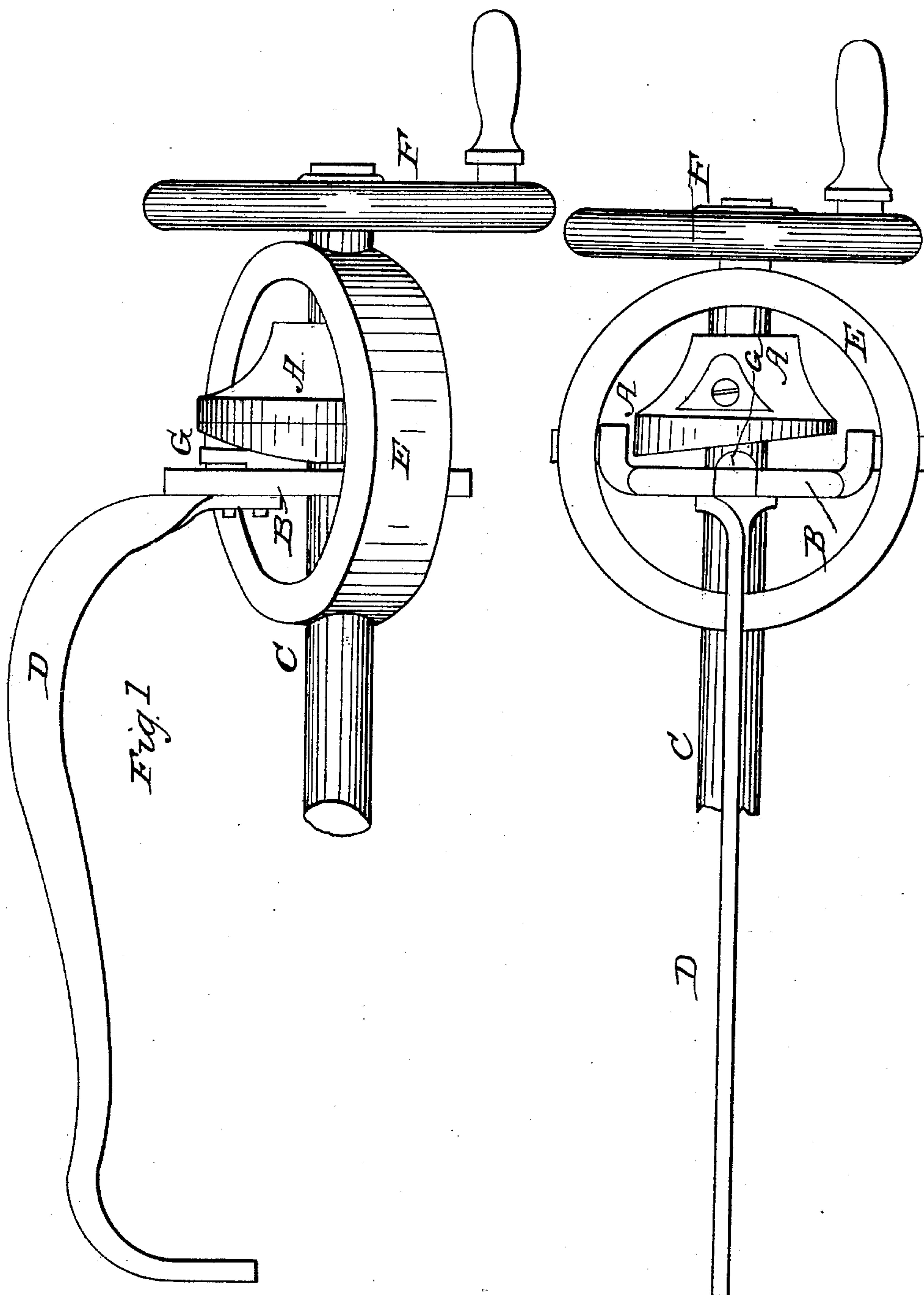


W. H. LAZELLE.
Sewing Machine.

2 Sheets—Sheet 1.

No. 18,817.

Patented Dec. 8, 1857.

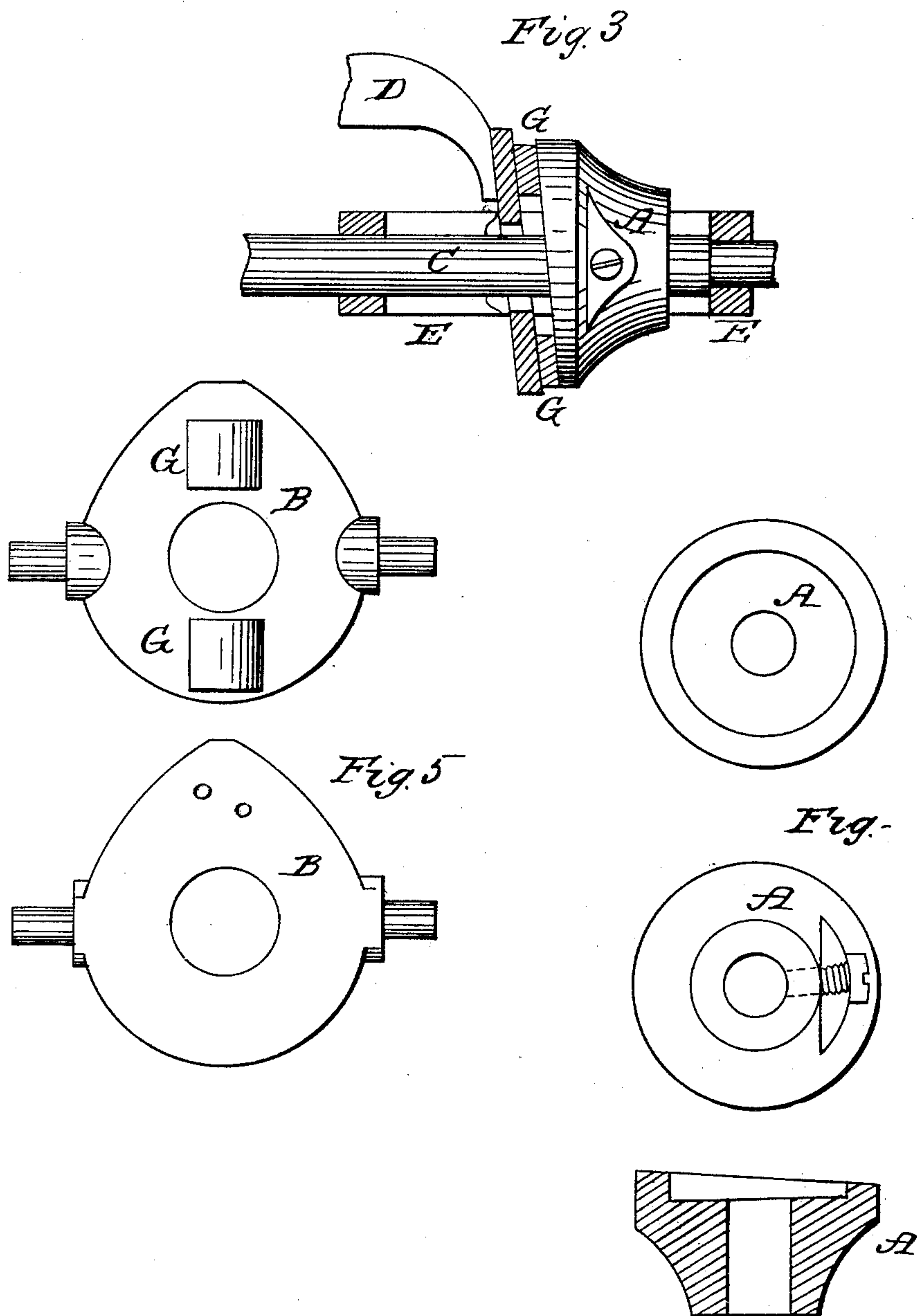


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Patented Dec. 8, 1857.



UNITED STATES PATENT OFFICE.

WILLIAM H. LAZELLE, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 18,817, dated December 8, 1857.

To all whom it may concern:

Be it known that I, WILLIAM H. LAZELLE, of the city, county, and State of New York, have invented a new and useful Improvement in the Parts or Apparatus of Sewing-Machines; and I do hereby declare that the following is a full and exact description thereof.

To enable others to make and use my invention, I will proceed to describe its construction and operation, reference being had to the drawings hereunto annexed and making part of this specification.

Figure 1 is a bird's-eye view of that part of the machine which is the subject of this application; Fig. 2, a plan of the same; Fig. 3, a section of the ring E and the plate B, with elevation of the disk-cam and shaft; Fig. 4, the disk-cam plans and section; Fig. 5, the plate upon which the cam operates, face and reverse.

The same letters refer to the same things in all the drafts.

A is the disk-cam; B, the plate; C, shaft; D, needle-arm; E, the ring; F, crank; G, the bosses or knobs upon the face of the plate.

The parts of the sewing-machine which are the subject of this application consist of the apparatus by which the needle-arm D is caused to operate—to wit., the disk-cam A and the plate B. Upon the driving-shaft C the cam A is set firm. Upon the face of this disk one side is raised and the other depressed. (See the section, Fig. 4, also the plan and elevation, Figs. 2 and 3.) Within the ring E (within which this apparatus is set) the plate B is hinged at right angles to the shaft, as seen in Fig. 3. The hole in the plate is large, (see Fig. 5,) so that the plate can vibrate without

touching the shaft. Upon the face of the plate are two knobs or semi-cylindrical bosses, G, which are made smooth and rest against the face of the disk A.

To operate the needle-arm D the shaft is turned. The disk-cam being against the bosses G upon the plate, its rotation causes the needle-arm to act up and down. As seen at Fig. 3, the needle-arm is down, the most prominent part of the face of the disk C being up. When turned down, the needle-arm would be up. In Figs. 1 and 2, the prominent part of the face of the cam being at the side, the needle-arm is horizontal or half-way between its highest and lowest point.

The object of my invention or improvement is to effect the movement of the needle-arm by a simple and cheap device, and at the same time secure an easy and noiseless operation.

Having thus fully described my improvement, I would here remark that I am well aware of the common use of the cam movement for vibrating the needle-arm of sewing-machines. I therefore distinctly disclaim the use of a cam for operating the needle-arm; but

What I do claim, and desire to secure by Letters Patent, is—

The disk B, to which the needle-arm is rigidly attached, provided with its bosses or friction-surfaces G G, in combination with a plain-faced disk-cam, A, arranged and operating in the manner and for the purpose specified.

WILLIAM H. LAZELLE.

Witnesses:

OWEN G. WARREN,

JOHN T. STURTEVENT.