

Jan. 5, 1943.

J. G. SOLOMON

2,307,722

SAFETY STEP STOOL

Filed June 7, 1940

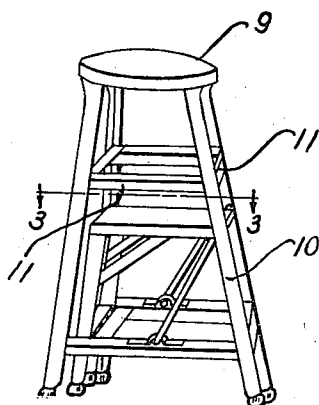


fig. 1

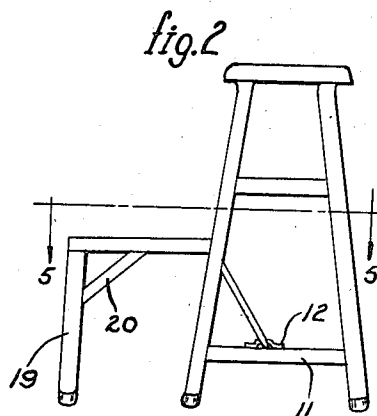


fig. 2

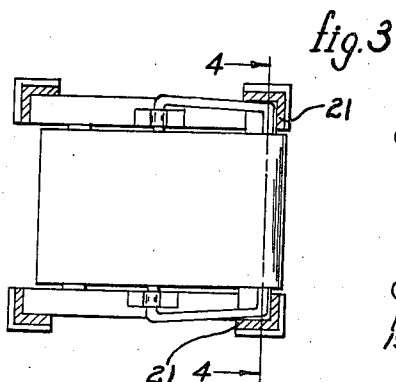


fig. 3

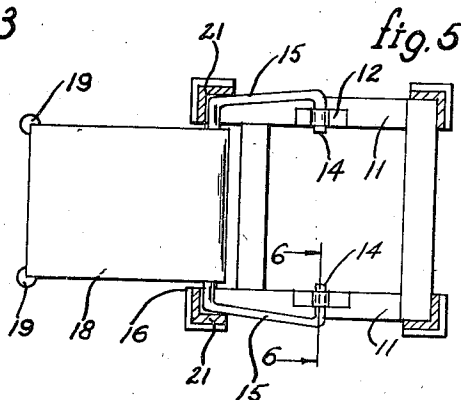


fig. 5

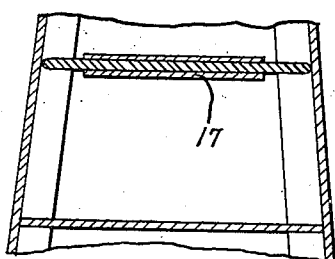


fig. 4

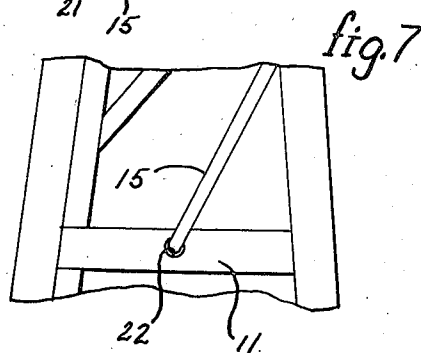


fig. 7

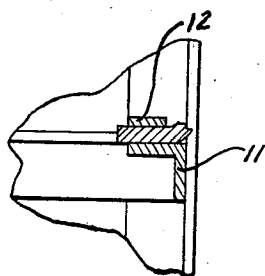


fig. 6

INVENTOR.
JULIUS G. SOLOMON
BY *Thos. J. Donnelly*
ATTORNEY.

UNITED STATES PATENT OFFICE

2,307,722

SAFETY STEP STOOL

Julius G. Solomon, Detroit, Mich.

Application June 7, 1940, Serial No. 339,279

1 Claim. (Cl. 155-42)

My invention relates to a new and useful improvement in a safety-step stool. It is an object of the present invention to provide a stool so constructed and arranged that, while it may be used for the ordinary purposes of a stool, it may be easily and quickly adjusted to a relative position of its movable parts so that the stool is provided with a step whereby the user may easily and quickly step up onto the stool when it is desired to stand upon the stool.

Another object of the invention is the provision of a stool of this class having a movable step-forming member associated therewith so constructed and arranged that it may also serve as a seat.

Another object of the invention is the provision of a stool of this class so arranged and constructed that the step is automatically secured in its extended or usable position and automatically secured in its non-usable or inoperative position.

Other objects will appear hereinafter.

It is recognized that various changes and modifications may be made in the present invention without departing from the spirit of the same and it is intended that such variations and modifications shall be embraced within the claim herein.

Forming a part of this specification is a drawing, in which,

Fig. 1 is a perspective view of the invention showing the step-forming member moved to inoperative position,

Fig. 2 is a side elevational view of the invention showing the step-forming member swung outwardly into operative position,

Fig. 3 is a sectional view taken on line 3-3 of Fig. 2,

Fig. 4 is a sectional view taken on line 4-4 of Fig. 3,

Fig. 5 is a sectional view taken on line 5-5 of Fig. 2,

Fig. 6 is a fragmentary sectional view taken on line 6-6 of Fig. 5, and,

Fig. 7 is a fragmentary side elevational view of the invention showing a slightly modified form.

It is preferred to form the invention from material preferably of a spring steel type. The invention comprises a seat 9 welded or otherwise suitably secured to which are supporting legs 10, these legs 10 being formed to the shape of angle iron throughout the major portion of their length. Brace rods 11 serve to connect the legs, these brace rods being welded to the inner faces of the flanges of the angle iron constituting the

legs 10. It will be noted that there is a lower set of brace rods and an upper set, thus, imparting rigidity to the structure. Mounted on the upper surface of oppositely disposed braces 11 are knuckle-forming straps 12 each provided with a knuckle in which engages the inwardly turned end 14 of the legs 15 of a U-shaped member formed from a springable rod and having the bight 16 engaged in the knuckle 17 provided on the edge of the plate 18. Secured to and depending from the opposite edge of the plate 18 are supporting legs 19, suitable brace rods 20 being used to connect the legs 19 to the plate 18.

The construction is such that by swinging the U-shaped member on the parts 14 as a pivot, the plate 18 may be brought inwardly into the position shown in Fig. 1 so as to lie beneath the seat 9 and the legs 19 will be positioned entirely within the area determined by the legs 10. When swung into this position, the legs 15 will be sprung slightly inwardly by the flanges 21 of the legs 10, the legs 15 being normally extended outwardly a greater width than the distance separating the inner faces of the flanges 21 so that when the step-forming member is swung into the position shown in Fig. 1, it is automatically secured in this position so that a tilting or tipping of the stool will not dislodge the step-forming member and permit it to swing outwardly. Thus, it becomes possible to carry the stool about even in a tilted position without dislodging the step from its inwardly folded position.

When desired, the U-shaped supporting member may be swung outwardly on the parts 14 as a pivot so that the step-forming member will be located in the position shown in Fig. 2. The construction is such that when swung into this position, the legs 15 are again sprung inwardly by the flanges 21 of oppositely disposed supporting legs 10 and the step-forming member is thus secured against undue swinging inwardly from its outwardly moved position. The construction is such that when the U-shaped member engages the legs 10, the legs 19 will be vertical and engaging the support on which the legs 10 rest while the plate 18 will be positioned in a horizontal position thus providing a step or a seat as desired.

In this way I have constructed a durable, compact, economically manufactured and light stool having the step-forming member mounted thereon and easily movable into operative and inoperative positions.

In Fig. 7 I have indicated a slight modification of the invention in which I have shown an opening 22 formed in the brace 11 through which the

ends 14 of the legs 15 are projected, thus, dispensing with the knuckle-forming straps 12.

What I claim as new is:

A stool of the class described comprising: a seat; spaced apart supporting legs secured to and depending from said seat for supporting the same; a supporting member carried by said legs intermediate their ends and swingable relatively thereto; a step-forming plate swingably connected adjacent one of its edges to said supporting member; supporting legs carried by and depending from said plate, adjacent its opposite edge, said

supporting member being of sufficient length for, upon swinging in one direction, projecting said plate outwardly of said first named legs and, upon swinging in the opposite direction, elevating said second named legs and swinging said plate and said second named legs inwardly of said first named legs to a position beneath said seat, there being frictional engagement between said first named legs and said supporting member upon swinging of said supporting member in either direction a predetermined distance.

JULIUS G. SOLOMON.