United States Patent

Hohmann

[15] **3,647,214**

[45] **Mar. 7, 1972**

[54] PORTABLE SHOOTING GALLERY AND GUN CART

[72] Inventor: **John F. Hohmann,** 403 Beech Ave., Takoma Park, Md. 20012

[22] Filed: **Apr. 21, 1970**

[21] Appl. No.: **30,387**

[52] **U.S. Cl.** **273/105.6,** 280/47.24

[51] **Int. Cl.** **F41j 7/00**

[58] **Field of Search**.....273/26 A, 105.6, 102 R, 102 AP, 273/102.1 R; 280/47.19, 47.24, 47.33

[56] **References Cited**

UNITED STATES PATENTS

2,078,119	4/1937	Benedict	280/47.24
2,657,058	10/1953	Mulcany	273/26 A
3,008,714	11/1961	Pullen	273/102.1
2,842,373	7/1958	Duerr	280/47.19

Primary Examiner—Anton O. Oechsle
Assistant Examiner—Marvin Siskind
Attorney—Imrie & Smiley

[57] **ABSTRACT**

An open framework includes spaced side portions, spaced bottom portions, and spaced horizontal portions, said horizontal portions having targets supported thereby. A front angle portion is connected to the forward ends of the bottom portions and pivotally supports targets thereon which are spring urged into operative position. A swingable support member is supported by the underside of said front angle portion. A pair of wheels are supported on axle means provided on the framework and are readily detachable therefrom. A removable support means in the form of an open top container is provided for supporting the lower ends of guns and for carrying ammunition or the like.

5 Claims, 6 Drawing Figures

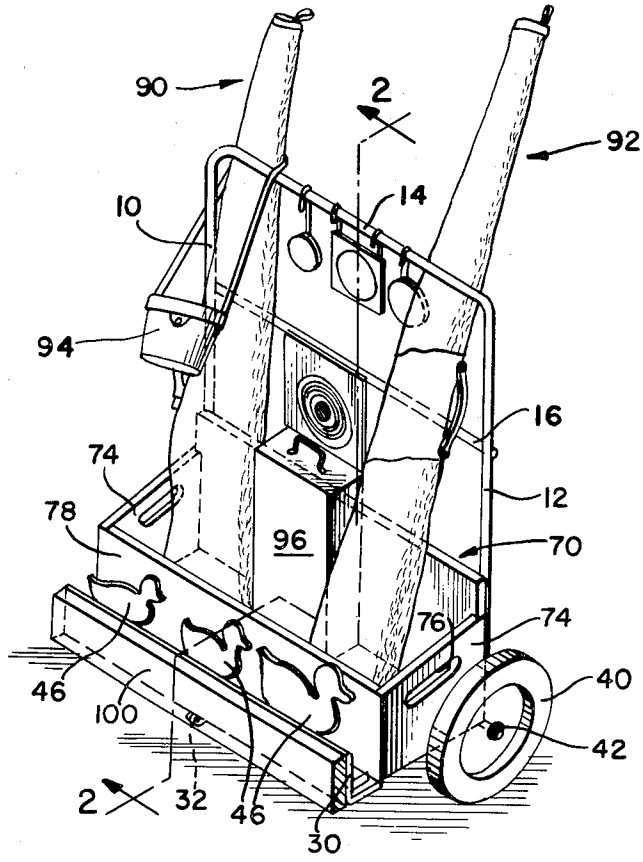


FIG. 1.

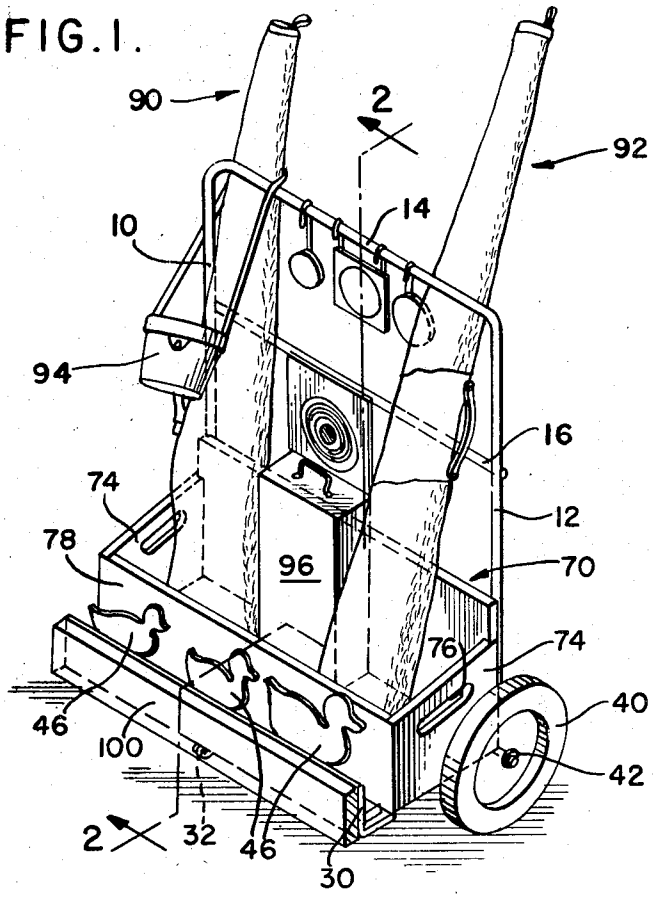


FIG. 2.

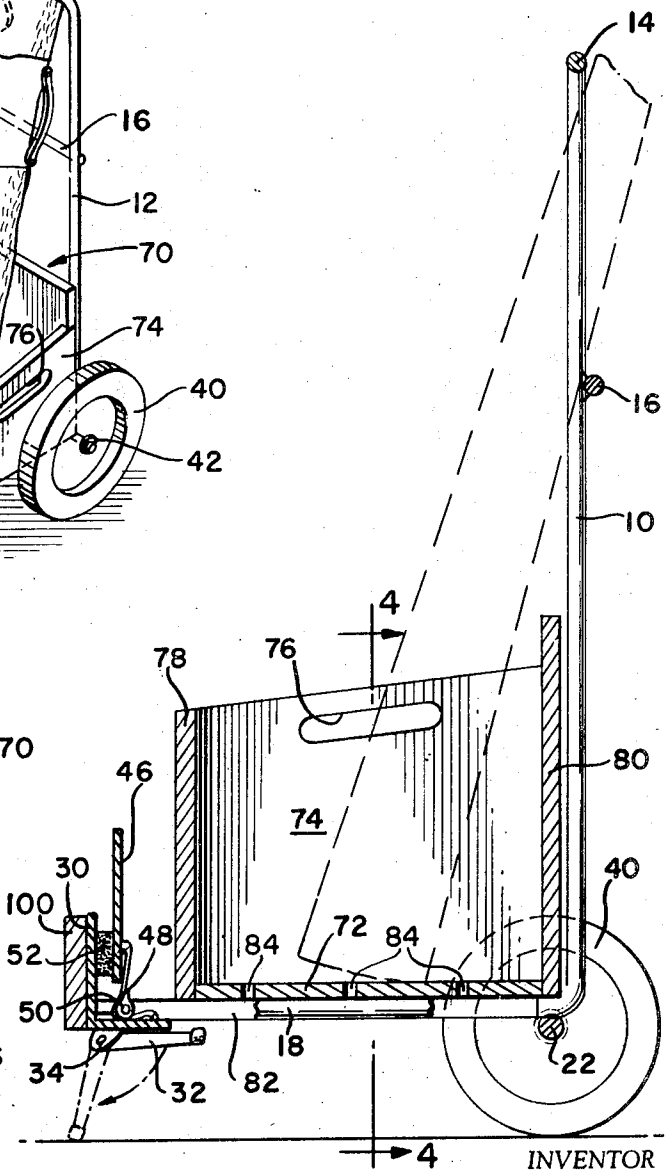
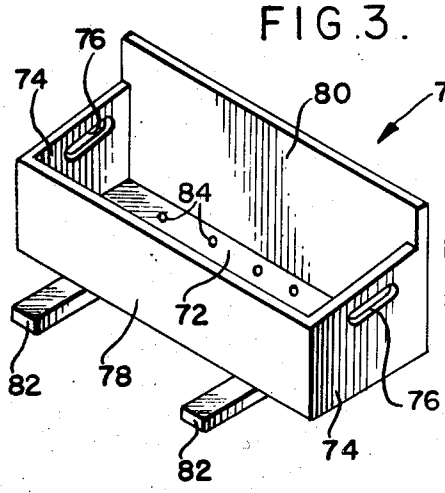


FIG. 3.



INVENTOR
JOHN F. HOHMANN

BY Fowler, Smiley, Snyder and Putnam

ATTORNEY

FIG. 4.

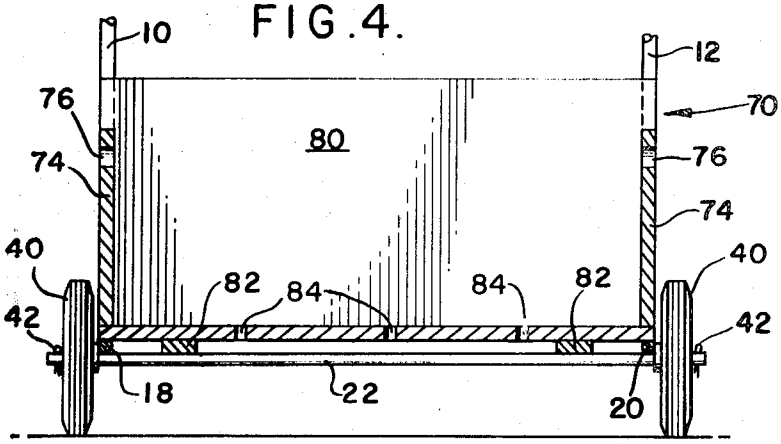


FIG. 5.

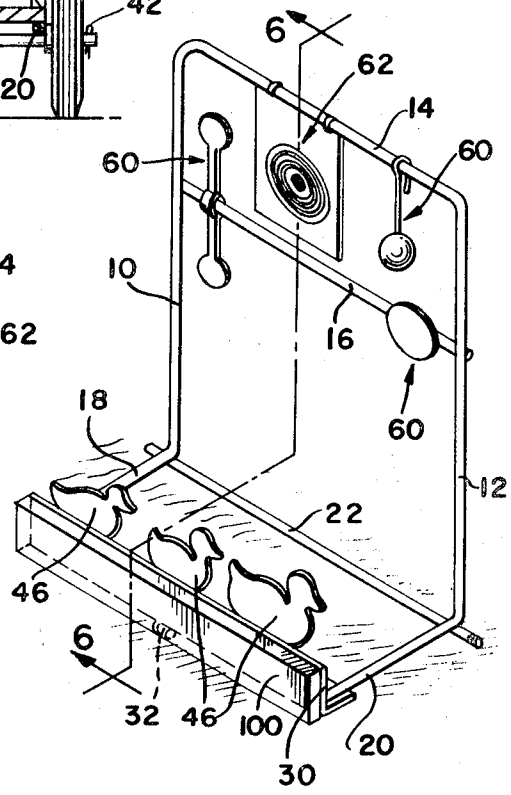
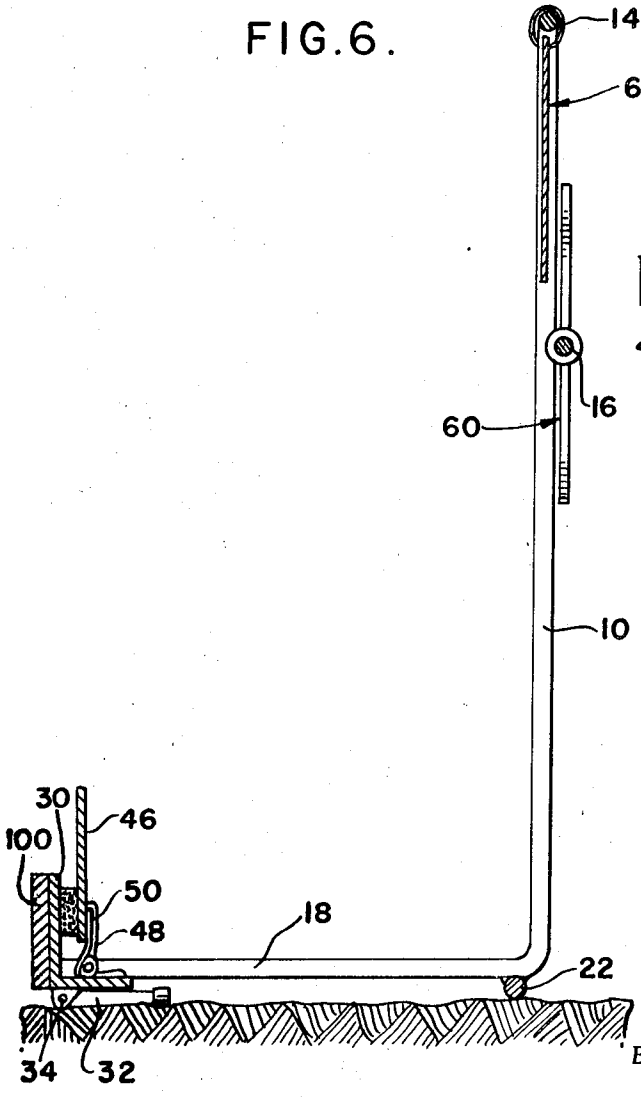


FIG. 6.



INVENTOR
JOHN F. HOHMANN

BY Smirne Smiley, Snyder and Peterson

ATTORNEY

PORTABLE SHOOTING GALLERY AND GUN CART

BACKGROUND OF THE INVENTION

The present invention is especially adapted for use by sportsmen who desire to engage in small bore target shooting at distances of up to 75 yards or more. It is desirable to provide a device which enables necessary shooting equipment such as guns, ammunition and targets to be readily transported to a remote site whereupon a shooting gallery construction can be readily erected for use in target shooting.

Such a device should be a self-contained unit which enables the entire target-shooting operation to be carried out after the device has been moved into operative position.

In the past, it has been a common procedure for sportsmen to carry various items such as cans, bottles and the like into fields to serve as targets in the shooting practice. This type of procedure results in litter and trash which should be cleaned up after the target shooting is completed.

Since wild game is becoming increasingly scarce, it is more and more difficult to locate suitable spots for hunting, and a device of this type will enable sportsmen to practice shooting and sharpen their eyes. A property owner who may be reluctant to allow sportsmen to hunt wild game on his property additionally will be more willing to allow a person to fire at a stationary target since the possibility of mishaps is substantially eliminated.

A device of this type provides a substantial safety factor since the line of fire is concentrated into a limited area, and it is only necessary for the sportsman to select a suitable site where no damage can be done.

The provision of a device including targets thereon eliminates the necessity of walking back and forth to set up targets as would be the case where cans, bottles and the like are employed as targets.

SUMMARY OF THE INVENTION

The portable shooting gallery and gun cart of the present invention includes an open framework having spaced horizontal portions which confine parts of guns and further serve to support targets thereon. The framework includes an axle, and readily detachable wheels supported on the axle so that the device can be readily moved from place to place, and the wheels subsequently removed when it is desired to initiate target practice. The wheels are removed so that they are not damaged by bullets during the firing procedure.

A swingable support member is provided on the framework to support the device in upright position while the wheels are still mounted on the axle means. When the wheels are removed, this support member is swung out of support position and the entire device rests on the ground.

Additional targets are pivotally mounted on the front portion of the framework and are spring urged into upright position, resilient stop means being provided for limiting movement of such further targets.

A support means in the form of an open top container is supported on the framework and is held in place thereon by forwardly extending portions of the support means.

The device of the present invention enables all of the necessary equipment including guns, ammunition and targets to be readily moved into operative position simply by grasping the top of the framework and pulling the device so that it moves over the terrain on the wheels thereof to a point from which it is desired to shoot. The guns, ammunition and support means are removed from the framework and the device is then wheeled a selected distance and the targets arranged in proper position for target practice. The wheels are detached and moved away from the framework whereupon the target shooting can commence.

The device is of a size so that it will fit in the trunk of an average automobile and in a typical example may be approximately 30 inches wide, 38 inches high, and having a fore and aft dimension of about 12 inches with wheels of approximately 10 inches in diameter. These dimensions are, of course, not critical, and have been given simply as a typical example of the dimensions of the device.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a top perspective view illustrating the device of the present invention fully loaded and in position to move the equipment into any desired position;

FIG. **2** is an enlarged sectional view taken substantially along line **2—2** of FIG. **1** looking in the direction of the arrows;

FIG. **3** is a top perspective view of the support means of the device;

FIG. **4** is a sectional view taken substantially along line **4—4** of FIG. **2** looking in the direction of the arrows;

FIG. **5** is a top perspective view of the device as set up on the ground for target practice, and,

FIG. **6** is an enlarged sectional view taken substantially along line **6–6** of FIG. **5** looking in the direction of the arrows.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings wherein like reference characters designate corresponding parts throughout the several views, an open framework includes a pair of spaced substantially parallel side portions **10** and **12** joined at the upper ends thereof by an integral horizontal portion **14**. A separate horizontal member **16** is suitably secured as by welding to the side portions **10** and **12**. The members of the framework may be formed of suitable material such as ½ inch diameter round iron rod, the various portions of the framework being rigidly secured to one another.

The lower ends of side portions **10** and **12** are bent at a substantially 90° angle and extend forwardly to define spaced substantially parallel bottom portions **18** and **20**. A further frame member **22** is rigidly secured to the under surface of portions **18** and **20** as by welding and extends laterally on either side of the side portions of the framework so as to define an axle upon which wheels **40** can be mounted on opposite ends thereof.

The framework includes a front portion **30** in the form of a quarter inch thick steel angle member which is fixed as by welding to the forward ends of the bottom portions **18** and **20** of the framework. A support member **32** is connected to the under surface of angle member **30** for swinging movement about a pivot axis **34** whereby the support member can be swung between the phantom line and full line positions shown in FIG. **2**.

A pair of wheels **40** are mounted at opposite ends of the axle **22** and are retained in operative position by relatively long unbent cotter pins **42**. These cotter pins enable the wheels to be readily detached when it is desired to set up the device for actual shooting. As seen in FIG. **2**, when support member **32** is in the phantom line position and the wheels **40** are mounted on axle **22**, the device is supported such that the side portions thereof extend substantially vertically when resting on a horizontal support surface. On the other hand, when the wheels are removed from the axle and support member **32** is pivoted into the full line position, the device can then be supported on the ground as shown in FIG. **6**, the folded support member and the axle serving to support the framework so that the side portions thereof extend substantially vertically when the device is resting on a horizontal support surface.

Targets **46** in the form of ducks, rabbits or other game, are made of quarter inch flat sheet steel, each of these targets being pivotally supported on the front portion **30** of the framework by means of a hinge **48** including a spring **50** normally biasing the targets in a counterclockwise direction as seen in FIG. **2**. It is apparent that the spring means **50** normally urges the targets into an upright position and that these targets are adapted to be pivoted in a counterclockwise direction when struck by a bullet.

A resilient bumper means **52** formed of rubber or the like is suitably secured as by an adhesive substance to the rearwardly facing surface of the upwardly extending flange of angle

member 30 in position to engage a central portion of each of the targets 46. This bumper means serves as a shock absorber when the targets pivot in a counterclockwise direction as seen in FIG. 2 and further serves to relieve strain on the associated spring means 50 after the target has returned to the upright position.

A plurality of miscellaneous targets 60 are supported by the spaced horizontal portions 14 and 16 of the framework as seen most clearly in FIG. 5. In addition, a conventional bull's-eye target 62 formed of heavy paper is also supported by the framework. If necessary, this latter target may be supported by a rigid frame or backing material to rigidify the target.

A support means 70 comprises a container open at the top thereof which may be formed of a suitable material such as wood or the like. This support container includes a bottom 72 and a pair of opposite end walls 74 having hand holes 76 formed therethrough which enable the support container to be readily grasped and lifted when so desired. The container includes a front wall 78 and a rear wall 80, the rear wall being of substantially greater height than the front wall.

The support container is adapted to rest upon the bottom portions 18 and 20 of the framework, and the support container includes a pair of spaced portions 82 which extend forwardly thereof as seen particularly in FIGS. 2 and 3, the forward ends of portions 82 engaging the rearwardly facing surface of the vertically extending flange of angle member 30. This interengagement insures that the support container is maintained in the operative position shown in FIG. 2 and is held in place between the angle member 30 and the upwardly extending side portions 10 and 12 of the framework. Several small holes 84 may be drilled in the bottom of the support to allow water to drain out of the container in case of rain.

Referring to FIG. 1, the device is shown as supporting suitable equipment for use in target practice including a pair of guns 90 and 92 disposed within conventional gun cases to prevent damage to the guns when moving over uneven terrain. The barrel portion of the gun has been inserted between horizontal portions 14 and 16 of the framework, while the butt portion of the gun is supported within the support container 70. A binocular case 94 is shown as being supported by one of the guns while a box of ammunition 96 is illustrated as supported within container 70 between the two guns.

In order to prevent bullets from ricocheting off of the upwardly extending flange of angle member 30, a suitable means such as a piece of wood 100 is secured to the forwardly facing surface of the angle member. As an alternative arrangement, the upwardly extending flange of angle member 30 may be disposed at an angle so that it will deflect bullets downwardly into the ground.

As this invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, the present embodiment is therefore illustrative and not restrictive.

What is claimed is:

1. A portable shooting gallery and gun cart comprising:

An open framework including:

spaced side portions in vertical alignment,

space bottom portions extending forwardly from said side portions,

removable support means carried by said bottom portions for supporting the lower ends of guns and for carrying ammunition and the like,

spaced horizontal portions supported by said side portions for confining guns supported by said removable support means,

axle means fixed to said framework adjacent the joints between said side and bottom portions,

wheels supported on said axle means and being readily detachable therefrom, and

a front section mounted on the front ends of said bottom portions;

A plurality of targets,

at least one of said plurality of targets supported by at least one of said horizontal portions,

at least one of said plurality of targets supported by said front section on said bottom portions, and

said target supported by said front section being mounted for pivotal movement with respect to said front section and being spring biased into its upright operative position.

2. Apparatus as defined in claim 1 including resilient stop means interposed between said front section and said target pivotally mounted thereon to cushion movement of said target.

3. Apparatus as defined in claim 2 comprising a support member pivotally mounted with respect to said front section and swingable between an upright position to support said bottom portions in substantially ground parallel position when said wheels are on said axle means and a substantially horizontal position to enable said bottom portions to be disposed in ground engaging position when the said wheels are removed from said axle means.

4. Apparatus as defined in claim 1 comprising a support member pivotally mounted with respect to said front section and swingable between an upright position to support said bottom portions in substantially ground parallel position when said wheels are on said axle means and a substantially horizontal position to enable said bottom portions to be disposed in ground engaging position when the said wheels are removed from said axle means.

5. Apparatus according to claim 1 wherein said removable support means comprises an open top container having forwardly extending portions for engagement with said front section to inhibit movement of said support means relative to said bottom portions.

* * * * *