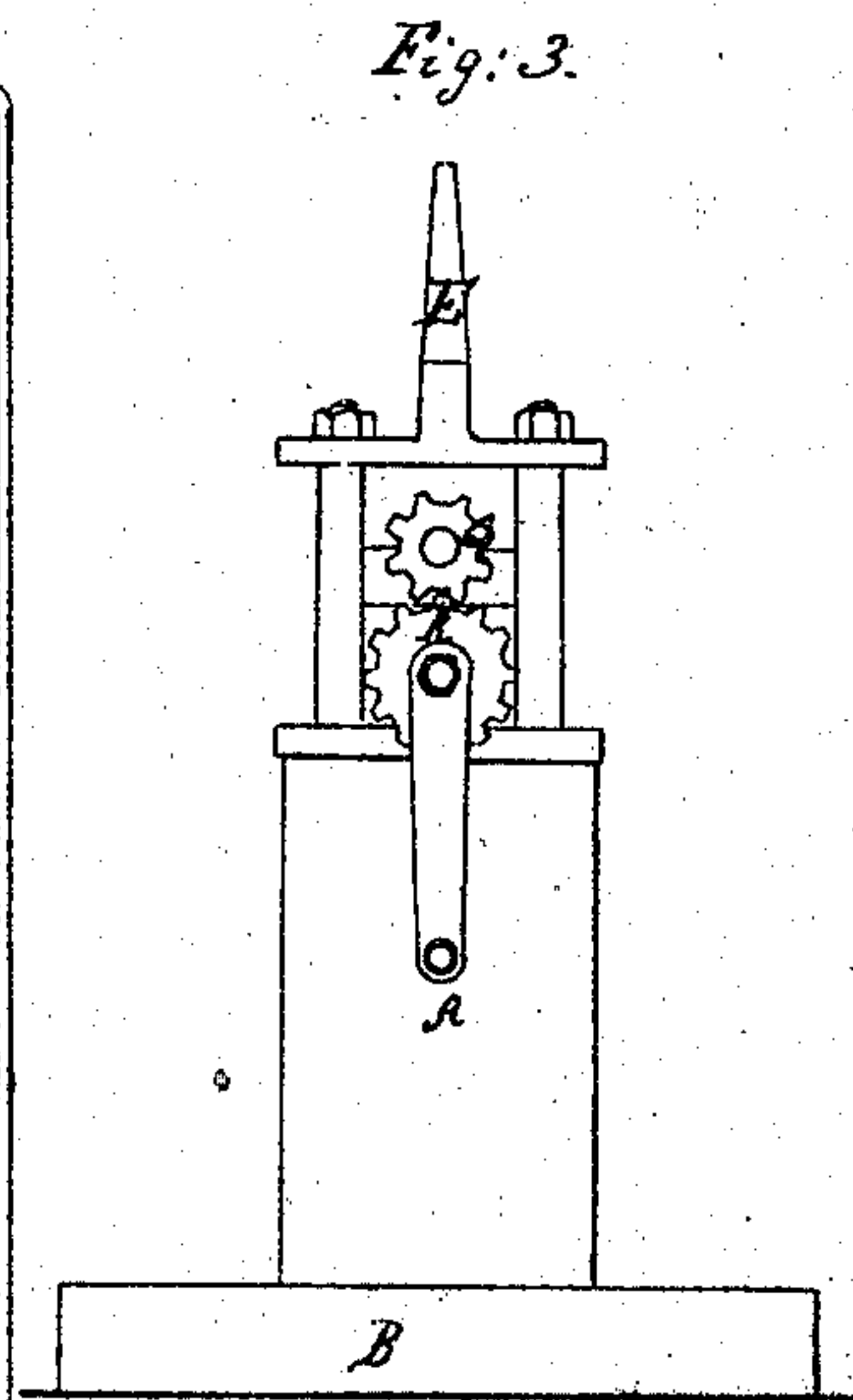
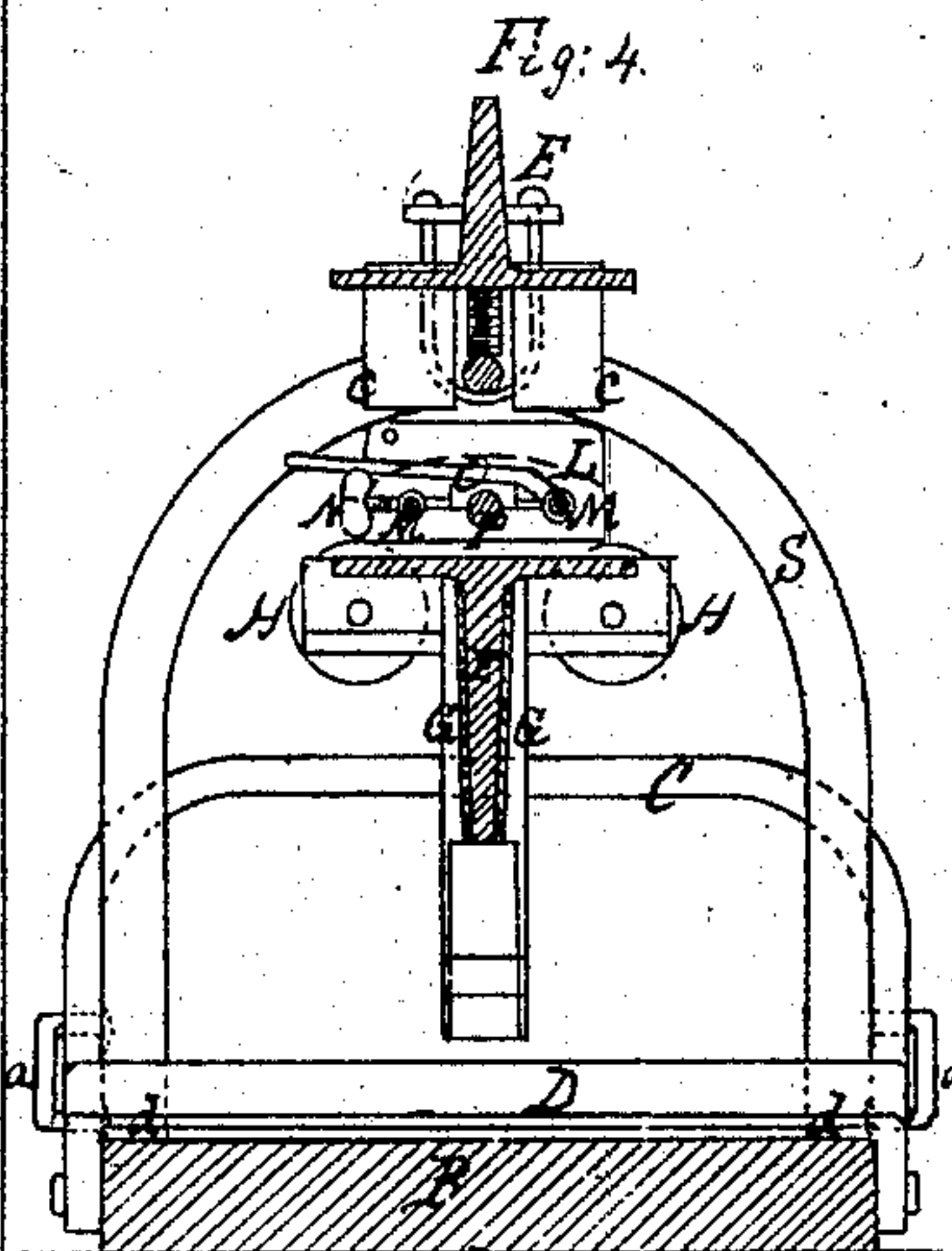
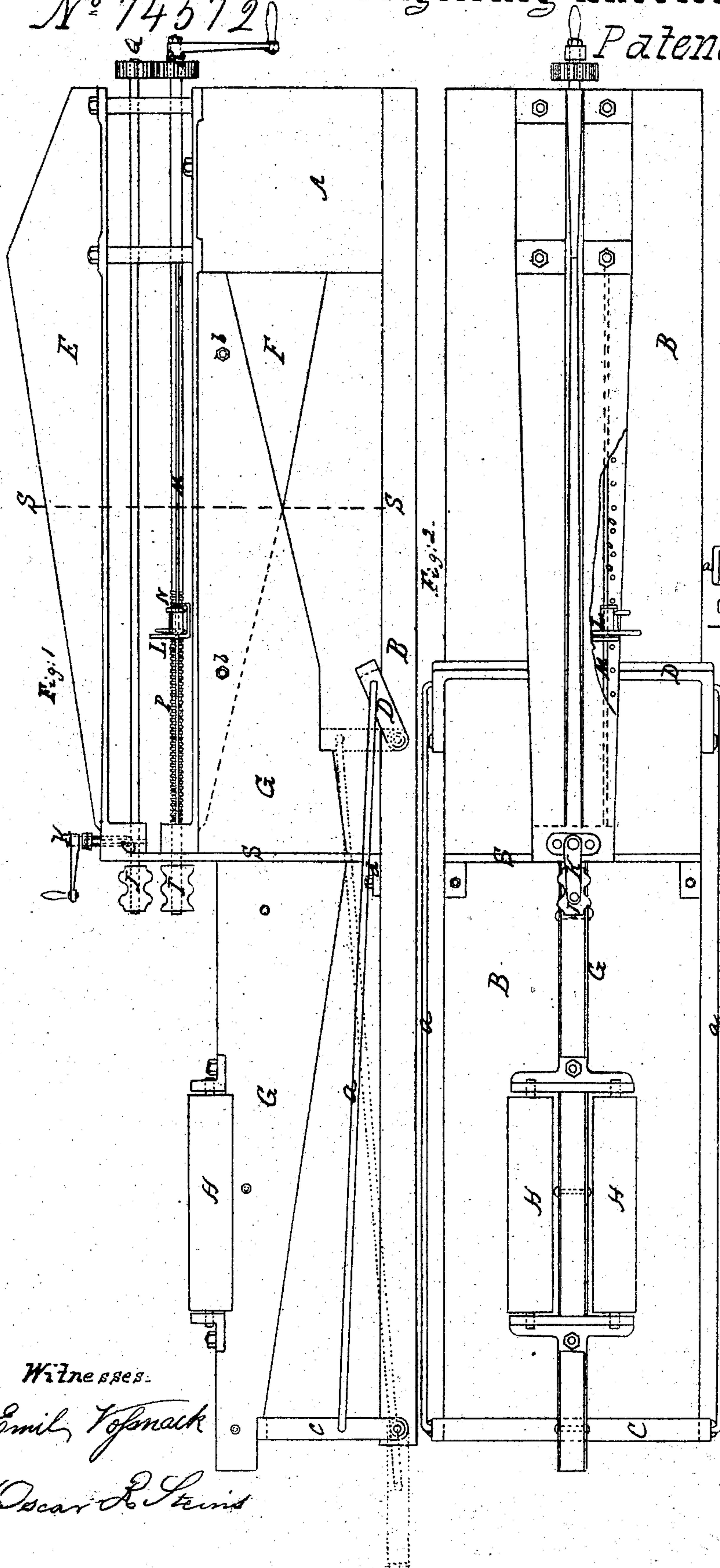


Corrugating Sheet Metal.

Patented Feb. 18, 1868.



Wilnesses:

Emil Tofonack

Oscar L Stein

Inventor.

Geo. R. Moore

United States Patent Office.

GEORGE R. MOORE, OF LYONS, IOWA.

Letters Patent No. 74,572, dated February 18, 1868.

IMPROVEMENT IN MACHINE FOR CORRUGATING SHEET METAL.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE R. MOORE, of Lyons, in the county of Clinton, and State of Iowa, have invented certain new and useful Improvements in Corrugating-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is to provide a machine for making diametrical corrugations upon sheet-metal cylinders, of several feet in length, and upon any place in their whole length which may be desired.

Machines for doing this kind of work upon short lengths of cylinders, or upon places near the ends of long cylinders, are old and very common, and known in "tin-shops" as "beading-machines." My invention provides for extending the length of arbors, and the support of the same, in this general kind of a machine, so that without great expense cylinders from six to ten feet long can be corrugated or "beaded" at any place in their whole length. My invention provides also for a convenient handling and holding of the cylinders in the required process; also, for a screw or spiral corrugation, when desired.

Figure 1 is a side elevation.

Figure 2 is a plan view.

Figure 3 is an end view.

Figure 4 is a cross-section on a line S S, fig. 1.

A is the ordinary standard, upon which the machine is bolted down upon the bench B. C and D are special movable standards or movable supports, in this case pivoted to the bench, and attached to each other by rods, *a a*, of such length as to alternate their positions and secure one as an upright support to the machine, when the other lies in a horizontal position upon the bench. E and F are the ordinary arms of the framework of the machine, and G is a special extension or lever support to the arm F, to which, in this case, it is bolted with small bolts, *b b*. Upon this extension-lever, G, there are rollers, H H, which serve as a saddle to carry the cylinder easily while rotating in the machine.

The cylinder to be corrugated is passed into the machine, so as to enclose the usual arm F, the extension-lever G, with the saddle-rollers H H, and one of the corrugating-rollers, I, and its arbor, with which the crank of the machine is firmly connected. To do this, the movable standard, C, is turned down to a horizontal position, and the cylinder placed into the machine as far as to D, when D is turned down, and C brought into an upright position, where it remains until the work is done. The upper corrugating-roller, J, is forced down by the arm-screw K, so as to indent the cylinder as much as may be desired, when the crank is turned and the corrugation accomplished.

The gauge L may be used in the ordinary way, also in connection with the screw-guide O, when that is pressed down into the thread upon the lower arbor. In this machine the cog-wheels Q and R are not of equal number of cogs, but Q revolves its arbor and roller faster than R, and thus, by rubbing upon the metal slightly, burnishes a part of the corrugation. The gauge-rods M M are bolts as well, to strengthen the machine, and are designed and applied for this double purpose of being a part of the substantial framework, and at the same time serving as gauge-rods. S is a circular or pronged brace, of sufficient width, or of such shape as to allow any cylinder to be corrugated to pass under it, and it is applied to give additional strength to the upper part of the framework of the machine, to which it is bolted or made fast at C, and also to the bench at *d d*.

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

1. The combination of base-plate B, standard A, arms E and F, and arched brace S, constructed and arranged substantially as described.
2. The combination of the extension-arm G with the arm F and hinged supports C and D, constructed and arranged substantially as described.
3. The combination of arms F and G, roller-bearings H H, and corrugating-rollers I and J, constructed and arranged substantially as described.
4. The combination of the rods M M, gauge L, latch-nut O, and screw-arbor P, constructed and arranged substantially as described.

Witnesses:

EMIL VOSSNACK,
OSCAR R. STEINS.

GEO. R. MOORE.