

J. A. & H. A. HOUSE.
Sewing Machine Clamp.

No. 55,866.

Patented June. 26, 1866.

FIG. 1.

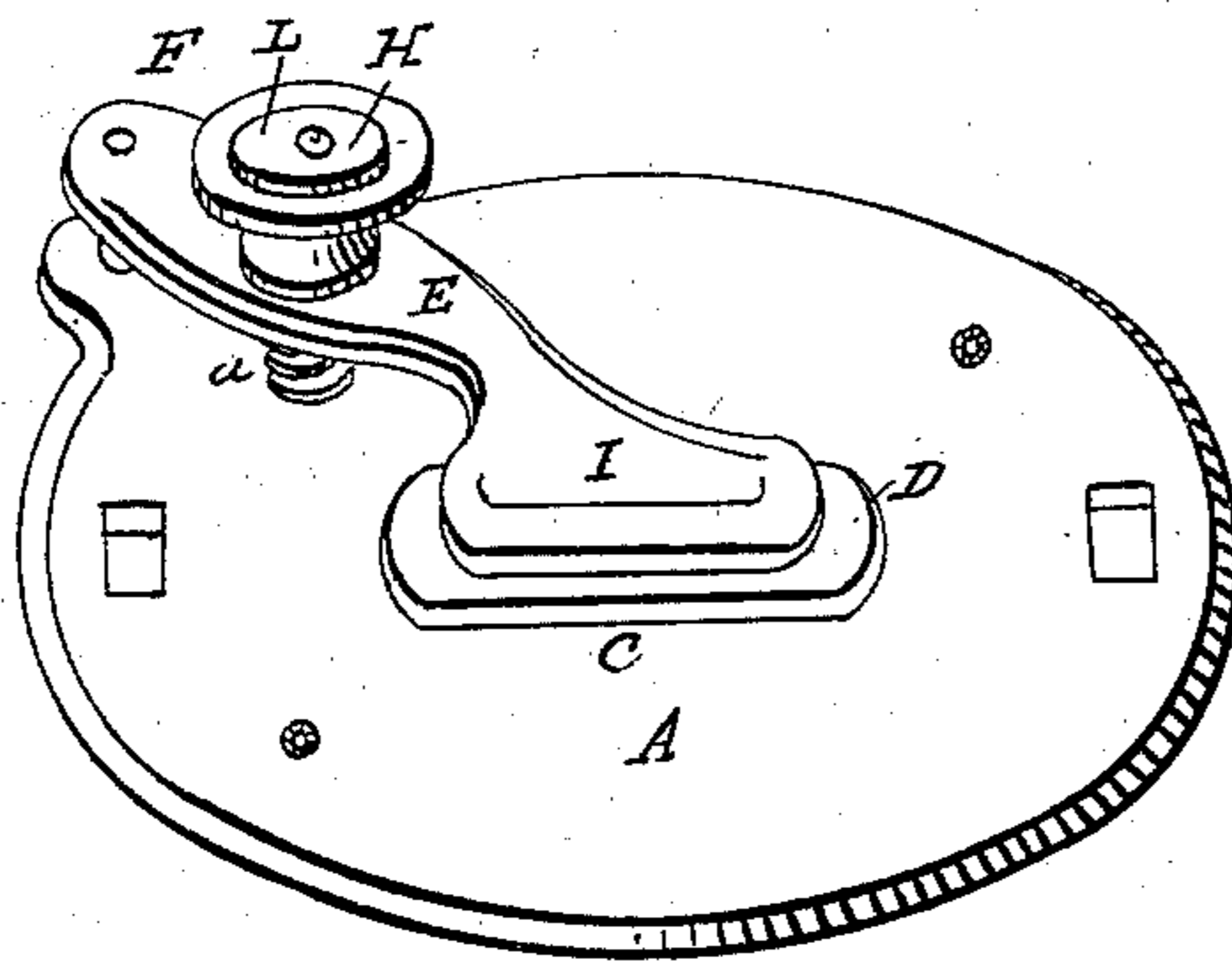
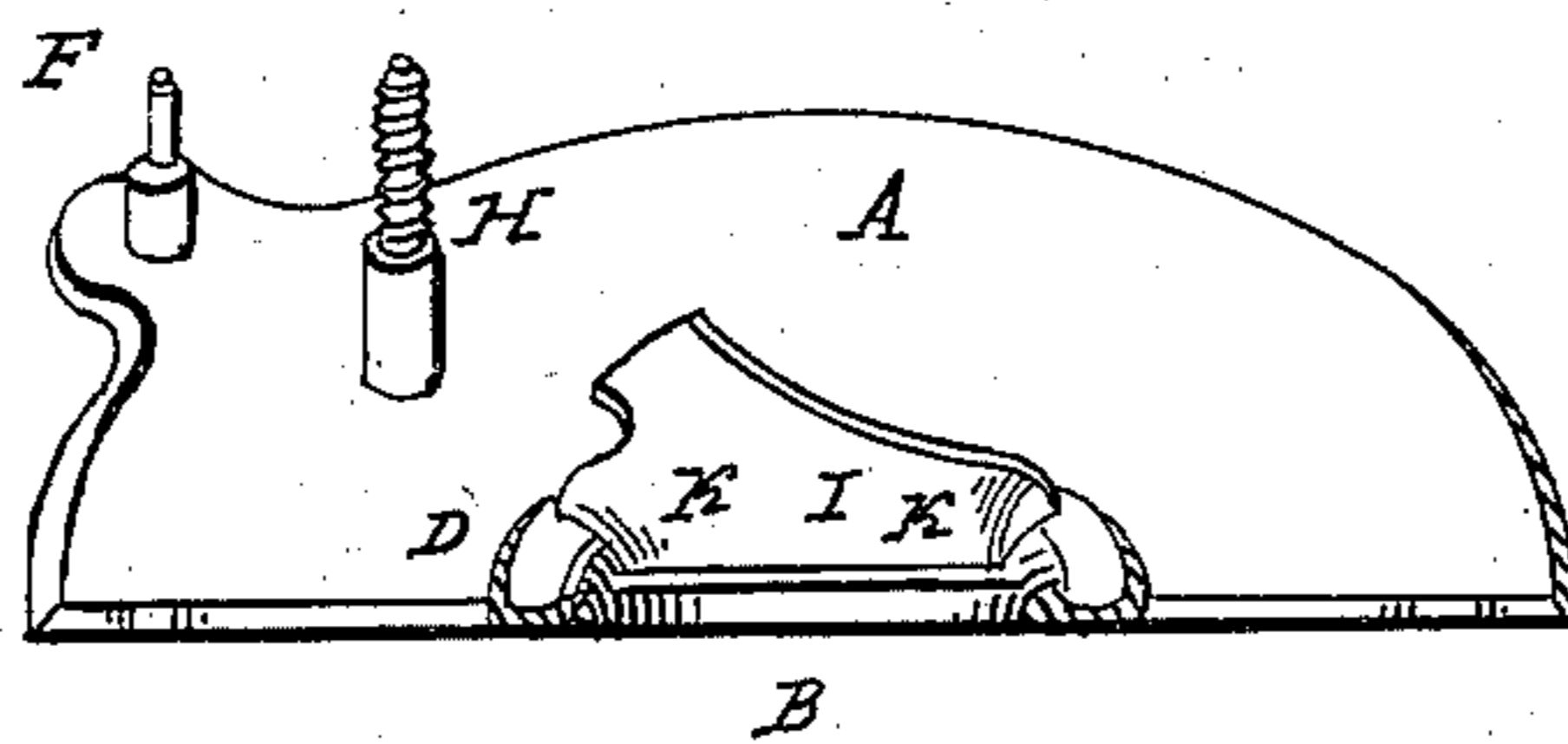


FIG. 2.



WITNESSES:

J. S. Peyton
Wm. H. Lang.

INVENTOR.

John H. A. House
by his attys
Baldwin & Son

UNITED STATES PATENT OFFICE.

JAMES A. HOUSE AND HENRY A. HOUSE, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN SEWING-MACHINE CLAMPS.

Specification forming part of Letters Patent No. 55,866, dated June 26, 1866.

To all whom it may concern:

Be it known that we, JAMES A. HOUSE and HENRY A. HOUSE, both of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new and useful Improvement in Sewing-Machines; and we do hereby declare that the following is a full, clear, and accurate description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a view, in perspective, of our invention applied to a button-hole-machine rotating plate; and Fig. 2 is a perspective view, partly in section, of one-half of a rotating plate for working button-holes.

It is of primary importance in sewing by machinery to have the cloth held rigidly at the point where it receives the stitches, that it may properly receive the puncture of the needle and the pull of the thread in tightening the stitch, and this is in re especially necessary in stitching button-holes automatically.

It is therefore the object of our invention to hold the material to be sewed beneath the needle so that it shall be stretched and held taut in the line to receive the stitching; and to this end our invention consists in surrounding the opening in the table through which the needle passes with india-rubber, and so forming the clamp that while holding the material to be stitched it shall be pressed upon the rubber and held taut to receive the stitches with an elastic pressure that will act uniformly, though the material being sewed may be of varying thicknesses.

The rotating plate A is perforated at B with an opening of the length and width necessary for working a button-hole, and this opening is surrounded with a ring, C, of india-rubber, which is secured to the plate with a metal washer, D, by screws or rivets that compress the rubber on its outer edge and hold it snugly and permanently, but permit it to rise above the washer at its inner edge, so as to let the material to be sewed rest upon the rubber, the inner edge of which is parallel with the opening B in the plate A.

A presser, E, resting at its heel on a guide-pin, F, and on a spiral spring, G, surrounding a screw-stud, H, in the plate A, has a flared margin, I, curved on its under side in a con-

cave to form a sharp edge, K, that will rest against and fit the inner edge of the rubber C where it surrounds and rises above the opening B in the plate A. The presser E is held in position and adjusted by a milled nut, L, on the screw-stud H, the tendency of the spiral spring being always to keep the presser raised against the under surface of the milled nut.

The operation is as follows: The material to receive the button-hole is properly placed upon the india-rubber over the opening in the table, and the clamp is screwed down until the material is drawn properly taut to receive the stitching, when it will be found that the goods will be held in a smooth rigid plane that will receive the stitching with perfect and uniform tension and regularity.

In this example of one mode of applying our invention we have shown it adapted to a button-hole machine; but we do not desire so to limit it, for it is obviously capable of most beneficial application to any automatic sewing, and with these marked advantages: first, the character of the surface of the rubber will give the most desirable degree of friction to any goods passed over the rubber by the feed mechanism to keep the goods smooth and taut under the needle; and, second, the elasticity of the rubber, together with the yielding pressure, will permit materials of varying thickness to be fed between the rubber and the presser without interrupting the perfect uniformity of the sewing.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. Surrounding the opening in the table of sewing-machines through which the needle passes with a lining of india-rubber, substantially in the manner and for the purpose set forth.

2. The combination of the yielding presser with the rubber-lined opening, substantially as and for the purpose set forth.

In testimony whereof we have hereunto subscribed our names.

JAMES ALFORD HOUSE.
HENRY ALONZO HOUSE.

Witnesses:

GEORGE C. BISHOP,
SAMUEL BURR.