April 14, 1942. L. KALDIZAR 2,279,325

GUN RACK

Filed April 29, 1941 2 Sheets-Sheet 1

Fig. 1.

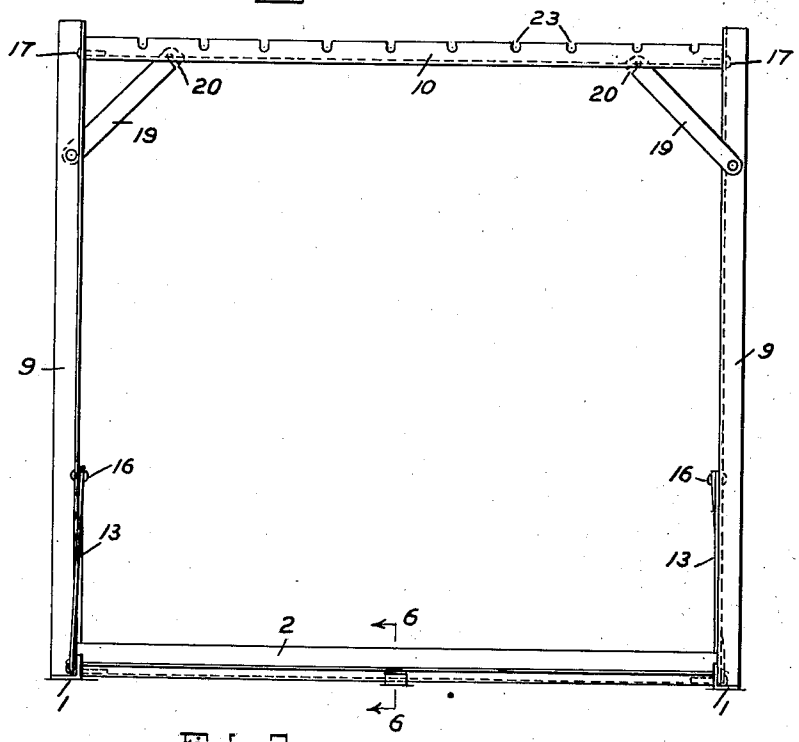


Fig. 2.

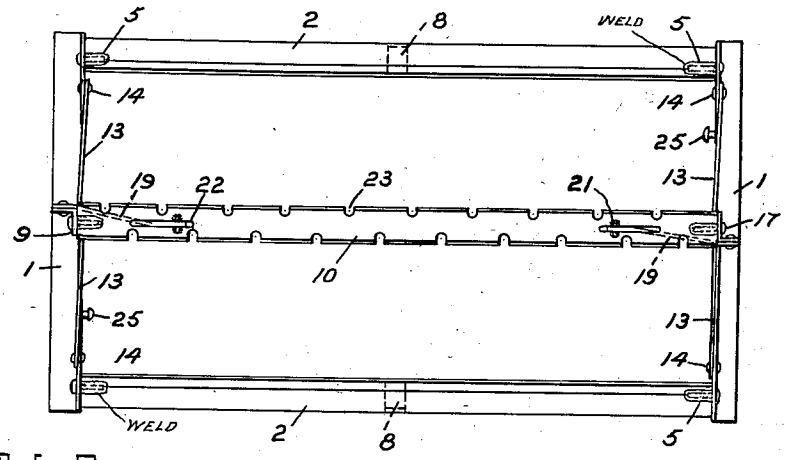
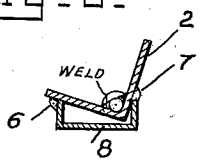


Fig. 6.



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April 14, 1942. L. KALDIZAR 2,279,325

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Filed April 29, 1941 2 Sheets-Sheet 2

Fig. 3.

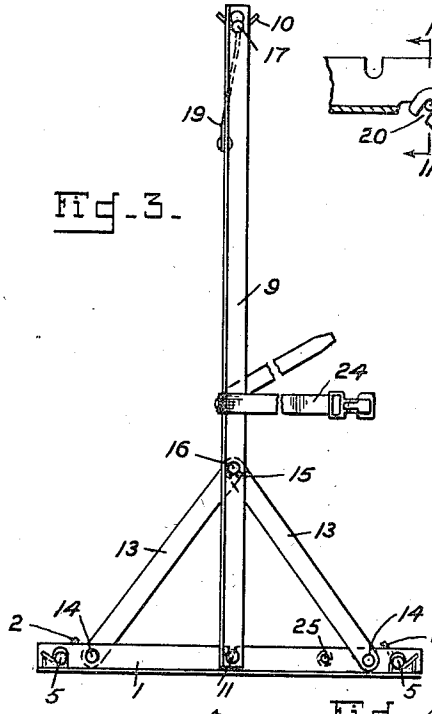


Fig. 7.

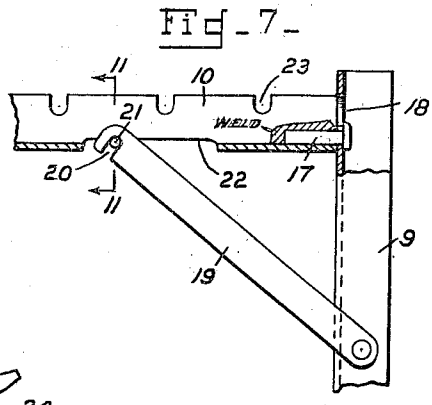


Fig. 8.

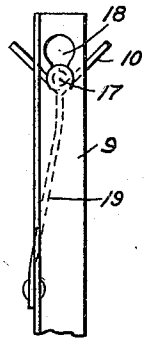


Fig. 9.

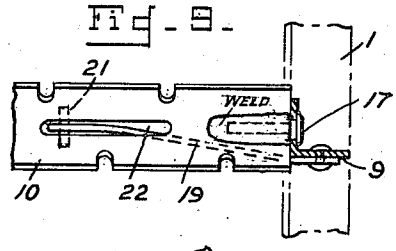


Fig. 4.

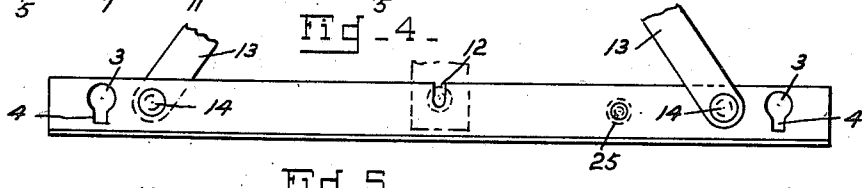


Fig. 5.

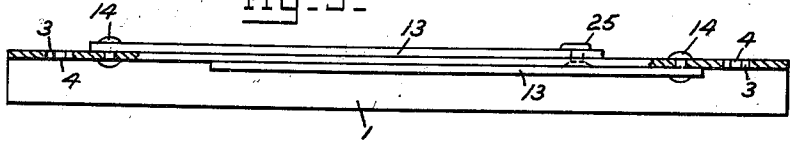


Fig. 12.

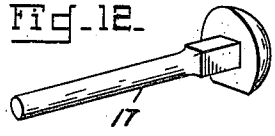


Fig. 10.

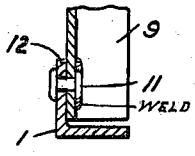
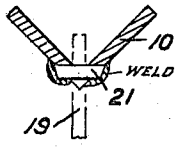


Fig. 11.



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UNITED STATES PATENT OFFICE

2,279,325

GUN RACK

Lewis Kaldizar, United States Army, Aberdeen Proving Ground, Md.

Application April 29, 1941, Serial No. 390,939

7 Claims. (Cl. 211—64)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

The invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to racks, and more particularly to a rack for the storage of rifles.

During military operations need has arisen for a light, portable, collapsible rack for temporary storage of rifles undergoing repair.

Objects of the present invention are to provide a portable rack, simple in construction, easy to assemble, strong, light and durable, and inexpensive to manufacture.

Other novel features and advantages will become apparent in the following detailed description when considered in conjunction with the accompanying drawings, wherein

Fig. 1 is a front elevation of the gun rack,

Fig. 2 is a plan view thereof,

Fig. 3 is a side elevation of the rack,

Fig. 4 is an enlarged detailed view of one of the base members,

Fig. 5 is a plan view of a base member knocked down for transportation,

Fig. 6 is an enlarged sectional view taken on the line 6—6 of Fig. 1,

Fig. 7 is an enlarged, fragmentary detailed view of the detachable mounting of the muzzle support,

Fig. 8 is an end view of the muzzle support of Fig. 7,

Fig. 9 is an enlarged, fragmentary plan view of the detachable mounting of the muzzle support,

Fig. 10 is an enlarged view showing the locking assembly of an upright to a base member,

Fig. 11 is a section taken on the line 11—11 of Fig. 7, and

Fig. 12 is a perspective view of one of the locking pins.

According to a preferred embodiment of the invention, two horizontal end members 1 of suitable angle iron are detachably connected by two cross pieces 2 of similar material to form a rectangular base. Each angle member 1 has a flat portion positioned to rest on the ground while the other flange extends in a vertical plane. Circular apertures 3 (Fig. 4) appear in the vertical flanges adjacent the end of the base members 1 and narrower notches 4 intersect the lower portions of the apertures. Round bodied, square necked, oval headed locking pins 5 are welded to the ends of the cross member 2. (See Figs. 2, 6 and 12.) It has been found that threadless carriage bolts make very satisfactory pins. These pins are nested in the angle of the cross pieces with the head and neck portions projecting a distance slightly greater than the thickness of the angle iron. By passing the heads through the apertures 3 and forcing the square neck portions of the pins into the confining slots 4, the cross pieces 2 may be securely locked to the end members 1. The cross pieces 2 are tilted at an angle as shown in Fig. 6 to form satisfactory rests for the rifle butts. Welded to the central part of the cross pieces at 6 and 7 are short channel sections 8 which form feet and assist in supporting the butt rests 2.

Angle bars forming vertical uprights 9 are conditioned to be detachably mounted on base members 1 to sustain the removable muzzle support 10. The lower end of each upright carries a rivet 11 welded thereto and having a projecting shank and head. (See Fig. 10.) The shank portion is adapted to be inserted in a slot 12 centrally located in an end member 1. Angular braces 13, preferably flat metal bars, are pivotally mounted on the base members 1 at 14. The ends opposite the pivots are provided with notches 15 to closely engage the bodies of headed pins 16 welded to the uprights 9. This insures a rigid column free from any lateral displacement.

Muzzle support 10 is a section of angle iron provided with locking pins 17 which engage the slotted extensions of apertures 18 in the upper ends of the uprights. These locking pins are the same type as employed in the cross pieces 2 and are attached in the same manner. Lock braces 19, preferably of spring metal, are pivoted at their lower ends to the uprights 9. The other ends of these braces are furnished with notches 20 to hook over rods 21 welded to the muzzle support 10. Near the ends of the muzzle support are alongated slots 22 which permit an oscillatory movement of the hook ends of the locking braces 19 to engage or disengage the rods 21. (See Figs. 7 and 9.) The rods 21 are welded to the muzzle support at convenient distances to receive the notched extremities of the lock braces 19 in a firm engagement. The plane of swing of these braces is offset from the slot 22 by any manually springing the braces may be urged laterally into engagement with the slot, thus insuring a more positive locking action. (See Figs. 7 and 9.)

The muzzle support 10 is fitted preferably with notches 23 on both sides in staggered relationship and are adapted to receive the muzzle ends of the rifle barrels. The butt rests 2 are tilted at a convenient angle, as previously described, to accommodate the gun stocks.

A strap 24 wih a buckle is riveted to each vertical upright 9 to a secure the rack parts together when knocked down for travelling purposes.

A pin or rivet 25 is welded to the inner side of the vertical flange of each base member 1. It is so positioned that when the rack is dismantled one of the angular braces 13 may be rotated about its pivot until its notch engages this pin to secure it for transport. (See Fig. 5.) The adjacent brace 13 is attached to the opposite side of the vertical flange and may be folded until it meets the horizontal flange of the base piece 1. It also rests in frictional engagement with the vertical flange of the angle iron. This prevents undesired movement of the brace elements during transportation of the collapsed rack.

To assemble the rack the base members 1 are placed on a flat surface, the cross pieces 2 are then locked to the base members by inserting the pins 5 into the apertures 3 and forcing the shank portions of the pins down into the slots 4 to effect a secure engagement. This completes the base. The pins 11 of the uprights 9 are next inserted in the notches or apertures 12 of the base members 1 and the angular braces 13 are swung to lock the hook portions 15 about the pins 16 in the uprights. Then the muzzle support is assembled by inserting the spring braces 19 through the slots 22 and the pins 17 of the muzzle support are inserted in the apertures 18 in the top of the uprights 9 and forced down into the confining slots. Notches 20 of the spring braces 19 may now be rotated into engagement with the pins 21. The rack is now completely assembled and ready for use. Its disassembly is the reverse of the above described procedure.

The embodiment herein disclosed is merely illustrative and may be departed from in many ways without departing from the spirit and scope of the invention as pointed out in and limited solely by the appended claims.

I claim:

1. In a collapsible gun rack, a pair of spaced horizontal base bars each having a centrally located aperture, vertical uprights having apertures including slot portions near the upper ends of said uprights, headed protuberances at the lower ends of said uprights conditioned to detachably and firmly engage said centrally located apertures, a lug on each of said uprights, brace straps pivoted to each of said base bars adjacent their ends, a hook on the opposite ends of said brace straps to firmly engage the lug on said uprights, a muzzle receiving bar, headed lugs at the ends of said muzzle bar to detachably and firmly engage the slot portions of the apertures in said vertical uprights, lugs spaced from the ends of said bar, brace straps pivoted to the uprights, and hooks on the opposite ends of said brace straps to engage the lugs on said muzzle bar.

2. In a collapsible gun rack, a pair of spaced horizontal base bars having an irregular aperture adjacent each end and a centrally located aperture, spaced horizontal bars at right angles to said first mentioned bars, a headed protuberance on the end of each of the last named bars conditioned to detachably and firmly engage said irregular apertures in the first mentioned bars, vertical uprights having apertures including slot portions near the upper ends of said uprights, headed protuberances at the lower ends of said uprights conditioned to detachably and firmly engage said centrally located apertures, a lug on each of said uprights, brace straps pivoted to each of said base bars adjacent their ends, a hook on the opposite ends of said brace straps to firmly engage the lug on said uprights, a muzzle receiving bar, headed lugs at the ends of said muzzle bar to detachably and firmly engage the slot portions of the apertures in said vertical uprights, lugs spaced from the ends of said bar, brace straps pivoted to the uprights, and hooks on the opposite ends of said brace straps to engage the lugs on said muzzle bar.

3. A collapsible gun rack comprising, when assembled, a pair of spaced horizontal base bars having an irregular aperture near each end and a centrally positioned aperture, spaced horizontal bars at right angles to each of said first mentioned bars, a headed projection at the end of each of the last mentioned bars conditioned to detachably and securely engage the slot portions of said irregular apertures, angular faces on said last mentioned bars to receive gun butts, vertical uprights having apertures including slot portions near the upper ends of said uprights, headed protuberances at the lower ends of said uprights conditioned to detachably and firmly engage said centrally located apertures, a lug on each of said uprights, brace straps pivoted to each of said base bars adjacent their ends, a hook on the opposite ends of said brace straps to firmly engage the lug on said uprights, a muzzle receiving bar, headed lugs at the ends of said muzzle bar to detachably and firmly engage the slot portions of the apertures in said vertical uprights, lugs spaced from the ends of said bar, brace straps pivoted to the uprights, and hooks on the opposite ends of said brace straps to engage the lugs on said muzzle bar.

4. In a device of the character described, a pair of spaced horizontal base members having an irregular aperture near each end and a centrally positioned slot, spaced horizontal members at right angles to each of said first mentioned bars, a headed projection at each end of said last mentioned members conditioned to detachably and securely engage the slot portions of said irregular apertures, angularly disposed faces on said last mentioned members to accommodate gun butts, vertical uprights having apertures including slot portions at the upper end of said uprights, headed projections at the lower extremities of said uprights conditioned to detachably and firmly engage said centrally located slots, a headed lug on each of said uprights, brace straps pivoted to each of said first mentioned base bars adjacent their ends, a hook on the opposite ends of said brace straps to closely engage the lug on said uprights, a muzzle receiving bar provided with spaced notches on opposite sides thereof, headed lugs at the ends of said muzzle bar to detachably and firmly engage the slot portions of the apertures in said vertical uprights, lugs spaced from the ends of said bar, brace straps pivoted to the uprights, and hooks on the opposite ends of said brace straps to engage the lugs on said muzzle bar.

5. In a collapsible gun rack, a pair of spaced horizontal angle irons having an irregular perforation near each end and in addition a centrally positioned slot, a pair of spaced horizontal angle irons at right angles to each of said first mentioned irons with their web portions tilted to receive gun stocks, a headed lug integral with and at each end of said last mentioned irons conditioned to detachably and securely engage the slot portions of said irregular perforations, vertical angle iron uprights having irregular

apertures including slots at the upper ends of said uprights, headed square shank lugs at the lower extremities of each of said uprights conditioned to detachably engage said centrally located slots, a headed lug on each of said uprights and integral therewith, brace straps pivoted to each of said base bars, a hook notch on the opposite ends of said brace straps to engage the lug on said uprights, an angle iron muzzle bar with its notched webs upwardly extending, headed square shank lugs at the ends of said muzzle bar to detachably engage the slot portions of the apertures in said uprights, slots near the ends of the muzzle bar and a rod spanning each of said slots, and offset spring metal brace straps pivoted to the uprights having hook notches to engage the rods on said muzzle bar upon the application of a lateral displacing thrust.

6. A demountable gun rack comprising, when assembled, a polygonal base having headed pin and slot end connections, slots in said base, upright members with lugs received in said slots, bracing arms pivoted to said base and detachably secured to said upright members, a cross piece having receiving means for gun muzzles and detachably secured to the uprights through headed pin and slot connections.

7. A demountable gun rack comprising, when assembled, a polygonal base having headed pin and slot end connections, slots in said base, upright members with lugs received in said slots, bracing arms pivoted to said base and detachably secured to said upright members, a cross piece having receiving means for gun muzzles and engaging the uprights through headed pin and slot connections, bracing members pivoted to said uprights and slots in said bracing members engaging portions of said cross piece.

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