

Feb. 20, 1962

H. ZINNOW

3,022,072

EXERCISING APPARATUS

Filed July 6, 1960

FIG. 1.

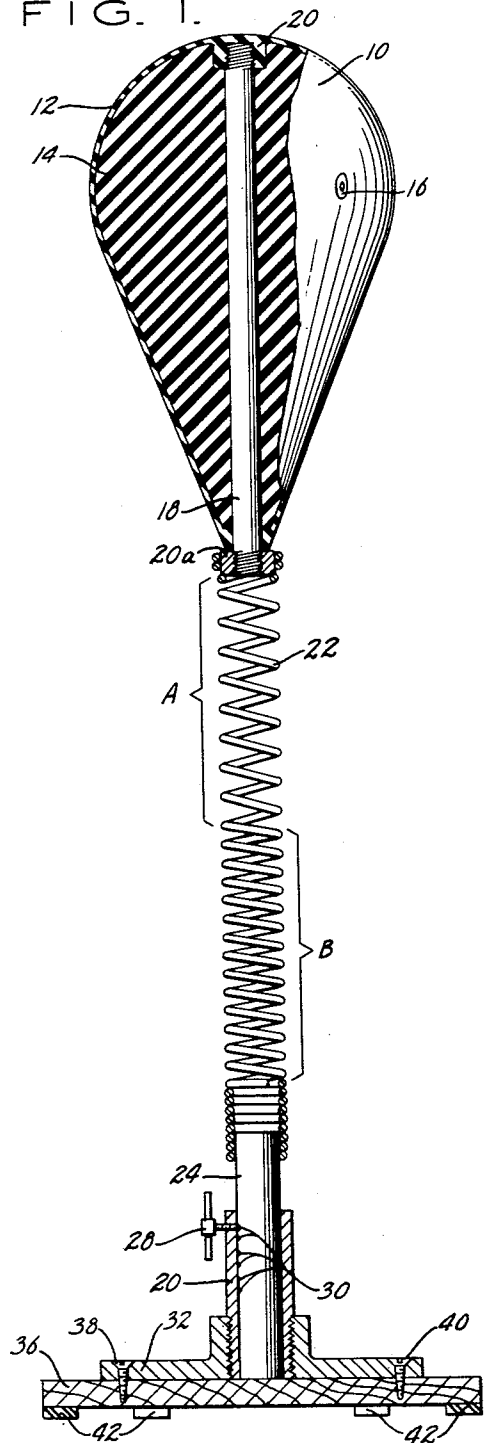
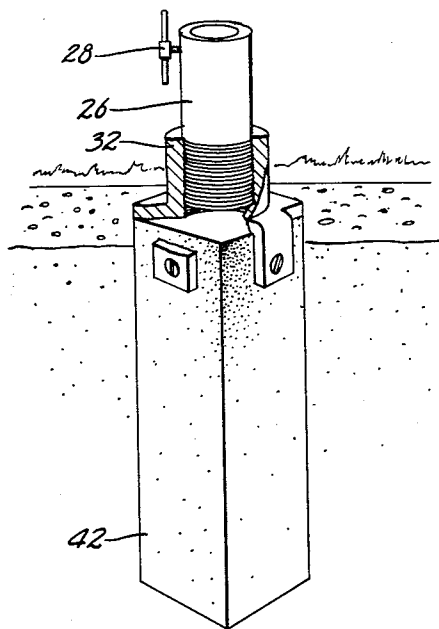


FIG. 2.



INVENTOR.  
HENRY ZINNOW

1

3,022,072

## EXERCISING APPARATUS

Henry Zinnow, 214 Lawton Ave., Cliffside Park, N.J.

Filed July 6, 1960, Ser. No. 41,089

5 Claims. (Cl. 272-78)

This invention relates to a type of gymnasium apparatus known as a punching bag and which is used for pugilistic practice by boxers.

The present invention is an improvement over the apparatus disclosed and claimed in my previous U.S. Patent No. 2,082,272, issued June 1, 1937. The apparatus of said patent had a screw-threaded rigid stem, a sleeve engaged on the stem, the sleeve having a reduced upper portion adjacent the punching bag, an open wound spring encircling the sleeve and fixed at its upper end to the upper portion of the sleeve, a stepped circular pedestal having an axial pendant integral shank adapted to be driven into the ground and having an upwardly extending post provided with a reduced upper portion to receive the opposite end of the spring. The bag used in the apparatus was inflatable with air just like an automobile tire and had an inner tube. While quite satisfactory for long periods of time, it happened that the air would sometimes come out of the bag necessitating its replacement.

The main object of this invention is to provide a punching bag which need not be air-inflated owing to its construction.

Another object of this invention is to provide a readily portable punching bag unit which may be used indoors or outdoors, as desired.

Another object of the invention is to provide a punching bag unit composed of few and simple parts readily assembled and disassembled.

These objects are attained by the novel construction and combination of parts hereinafter described and shown in the accompanying drawing forming a part of this disclosure, wherein:

FIGURE 1 is a side elevational view, partly in section, of a preferred embodiment of the invention and

FIGURE 2 is a perspective view of the lower part of the apparatus arranged for outdoors or field service.

Referring now to FIGURE 1, the punching bag 10 may be of the usual pear-shaped variety, as shown, or of other suitable configuration (round, etc.). The outer bag can consist of any airtight elastic material such as rubber or plastic material 12. Inside the bag is positioned shaped inflatable material 14 such as foam rubber, urethane foam or sponge. At least one breather hole 16 is provided in the bag to permit the exit and re-entry of air as the same is punched, in the manner of a "squeeze" bottle. A rigid tube 18, suitably of metal or hard plastic, passes lengthwise through the bag, substantially centrally thereof. Both extremities of tube 18 are threaded. The upper end of the tube is secured to threaded member 20 which may be formed integrally with the outer bag 12.

Rigidly secured to the downwardly extending stem portion of bag 12 is an internally threaded annular metallic cap 20A. The lower end of tube 18 is threaded therein.

With the use of tube 18, much strength and rigidity is imparted to the bag. Further the bag will always be aligned in a straight line and will not sag. Similarly, the bag will always rebound into normal upright position quite irrespective of the direction from which a blow was delivered.

Metallic cap 20, as shown on FIGURE 1, is friction-held by close encirclement with several coils of an open-wound helical spring 22. For best performance this spring should be tempered and hardened. Preferably,

2

too, the upper coils A should be spaced apart by about 1/2 an inch while the lower coils B should be much closer and about 1/4 of an inch at the lower end of the spring, the coils should be adjacent to one another as shown.

In this manner, the apparatus will rebound to normal position very rapidly and without appreciable loss of time.

The lower end of the spring is coiled around a post 24 set axially in a sleeve 26. A set screw 28 is provided in the sleeve so as to regulate the height of the punching bag by engaging post 24 at different notches 30, provided in the lower part thereof. Sleeve 26 has a threaded lower extremity which fits in complementarily threaded, annular, stepped flange member 32. Preferably, flange member 32 should be of a heavy material such as brass or bronze so as to provide rigidity to the apparatus. Member 32 in turn is secured to a wooden base 36 in any suitable way such as with screws 38 and 40. Rubber runners 42 are secured to the underside of the base.

The embodiment above-described is the portable version of the present invention.

In its modified form, shown on FIGURE 2, flange member 32 is secured, by means of screws, to a 4 x 4 beam 42, previously driven into the ground until the flanged pedestal sits on the earth. The rest of the construction is as shown on FIGURE 1.

It will be understood that the present apparatus may be made of any desired size or weight. Similarly the same may be made for use as a toy because of its rugged construction.

Obviously, variations may be made in the size, form and relative position of the component parts without departing from the scope of the claims.

What I claim is:

1. A punching bag assembly comprising an outer bag member of airtight elastic material having at least one breathing hole therein for the inlet and outlet of air, a foam material in said bag adapted to take in and let out air, a rigid member extending longitudinally in said bag, means in the upper part of said bag for securing one end of said rigid member thereto, an annular member secured to the lower end of said bag, the lower end of said rigid member fitting therein, a hardened and tempered open wound spring having its upper coils friction-fitted around said annular member and having a major portion of its length as the only supporting means for said bag, the distance between coils of said spring progressively diminishing from its upper to its lower extremity, the lower coils being mutually contacting and wound around a post, said coils having a substantially constant outer diameter, a sleeve for said post, a heavy stepped annular flange for said sleeve, and a supporting base secured to said flange.

2. The assembly of claim 1, further provided with means for adjusting the height of said post relative to said sleeve.

3. The assembly of claim 2, wherein said foam material is foam rubber.

4. The assembly of claim 2, wherein said foam material is a resilient foamed plastic.

5. The assembly of claim 2, wherein said foam material is resilient urethane foam.

## References Cited in the file of this patent

### UNITED STATES PATENTS

925,342	Johnson	June 15, 1909
1,020,367	Patterson	Mar. 12, 1912
1,446,835	Cook	Feb. 27, 1923
2,082,272	Zinnow	June 1, 1937
2,085,161	Kraus	June 29, 1937
2,184,453	Hayes	Dec. 26, 1939