of the adjacent springs abut, as shown in connection with the upper weight in Fig. 1.

The springs are comparatively light or resilient, so as not to prevent the weights from sliding or shifting on the guide-rod B, but permit the same to play freely on the rod and float between the springs in swinging the club. The springs on the lower or outer side of the weights are compressed as the weights move outward on the rod by centrifugal force, and when the club is swung so slowly or reaches such a position that the resistance of said lower springs overcomes the centrifugal force the springs by their reaction shift the weights in the opposite direction against the springs on the other side of the weights, which latter cushion the weights in the same manner as the lower springs. Owing to this action of the weights and springs the club produces the sensation of being active or life-like, as distinguished from the effect produced by the dead-weight of the ordinary solid Indian club or a hollow club having stationary weights or weights which are practically restrained against movement in either direction. With a little practice the club may be swung, so as to produce a number of distinct jerks or impulses in a single revolution, rendering the exercise novel and interesting and giving variety to the movements.

The club may be rendered lighter or heavier by removing or adding one or more weights, or the different-sized weights may be interchanged to bring the heaviest weight at either end or in the middle of the club. When the largest weight is arranged near either end of the guide-rod B, a heavier spring may be arranged on the outer or lower side thereof to prevent the spring from being compressed too easily.

The weights are applied, removed, or changed by unscrewing the thumb-nut b^2 and the handle F at opposite ends of the guide-rod B and detaching the sections A A' of the shell or body and the screw-threaded plug or stop *c* from the rod. The weights and springs can now be slipped on or off the guide-rod and disposed thereon as desired. After applying the weights and springs to the rod the plug *c*, body-sections A A', thumb-nuts b^2, and handle F are again replaced.

The shell or hollow body A A' simply serves as a casing which incloses the guide-rod B and the weights and springs and improves the appearance of the device; but it is obvious that the device could be used with equal effect by detaching or omitting the body.

I claim as my invention—

1. In an exercising device, the combination with a guide-rod provided at its upper end with a handle, of a sliding weight mounted loosely on said rod and provided with a bore of larger diameter than said rod, which enlarged bore extends inwardly from opposite ends of the weight nearly to the middle thereof, forming internal stops or shoulders, and springs applied to said rod on opposite sides of said weight and bearing at their inner ends against the internal shoulders of the weight, substantially as set forth.

2. In an Indian club, the combination with a sectional shell or hollow body having a closed head and bottom, of a guide-rod arranged lengthwise therein and having screw-threaded end portions which pass through the head and the bottom of the shell, stops secured to the upper and lower portions of the rod and bearing against the inner sides of the head and bottom of the shell, clamping-nuts applied to the projecting upper and lower ends of said rod and bearing against the head and the bottom of the shell, respectively, said upper nut carrying a suitable handle, a sliding weight mounted loosely on said rod, and springs arranged on said rod above and below said weight and bearing against opposite ends thereof, substantially as set forth.

Witness my hand this 30th day of August, 1899.

ALBERT W. COURTNEY.

Witnesses:
CARL F. GEYER,
ELLA R. DEAN.