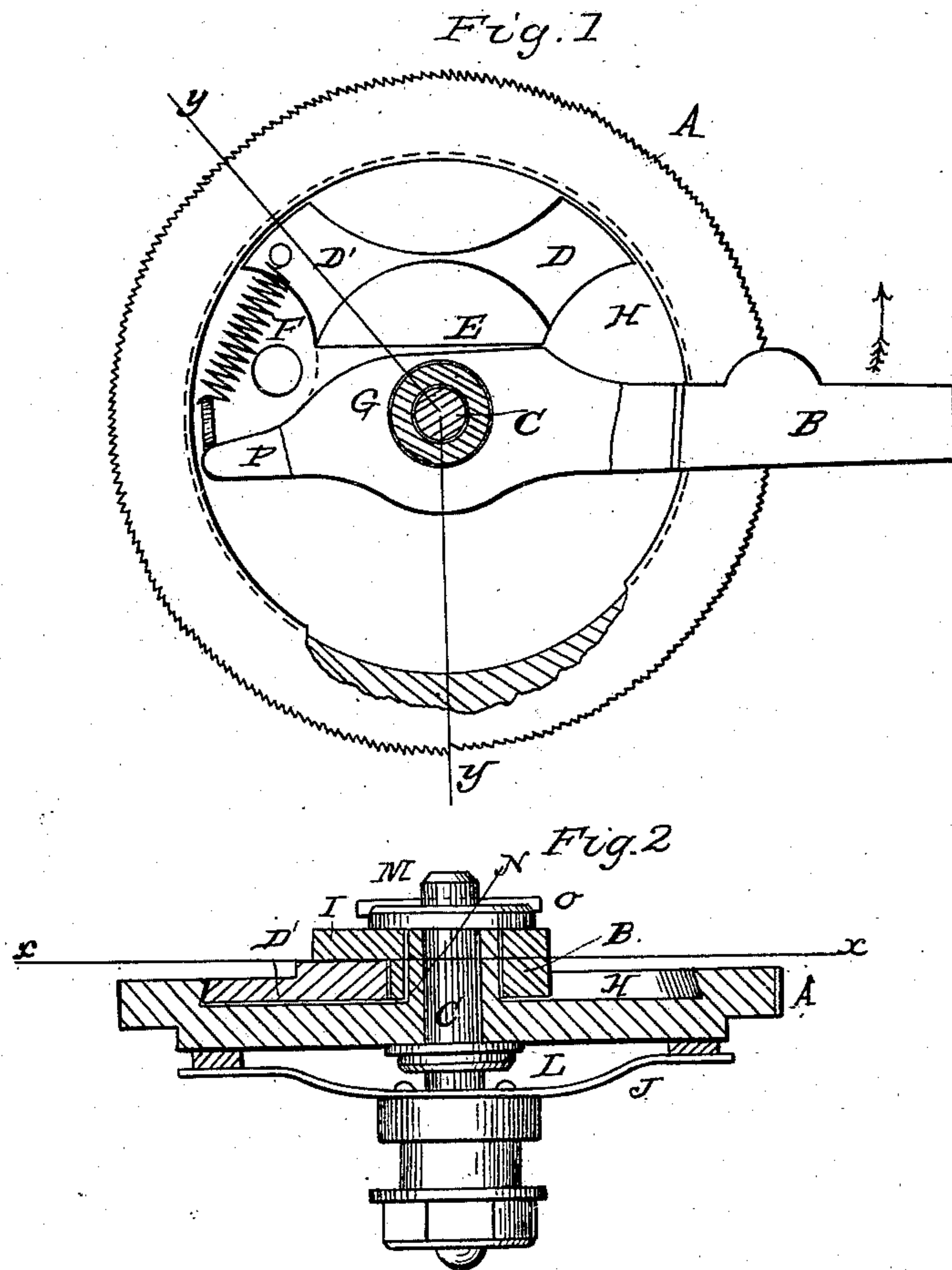


A. GALLETH.

Feeding Wheel for Sewing Machines.

No. 55,847.

Patented June 26, 1866.



Witnesses
J. W. B. Covington
Geo. A. Service

Inventor
Anton Galleth
Per Munn & Co
Attorneys

UNITED STATES PATENT OFFICE.

ANTON GALLETH, OF NEW YORK, N. Y.

IMPROVEMENT IN FEEDING-WHEELS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 55,847, dated June 26, 1866.

To all whom it may concern:

Be it known that I, ANTON GALLETH, of the city, county, and State of New York, have invented a new and useful Improvement in the Feed for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of a feed-wheel for a sewing-machine, a portion of the actuating-lever being cut away on the line *x* of Fig. 2. Fig. 2 is a section through the wheel on the bent line *y* of Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is an improvement in rotating feeding devices for sewing-machines, consisting in improved means for converting a reciprocating into an intermittent rotary motion.

The letter A designates a feed-wheel for a sewing-machine, having the usual roughened periphery to enable it to take hold of the material to be sewed. It is perforated at its center to receive the axle C, on which it turns. This axle has a fixed collar, L, which comes against the wheel at one side, and a movable collar, M, which comes against the end of the hub N of the wheel, where it is secured by a pin, *o*, that goes through the end of the axle.

The wheel has a circular depression, H, on that face which has the hub, the depression being cut in such a manner that the side of the wheel and the side of the chamber thus formed shall form an acute angle, as seen in Fig. 2.

B is a lever, so formed as partly to lie in the depression H of the face of the wheel, having a hole through it, so that it can embrace the hub N loosely and turn freely thereon. It extends on the left-hand side toward the wall of the depression, near which it ends, P designating the end on that side, and its other end extends in a straight line over the rim of the wheel, so that it may be connected with or be acted upon by any suitable device for giving to it a reciprocating motion.

E is a friction-block having two radial arms,

lettered, respectively, D D', whose ends are angular in cross-section, like the wall of the depression H of the wheel, being also curved concentrically with that wall. It is connected to the lever B by means of a spiral spring, F, which extends from the arm D' to the end P of the lever. The body of the block E is straight toward the axis of the wheel, where it is opposite the side of the lever B, while the adjacent side of said lever is partly straight and partly curved, as at G, so as to recede from the straight face of the block.

The effect of this construction is that when the lever is moved in the direction of the arrow the straight portion of its side, which extends on both sides of a diametrical line which would cross the face of the block at right angles, comes against the straight face of the block and moves it around within depression H, the end P of the lever drawing the block also through the spring F, so that the ends of both arms are kept, as it were, in equilibrium and in coincidence with the circumference of the depression; but when the lever is moved in the contrary direction the curved portion of its side, at G, is brought against the block at a point at one side of the diametrical line or the radius which crosses its straight side at a right angle, and consequently it tilts the block and brings the ends of its arms against the circumference of the depression at an angle, thereby effectually braking the wheel and causing it to move with the lever. When the lever is next moved in the direction of the arrow the block E slides around with it, without moving the wheel, and so going back for a fresh hold to give another feed-movement to the wheel. The wheel is also held from being turned back by this part of the reciprocation of the lever by means of a flat spring, J, which is secured to the axle back of the wheel, its ends resting against the back side of the wheel, as shown in Fig. 2.

The straight side and body of block E which adjoins the lever is covered and protected by a cap, I, which extends from the face of the lever in a curved form, so as to cover so much of the block as has the form of an arc of a circle in Fig. 1. This cap prevents dust and obstructions from getting between the block and lever, and also holds the block in place.

It will be observed from this construction that the block E is not fastened by pivots or joints, but is set loosely in depression H, being only connected to the lever by the spring F and covered by the cap I.

I claim as new and desire to secure by Letters Patent—

The arrangement of the wheel A, lever B,

with its side G, as described, block E, spring F, and friction-spring J, combined and operating in the manner and for the purpose herein specified.

ANTON GALLETH.

Witnesses:

GUSTAVE F. G. DIETERICH,
M. M. LIVINGSTON.