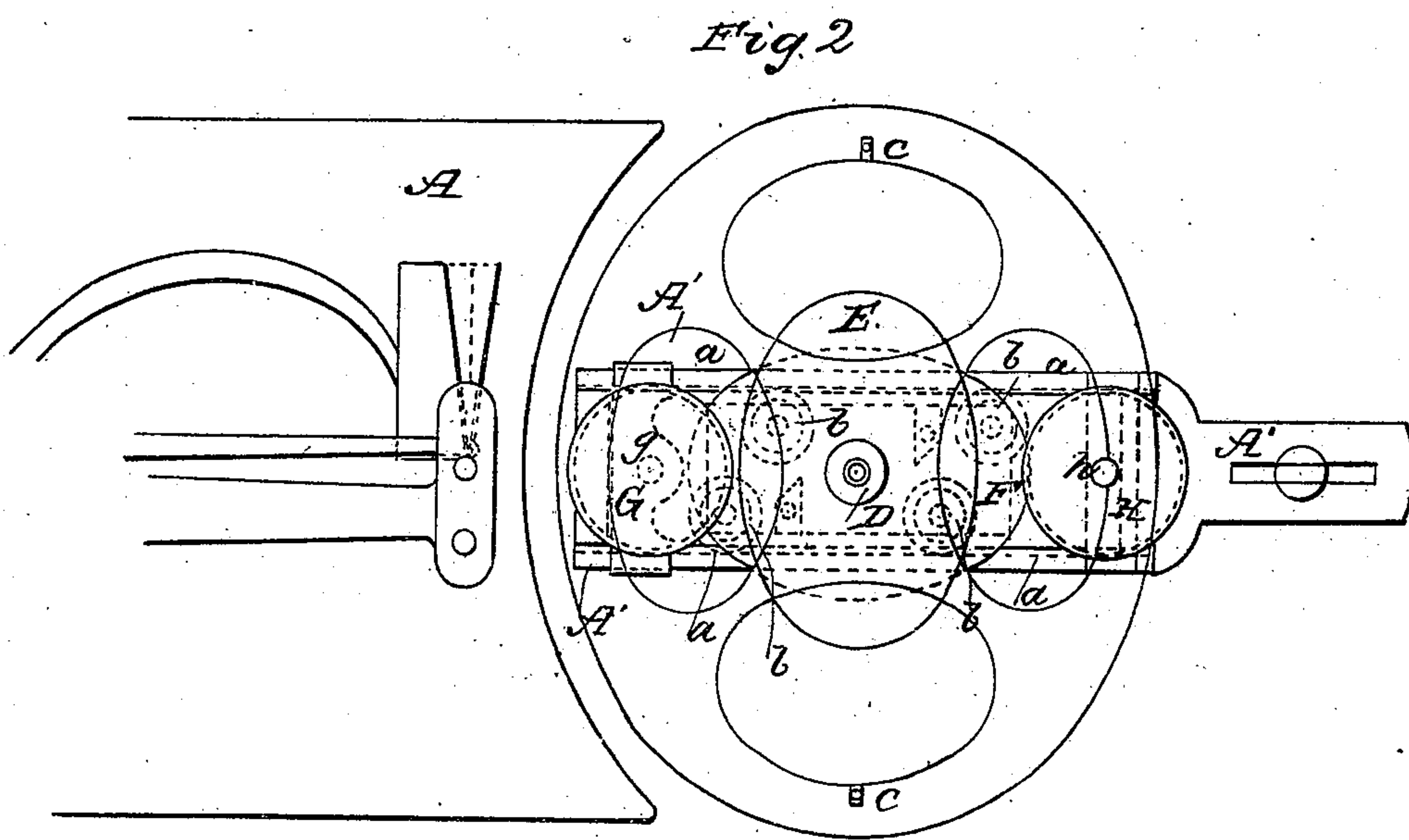
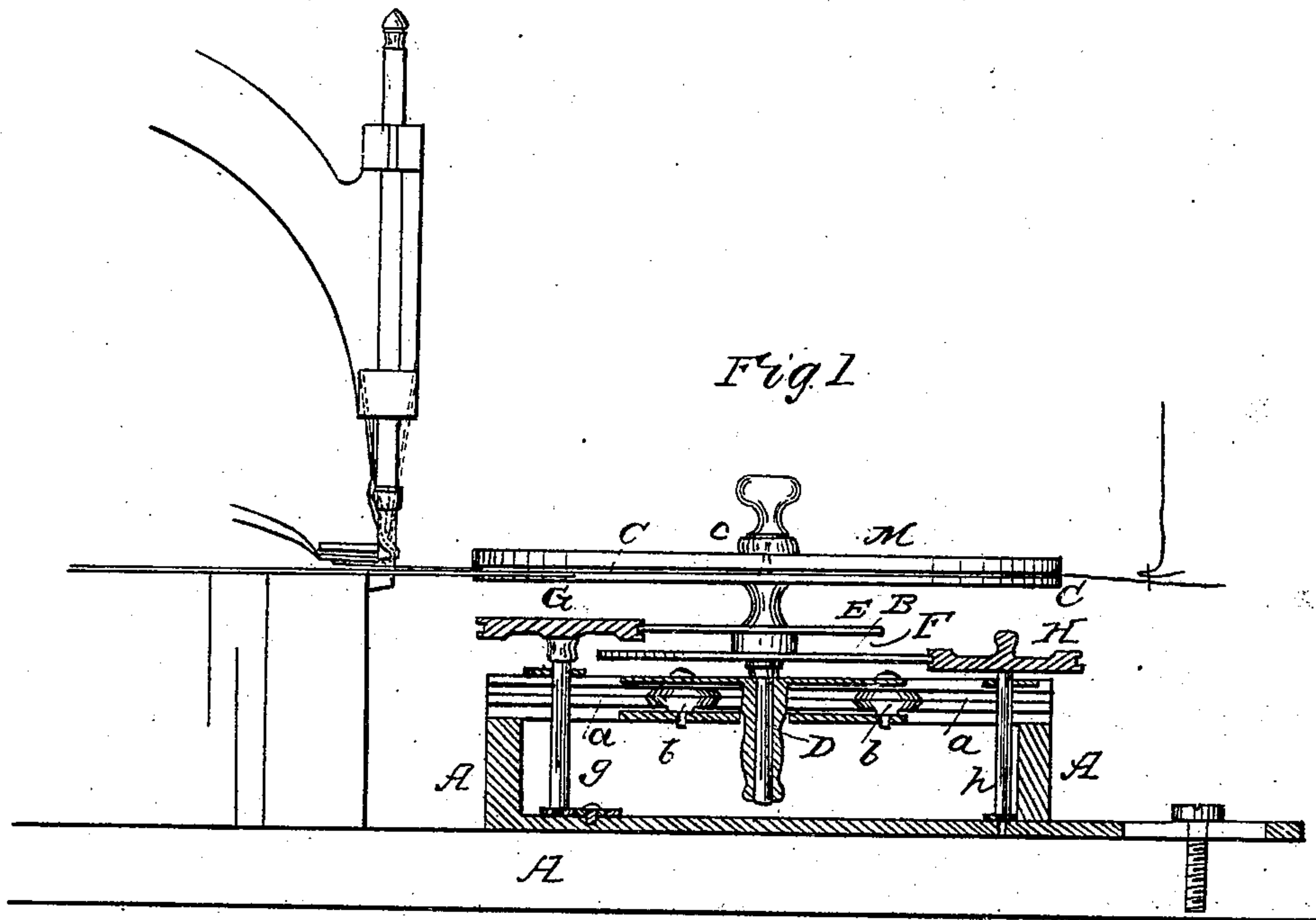


J. W. BLACKHAM.

Sewing Machine.

No. 42,158.

Patented April 5, 1864.



Witnesses
Thomas D. Gletson
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UNITED STATES PATENT OFFICE.

JOB W. BLACKHAM, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN DEVICES FOR SEWING HAT-LININGS IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 42,158, dated April 5, 1864.

To all whom it may concern:

Be it known that I, JOB W. BLACKHAM, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 a plan view, showing the novel portions, with so much of the other portions as is necessary to indicate their relations thereto.

Similar letters of reference indicate like parts in both figures.

My invention is adapted to sew together the parts of the lining of hats. The lining, or the portion thereof which my machine is intended to operate on, is formed in two parts. One part encircles the head in the form of a hollow cylinder or hollow elliptical figure, and the other, usually designated the "tip," is plane and extends across the top. I mount the silk or other material adapted to form the tip on a rotating platform which revolves very freely on a slender axis, and I supply the material to be sewed thereto through a guide of any suitable construction. A sewing-machine of any approved construction may be used, and the feeding mechanism of any ordinary sewing-machine will suffice, by its action in the ordinary manner, in connection with my invention, to impart the proper gradual rotating motion. After the circuit has been completed I remove the goods and supply other pieces and repeat the operation.

Ordinary hats are considerably oval, and I mount my axis on a sliding frame and provide mechanism for moving it with great ease and precision, so that the line of stitches shall describe exactly the oval desired. I thus make oval linings adapted to correspond far more perfectly with the interior of the hat than if the circuit described by the line of stitches were perfectly circular.

The nature of my invention consists in the means whereby I am able to move my center, or the pintle on which my tip revolves, with ease and precision.

To enable others skilled in the art to make and use my machine, I will proceed to describe its construction and operation by the aid of

the drawings and of the letters of reference marked thereon.

A is an ordinary frame-work of the sewing-machine.

A' is a rigid frame-work attached to the fixed framing A, and *a a* are V-shaped grooves.

B is a traversing carriage mounted on four anti-friction wheels, *b b*, with corresponding rims adapted to fit into the grooves *a a*.

C is a horizontal wheel or platform of an oval form, and of a size a little less than the line of stitches which is intended to be formed by its aid. It is mounted on a pivot or pintle, D, which is carried in a deep socket in the traversing carriage B.

E is an oval wheel firmly fixed on the pintle D in the position represented, and F is a corresponding wheel fixed a little lower, and with its longer axis at right angles to the longer axis of E, as represented.

G and H are circular wheels mounted on pivots *g h*. These pivots *g h* are free to turn; but they are supported, not in the traversing carriage B, but in suitable bearings in the fixed framing A'.

M is a weight corresponding in form and size to the oval wheel or platform C, and adapted to be readily placed on and removed therefrom. The material of the hat-tip is indicated by red lines in Fig. 1. It is laid flat upon the platform C, and is pressed down on the two points *c c*, which project upward therefrom in the positions represented. There are corresponding holes in the weight M, and I lay the latter upon the material of the tip in such a manner that the holes coincide in position with the pins *c c*. The hat-tip, it will therefore be understood, is smoothly and firmly held between the plane surfaces of C and M, with its edges projecting more or less in all directions beyond their peripheries.

It will be observed that the effect of the anti-friction wheels *b b* is to greatly promote the freedom of motion of the frame B in the line directly to and from the needle while guided strictly in that line, and that the effect of the two ovals E and F, mounted as described and connected as represented, on the wheels G and H and on the several other parts is to compel the carriage B and its connections to traverse with a positive motion and a mathematical accuracy in the path thus prescribed, ac-

ording as the rotation of the platform C, and consequently of the work carried thereon, progresses.

It is practicable and easy by the aid of my invention to sew the linings in the oval form desired, while all previous efforts to this end have failed, as I believe, in consequence of the want of certainty and of freedom of motion.

I do not claim the devices shown in the patent issued to Rudolph Eickemeyer, March 24, 1863; but,

Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is as follows:

1. In combination with the operative parts of a sewing-machine, the within-described ar-

rangement of the ways *a a*, anti-friction wheels *b b*, and traversing carriage B, adapted to support the part which carries the hat-tip and to allow it to rotate and slide freely back and forth, as herein specified.

2. In combination with the above, the employment of the two ovals E and F, arranged at right angles to each other, and adapted to act on the wheels G H, or their equivalents, so as to give a positive motion in both directions, substantially in the manner and for the purpose herein set forth.

J. W. BLACKHAM.

Witnesses:

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