E. D. SMITH.

FOLDING STOOL.

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1,244,911.

Patented Oct. 30, 1917.

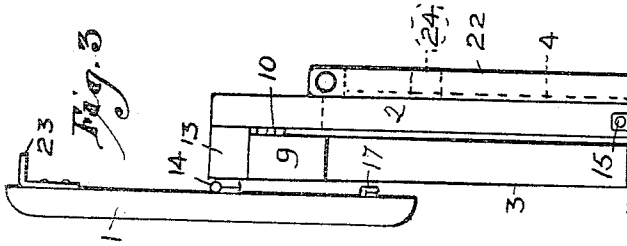


Fig. 3

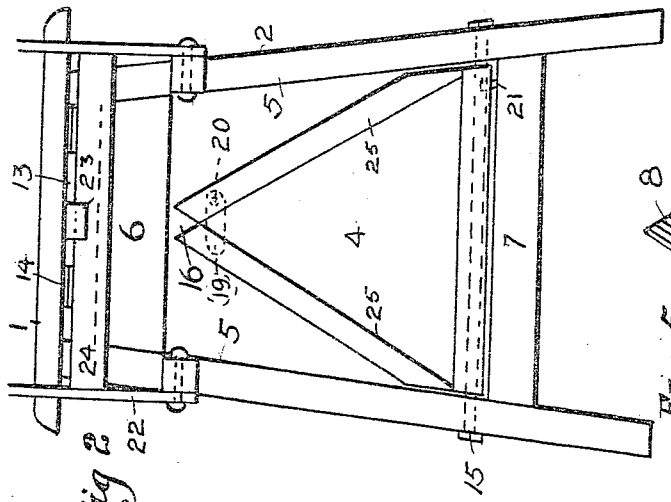


Fig. 2

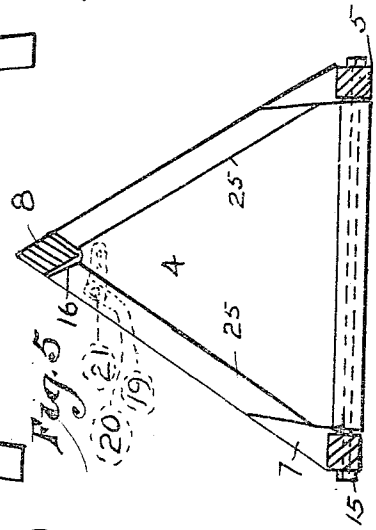


Fig. 5

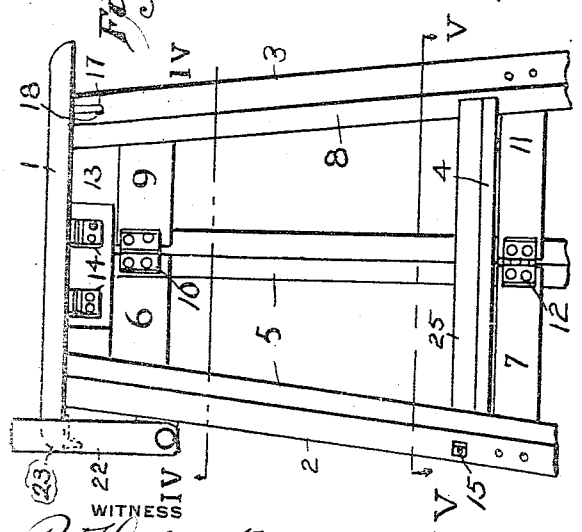


Fig. 1

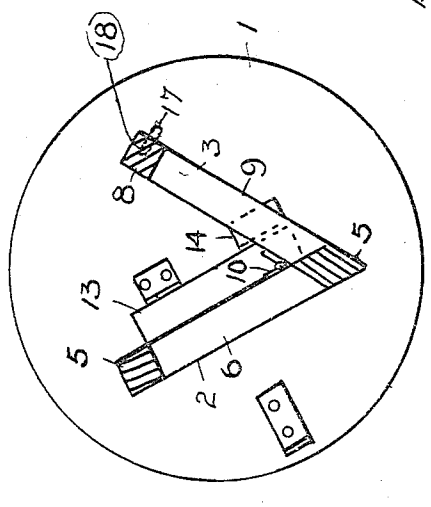


Fig. 4

WITNESS

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FOLDING STOOL.

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To all whom it may concern:

Be it known that I, EDWIN D. SMITH, a citizen of the United States, residing at Crafton, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Folding Stools, of which the following is a specification.

It is the object of this invention to provide a stool, chair, or similar article with a folding seat or top, and supports, together with suitable accessory device for locking the stool, or similar article, in its normal position.

Referring to the accompanying drawings, Figure 1 is a side view of a folding stool embodying the principles of my invention, portions thereof being broken away; Fig. 2, a side elevation of my stool with all the parts folded except the seat; Fig. 3, a view taken at right angles to Fig. 2, but showing the seat folded; Fig. 4, a section on the line IV—IV, Fig. 1; and Fig. 5, a section on the line V—V of Fig. 1.

While my invention may be applied to various articles, such as stools and chairs, I will describe the same in connection with a stool having a foldable back.

My invention comprises the seat 1, the two frame or seat-supporting members 2 and 3, the locking-member 4 and various auxiliary devices to be described hereinafter.

The frame 2 comprises the two downwardly diverging members 5 connected near their upper ends by the cross-piece 6 and near their lower ends by the cross-piece 7. The frame 3 comprises the member 8 having the cross-piece 9 connected with the cross-piece 6 by the hinge 10 and the cross-piece 11 connected to the cross-piece 7 by the hinge 12. Between the upper ends of the members 5 and resting on the cross-piece 6 I secure the block 13 which projects from the frame 2 toward the frame 3. The central portion of the seat 1 is connected to the projecting edge of the block 13 by means of the hinges 14.

15 is a hinge or pivot-rod extending through the members 5 slightly above the cross-piece 7 and parallel therewith. This pivot-rod extends through the edge of the locking-member 4. This member is triangular and has the angle opposite the pivot-rod provided with the notch 16 to receive the inner angle of the member 8 when the locking-member 4 is swung down to horizontal position so as to rest on the cross-piece 11. The locking-member 4 when in horizontal position, as shown in Figs. 1 and 5, securely holds the frame 3 from lateral movement in either direction. In order to position the frame 3 correctly so that the notch 16 will receive the frame 3 when the locking-member 4 is moved from its folded position shown in Figs. 2 and 3, I provide the lower side of the seat 1 with a downwardly extending hook 17 which enters the opening 18 near the upper end of the member 8. Preferably the lower side of the locking-member 4 near its notched angle is provided with a metal plate 19, having a hole 20 to receive the pin 21 extending downwardly from the member 11 of the frame 3. This plate and pin provide additional securing means for holding the parts rigidly in place but they may be omitted if desired.

On the outer side of the frame 2 and near its upper portion I secure the pivoted back 22 which is adapted to be folded down against the outer face of the frame 2, as shown in Fig. 3. The bottom of the seat 1 is provided with a catch or hook 23 which is adapted to be brought behind the cross-piece 24 on the back 22 when the back has been swung to its uppermost position and the seat swung to its normal or horizontal position.

When the stool is arranged for use the parts are as shown in Figs. 1, 4, and 5. When it is desired to fold the stool the locking-member 4 is swung up on the pivot-rod 15 so that it lies between the members 5 of the frame 2. The frame 3 is then swung on the hinges 10 and 12 so as to make the frame 3 lie against the frame 2 as shown on Fig. 3. In this position the frame 3 lies beneath the projecting portion of the block 13 so that the seat 1 may be swung on its hinges 14 into a position parallel with the folded frames 2 and 3, as shown on Fig. 3. The back, being released from the hook 23, is then folded downwardly against the frame 2 as shown in Fig. 3.

It will be noted that my invention as illustrated shows the stool provided with a triangular support comprising the two members 5 and the member 8 which are arranged with the member 8 in a plane midway between the members 5. I have shown the locking-member 4 provided on its upper face with marginal strips 25 so that the

locking-member may also serve as a receptacle for containing various articles.

Although I have shown an article of furniture with three legs or points of support, I do not limit my invention to that number.

I claim—

1. In a folding stool, chair, or the like, upright supports pivoted together so as to be folded, one on the other, a top adapted to be supported in a horizontal position by the supports when unfolded and hinged on one support so as to be folded in parallel relation to the folded supports, and a locking device pivoted to one support and arranged to be folded in parallel relation thereto and to be swung into engagement with another of the supports to lock them in their unfolded position.

2. In a folding stool, chair, or the like, upright supports pivoted together so as to be folded, one on the other, a top adapted to be supported in a horizontal position by the supports when unfolded and hinged on one support so as to be folded in parallel relation to the folded supports, a locking device pivoted to one support and arranged to be folded in parallel relation thereto and to be moved to lock the supports in their unfolded position, a back adapted to be folded against one of the supports and to be raised to upright position above the top, and means for locking the top in its upright position.

3. In a folding stool, chair, or the like, upright supports pivoted together so as to be folded, one on the other, a top adapted to be supported in a horizontal position by the supports when unfolded and hinged on one support so as to be folded in parallel relation to the folded supports, a locking device pivoted to one support and arranged to be folded in parallel relation thereto and to be moved to lock the supports in their unfolded position, a back adapted to be folded against one of the supports and to be raised to upright position above the top, and means carried by the top for locking the top in its upright position.

4. In a folding stool, chair, or the like, upright supports pivoted together so as to be folded, one on the other, a top adapted to be supported in a horizontal position by the supports when unfolded and hinged on one support so as to be folded in parallel relation to the folded supports, a locking device pivoted to one support and arranged to be folded in parallel relation thereto and to be moved to lock the supports in their unfolded position, a back adapted to be folded against one of the supports and to be raised to upright position above the top, and a hook carried by the top and engaging a portion of the back for locking the top in its upright position.

5. In a folding stool, chair, or the like, a top, upright supports pivoted together so as to be folded, one on the other and to be expanded to form a polygonal rest for the top, means for pivoting the top to one of the supports so that it may be folded parallel with the folded supports, and a polygonal locking piece having one portion pivoted to one support and another portion adapted to engage another support and lock the supports in their expanded positions.

6. In a folding stool, chair, or the like, a top, upright supports pivoted together so as to be folded, one on the other and to be expanded to form a polygonal rest for the top, means for pivoting the top to one of the supports so that it may be folded parallel with the folded supports, a polygonal locking piece having one portion pivoted to one support and another portion adapted to engage another support and lock the supports in their expanded positions, a back pivoted to one support so that it may be folded parallel to the folded supports, and means for locking the back in an upright position.

Signed at Pittsburgh, Pa., this 18th day of September, 1916.

EDWIN D. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."