The present invention relates to a new and improved combination target and projectile receiver.

An object of the invention is to provide a target and projectile receiver that will effectively prevent the ricocheting of bullets aimed at the target thereby minimizing the hazards of similar devices.

A further object of the invention is to provide a device of the character described adapted for use on rifle or pistol ranges, or indoors with perfect safety.

A still further object of the invention resides in the provision of a receptacle for receiving the projectiles that is completely enclosed and conveniently accessible.

Another object of the invention resides in the provision of a means for illuminating the target and receiver that is adapted to be secured to the body of the device.

Other objects of the invention reside in the novel combination and arrangement of parts and in the details of construction hereinafter illustrated and/or described.

In the drawing:

Figure 1 is a vertical sectional view taken substantially on line 2—2 of Figure 2.

Figure 2 is a front elevational view of the device according to the present invention.

Figure 3 is a fragmentary sectional view taken substantially on line 3—3 of Figure 1; and

Figure 4 is a partial side elevational view of the device illustrated in Figure 1 and illustrating a modified hopper front enclosure.

The herein described invention may be erected on a rifle or rifle range, or indoors and may be either a permanent or a temporary structure. It comprises substantially a cabinet-like structure, the deflection plates of which are completely enclosed on three sides and formed of a relatively heavy steel. The projectile or bullet upon impacting the deflection plates will be caused to travel in a downward direction and then be deposited in a conveniently accessible compartment.

Referring to the drawing for a more detailed description thereof, the cabinet-like structure indicated generally by the numeral 5 comprises vertically disposed leg members 6 and 7 which are preferably formed of angle iron and which are held in spaced relation by means of the back wall plate 8 and front wall plate 9. The plates 8 and 9 are preferably welded to the leg members. In the formation of a collapsible structure the plates 8 and 9 may be bolted or similarly attached to the leg members 6 and 7 in a well known manner. A pair of side members 10 are also attached to the leg members 6 and 7, and as illustrated in Figure 3 of the drawing, said side members are disposed on the inside of the angular portion of said leg members. The upper ends of the side members are disposed at an angle to conform with the angularity of the top deflecting plate 11 and are preferably welded thereto. By this construction it is impossible for a projected bullet to ricochet and be discharged upwardly or on either side of the cabinet-like structure. The front and back plates 8 and 9, respectively, are of a size sufficient to form a complete enclosure.

Referring to Figure 1 of the drawing it will be noted that there is provided a pair of deflecting plates 11 and 12, respectively. The top deflecting plate 11 diverges downwardly at an angle and one end thereof, is curved toward the front of the cabinet to direct the projected bullet toward the deflecting plate 12. The path of the projectile aimed at the target 13', is indicated by the arrows and it will be noted that the projectile when impacting the deflector plate 11 will course downwardly toward the curved end of said plate and then be projected against the plate 12. The plate 12 diverges upwardly from the front of the cabinet and the inner end 14 thereof will overlap the curved end 15 of the plate 12. The opposite end 16 of the plate 12 is curved downwardly whereby the projected bullets are caused to be discharged within the receptacle 16. As afore-indicated the deflecting plates 11 and 12 are welded or otherwise secured to the side walls 10 and are preferably formed of a relatively heavy steel. For use with larger caliber rifles, of course, the deflecting plates would be constructed of a still heavier grade of steel. It will also be noted that the front plate 9 is substantially the size of the curved end 15 and in conjunction with the front wall 17 of the receptacle 16 forms the necessary front enclosure.

The receptacle 16 is slidable disposed on angle shaped arms 18, which arms are welded or otherwise secured to the leg members 6 and 7. The receptacle 16 is preferably formed of steel and is readily accessible for emptying the projected bullets.

The target 13' is suspended in the upper front portion of the cabinet by means of the clip 19 carried by the wire 20, which wire is attached in any desired manner to the side walls 10. It is to be understood, however, that the cabinet structure can be of sufficient size to accommodate two or more targets which would be suspended in the illustrated and described manner.
For providing illumination for the target and receptacle there is employed a supporting arm 21 attached to the upwardly extending end 22 of the plate 11 and on the opposite end to a bracket 23 and is suitably clamped to said members by means of the clamps 24. The arm 21 is hollow for threadedly receiving the electrical conducting wire 25, the end 26 of which may be plugged into a suitable outlet. A conventional reflector 27 is carried by the opposite end of the tube 21 and within said reflector is supported the illuminating element.

Referring to Figure 4 of the drawing, it will be noted that the front portion surrounding the target 13' has been increased in size by providing a hopper front 28 which is preferably detachably secured to the front leg members 7 by any desired means. It will be noted that the lower end of the hopper front 28 extends below the removable receptacle 17 and when desiring to obtain access to said receptacle, the front 28 is removed.

From the above description it will be readily apparent that there is provided a target and projectile receiver that will effectively prevent the ricocheting of projected bullets and cause their deposit in an accessible receptacle. The angularity of the deflecting plates and their association with the front, side and rear members minimizes the hazard of the bullet being ricocheted back to the marksman.

Also it will be understood, of course, by those skilled in the art that variations in the hereinabove described device involving the substitution of substantial equivalents for the devices described are intended to be comprehended within the spirit of the present invention and that the invention is capable of extended application and is not confined to the exact showing of the drawing nor to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

What is claimed is:

1. A target and projectile receiver comprising 5 vertical supporting members, front, back and side members secured to said vertical supporting members whereby a cabinet-like structure is provided, target supporting means carried by the side walls of said cabinet, a deflecting plate diverging downwardly in back of the target and having one end thereof curved toward the front of said cabinet, a second deflecting plate diverging upwardly from the front of said cabinet and having an end curving away from the front of said cabinet, the opposite end of said second deflecting plate overlying the curved end of said first mentioned plate, and means for receiving the projectiles impacting said plates.

2. A target and projectile receiver comprising 20 vertical supporting members, back and side members secured to said vertical supporting members whereby a cabinet-like structure is provided, a hopper-like front member secured to the upper end of said vertical supporting members, target 25 supporting means carried by the side walls of said cabinet and spaced in front of said hopper-like front member, a deflecting plate diverging downwardly in back of the target and having one end thereof curved toward the front of said cabinet, a second deflecting plate diverging upwardly from the front of said cabinet and having an end curving away from the front of said cabinet, the opposite end of said second deflecting plate overlying the curved end of said first mentioned plate, a front wall plate secured to the vertical supporting members for concealing the curved end of said second mentioned deflecting plate, and means for receiving the projectiles impacting said plates.

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