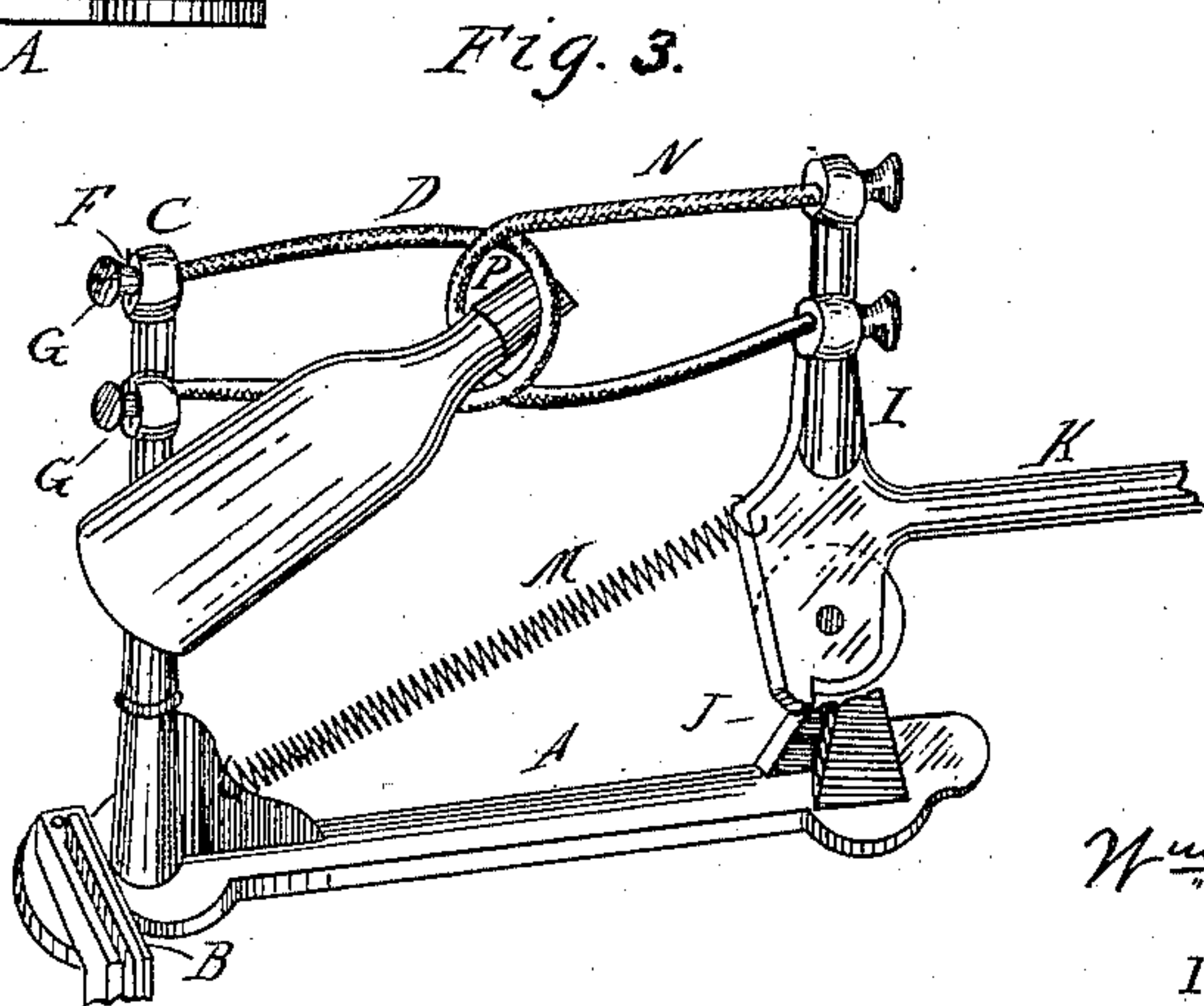
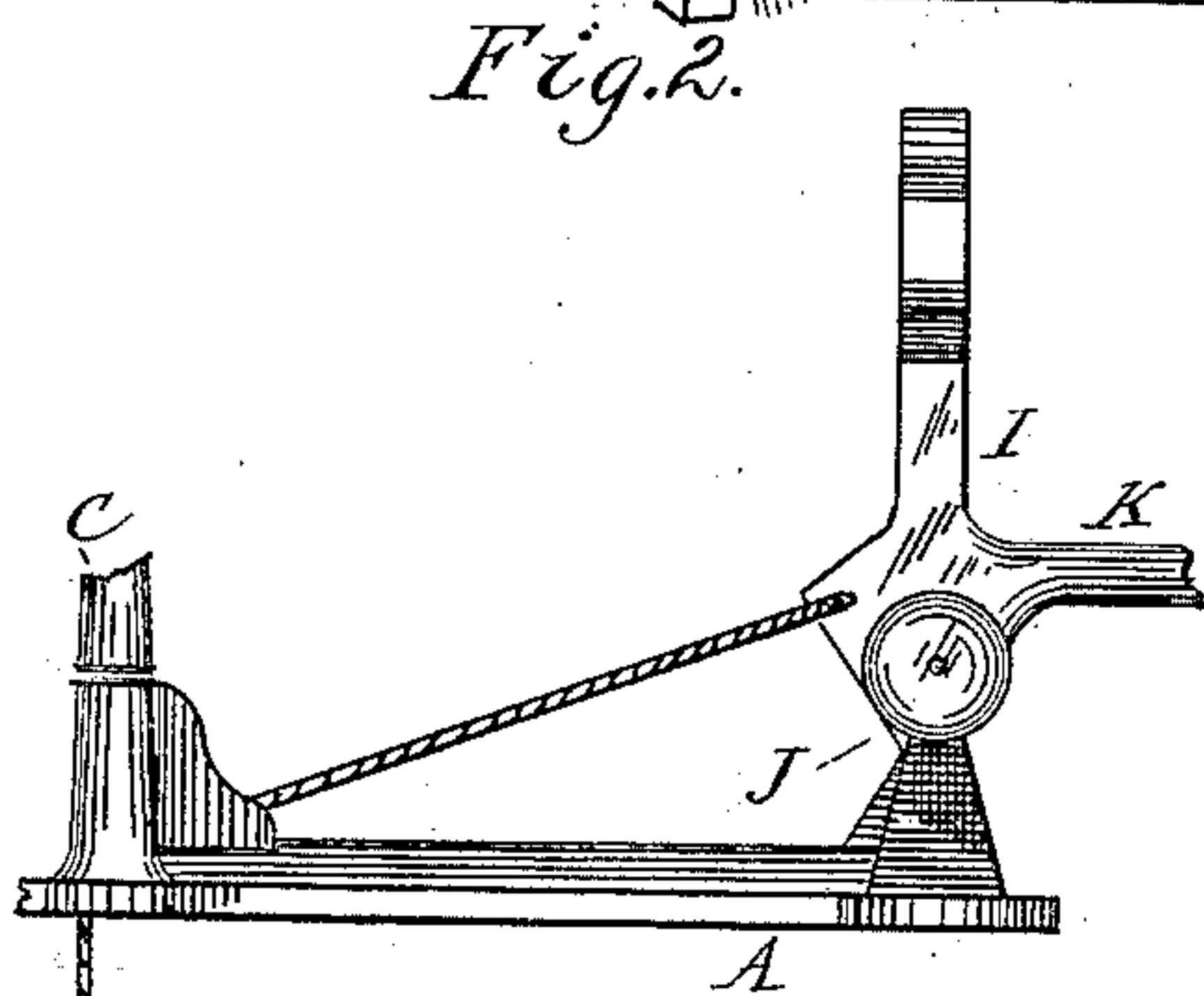
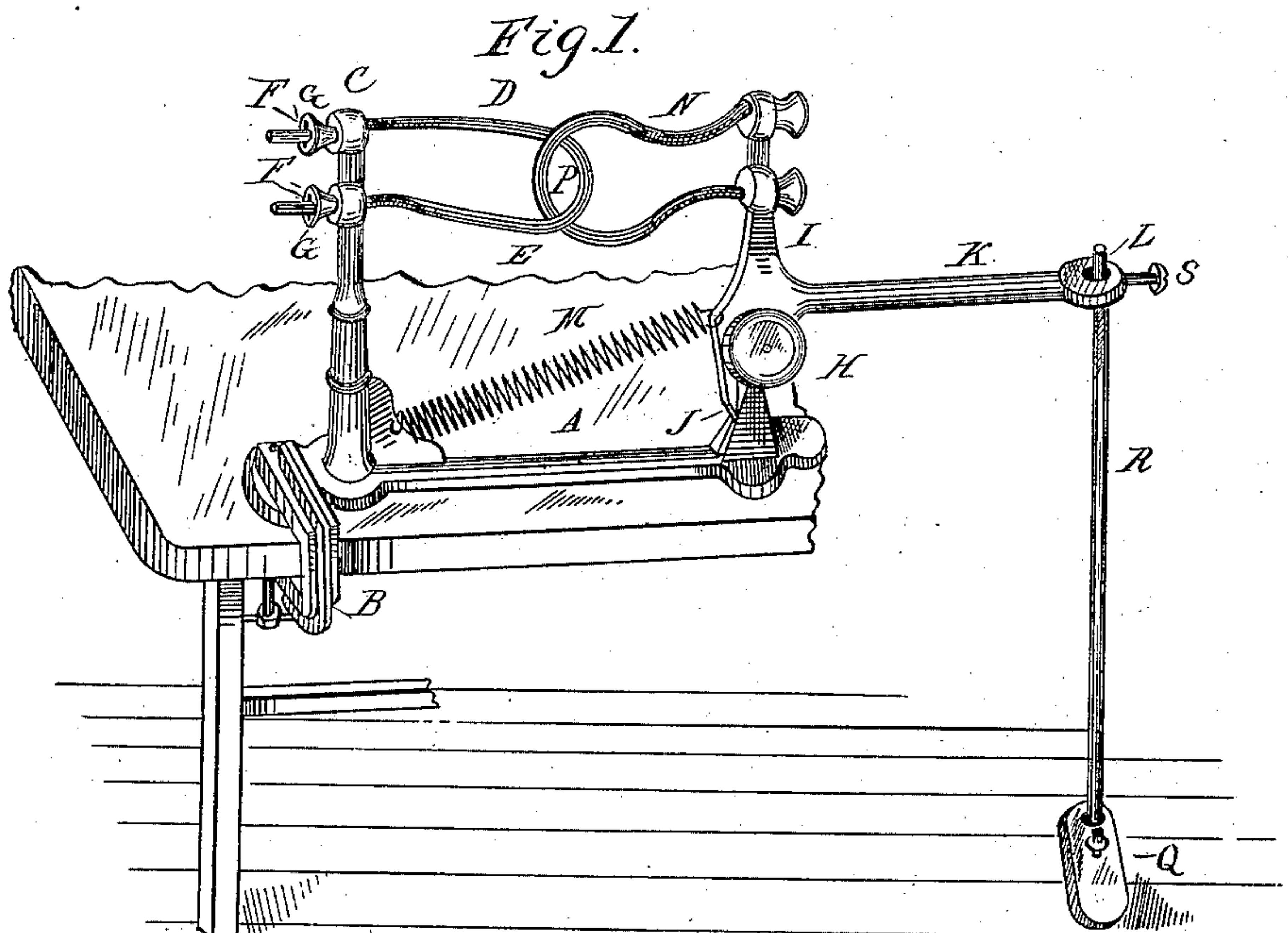


(No Model.)

W. REDLICH.
BOTTLE CAPPING MACHINE.

No. 309,358.

Patented Dec. 16, 1884.



WITNESSES

J. H. [Signature]

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UNITED STATES PATENT OFFICE.

WILLIAM REDLICH, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
HENRY REDLICH, OF SAME PLACE.

BOTTLE-CAPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 309,358, dated December 16, 1884.

Application filed June 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM REDLICH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Bottle-Capping Machine, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to machines for capping bottles, jars, jugs, &c., with the capsules usually placed over the mouth and neck of such vessels; and it has for its object to produce a machine of the class referred to that shall possess superior advantages in point of simplicity, cheapness, durability, and general efficiency; and the invention consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a view in perspective of a machine embodying my improvements. Fig. 2 is a modification showing a weight used in place of the spring shown in Fig. 1; and Fig. 3 is a view showing the manner of using the bottling-machine.

Referring by letter to the accompanying drawings, A designates the base of the machine, which is provided with a screw-clamp, B, by which the machine is secured to the table or bench where it is to be used. From the base A, near that end which is provided with the clamp B, rises a standard, C, provided with two openings, through which the ends of one half D of the capping belt, band, or cord E are passed from within outwardly, and prevented from being withdrawn therefrom by nuts F, held in place by cross-pins G, or in any other suitable manner. At the opposite end of the base A are provided the lugs H, between which a short standard, I, having a stop, J, and an arm, K, provided with a vertical hole, L, is pivoted and connected by a spring, M, to the base A. The short standard I is also provided with two openings, through which the other half, N, of the capping-belt E is secured in a manner similar to that described for the half D of said belt E. The two halves D and N of the capping-belt E are linked together to form the capping-loop P, through

which the neck of the bottle, with the loose capsule in place, is passed to press or spin the capsule to place smoothly and evenly. The pressure of the loop P upon the capsule is regulated by the treadle Q, connected to the arm K by a cord, rope, or round leather band, R, secured in the vertical hole L by a set-screw, S, so that the treadle may be adjusted to tables or benches of different heights. When the pressure on the treadle is removed, the spring M will draw the short standard back to its normal position, thereby enlarging the capping-loop and permitting the capped bottle-neck to be removed.

Instead of the spring M, a weight, T, attached to a cord running over a pulley, may be used to return the short standard to its normal position.

The operation of the machine is simple, and the work performed is of a superior character. The metal capsule is first placed loosely on the neck of the bottle, jug, or jar, and the neck of the bottle, with the capsule in place, is inserted into the capping-loop, and the loop is tightened thereon by operating the treadle. By pushing on the bottle and at the same time turning it, the capping-loop will spin or press the capsule tightly and smoothly upon the neck of the bottle, and at the same time will conform to any rings, grooves, or curvatures that may be formed with the neck of the bottle. When the pressure on the treadle is removed, the capped neck of the bottle may be removed.

As an illustration of the tightness and evenness of the work performed by this machine, I will state that I have filled bottles with kerosene, and without corking the bottle thus filled have spun a metal capsule over the mouth and neck of said bottle, and have turned it upside down after the manner of racking wine-bottles, and the metal capsule alone confined the kerosene so securely as to prevent leakage or the escape of the odor of the kerosene thus confined. It will thus be seen that where porous corks are used this machine will cause the capsules to so thoroughly fit the neck of the bottle as to hermetically seal the bottle. The machine does not form folds in the metal, but spins the metal of the capsule on evenly

and uniformly. The capping-belt is preferably of soft leather, and is round, as shown, and the smoothness and tightness are caused by the friction of the belt rather than the pressure. India-rubber or similar material may be used. The belt has a kind of spinning and stretching effect upon the metal capsule, but does not break it. It causes the capsule to conform to rings and swells on the neck of the bottle, and imparts a polish to the metal, owing to the flexibility of the belt.

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

1. The combination, with the bed-plate and rigid arm provided with the loop D, of the hinged arm and loop N, with stop J and arm

K, the spring M, and the treadle Q, and band R, substantially as specified.

2. The combination, with the base-clamp, rigid standard with stop and arm, as described, of the belts D and N, linked together and secured in their respective standards to form the capping-loop, the spring connecting the hinged standard to the base, and the treadle and its connecting-cord, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM REDLICH.

Witnesses:

EMIL R. HAASE,

HENRY A. HOFFMAN.