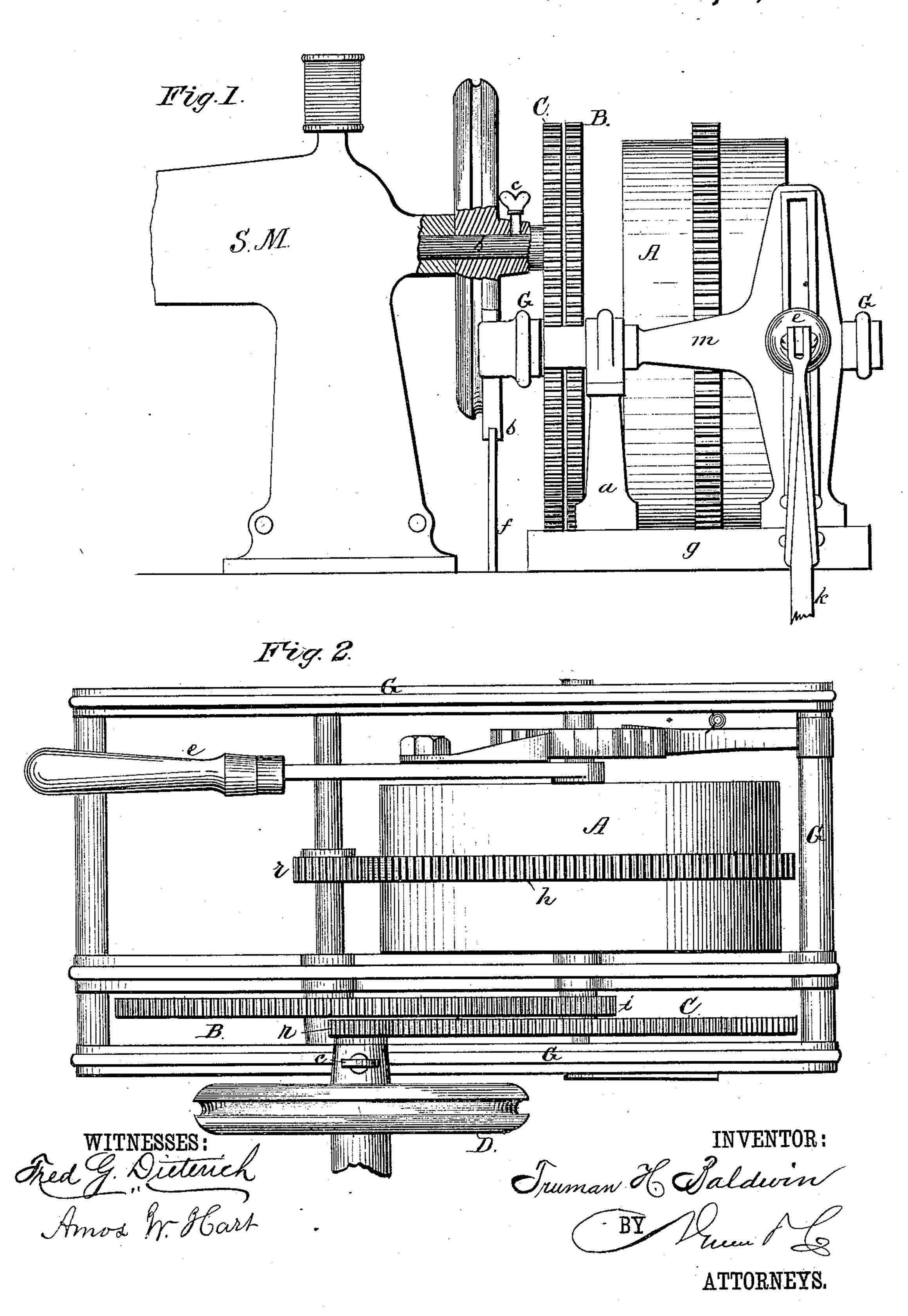
T. H. BALDWIN.

Spring Power Motor for Working Sewing and Other Small Machines.

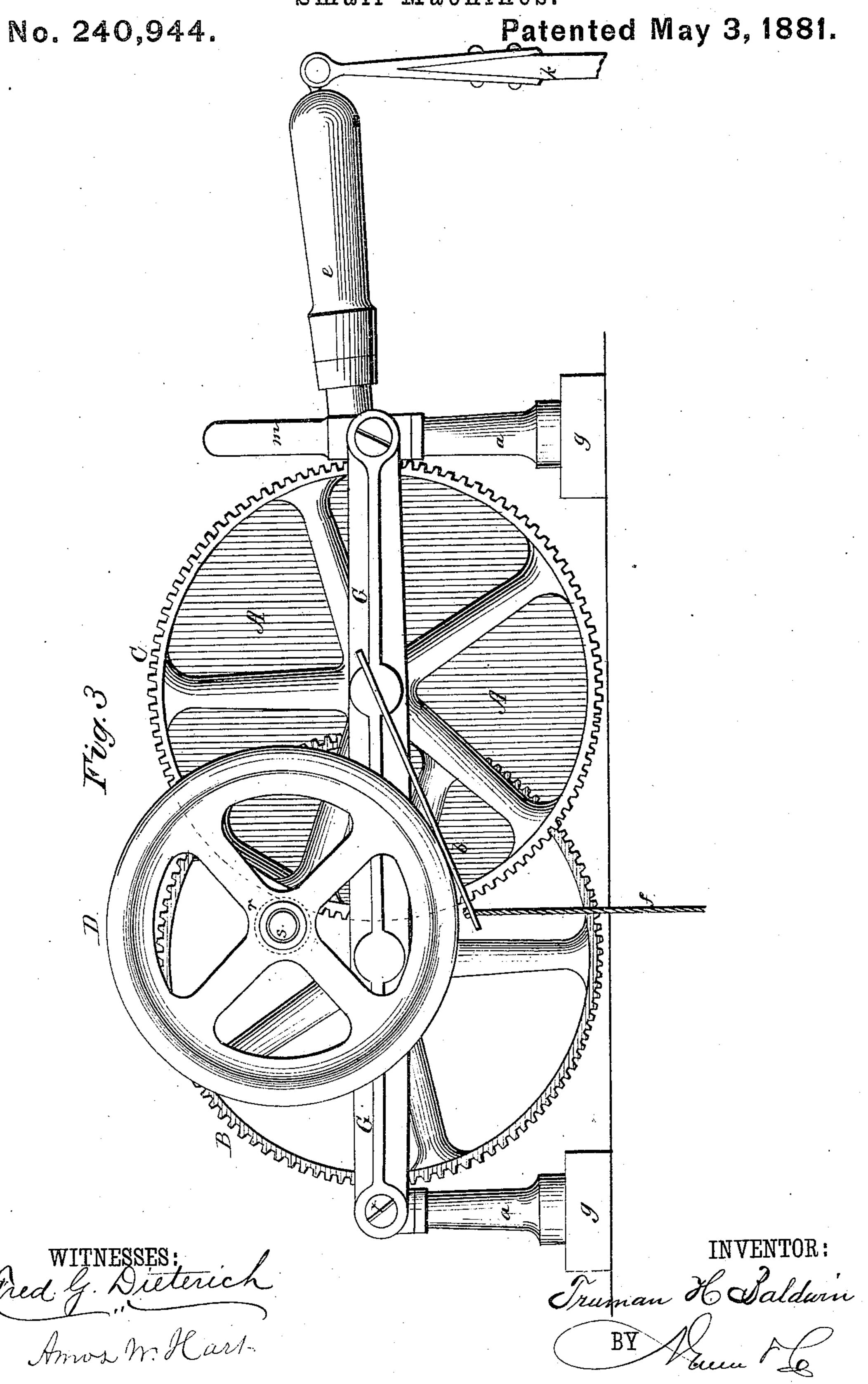
No. 240,944.

Patented May 3, 1881.



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Spring Power Motor for Working Sewing and Other Small Machines.



United States Patent Office.

TRUMAN H. BALDWIN, OF BARABOO, WISCONSIN.

SPRING-POWER MOTOR FOR WORKING SEWING AND OTHER SMALL MACHINES.

SPECIFICATION forming part of Letters Patent No. 240,944, dated May 3, 1881.

Application filed December 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, TRUMAN H. BALDWIN, of Baraboo, in the county of Sauk and State of Wisconsin, have invented a new and Improved Spring-Motor; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is an improvement in the class of spring-power motors for

10 driving small machines.

My invention relates more particularly to an improved spring-motor for sewing-machines; and it consists in the construction and combination of parts, as hereinafter described and claimed.

In accompanying drawings, forming part of this specification, Figure 1 is an end view of the motor and side view of a sewing-machine head, part being broken away. Fig. 2 is a plan view of the motor without a treadle attachment. Fig. 3 is a side elevation of the motor provided with the treadle.

Similar letters refer to similar parts throughout the several views.

The drum A contains a metal spring, F, attached to the center shaft, o, and to the toothed or friction-geared periphery of the drum h, in such manner that when wound up by means of the handle e, the ratchet d, and the ratchet-30 wheel E, it causes the toothed wheel h to revolve, thus revolving the pinion i and the wheel C, which is keyed on the same shaft as i. The wheel C revolves the pinion q, which turns the wheel B, which again revolves the pinion r, 35 which is keyed to the center of the wheel D, which connects by this center to the sewingmachine shaft, (marked s.) The spring l is attached, by the cord f, to a treadle to be operated by the foot, and acts as a friction-brake 40 on the wheel D, either reducing or stopping the motion of the machine. The rod k connects the end of the lever e to another treadle, (not shown,) and is for the purpose of winding up the machine by foot-power. The lever e is also 45 adapted for the use of the hand in winding up.

The metal frame G m, which supports the above parts of the motor proper, is itself supported by posts a a, screwed to wooden bars g g.

While the motor may be used with various sewing-machines, it is more particularly adapt- 50 ed for the one known as the "Domestic." To attach the motor thereto it is placed on the table of the machine and the band-wheel of the latter removed from its journal s, and the grooved pulley D substituted for it, as shown 55 in Fig. 2. Said wheel D has an extended hub or tubular bearing, on the outer end of which is keyed or otherwise suitably secured a spurpinion, r, which meshes with the gear C of the motor. The bearing of the wheel D is provided 60 with a clamp-screw, c, for securing it to its journals, which is the projecting end of the rotating shaft that reciprocates the needle carrier. (Notshown). The wheel D serves as a balance for the sewing-machine, and being periph- 65 erally grooved, as specified, a round belt may be applied to it for winding thread-bobbins.

The motor attachment above described is adapted for imparting about twenty thousand revolutions at each winding to the shaft on 70 which the balance-wheel D is mounted, and the winding may be effected with comparative ease by means of the lever.

The motor is compact in form, and may be quickly attached to or detached from the sew-75 ing-machine by reason of the construction and mode of applying the wheel D, which constitutes an intermediary between the sewing-machine and motor proper.

I do not, of course, claim the use or applica- 80 tion of a spring or weight motor for running sewing and other small machines; but

What I do claim is-

The wheel D, provided with a pinion, r, and fastening device c, in combination with the 85 spring-motor, consisting of the spring-drum, geared as shown, the spur-wheels BC, pinion i, the ratchet pawls and lever, said wheel being adapted for attachment to the journal of a sewing-machine shaft, as shown and described. 90

TRUMAN H. BALDWIN.

Witnesses:

M. BENTLEY, REUBEN BALDWIN.