No. 692,506. Patented Feb. 4, 1902.

H. ECKER.

MILITARY STOOL.

(Application filed June 7, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

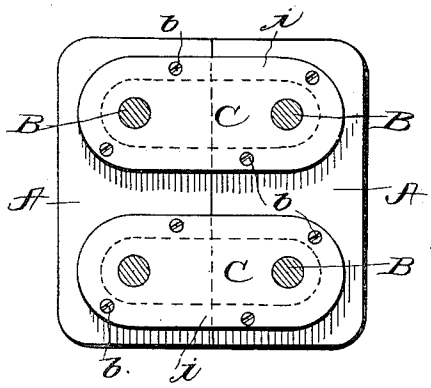


Fig. 2.

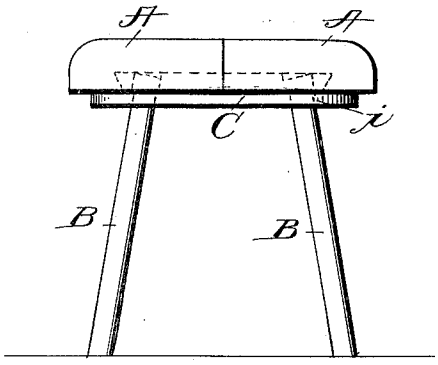


Fig. 3.

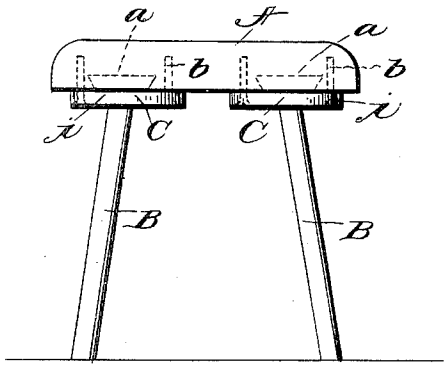


Fig. 4.

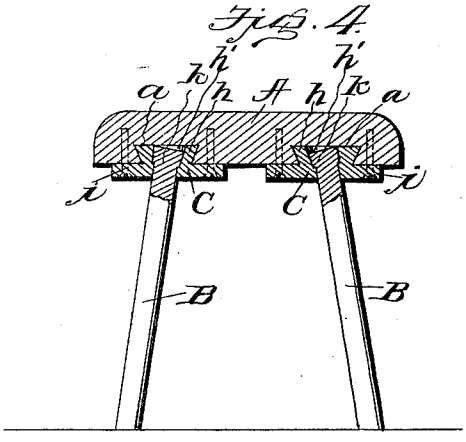
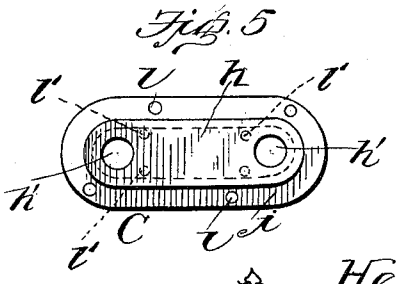


Fig. 5



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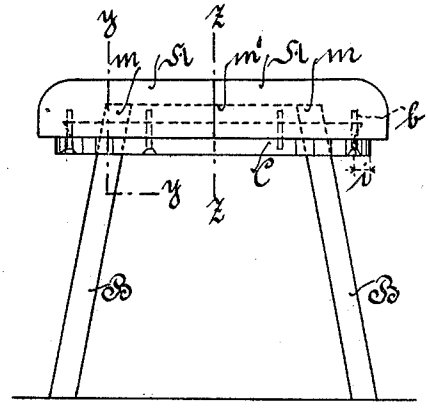


Fig. 6.

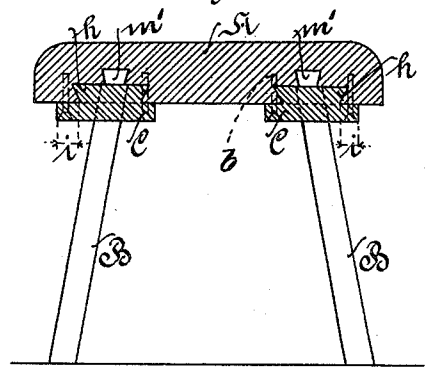


Fig. 8.

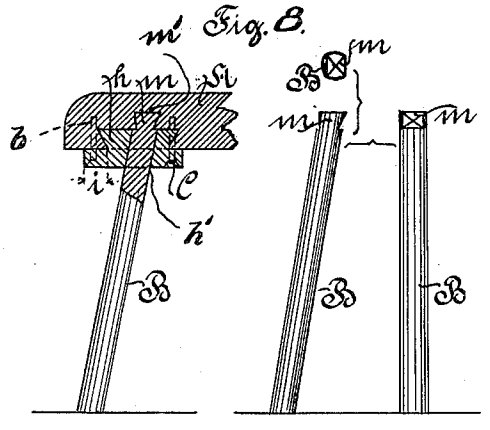


Fig. 7. Fig. 9.

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UNITED STATES PATENT OFFICE.

HEINRICH ECKER, OF SINZIG, GERMANY.

MILITARY STOOL.

SPECIFICATION forming part of Letters Patent No. 692,506, dated February 4, 1902.

Application filed June 7, 1900. Serial No. 19,464. (No model.)

To all whom it may concern:

Be it known that I, HEINRICH ECKER, manufacturer, a subject of the King of Prussia, German Emperor, and a resident of Sinzig, in the Province of Rhineland and Kingdom of Prussia, Germany, have invented new and useful Improvements in Military Stools, of which the following is a specification.

My invention relates to improvements in military stools for use in barracks and hospitals, and has for its object the production of a stool which is simple of construction, adapted to effectually stand rough usage and wear, and in which the parts when broken or injured are susceptible of being readily and easily removed and replaced by new parts.

With these and other minor ends in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a bottom plan view of a stool embodying my invention. Fig. 2 is a side elevational view of the same. Fig. 3 is a similar view taken at right angles to Fig. 2. Fig. 4 is a vertical section through the seat on line $x\,x$ of Fig. 1. Fig. 5 is a top plan view of one of the cross-pieces. Fig. 6 is a view similar to Fig. 2, showing a modification. Figs. 7 and 8 are sectional views taken, respectively, on the line $y\,y$ and $z\,z$ of Fig. 6. Fig. 9 shows two elevational views taken at right angles to each other and a top plan view of one of the stool-legs.

Stools of the class to which my invention relates are used to a large extent in the military barracks and hospitals of a number of countries, and as generally constructed consist of a seat made up of a pair of seat-boards arranged side by side, said boards being provided in their under sides with matching dovetailed grooves for the reception of the arris-fillets or dovetailed extensions of cross-pieces uniting the boards, to which cross-pieces the legs are also secured. Heretofore the cross-pieces have been made comparatively narrow, as they have only to serve as supports for the dovetailed slabs or arris-fillets against the under surface of the stool to reinforce said slabs against breaking when lateral strain falls thereon, and the cross-pieces have been secured by screws or other fastening devices passed upwardly therethrough and through the dovetailed edges of the slabs, thus weakening said edges and impairing the strength of the cross-pieces, which are liable to break under the rough usage to which stools of this character are subjected. My invention contemplates the provision of means whereby this objection is obviated in a simple and effective manner as well as the provision of a novel construction of fastening for the legs, so as to adapt the same to coact with the cross-pieces in effecting a firm and secure union of the parts.

Referring now more particularly to the drawings, in which like reference characters designate corresponding parts throughout the several views, the letters A A designate the seat-boards of the stool, which are placed side by side in the usual manner, with their inner edges abutting, and are mounted upon the legs B B, four of which are employed, in the customary manner. The seat-boards are provided with matching dovetailed grooves a for the reception of the dovetailed slabs or arris-fillets h, extending longitudinally from the upper surface of the cross-pieces C, which bear upon the under sides of the seat-boards and unite the same.

In assembling the parts the seat-boards are placed side by side, with their inner edges facing, and the dovetailed extensions h of the cross-pieces fitted in the grooves of one seat-board. The free ends of said cross-pieces are now forced through the grooves of the other board to secure both seat-boards together. According to my invention each cross-piece is provided with a comparatively broad marginal flange i, provided at suitable intervals with openings l for the passage of screws b or other suitable fastening devices, which are driven into the seat-boards to hold the same securely connected and to prevent longitudinal displacement of said cross-pieces. These openings l, of which four are preferably employed in practice, are arranged in pairs at a diagonal angle on opposite sides of the sockets h', which receive the legs B, so as to adapt the screws b to reinforce the cross-pieces against both lateral and longitudinal strain

and to prevent displacement thereof and the breaking of the dovetailed edges of the slabs or arris-fillets *h*.

As stated, it has been customary heretofore to make the cross-pieces C comparatively narrow and with little or no projection beyond the arris-fillets, the fastening-screws being passed upward through the cross-pieces and through the dovetailed edges of the arris-fillets, by which said edges are of course materially weakened and liable to break under strain—such, for instance, as a lateral strain produced by striking the legs B against the floor or other surface. By my invention this objection is avoided in a simple and effective manner, as the screws are passed upward into the body of the seat-board on opposite sides of the arris-fillets and are not passed through the dovetailed edges, whereby a much more secure and stable fastening is provided and the screws have a much longer bearing to hold the cross-pieces in position against strain. The legs B are provided, as usual, at their upper ends with heads or enlargements *k*, which fit within the sockets *h'* of the cross-pieces and are held by the latter in proper position. In applying the legs they are inserted, as before, from the top preliminary to the connection of the cross-pieces with the seat-boards and are held against movement when said cross-pieces are inserted within the dovetailed groove and the screws are applied to secure said cross-pieces. In Fig. 5 of the drawings I have shown in dotted lines the usual arrangement of the openings (here lettered *l'*) for the passage of the screws, from which it will be seen that they pass through the body of the cross-pieces and upward through the arris-fillets or dovetailed extension *h* adjacent to the dovetailed edges thereof, thus weakening the arris-fillets in an obvious manner.

In Figs. 6 to 9, inclusive, I have shown a modification in which the seat-boards are provided with counter-dovetailed grooves *m'* to receive dovetailed heads *m* upon the upper end of the leg B, this construction affording an auxiliary fastening, which is adapted to hold the legs much more firmly and securely in position to reinforce the cross-pieces C, so as to provide for a rigid and stable union of the parts.

Changes in the form, proportion, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a stool, the combination of the seat-boards provided with matching dovetailed grooves, cross-pieces provided with dovetailed slabs or arris-fillets fitted in said grooves and a marginal flange, fastening devices passed upward through the flange and into the seat-boards on opposite sides of but not through the dovetailed projections of the arris-fillets, and legs fitted in sockets in said cross-pieces, substantially as set forth.

2. In a stool, the combination of the seat-boards provided with matching dovetailed grooves and with counter-dovetailed grooves, cross-pieces provided with dovetailed slabs or arris-fillets fitted in said grooves, and a marginal flange, fastening devices passed upward through the flange and into the seat-boards on opposite sides of the arris-fillets, and legs fitted in sockets in the cross-pieces and having dovetailed heads fitted in said counter-dovetailed grooves, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

HEINRICH ECKER.

Witnesses:
BERNHARD BROCKBURG,
F. E. MALLETT.