No. 717,273. Patented Dec. 30, 1902.

R. REACH.

STRIKING BAG DISK.

(Application filed Apr. 12, 1902.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

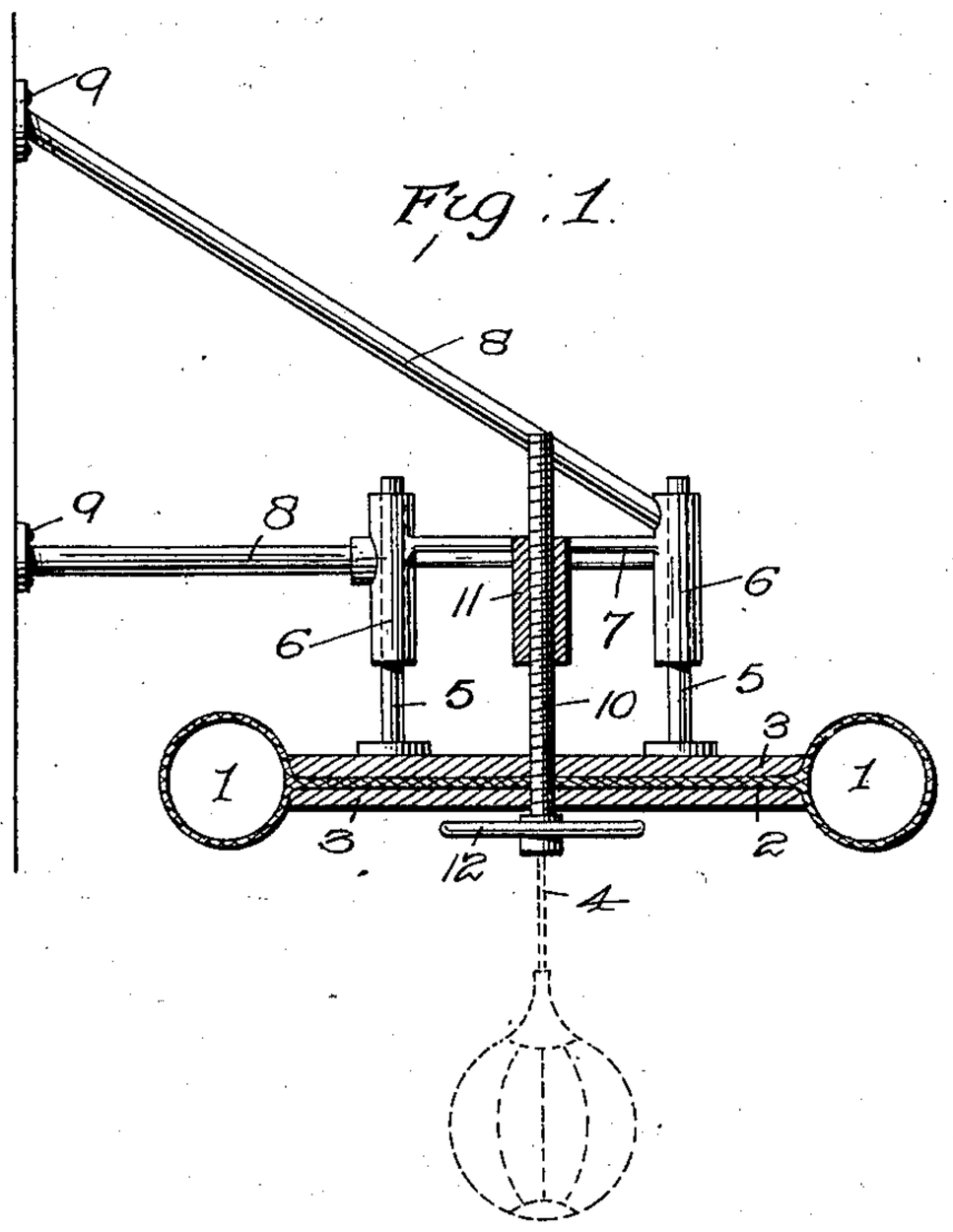


Fig. 2.

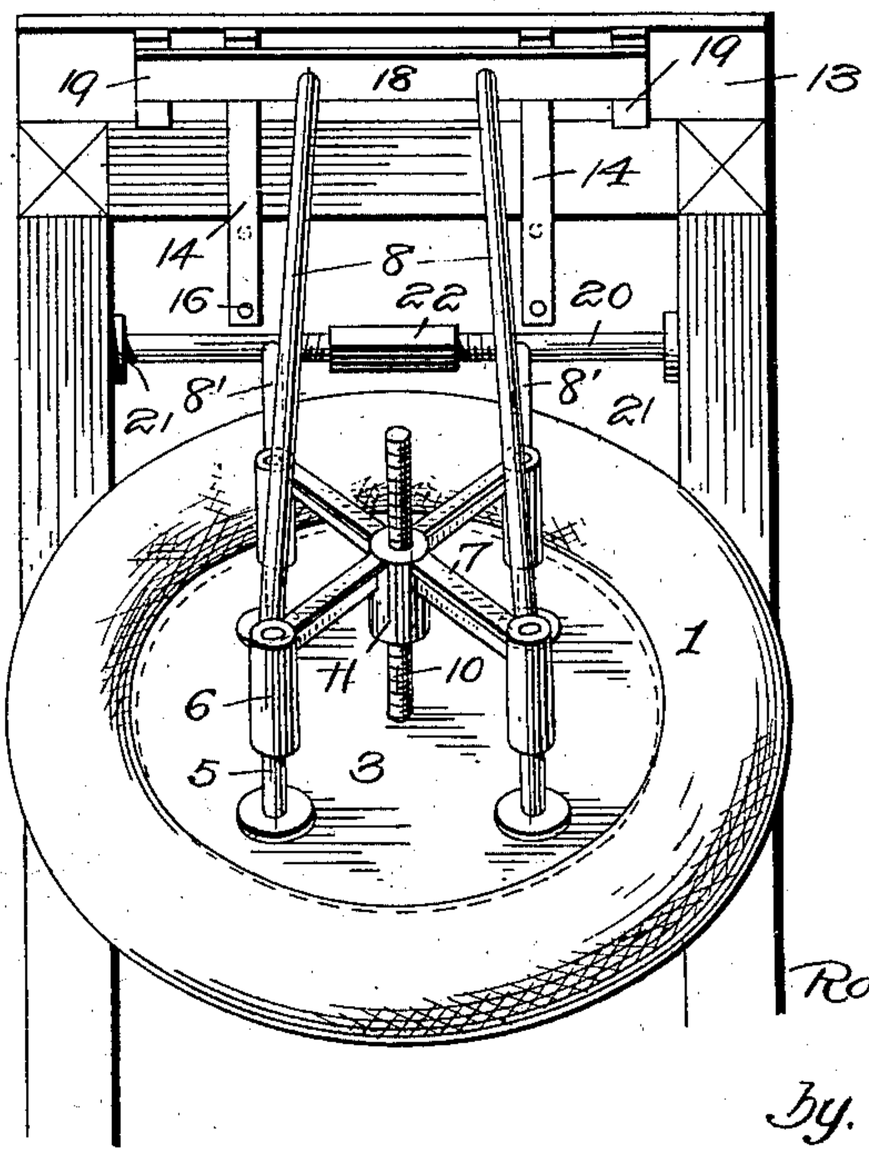
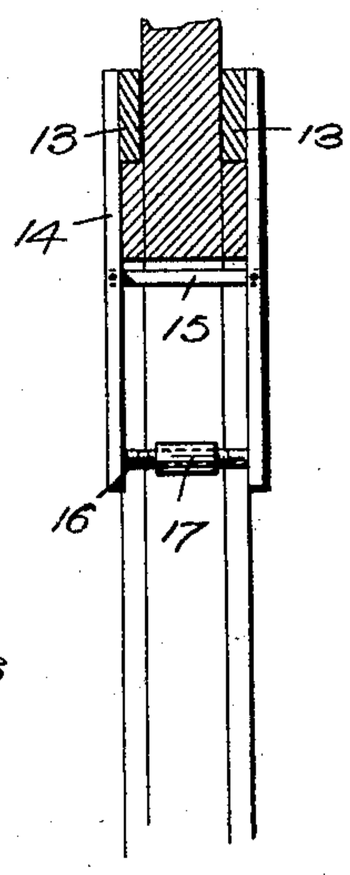


Fig. 3.



Attest:
A. M. Addison
Edw. L. Reed

Inventor:
Robert Reach.
By. Ellis Spear
Atty.

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Fig. 4

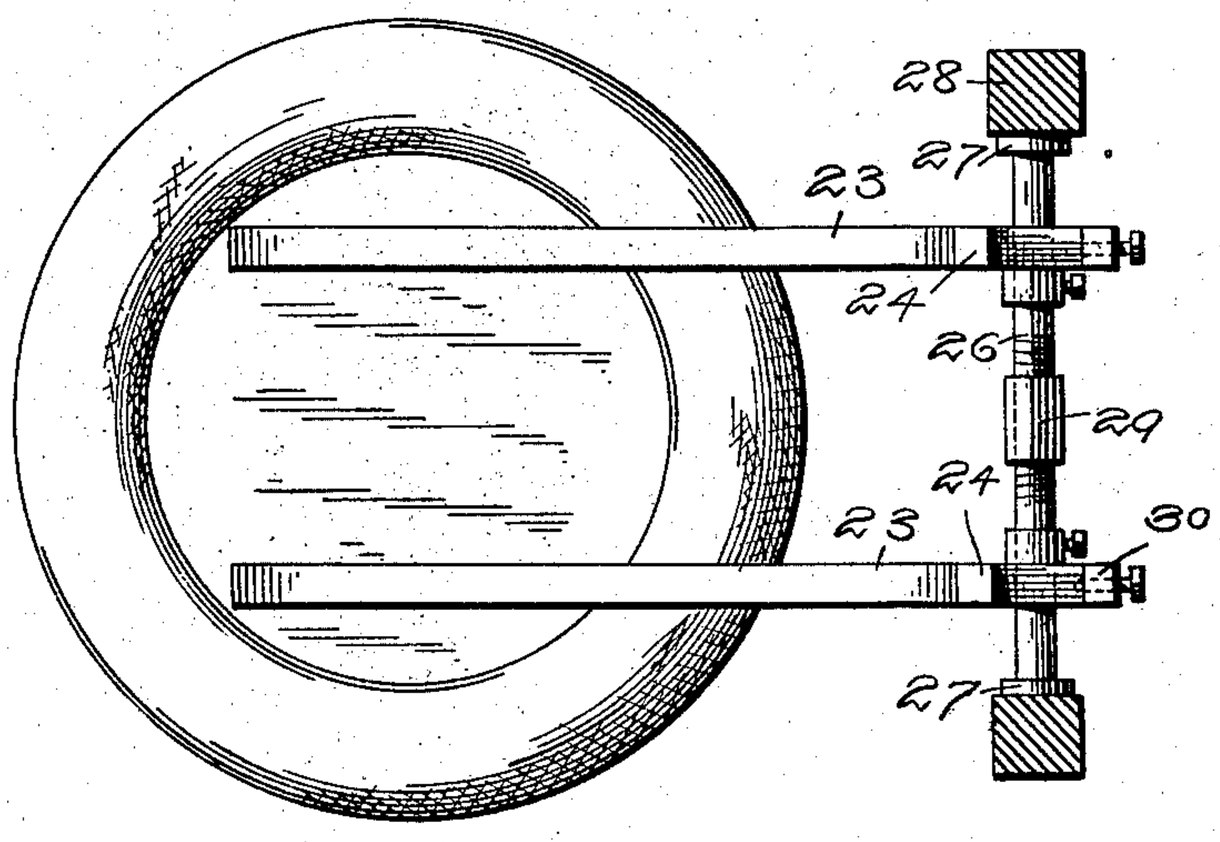
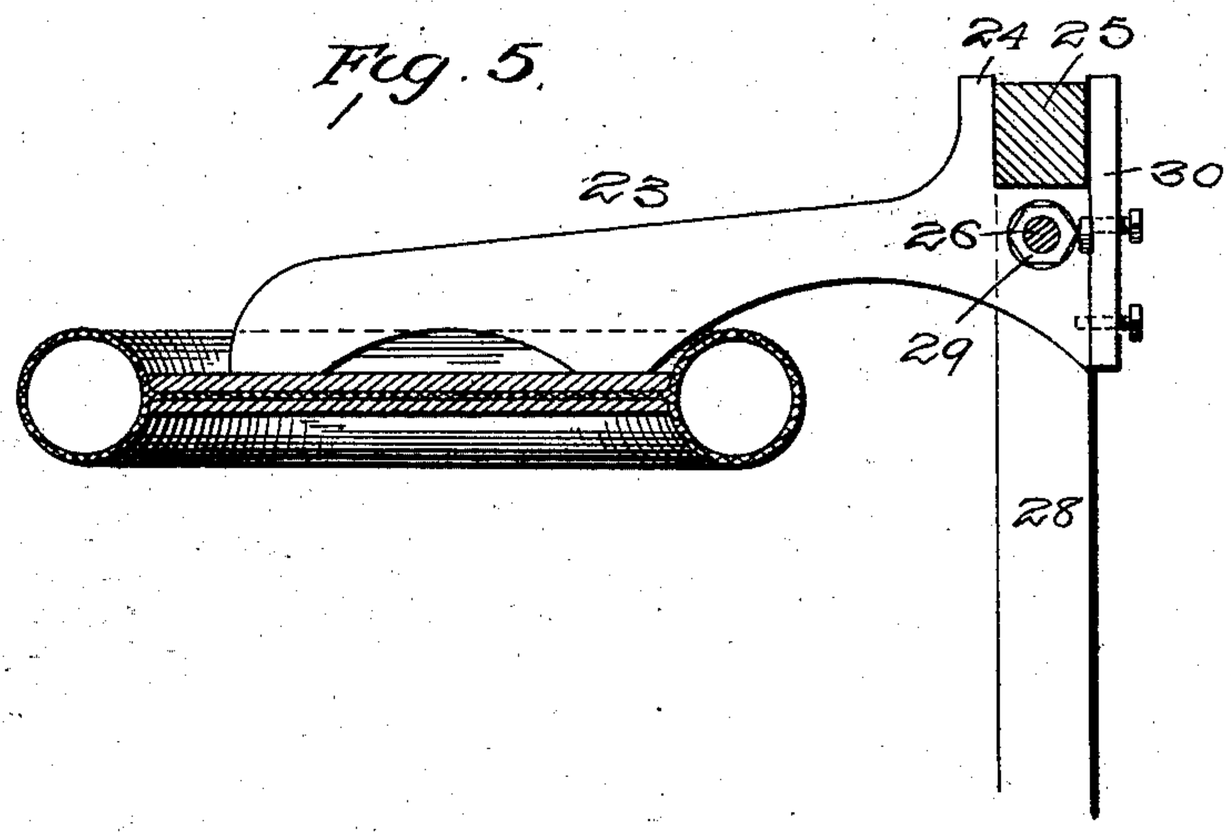


Fig. 5.



Attest:
C. Smiddleton
Edw. L. Reed.

Inventor.
Robert Reach.
By. Ellis Spear
Atty.

UNITED STATES PATENT OFFICE.

ROBERT REACH, OF PHILADELPHIA, PENNSYLVANIA.

STRIKING-BAG DISK.

SPECIFICATION forming part of Letters Patent No. 717,273, dated December 30, 1902.

Application filed April 12, 1902. Serial No. 102,575. (No model.)

To all whom it may concern:

Be it known that I, ROBERT REACH, a citizen of the United States, residing at Philadelphia, Philadelphia county, Pennsylvania, have invented certain new and useful Improvements in Striking-Bag Disks, of which the following is a specification.

My invention relates to striking-bag disks; and it consists in the features and combinations of parts hereinafter particularly described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional view of the invention, showing the same adapted to be attached to the wall. Fig. 2 is a perspective view showing the apparatus attached to a doorway. Fig. 3 is a detail view of Fig. 2. Figs. 4 and 5 are respectively a plan and a side view, partly in section, of a modified form of the apparatus.

My disk comprises a ring-shaped inflated cushion or tube 1, disposed in horizontal plane and having a web center 2, said web extending completely across from one side of the tube to the other. This center is clamped between disks or boards 3, of suitable material, which completely cover the web center and extend close to the inner side of the cushion. The cushion is of such a diameter as to project above and below the plane of the clamping-boards, so that its lower part affords sufficient surface for the bag to strike against. This bag is suspended centrally below the disk by means of a flexible connection 4, and this is of such length that the inflated bag will strike the inflated cushion.

In Fig. 1 I show one form of supporting means, consisting of a series of vertically-extending rods 5, guided in bosses 6 of a supporting-frame or bracket or spider 7, the said supporting-frame or spider being connected with arms 8, attached by plates 9 to the wall, suitable screws passing through the said plates and serving as the attaching means. An adjusting-screw 10 extends centrally and vertically through the clamping plates or boards and has a threaded connection with a central boss 11 of the supporting-frame or spider 7. By turning a hand-wheel 12 on the lower end of this screw-shaft the disk may be raised or lowered, the said guide-rods moving vertically through the bosses of the spider and in all adjusted positions serving to hold the disk horizontally and firmly in place.

In Fig. 2 I show the apparatus as applied to a doorway. In this case the disk, as before described, comprises the ring-shaped inflated cushion with the web center and the clamping-boards, the main difference in this construction being in the form of the supporting means. This supporting means is intended to be attached to the door-frame without the use of nails, screws, or like attaching devices, so that the user may readily put the apparatus up or take it down without damage to the woodwork. This supporting-frame comprises clamping-boards 13, adapted to fit against the wall above the lintel, so as to rest upon the upper edge of the same, one board being on the outside of the doorway and the other on the inside. These clamping-boards are held in place by arms 14, arranged in pairs, the members of each pair being connected by a cross-piece 15, pivotally connected at its ends to the said arms 14. Said arms have also between their lower extremities a cross-bar 16, the two sections of which have upon their adjacent ends screw-threads running in opposite directions and connected by a turnbuckle 17. By turning the turnbuckle the lower ends of the arms 14 are spread apart and the upper ends are moved toward each other to cause the clamping-boards to be clamped against the walls and to rest with their lower edges against the lintel of the door. The clamping-boards 13 have attached thereto one pair of the supporting-arms 8, said arms being connected to a rod 18 screwed at its end 19 to the clamping-board. The other pair of supporting-arms 8′ are connected with a clamping-rod 20, having feet or plates 21 at its ends to fit against the inner side of the door-jambs, the said rod being adjusted by a turnbuckle 22. By this construction it will be seen that the apparatus may be securely held to the door-frame by the clamping action of the boards 13 and the rod 20, no fastening devices—such as nails, screws, or bolts—being required.

As above stated, the striking-bag is arranged to contact directly with the pneumatic cushion. This cushion is perfectly free to have the necessary resiliency, the

only rigid portion being the web center and the clamping-boards. By the combined resilience of the striking-bag and the pneumatic cushion a quick and powerful return of the bag is insured.

In Figs. 4 and 5 I show a modification of the apparatus, in which supporting-arms 23 extend from the disk, said arms having jaws 24 to embrace the lintel 25 of the door-frame from beneath. Through these arms an extension-bar 26 extends, having feet 27 to bear against the door-jambs 28 and a turnbuckle 29, by which the bar may be expanded to be clamped in place across the doorway. One side of the jaws 24 is made adjustable, as at 30, so that the device can be fitted to different-size lintels.

I claim as my invention—

1. A striking-bag disk comprising a ring-shaped cushion having a web center and supporting means connected with the said web center, substantially as described.

2. A striking-bag disk comprising a ring-shaped cushion having a web center, and supporting means connected with the said web center, said supporting means consisting of a rigid board in contact and connected with the web center and a supporting-bracket connected with the rigid plate, the said cushion being free and unobstructed throughout its extent, substantially as described.

3. A striking-bag disk comprising a pneumatic tube, a web connected therewith and supporting means connected with the web, substantially as described.

4. In combination, the ring-shaped air-cushion having a web center, a rigid board in contact with the web center and connected therewith, a bracket, a rod connected with the board and arranged to slide through the bracket and a screw-rod for adjusting the disk in relation to the bracket, substantially as described.

5. In combination with a striking-bag disk, means for attaching the same to a doorway comprising clamping means to engage the inner sides of the door-jamb and clamping means to engage the lintel, said latter clamping means comprising boards for engaging the wall above the lintel inside and outside the doorway and means for adjustably holding said boards, substantially as described.

6. In combination with a striking-bag disk, means for attaching the same to a doorway comprising clamping means to engage the inner sides of the door-jamb and clamping means to engage the lintel, said latter clamping means comprising boards for engaging the wall above the lintel inside and outside the doorway and means for adjustably holding said boards, said adjusting means comprising the arms 14 embracing the lintel and means for spreading the lower ends of said arms apart to press the clamping-boards against the wall, substantially as described.

7. In combination in a striking-bag disk, a pneumatic ring-shaped cushion, a support and a flexible connection intermediate of the support and the said ring, substantially as described.

8. In combination in a striking-bag disk, a ring-shaped cushion, supporting means and a connection between the same and the ring, said connection extending across the opening within the ring and in the plane of said ring, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT REACH.

Witnesses:

HENRY E. COOPER,

WALTER DONALDSON.