S. FISCHLOWITZ.

Method of Turning Angular Bodies having Convex Surfaces.

No. 198,012. Patented Dec. 11, 1877.

Fig: 1.

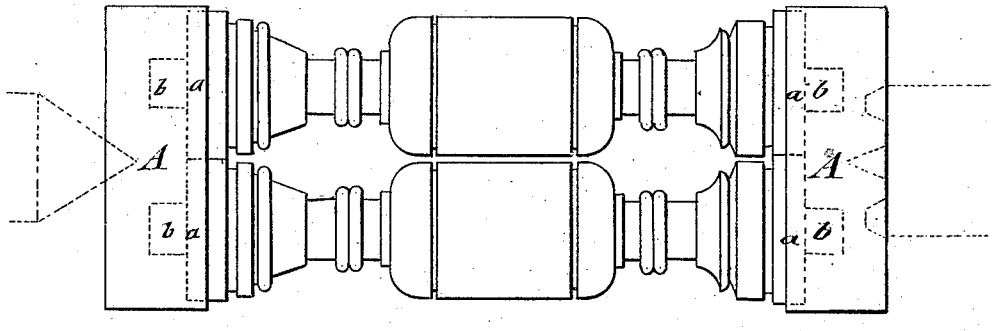


Fig: 2.

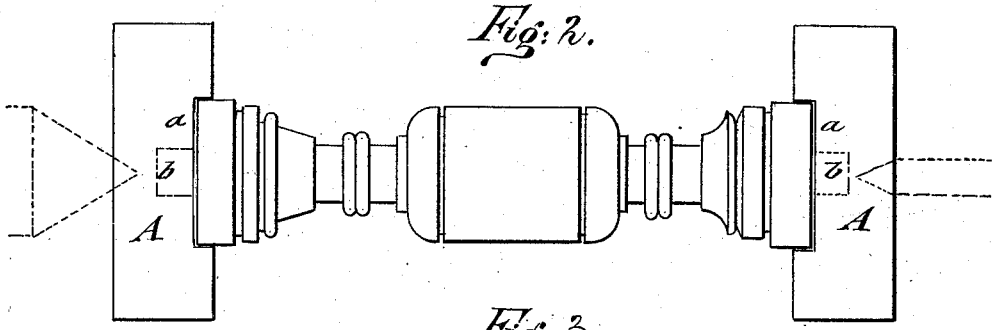
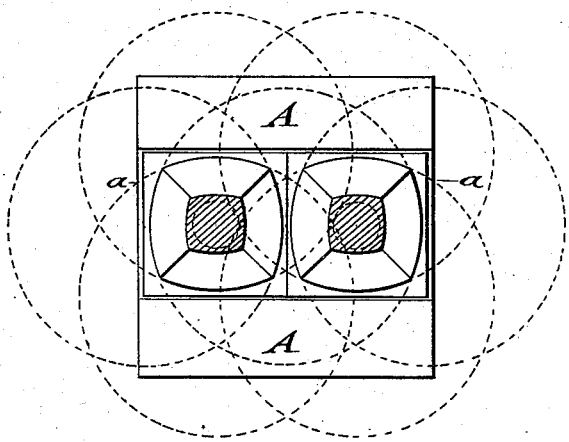


Fig: 3.



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IMPROVEMENT IN METHODS OF TURNING ANGULAR BODIES HAVING CONVEX SURFACES.

Specification forming part of Letters Patent No. **198,012**, dated December 11, 1877; application filed November 17, 1877.

To all whom it may concern:

Be it known that I, SALOMON FISCHLOWITZ, of the city, county, and State of New York, have invented a new and useful Improvement in Turning Angular Bodies having Convex Sides on a Common Lathe, of which the following is a specification:

In the accompanying drawing, Figures 1 and 2 are side views of square baluster-bodies, shown as supported in a common lathe; and Fig. 3 is a vertical transverse section, illustrating method of turning off the bodies.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved method of turning angular bodies with convex sides on a common lathe, in very simple and effective manner, so as to produce approximately square balusters, columns, legs, and rounds of chairs, curtain-poles, and other devices on a common lathe with the same facility as round objects.

The invention consists of wooden or other boxes having an oblong groove of twice the size of the body to be turned, and socket-holes for inserting the tenoned ends of the blocks.

The boxes are secured to the lathe-centers, and turned by the spindle, so as to cut, first, the outer sides. The blocks are then changed in the boxes and the second side cut, as before, and so on until all the sides are turned off, forming, finally, angular bodies with arc-shaped sides.

In the drawing, A represents the boxes to which the blocks from which the bodies are to be turned are mounted. The boxes are of square or other shape, and provided with a groove, *a*, equal in width to, but of twice the length of, the blocks. Each box A has two mortises, *b*, at the center of each of the semi-sections of the groove, for inserting the tenoned ends of the blocks, and securing thereby the blocks rigidly in place in the boxes against axial displacement by the grooves, and against radial displacement by the mortises and tenons. The boxes are applied to the lathe-centers and revolved by the spindle, in the customary manner in lathes. The blocks are cut according to the pattern, in the usual manner in turning, the revolutions of the blocks against the cutting-knife cutting first the outer sides, as indicated in Fig. 3. The position of the blocks is then changed in the grooves of the boxes, in such a manner that the adjoining sides are brought to the outside, which are then turned off in the same manner as the first. The remaining sides are then cut in the same manner, and thereby an angular body, with rounded-off sides, of neat and ornamental appearance, obtained, that may be applied extensively for stair-cases, balconies, in the manufacture of chairs, and other branches of the arts.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. For turning angular bodies having convex sides on common lathes, a block-retaining box secured to the lathe-centers, and having a longitudinal groove equal in width to, but twice the length of, the square of the blocks from which the bodies are turned, each square or semi-section of the groove having mortise-holes for the tenoned ends of the blocks, substantially as and for the purpose set forth.

2. The method or art of turning angular bodies having convex sides on a common lathe, consisting in mounting two blocks sidewise of each other on revolving boxes of the lathe, and turning off, first, the diametrically-opposite sides of the same, then changing the position of the blocks and turning off the next sides, and so on until all the sides are finished, substantially as shown and described.

SALOMON FISCHLOWITZ.

Witnesses:
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