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E. ENTRINGER

2,381,581

HOOP STICK

Filed Nov. 13, 1944

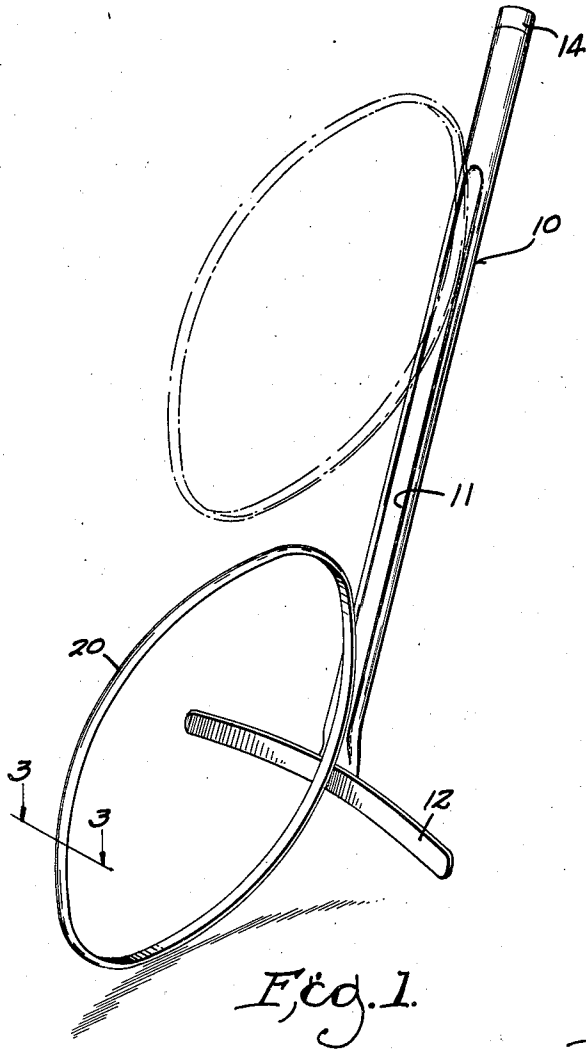


Fig. 1.

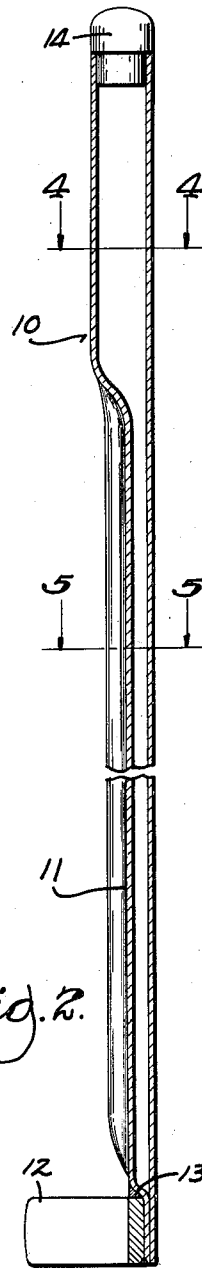


Fig. 2.

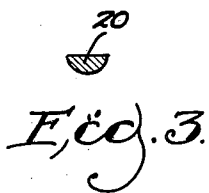


Fig. 3.

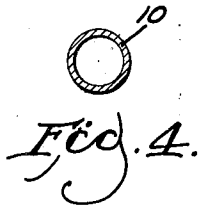


Fig. 4.

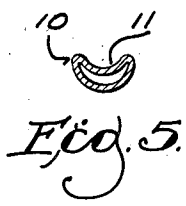


Fig. 5.

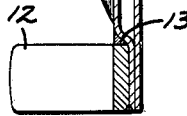


Fig. 6.

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UNITED STATES PATENT OFFICE

2,381,581

HOOP STICK

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Application November 13, 1944, Serial No. 563,197

1 Claim. (Cl. 46-220)

My invention relates to improvements in hoop sticks.

The object of my invention is to provide a hoop stick which may be initially used to provide a runway for a free rolling hoop, whereby to facilitate starting it in rolling motion, and then used to propel and guide it along a selected line of travel, or to check its motion, more accurately than can be done with the hoop sticks heretofore constructed.

In the drawing:

Figure 1 is a perspective view of my improved hoop stick, with dotted lines indicating the starting position of the hoop shown in full lines at the point of delivery.

Figure 2 is a view of the hoop stick shown in vertical section.

Figure 3 is a cross section of a preferred form of hoop, drawn to line 3-3 of Figure 1.

Figure 4 is a cross section of the handle portion of the hoop stick drawn to line 4-4 of Figure 2.

Figure 5 is a cross section of the rollway drawn to line 5-5 of Figure 2.

Like parts are identified by the same reference characters throughout the several views.

My improved hoop stick will preferably be formed of metal or plastic material. The handle 10 and rollway 11 may be formed of tubing, and may be cylindrical in the handle portion, and in the rollway portion it may have an arcuate or crescent-shaped cross section, due to collapsing the tube along one side and pressing it into the lower half, as indicated in Figure 5, or cutting away the upper half of the tube and utilizing the lower half portion 11a.

It is not necessary that either the handle or the rollway portion be hollow, particularly if formed of molded material. If made from a piece of tubing, as illustrated in the drawing, the handle end will preferably be provided with a suitable cap 14 and the other end will be compressed and downwardly offset with reference to the rollway, as indicated at 13 in Figure 2, thus forming a seating for the cross head 12, the upper surfaces of which is in a plane which includes

the bottom of the rollway groove, whereby the hoop may pass over it without jolt or jar.

If molded, the entire hoop stick may be made in one piece. If the handle and rollway are formed of tubing, these parts, with the exception of the cap 14, may comprise one piece and the cross head welded, bolted, or riveted thereto. The entire tool may be made very light, and may be manipulated with substantially the same facility as any ordinary hoop stick of the straight bar type, notwithstanding its additional function as a hoop starter and the motion controlling function of the cross head.

I attach great importance to the fact that my improved hoop stick is entirely free of any connection with the hoop, whereby the latter may have a free rolling motion and may, at times, be quite remote from the person who manipulates the hoop stick. Operation of my improved hoop stick may therefore become a game of considerable skill and a large number of skillful maneuvers executed, which would be impossible with a cumbersome hoop starting mechanism, or with one even loosely connected with the hoop. The hoop 20 may be made of very light material and is preferably half round, or semi-cylindrical, in cross section, as shown in Figure 3.

I claim:

A hoop stick comprising the combination of a piece of tubing of cylindrical form in one end portion and having the other end flattened, downwardly offset, and a flat, thin cross head, the central portion of which is secured to the downwardly offset portion of the hoop stick, said piece of tubing having intermediate portions collapsed to form a runway of arcuate cross section, the bottom of which is in registry with the upper surface of the cross head whereby to allow the hoop to roll freely down the runway and over the cross head, said cross head having its end portions curved downwardly and forwardly with reference to the hoop starting position of its central portion.

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