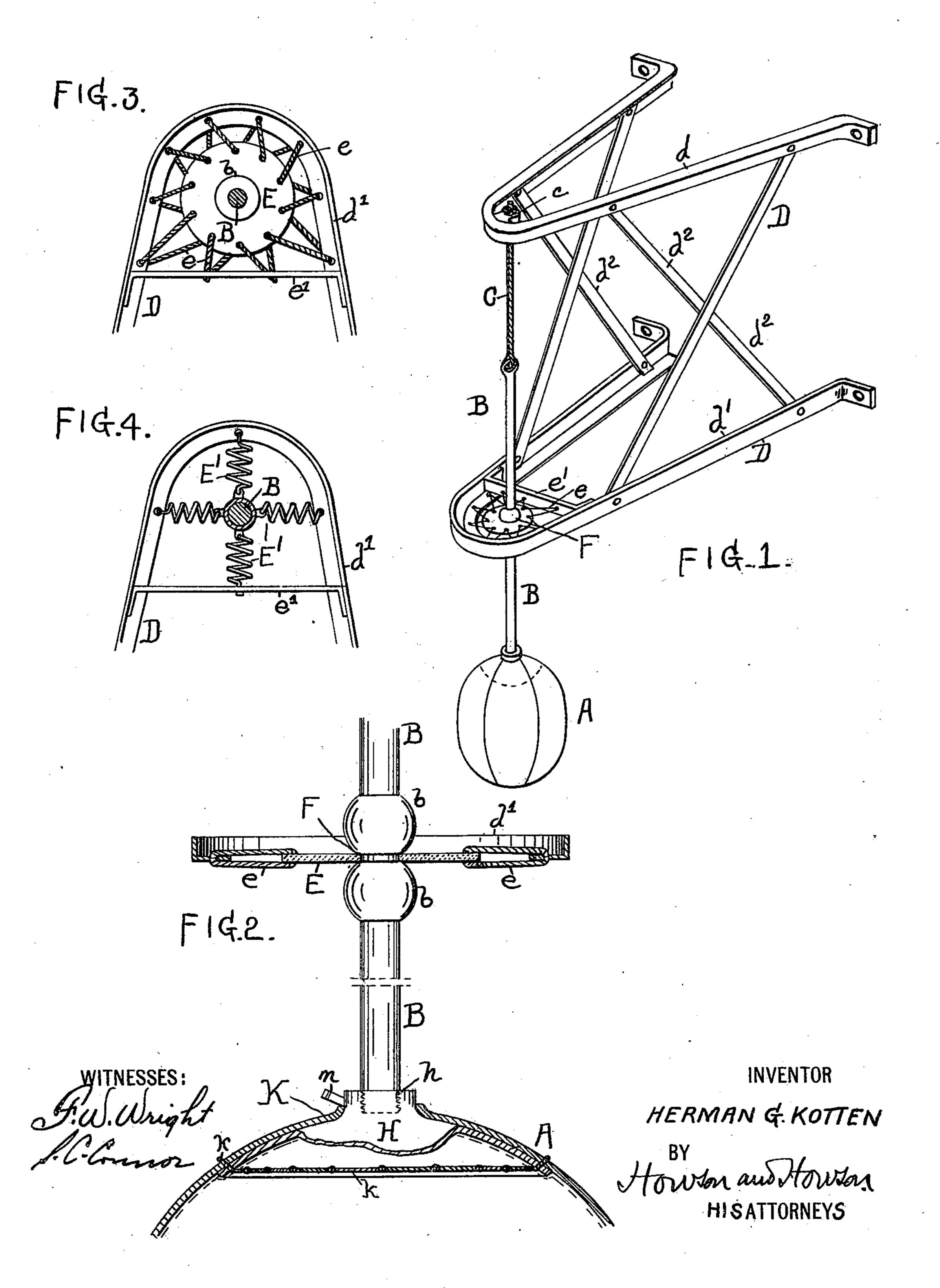
H. G. KOTTEN. PUNCHING BAG SUPPORT.

(Application filed Oct. 16, 1900.)

(No Model.)



United States Patent Office.

HERMAN G. KOTTEN, OF ENGLEWOOD, NEW JERSEY.

PUNCHING-BAG SUPPORT.

SPECIFICATION forming part of Letters Patent No. 668,525, dated February 19, 1901.

Application filed October 16, 1900. Serial No. 33,229. (No model.)

To all whom it may concern:

Be it known that I, HERMAN G. KOTTEN, a citizen of the United States, residing in Englewood, Bergen county, in the State of New Jersey, have invented Improvements in Punching-Bag Supports, of which the following is a specification.

My invention relates to punching-bag appliances for athletic practice in gymnasiums, private houses, and elsewhere; and the main object of my invention is to so construct the appliance that while it will be strong and efficient and the bag will be lively in its action the appliance as a whole will be comparatively noiseless and free from jarring under the blows of the user.

In the accompanying drawings, Figure 1 is a perspective view of the preferred form of my appliance. Fig. 2 is a sectional view drawn to an enlarged scale. Fig. 3 is a plan view of the device shown in Fig. 2, but drawn to a smaller scale again; and Fig. 4 is a plan view of a modification.

One of the principal features of my invention consists in mounting the punching-bag itself upon a rod, which instead of being suspended or otherwise supported, so as to swing on its end, is made a lever of the first order—that is, one in which the fulcrum is between the power and the resistance.

In the drawings, A is the punching-bag, secured to one end of the lever B, which has the resistance applied at the opposite end in the shape of an elastic cord C, while between 35 the ends of the rod there is provided a universal fulcrum for the lever at F. This fulcrum is one which will allow the necessary freedom of swing to the lever in all directions, and for the sake of simplicity and efficiency 40 I prefer to make the fulcrum itself flexible. A convenient form of flexible fulcrum is made of a disk E, of leather, rubber, or other such material, through which the lever passes, balllike or other enlargements b, and with rounded 45 edges bearing against opposite faces of the disk. This disk E and the elastic cord C are connected to any suitable framework, so as to constitute the supporting means for the punching-bag and its lever.

A suitable form of frame D, adapted for the purpose, is represented in the drawings and ver parconsists of upper and lower angle-irons d d', lever.

bent to approximately a V shape and adapted to be screwed or bolted to the wall and connected by diagonal braces d^2 . At the angle 55 of the top bar d is provided any suitable eye c for attachment of the elastic cord C. At the angle of the lower bar d' is a cross-bar e', thus forming a ring in the frame larger than the flexible disk E, and the latter is laced to 60 this ring by cords e or is otherwise suitably secured to the frame.

In Fig. 4 I have shown a modified form of flexible fulcrum, consisting of radial springs E', connecting the lever with the ring of the 65 frame D.

The bag A may be secured to the end of the lever in any suitable way; but I prefer that shown in Fig. 2. As there shown, the end of the lever is screwed into the threaded socket 7ch of a concavo-convex disk H of metal, and this socket may also have an opening for the inflating-nipple n. The upper open end of the outer leather cover K is slipped over this metallic disk H and secured thereto by stitching or lacing k, passing through the leather and holes in the disk.

A punching-bag appliance constructed as described with the bag carried by a lever having a fulcrum between the bag and the elassotic resistance, and especially with a flexible fulcrum, will allow full, free, and lively movements of the bag in all directions and yet will be free from the excessive jarring and noise attendant on the use of punching-bags as 85 usually constructed.

I claim as my invention—

- 1. A punching-bag and a lever carrying the bag at its end, in combination with an elastic resistance applied to the other end of the le- 90 ver and a fixed frame in which the lever is pivoted at a point between the bag and the resistance.
- 2. A punching-bag and a lever carrying the bag at its end, in combination with an elastic 95 resistance applied to the other end of the lever and a flexible fulcrum for the lever between the bag and the resistance.
- 3. A punching-bag and a lever carrying the bag at its end, in combination with an elastic 100 resistance applied to the other end of the lever and a flexible disk through which the lever passes and serving as the fulcrum of the lever.

4. The combination of a frame with a punching-bag, a lever carrying the bag at one end, an elastic resistance at the other end of the lever suspending it from the frame, and a flexible disk through which the lever passes and which is also carried by the frame.

5. The combination of a frame with a punching-bag, a lever carrying the bag at one end, an elastic resistance applied to the other end of the lever and a flexible disk supporting the lever and forming a fulcrum therefor between the bag and the resistance.

6. A punching-bag and a lever carrying the bag at one end in combination with an elastic

resistance applied to the other end of the lever, and a supporting flexible disk through which the lever passes between the bag and resistance and rounded enlargements on the lever on opposite sides of the disk, substantially as described.

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

HERMAN G. KOTTEN.

Witnesses:

HUBERT HOWSON, F. WARREN WRIGHT.