# United States Patent

[11] 3,547,442


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[21] Appl. No. **784,833**
[22] Filed **Dec. 18, 1968**
[45] Patented **Dec. 15, 1970**


[54] **PORTABLE HORSESHOE PIT**
**9 Claims, 7 Drawing Figs.**


[52] **U.S. Cl.** ..... **273/104,** 273/100
[51] **Int. Cl.** ..... **A63b 67/00**
[50] **Field of Search** ..... 273/100, 102AP, 104, 106.25



[56] **References Cited**
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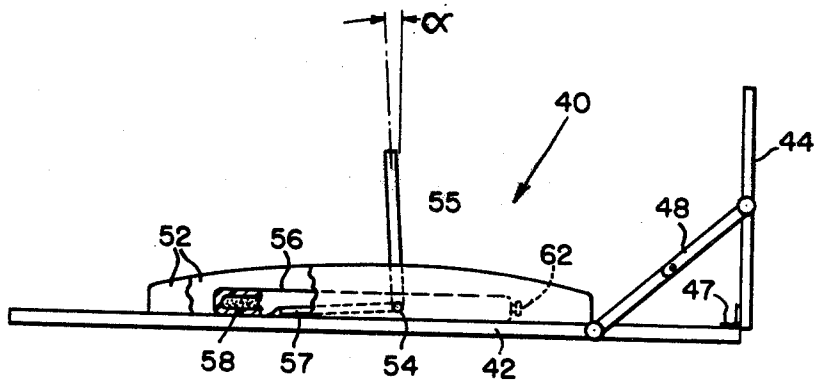
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**ABSTRACT:** This pit comprises a flat base having parallel sidewalls, a collapsible backstop pivotally connected to the rear end of the base, a bag or mat centered between the sidewalls, and a stake which projects upwardly through the center of the bag or mat, and which normally is inclined slightly forwardly at a slight angle to the vertical. The lower end of the stake is fastened to a support, which lies beneath the bag or mat, and which is mounted for limited pivotal movement about a horizontal axis transverse to the sidewalls, when the stake is struck by a horseshoe. The pivotal movement of the stake and the bag or mat help take the force of the blow of the horseshoe against the stake.

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SHEET 1 OF 2

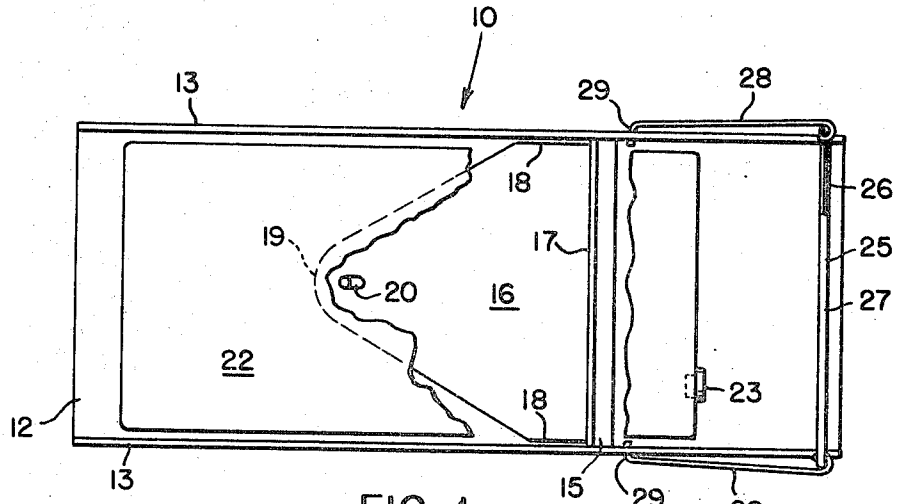



FIG. 1

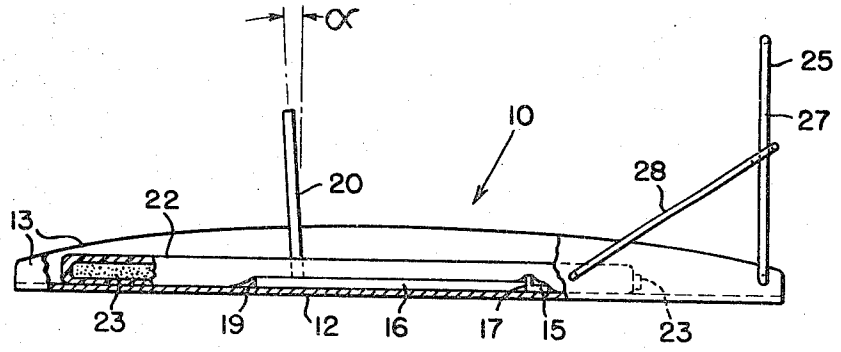



FIG. 2

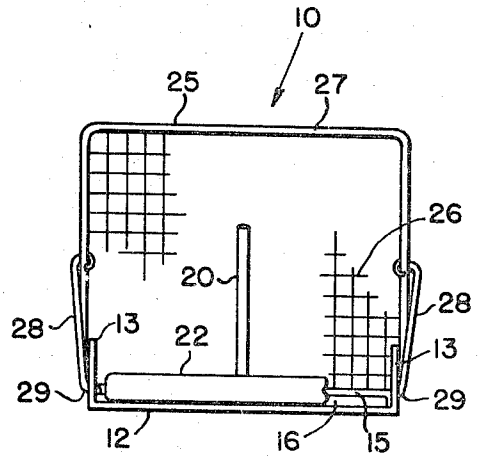



FIG. 3

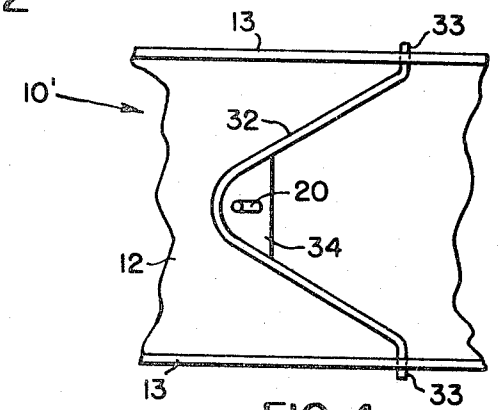



FIG. 4

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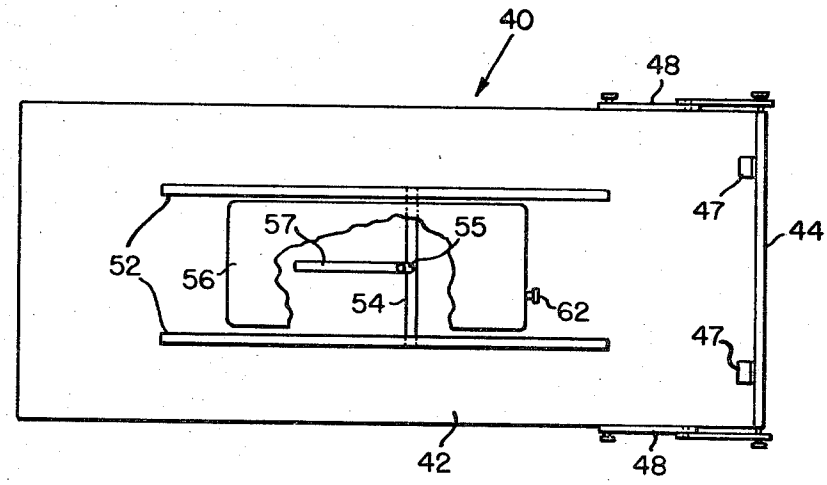



FIG. 5

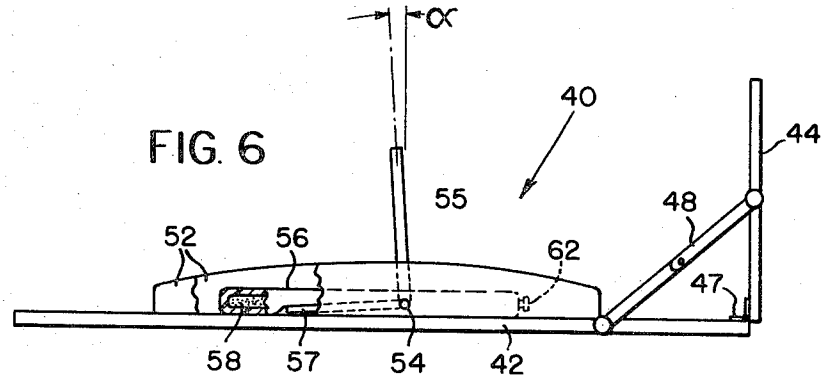



FIG. 6

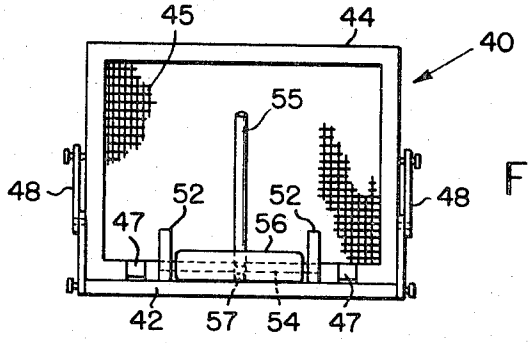



FIG. 7

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# PORTABLE HORSESHOE PIT

This invention relates to the game of horseshoes, and more particularly to a portable pit for use in playing such game.

In the game of horseshoes, horseshoes or horseshoe-shaped objects, are thrown from state to stake, the object being to throw the horseshoes, if possible, to ring or come close to the stake toward which they are thrown.

Because the distance between stakes in a regulation game is 40 feet, quite a bit of space has to be allotted to a moreover, court or courts if they are permanently installed on a playground; and this space is useless when no one is using the horseshoe court or courts.

Moreover, the pits around the stakes get dug up by the shoes and after a rain are usually quite muddy.

Furthermore, addicts of the game of horseshoes like to pitch the shoes at picnics and on stops on a trip. The experts at the game, moreover; like to have courts on which they can pitch regardless of the weather and practice at will.

For all these reasons, various types of portable courts for playing the game of horseshoes have been proposed. Prior portable pits or courts, however, have not proved to be entirely satisfactory.

An object of this invention, therefore, is to provide an improved portable horseshoe pit, which can readily be transported from place to place and which, when in use will serve the purpose of the game just as well as a pit on a permanently erected court.

Other objects of this invention are to provide a portable horseshoe pit, which is relatively inexpensive to manufacture, which is compact, and can quickly be put in place or collapsed for transportation.

Still another object of the invention is to provide a portable horseshoe pit or court, which is suitable for use almost anywhere and which may even be erected indoors, for instance, in a gymnasium so that the game can be played indoors in inclement weather.

Other objects of the invention will be apparent hereinafter from the specification and the recital of the appended claims, particularly when read in conjunction with the accompanying drawings.

In the drawings:

FIG. 1 is a plan view of a portable horseshoe pit made in accordance with one embodiment of this invention, portions of the pit being cut away for purposes of illustration;

FIG. 2 is a side elevational view of this pit with portions cut away and shown in section;

FIG. 3 is a fragmentary front elevational view of this pit;

FIG. 4 is a fragmentary plan view of a modified horseshoe pit made in accordance with a second embodiment of this invention;

FIG. 5 is a plan view of a horseshoe pit made in accordance with a still further embodiment of this invention, parts of this pit being cut away;

FIG. 6 is a side elevational view of the pit shown in FIG. 5 and with parts thereof cut away; and

FIG. 7 is a front elevational view of this last-named pit.

Referring now to the drawings by numerals of reference, and first to the embodiment illustrated in FIGS. 1 to 3, 10 denotes a portable pit comprising an elongate, rectangular base 12 having along its side edges spaced, parallel, upstanding sidewalls 13.

Secured on the upper surface of base 12 adjacent the rear on right end thereof as shown in FIGS. 1 and 2, and extending transversely between the sidewalls 13, is an angle iron 15. Removably seated on base 12 is a generally triangularly-shaped plate 16, which has a straight rear edge seated against the upturned web 17 of the angle iron 15. Adjacent its rear end plate 16 has its side edges straight and parallel, as denoted at 18 (FIG. 1), to slidably engage the inside faces of sidewalls 13.

Removably fastened at its lower end to plate 16 just rearwardly of its rounded apex 19, and projecting upwardly, and slightly forwardly at an angle to the vertical, is a metal rod or stake 20. Stake 20 is adapted to extend through a relatively large, flexible mat 22, which is removably mounted over base 12 between the sidewalls 13 thereof to cover plate 16. As shown more clearly in FIG. 2, mat 22, which may be (FIGS. vulcanized rubber bag, for instance, is filled with a fluidlike material 23 (e.g. sand). A plug 23 in the rear end of the mat 22 is removable to permit emptying and refilling the mat.



Pivotally connected at its lower edge to the rear end of base 12 is a rectangular backstop 25. Backstop 25 comprises a rectangular wire screen 26 secured across the opening in a rectangular frame 27 made of tubular pipe stock, or the like. The lower horizontal section of pipe defining frame 27 is journaled in registering openings in the rear ends of walls 13 so that the backstop 25 can be pivoted between its erected position (FIGS. 1 to 3), and a collapsed position (not illustrated) in which it overlies base 12. The backstop 25 is held releasably in its erected position by struts 28, which are pivotally fastened at one end to opposite sides of frame 27, and which have lateral projections 29 at their opposite ends releasably inserted in registering openings formed in the side walls 13.

In use, two of the pits 10 are positioned so that their stakes 20 are spaced approximately 40 feet from one another, and so that their front or forward ends (the left end thereof in FIGS. 1 and 2) face one another. Each metal horseshoe weighs approximately 2 pounds and 10 ounces, so that when a thrown horseshoe strikes a stake 20, it strikes it with considerable force. With applicant's construction, when the stake 20 is struck by a flying horseshoe, the support 16 tends to pivot slightly upwardly about its rear edge on and against the vertical web of angle iron 15 and against the resistance of the overlying mat 22. Consequently, the mat acts as a dashpot, and absorbs a substantial portion of the shock which otherwise would be transmitted to the stake 20. Moreover, since stake 20 normally is inclined slightly forwardly at an angle $\alpha$ to the vertical, this slight pivotal movement of support 16 tends to swing the stake to a nearly vertical position, so that a properly thrown shoe will not accidentally slide upwardly and off of the stake, as might occur if the stake were normally to be disposed vertically.

A still further advantage afforded by the use of the flexible mat 26 is that it also prevents falling horseshoes from bouncing out of the pit.

Referring now to additional embodiments, wherein like numerals are employed to designate elements similar to those employed in the embodiment of FIGS. 1 to 3, the pit 10' shown in FIG. 4 is similar to the first embodiment except for the type of support that is used for stake 20. In pit 10' the angle iron 15 and plate 16 are replaced by a generally V-shaped pipe 32, the free ends of which have lateral projections 33 that are rotatably journaled in registering openings in side walls 13. The lower end of stake 20 is secured to a flat segment or plate 34, which is fastened in the apex of the V-shaped support 32. The stake projects upwardly through an overlying flexible mat (not illustrated) of the type used in the first embodiment so that normally the stake is inclined slightly forwardly or toward the left in FIG. 4.

When the pit 10' is in use, the V-shaped support 32 will tend to swing slightly upwardly against the resistance of the overlying mat, and about the horizontal pivotal axis of its projections 33, when the associated stake 20 is struck by a horseshoe.

Referring now to FIGS. 5 to 7, the modified pit 40 comprises a flat, rectangular base, 42, to the rear end of which a rectangular backstop 44 is pivotally fastened by a pair of conventional hinge plates 47. The backstop comprises a flexible screen 45, which is secured tautly across the opening in frame 44. The backstop is held releaseably in its erected or upper position (FIGS. 5 to 7) by a pair of foldable braces 48, each of which is pivotally connected at one end to the backstop, and at its opposite end to the base 42.

Secured to the upper face of the base 42 substantially centrally thereof, and projecting slightly above the base, are two spaced, parallel, elongate side boards or guides 52. Rotatably journaled at opposite ends thereof in the walls 52, and extending transversely between these walls, is a shaft 54. Fastened at

its lower end to the midpoint of shaft **54**, and normally projecting upwardly and forwardly at an angle $\alpha$ to the vertical, is a stake **55**. Stake **55** extends through flexible mat **56**, which is removably mounted on the face of base **42** between side boards **52**. A counterbalancing rod **57**, which is fastened to the midpoint of shaft **54**, extends radially therefrom forwardly beneath mat **56**.

As shown more clearly in FIG. **6**, the mat **56**, which is similar to mat **22**, is provided with a removable plug **62** so that it can be filled with a fluid material **58** such as sand, water, or the like, so that is will not be easily displaced when struck by a flying horseshoe, and also so that it will tend resiliently to maintain stake **55** tilted forwardly with the rod **57** against base **42**.

As in the preceding embodiment, when the forwardly inclined stake **55** is struck by a flying horseshoe, it will tend to pivot rearwardly. The force is transmitted to rod **54** and tends to lift rod **57** off the upper face of base **42** against the resistance of the overlying mat **56**. This pivotal movement absorbs much of the shock loading which otherwise would have to be absorbed by stake **55**.

If desired, a T-shaped pipe fitting could be employed medially of rod **54** to join two separate, aligned sections thereof with the rod **57**. In this construction the lower end of stake **55** would be welded or otherwise secured to the T-shaped fitting. This construction permits rod **57** to be removably threaded in the fitting, so that when not in use, the rod **57** can be removed from the fitting to allow stake **55** to be swung down or folded against base **42**.

From the foregoing it will be apparent that applicant has devised a relatively simple and inexpensive, portable horseshoe pit, which is readily portable and collapsible. By mounting the stakes **20** and **55** for slight pivotal movement about a horizontal axis, and so that the stakes normally are inclined slightly forwardly, undesirable shock-loading of the stakes is minimized. Moreover, in addition to permitting slight pivotal movement of the stakes **20** and **55**, the shock-absorbing mats **22** and **56** reduce undesirable ricochetting of the shoes that land thereon. The backstops **25** and **44** are readily collapsed merely by removing the projections **29** of the struts **28** from the associated openings in the walls **13** of pit **10**, and by collapsing the braces **48** in the case of pit **40**. Moreover, the mats **22** and **56** may be removed from their respective pits **10** and **40**, and emptied, when not in use; and the stakes **20** may be threadably mounted in their supports **16** and **34** so that they can be removed readily. Thus, with a pair of my pits a horseshoe court can readily be erected anywhere, indoors or outdoors, and, after use, can readily be transported. A horseshoe addict or expert can readily, therefore, carry a horseshoe court about with him in the trunk of his automobile and set the court up quickly for practice or a game anywhere at any time.

Furthermore, it will be understood that while my invention has been described herein in connection with its use in playing a game of horseshoes, my pit can readily be used also in pitching quoits or similar games.

While the invention has been described in connection with several specific embodiments thereof, it will be understood that it is capable of still further modification, and this application is intended to cover any variations, uses, or adaptations of the invention following, in general, the principles of the invention and including such departures from the present disclosure as come within known or customary practice in the art to which the invention pertains and as may be applied to the essential features hereinbefore set forth, and as fall within the scope of the invention or the limits of the appended claims.

I claim:

**1**. A portable pit for use in playing the game of horseshoes, comprising:

a base having spaced, parallel sidewalls extending above said base;

a support mounted on said base between said walls for pivotal movement about a horizontal axis extending transversely between said walls;

a stake secured at its lower end to said support normally to extend above said base and forwardly at a slight angle to the vertical, when said support is in one position; and

means operative normally to maintain said support resiliently in said one position, and to allow limited pivotal movement of said support and stake about said horizontal axis, when said stake is struck by a horseshoe.

**2**. A portable horseshoe pit as defined in claim **1**, wherein said means comprises a flexible mat removably mounted on said base to overlie said support and to surround said stake adjacent its lower end.

**3**. A portable horseshoe pit as defined in claim **2**, including:

a backstop pivotally connected along one edge thereof to said base adjacent the rear end thereof for swinging movement about a second axis parallel to the first-named axis into and out of an erected position in which said backstop projects vertically upwardly from said base; and

means for releasably securing said backstop in its erected position.

**4**. A portable horseshoe pit as defined in claim **3**, wherein:

said support comprises a flat plate removably seated on said base beneath said mat, and having a pair of parallel side edges slidably guided against the confronting faces of said sidewalls, and having a straight rear edge extending transversely between said sidewalls;

a stop member is secured on said base rearwardly of said plate, and is engaged with said rear edge of said plate to provide a fulcrum about which said plate is pivotable; and

said stake is secured to said plate adjacent the forward edge thereof with the axis of said stake inclined forwardly relative to the upper surface of said plate.

**5**. A portable horseshoe pit as defined in claim **3**, wherein:

said support comprises a generally V-shaped rod having at its ends a pair of coaxial lateral projections journaled in said sidewalls for pivotal movement about said horizontal axis, and having its apex projecting forwardly of said horizontal axis and beneath said mat; and

said stake is secured at its lower end to said rod adjacent the apex thereof with said stake inclined to the plane containing said V-shaped rod.

**6**. A portable horseshoe pit as defined in claim **3**, wherein:

said support comprises a T-shaped rod having opposite ends of its crosspiece portion journaled in said sidewalls for pivotal movement about said horizontal axis, and having its right-angular stem portion projecting forwardly beneath said mat; and

said stake is secured at its lower end to the midpoint of said crosspiece portion with the axis of said stake inclined to the plane containing said T-shaped rod.

**7**. A portable horseshoe pit as defined in claim **3**, wherein said support comprises:

a shaft rotatably journaled at opposite ends in said sidewalls to pivot coaxially of said horizontal axis; and

a rod fastened at one end to said shaft and projecting at its opposite end beneath said mat at right angles to said shaft,

said stake being fixed at its lower end to said shaft medially of its ends, and disposed at an acute angle to said rod.

**8**. A portable horseshoe pit as defined in claim **2**, wherein said mat comprises a hollow, flexible container filled with a fluidlike material.

**9**. A portable horseshoe pit for use in playing the game of horseshoes, comprising:

an elongate, rectangular plate;

a rectangular backstop pivotally connected at the bottom thereof to the rear end of said plate for pivotal movement into and out of an erected position in which it projects vertically upwardly from said plate;

a pair of spaced, parallel sidewalls secured to said plate to extend at right angles to said backstop, when the latter is in its erected position;

an elongate, flexible mat removably mounted on said plate between said sidewalls;

a movable support positioned between said mat and said plate normally to be held resiliently in a position of rest against said plate by said mat;

a stake fixed at its lower end to said support for movement therewith, and projecting upwardly through said mat in a plane medially of said walls, and inclined slightly forwardly at an angle to the vertical, when said support is in its position of rest; and

means mounting said support on said base for pivotal movement against the resistance of said mat, and about a horizontal axis that extends transverse to said sidewalls, when said stake is struck by a horseshoe.