April 4, 1961 T. B. VAN GRONINGEN 2,978,246

TARGET DEVICE FOR BASE-BALL PITCHERS

Filed Oct. 13, 1958

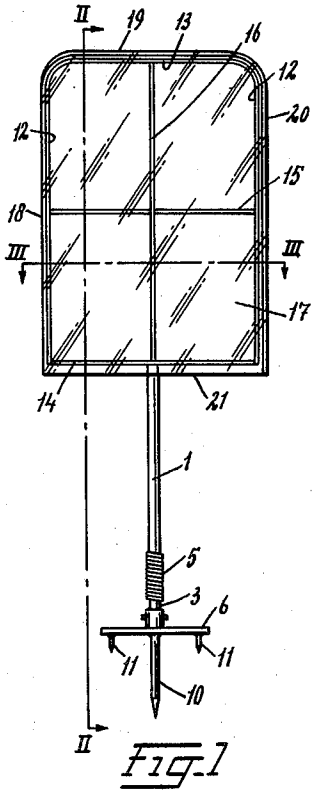


Fig. 1

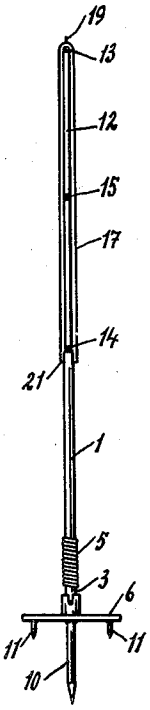


Fig. 2

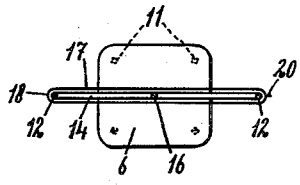


Fig. 3

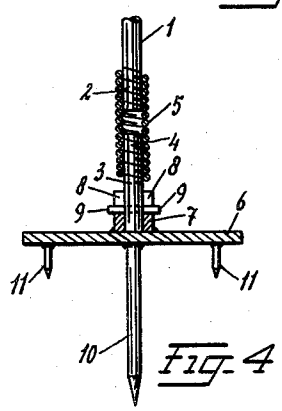


Fig. 4

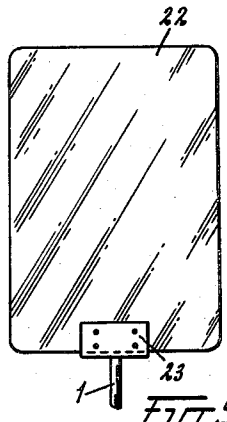


Fig. 5

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TARGET DEVICE FOR BASE-BALL PITCHERS

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3 Claims. (Cl. 273—26)

The invention relates to a practice device for base-ball pitchers.

It is an object of the invention to provide an improved device to be used by base-ball pitchers in practising an accurate delivery of the ball.

Another object of the invention is to provide a device of the kind described which may be easily placed in any desired spot on the training ground and can be stored in a relatively small space when not in use.

Still another object of the invention is to provide a device of the kind described which is cheap in manufacture and durable in use.

The practice device for base-ball pitchers according to the invention generally comprises a transparent target member substantially covering an area equivalent to the average "strike" area, which target member is mounted on a resilient supporting member in an upright position in such a way that the target member will yield backwards under the impact of a ball hitting it. The target member may consist of a flat plate of a resilient and transparent material or may comprise a rectangular frame and a transparent sheet of a suitable material, such as a suitable copolymer of a vinylchloride, stretched across this frame.

When a ball hits the target and the latter because of its resilient mounting yields under the impact, the momentum of the ball is broken and the ball is deflected upwardly or sideways to drop at a short distance from the target. It is thus easy to determine in which spot the ball has hit the target area which, of course, is of great importance for the pitcher to know.

Using a transparent target has the advantage that the situation for the pitcher better resembles the reality of actual play than would a full non-transparent target. A catcher taking his place behind the device will remain in full view of the pitcher through the transparent target. This catcher can follow the balls thrown at the target and catch those balls which are pitched wide.

Other features and advantages of the invention will appear from the following description thereof in conjunction with the accompanying drawing, showing two preferred embodiments.

Figure 1 is a front view of a first embodiment of the base-ball pitching device;

Figure 2 shows a side view, partly a section on the line II—II of the device of Figure 1 seen in the direction of the arrows;

Figure 3 is a section on the line III—III of Figure 1 seen in the direction of the arrows;

Figure 4 shows on enlarged scale a section of a detail; and

Figure 5 is a front view of the target portion of another embodiment of the device according to the invention.

The practice device for base-ball pitchers shown in the drawing comprises a supporting rod 1 of circular cross-section and provided with a screw-thread 2 at its lower end (Fig. 4). Below the supporting rod 1 is a short second rod 3 with a threaded upper end 4. The rods 1 and

3 are connected by a tightly wound coil spring 5 in which the threaded ends 2 and 4 have been screwed. The rod 3 is mounted on a rectangular supporting plate 6 which carries on its upper side a centrally located cylindrical socket 7 welded to the plate. The socket 7 engages the lower end of the rod 3 with a close fit and has two vertical slots 8 in its upper end adapted to accommodate two laterally projecting pins 9 on the rod 3. The rod 3 is thus prevented from rotating with respect to the plate 6 but may be removed from the plate by pulling it out of the socket 7 in an axial direction.

On its lower side the plate 6 has welded thereto a centrally located heavy pin 10 with a pointed end which pin extends downwards coaxially with the rods 1 and 3. The plate 6 further has on its lower side four shorter pins 11 likewise extending downwards and arranged at the four corners of the plate.

In the embodiment of Figures 1–4 the rod 1 carries on its upper end a target comprising a substantially rectangular frame having side bars 12, an upper bar 13 and a lower bar 14, the supporting rod 1 being welded to the lower bar 14 midway of the latter in such a way that the frame is held in an upright position. The size of the target frame and its height above the supporting plate 6 are such that in the mounted position of the device the frame covers an area which substantially corresponds to what may be called the "strike" area in base-ball for a man of average height. The frame further comprises a horizontal cross-bar 15 and a vertical cross-bar 16 which divide the target area into four substantially equal parts. The bars 12, 13, 14, 15 and 16 all have a circular cross-section. The upper corners of the frame are rounded-off, the side bars 12 and the upper bar 13 being formed from a single rod.

The target frame above described is covered by an envelope 17 of a flexible transparent sheet material. This envelope is made from a single piece which is folded double at 18 while the upper edges of the two sheet portions so obtained and the side edges opposite to the fold 18 are attached to each other at the seams 19 and 20, respectively, in any suitable way such as, for example, by heat sealing. The lower edges 21 of the two sheet portions of the envelope 17 are not attached to each other so as to leave an opening allowing the target frame to be introduced into the envelope. The envelope may thus be replaced by another one in case of damage.

As appears from Figures 1 and 3 the envelope 17 surrounds the target frame with a close fit except that at the lower side the edges 21 of the envelope extend a small distance downwards past the lower frame bar 14.

The envelope 17 can be made of any suitable sheet material of sufficient strength, flexibility and transparency. In practice a suitable copolymer of a vinylchloride in the form of a sheet having a thickness of approximately 0.04 inch has given good results. When the pins 10 and 11 are driven into the ground until the plate 6 is flat on the ground surface the target will be situated at the required height. The coil spring 5 has sufficient strength to keep the target in its upright position but allows the target to yield readily backward under the impact of the ball. The device may also be used indoors by removing the plate 6 from the rod 3 and by inserting this rod in a socket, similar to the socket 7 mounted in the floor.

According to the embodiment shown in Figure 5 the target consists of a single plate 22 of a transparent resilient material, such as a suitable artificial resin. The target plate 22 has the same dimensions as the target frame of Figure 1 and is fixedly mounted in a suitable metal clamping member 23 secured to the upper end of the rod 1.

Although the invention has been described with reference to two embodiments thereof it will be obvious, that

various modifications may be resorted to within the scope of the following claims.

What is claimed is:

1. A practice device for base-ball pitchers comprising an upright composed of two parts, one of said parts including a threaded upper end and the other of said parts including a threaded lower end, a coil spring member connecting said threaded ends, and a substantially rectangular target member on the upper end of said other upright part, said target member consisting of a metal frame fixed to the upper end of said second upright part and an envelope of a flexible material stretched across said frame.

2. A target device for base-ball pitchers comprising a resilient supporting member including a post and adapted to be mounted in a vertical position, an open metal frame of substantially rectangular shape mounted on the upper end of said post in an upright position, said frame defining a target area, and an envelope of flexible material enclosing said frame with a close fit, said envelope consisting of two parallel sheet portions attached to each other along their corresponding upper and side edges, the lower edges of said two sheet portions being independent of each other so as to leave an opening allowing said frame to be introduced into said envelope and for removing the latter from said frame, respectively.

3. The device of claim 2, in which said envelope is of flexible transparent sheet material and said rectangular frame comprises a horizontal and a vertical cross bar dividing the target into four equal areas.

References Cited in the file of this patent

UNITED STATES PATENTS

906,392	Dietz	Dec. 8, 1908
2,659,604	McGowen	Nov. 17, 1953
2,805,861	Lopas	Sept. 10, 1957