RETRIEVER FOR PING PONG OR TABLE TENNIS BALLS.
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WITNESSES:

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INVENTOR:
RETRIEVER FOR PING-PONG OR TABLE-TENNIS BALLS.


To all whom it may concern:

Be it known that I, FREDERICK H. SMITH, a citizen of the United States of America, and a resident of the city and county of San Francisco, in the State of California, have invented certain new and useful Improvements in Retrievers for Ping-Pong or Table-Tennis Balls, of which the following is a specification.

This invention has for its object to produce a retriever which shall be simple and efficient; and it consists in the improved construction and novel arrangement of parts of the same, as will be hereinafter more particularly set forth.

In the accompanying drawings, in which the same reference character indicates the same part in each of the views in which it occurs, Figure 1 is a perspective view of one form of my retriever, showing the position it occupies relatively to the ball when being placed sidewise thereon. Fig. 2 is a similar view showing the ball entering the retriever. Fig. 3 is a similar view showing the ball entered. Fig. 4 is also a perspective showing the relative position of the parts when the ball is in the corner of a room and the retriever is being forced endwise upon it. Fig. 5 is an elevation, partly in section, showing the application of the retriever in a vertical position.

In picking articles from the floor or other places it is often difficult or impossible to reach or remove them without considerable effort and inconvenience or without the use of some kind of an appliance which can be forced into engagement with the article. This is particularly true of the ball that is used in playing the game known as "ping-pong" or "table-tennis." Owing to the small size of the board or table on which the game is usually played and to the force with which the ball is struck by the players, the ball is frequently knocked onto the floor, where it is liable to roll under the furniture or into the corner of the room or other place where ordinarily it is inaccessible—that is, difficult to reach by hand; but even where it remains easily accessible the clothing or the numerous efforts required to stoop to pick it up render it very desirable that some means be employed which shall relieve one from the task of thus recovering the ball by hand.

I have discovered that by arranging a receptacle at the end of a handle and constructing the receptacle of suitable material and shape and providing it with means for permitting the ball to readily enter and then be held therein until forcibly released all the labor, discomfort, and other objections attendant upon manipulative retrieving can be easily avoided.

One form of my improved retriever is shown in the aforementioned drawings and consists of a substantially U-shaped strip 1 of flexible material, such as indurated fiber, which is flexibly secured to a handle 2 by means of a spring-coil 3. The handle 2 is inserted at one end in the coil, as in a socket, and may be formed from one or more pieces, and the coil is secured in position at the center of the strip 1 by means of a screw 4 and plug 5. Both the handle and plug are rounded at their ends that enter the coil, as seen in Fig. 5, in order to prevent them from catching in the spirals of the coil whenever it is flexed. When the handle is composed of sections, suitable sockets 6 are provided at the joints for securing the sections together, in the well-known manner.

Connected with the free ends of the strip 1—for instance, by means of suitable holes—are a plurality of retainers 7. These retainers are preferably four in number and inelastic, but flexible, and may be formed from a cord having its ends knotted, as at 8, and its intermediate portion passed successively through the said holes, with two portions, as 9, arranged longitudinally of one of the sides of the strip 1 and adjacent to the edges thereof and another portion, 10, arranged transversely across the other side of the strip near to and parallel with the end. By passing the cord loosely through the holes the spring or resiliency of the strip will cause all of the lengths of the cord to be held at a uniform tension at all times.

When constructed as herein described and shown, the receptacle much resembles a stirrup with two thin, flat, and smooth continu-
ous or unbroken sides or walls and with an open instead of a closed bottom. By forming the sides of the receptacle in this manner, the liability of catching upon and scratching the furniture or projections is avoided and the device can be forced over or upon the ball although it should be lying close to the wall or even in a corner, and by forming the top of the receptacle curved or rounding it will not be liable to catch upon any object in being withdrawn with or without the ball. The thin flat sides also afford sufficient flexibility to yield and let the cord retainers bend laterally and pass over the ball, (herein marked 11,) after which the sides spring out and stretch the cord taut enough to assist the ball in entering and then hold it until released. This avoids the necessity of constructing the retainers of rubber or other changeable or yieldable material, and it also admits of forcing the ball out from between them in any direction or of forcing the sides together, and thereby loosening the cords or retainers sufficiently to let the ball drop from between them. The cord retainers are so arranged relatively to each other that when viewed endwise they occupy the corners of a square the diagonal of which is equal to the diameter of the ball, as shown in Fig. 5. This will hold the ball securely after it has entered, and by arranging the retainers close to the ends and sides of the strip two of the said retainers will have been forced over or past the center of the ball before the end or side of the receptacle will have come in contact with the floor or surface on which the ball is resting. When the ball is lying in a position where the retriever can be used in a vertical position, the ball can be forced in between the two end cords by simply pressing down upon the handle; but where the handle is used at an angle the receptacle portion can be forced into a horizontal position by flexing the coiled spring. In the latter case the ball can be forced in between the retainers at the end or at either side of the receptacle, whichever is the most convenient, as the two oppositely-located open sides and the centrally-located handle render the device reversible.

As above described, it is evident that my improved retriever can be cheaply constructed and that it is light, but strong and durable. It can be used without the necessity of stooping, and the ball can be quickly secured and as quickly released, and it can be made plain or more or less ornamental, also can be formed from any suitable material other than specified or as a frame, or its walls might be rigid and the retainers yielding without departing from the principle of my invention.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A retriever comprising a resilient-walled frame having an open side and flexible retaining means extending between the walls.

2. A retriever comprising an open frame provided with resilient walls and inelastic flexible retainers extending across the open sides of the frame.

3. A retriever comprising an open frame provided with resilient walls and flexible retainers extending between and connecting the walls.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK H. SMITH. [L. S.]

Witnesses:

G. P. WOODWARD,
W. F. FINNIE.