

(No Model.)

J. F. J. GUNNING.
SEWING MACHINE GUIDE.

No. 255,617.

Patented Mar. 28, 1882.

fig 1

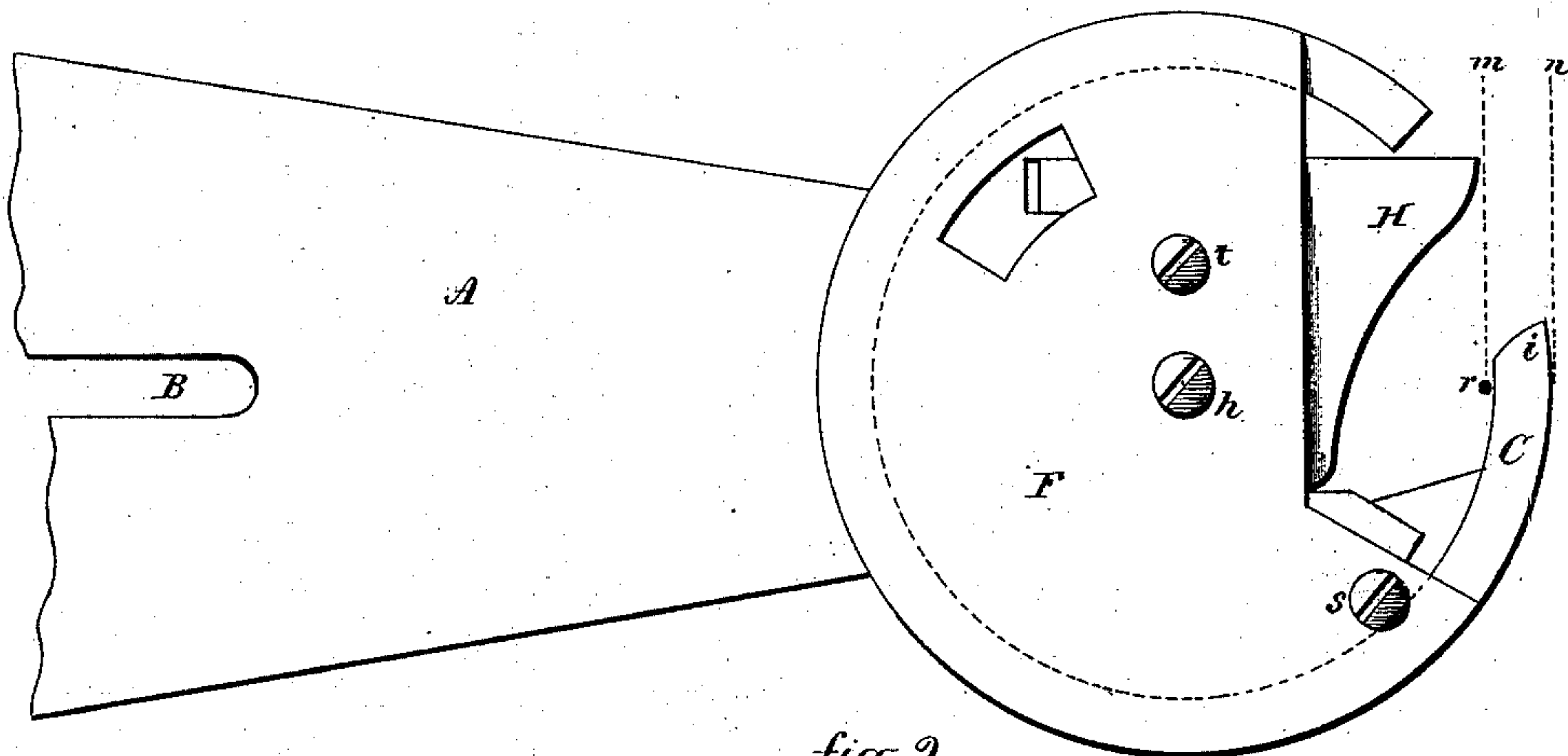


fig 2

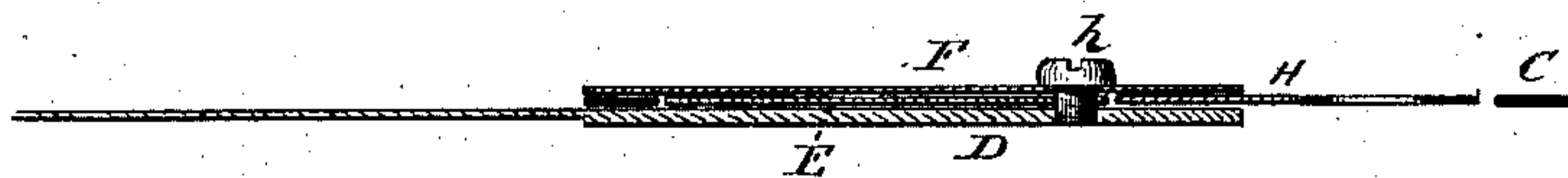


fig 3

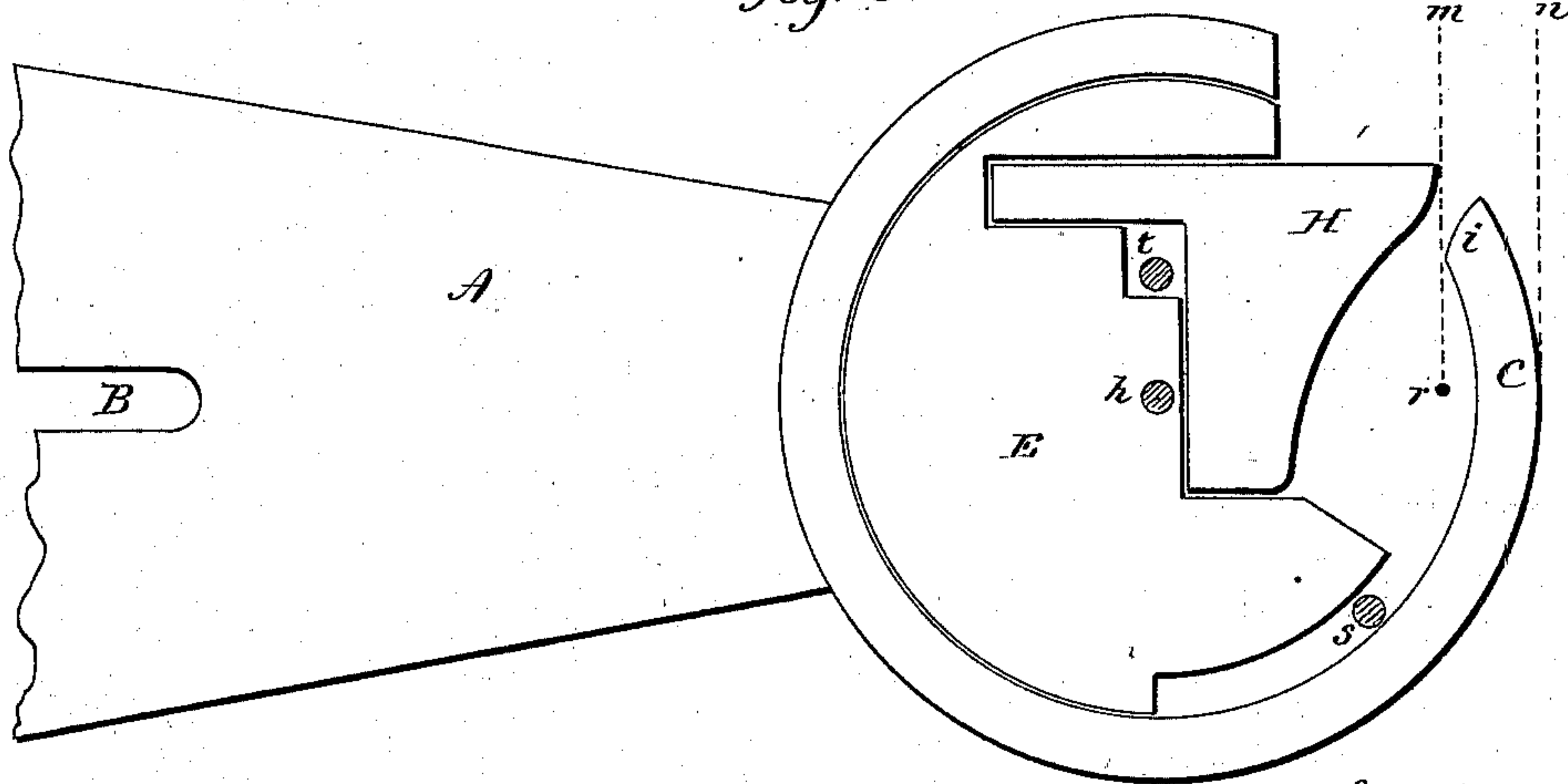


fig 4



Witnesses:

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SEWING-MACHINE GUIDE.

SPECIFICATION forming part of Letters Patent No. 255,617, dated March 28, 1882.

Application filed January 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. J. GUNNING, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Sewing-Machine Guides; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a top or plan view; Fig. 2, a longitudinal central section; Fig. 3, a top view with the cap removed; Fig. 4, a section of work to illustrate the operation of the guide.

This invention relates to an improvement in guides for sewing-machines, with special reference to that class which are used in making pockets in fabrics, such as required in corsets for the insertion of the bones or stays, a section of which is seen in Fig. 4, in which *a* represents the first pocket, and *b* the second. These pockets are made by parallel lines of stitches run through two fabrics, *d e*, and as at *f g*. If these stitches be run through the two fabrics while perfectly flat, it is difficult to open the pockets for the insertion of bones, whereas if the pockets be formed over a tongue-like guide, then the insertion of the stays is a simple and easy matter.

Guides have been made with tongues over which the pockets have been formed—that is, one thickness separated from the other by the tongue; but in such guides the tongue is of a constant width or invariable, and whenever a different width of such pocket is required a different guide must be applied to the machine. It frequently occurs that numerous widths of such pockets are desirable, or that parallel lines of stitches through fabrics at varying distances are required.

The object of my invention is to make a guide readily adjustable to different widths or distances between the parallel lines of stitches; and it consists in a segment-shaped tongue arranged to rotate around a center, whereby the lines of stitches, when a tangent of that segment, will be distant the width of the segment, the width of the pocket being increased as the end of the segment is turned around or brought

nearer the needle, as more fully hereinafter described.

A represents the arm by which the guide is secured to the work-plate, the arm being provided with a slot, *B*, through which a screw may be inserted to secure the guide. The working end of the guide is preferably made circular in shape, *h* being the center. Onto this circular part a segment-shaped tongue, *C*, is arranged, so that it may be rotated thereon, with the center *h* as its center of motion.

The tongue *C* is here represented as nearly a complete ring, and lies upon the under plate, *D*, with a plate, *E*, within it and fixed to the under plate, of substantially the same thickness as the tongue, then a cap, *F*, covering it, so that the segment-shaped tongue may be rotated in its seat, the center *h* being the center of rotation; or the guide can be arranged in any suitable groove or bearing, so as to be thus rotated. The width of the tongue *C* at its working end *i* is that of the narrowest pocket or space between the parallel lines of stitches required. One thickness of fabric passes below the tongue and the other above, as seen in Fig. 4. Suppose the tongue or guide to be set to the position seen in Fig. 1, and so that the line of stitches *m* to be made is a tangent from the inside of the tongue and the line of stitches *n* last made a tangent from the outside of the end of the tongue. Then the width of the tongue indicates the space between the two lines of stitches—that is, as seen in Fig. 4. The one line of stitches *f* is brought against the outside of the tongue, and the new line of stitches against the inside, or as near as may be, *r* indicating the position of the needle in making stitches. In this arrangement the two thicknesses of fabric with the line of stitches therein will run off the tongue in the usual manner for other tongue-guides. Now suppose a broader space is required between the lines of stitches, such as indicated by the lines *m n*, Fig. 3. The tongue *C* is turned forward until the inner edge of the end is distant from the tangent *n* equal to the width required between the stitches. The guide is moved from the needle until the inner line, *m*, will come into the path of the needle, carrying the line or tangent *n* outward accordingly.

Thus the width between the two lines $m n$ will be increased to the extent to which the segment-shaped tongue may have been turned.

The tongue is clamped in position and may be set by a binding-screw, s , which clamps the cap hard down upon it with sufficient force to hold it in place.

To insure a direct line of stitches I apply a second tongue, H , which extends outward between the two thicknesses of fabric, as seen in Fig. 4. This is arranged between the lower plate and cap in suitable guides, so as to move back and forth toward the tongue, as from the outward position, Fig. 1, to the inner position, Fig. 3. It is secured to the plates at any position to which it may be desired by the screw t , or other suitable device, so that the edge of the tongue will run against the line of stitches being made between the fabrics. Hence the path of the work will be governed by that line of stitches being made as it runs against the end i of the tongue around one side and the second tongue H on the other side. If these be in a straight line, then the work will be in a correspondingly straight line; but if the work is to be curved, then the tongue H will be moved outward or inward, according as the curve is to be to the right or left. This tongue may be made to slide between the cap and under plate, as here represented; or it may be a part of the central plate, E , and turn upon the same center toward or from the tongue.

The adjusting-tongue H may be employed

with a stationary tongue—that is to say, for illustration, suppose the tongue C in the drawings to be stationary, the tongue H , adjustable thereto, will govern the path of the work, so that the lines be straight or curved, as hereinbefore described. Hence I do not wish to limit the use of the guide H to the rotating tongue.

I claim—

1. The herein-described sewing-machine guide, consisting of the segment-shaped tongue C , arranged upon its holder so as to be rotated thereon, with its end i to lie between the thicknesses of fabric to be stitched together, substantially as described.

2. The herein-described sewing-machine guide, consisting of the segment-shaped tongue C , arranged upon its holder so as to be rotated thereon, with its end i to lie between the thicknesses of fabric to be stitched together, combined with an adjustable tongue, H , substantially as described.

3. In a sewing-machine guide, the combination of a tongue arranged to lie between the two thicknesses of fabric to be stitched together, and an adjustable tongue arranged to bear between the fabrics against the line of stitches being made, while the other tongue lies upon the opposite side of said line of stitches, substantially as described.

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Witnesses:

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