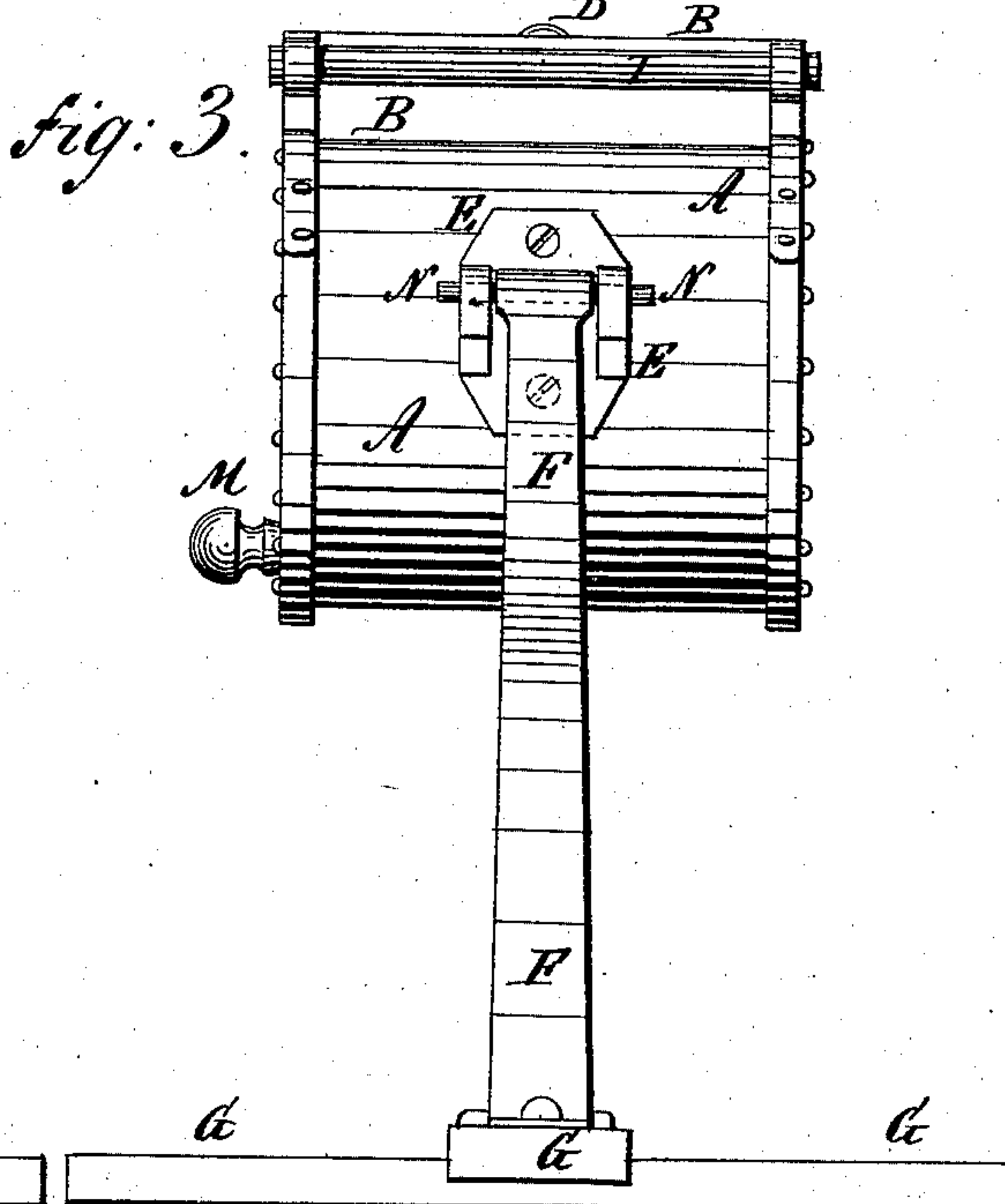
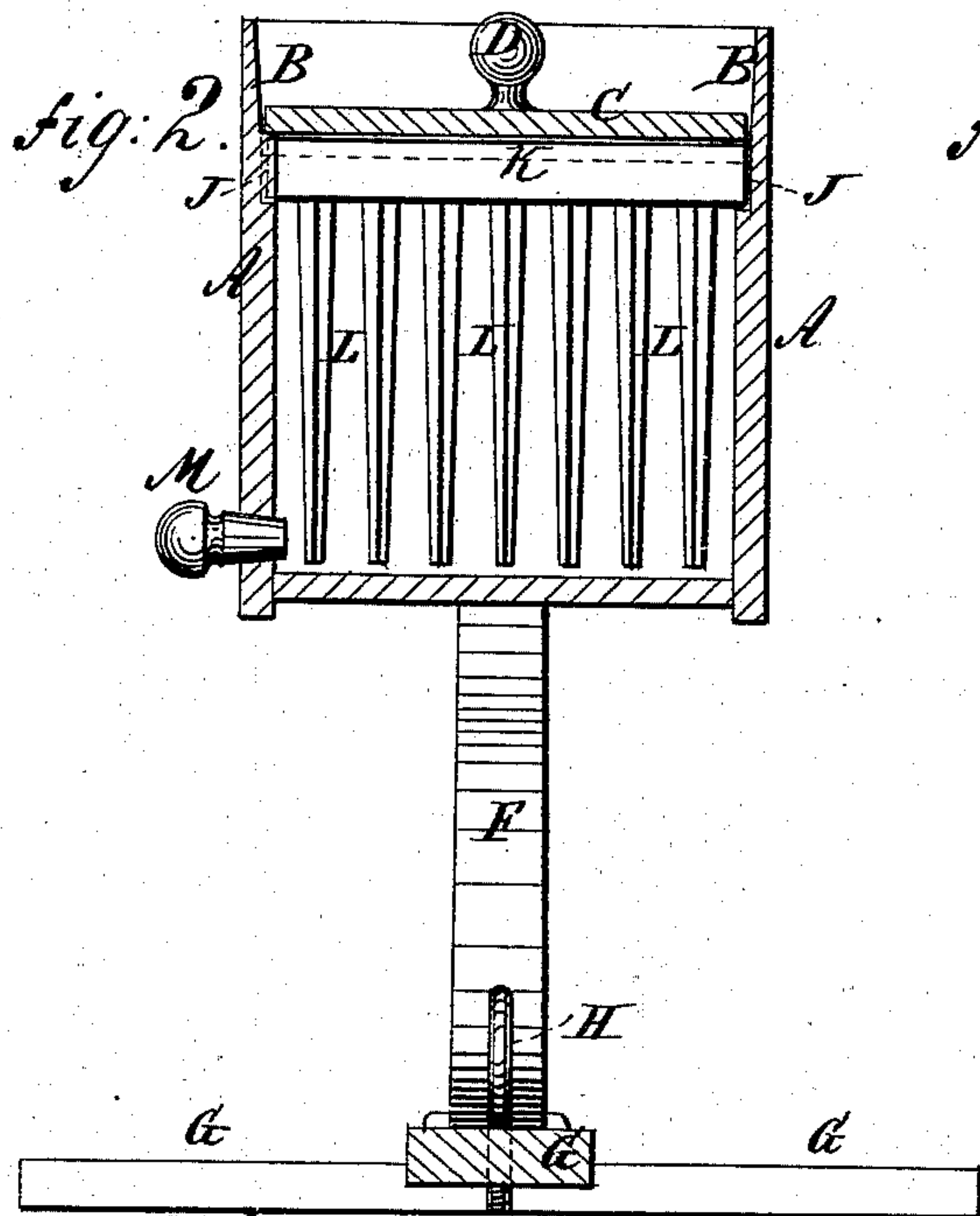
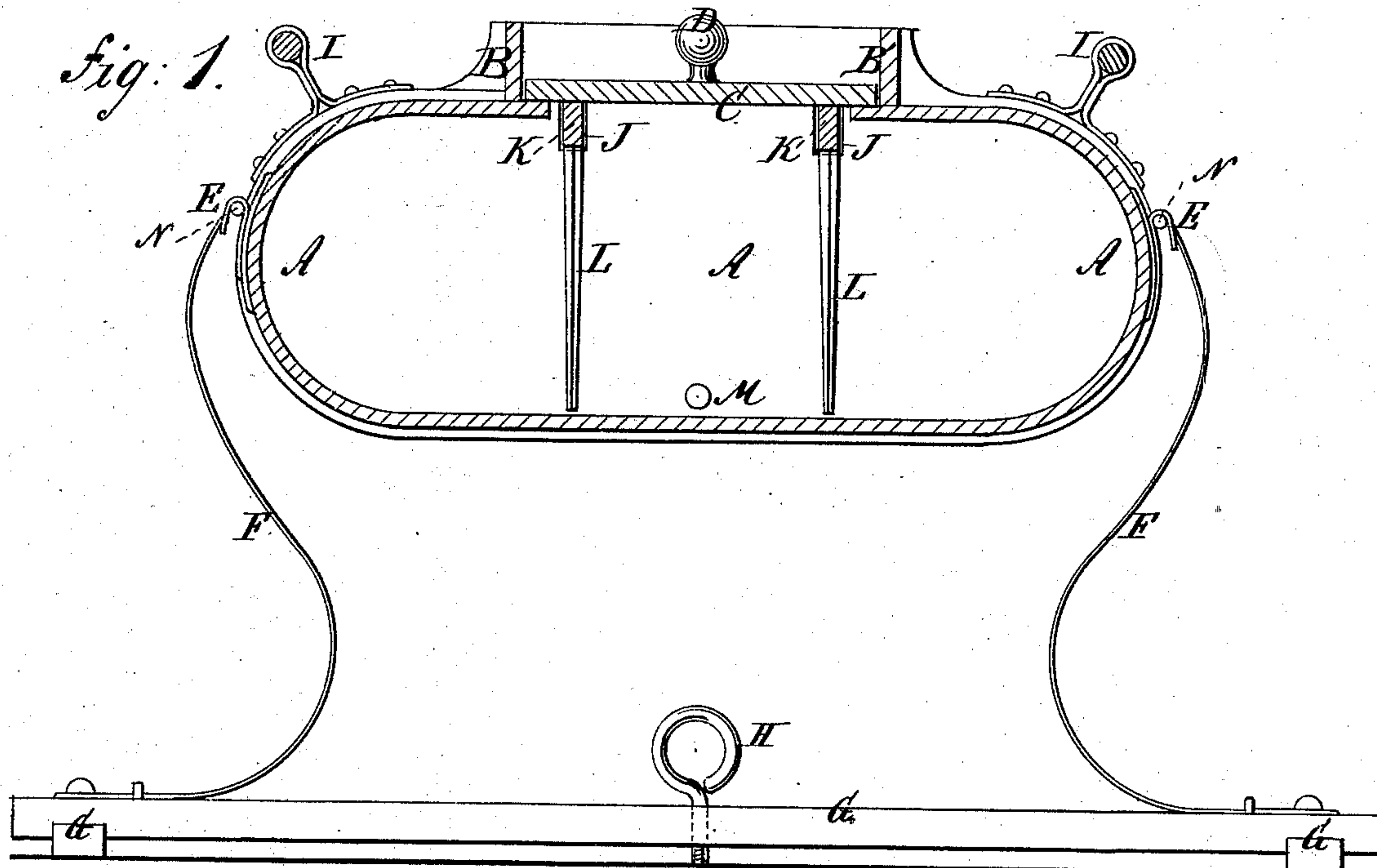


(Model.)

F. ALDRED.  
Churn.

No. 238,017.

Patented Feb. 22, 1881.



WITNESSES:

*A. Schehl.*  
*C. Sedgwick*

INVENTOR:

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# UNITED STATES PATENT OFFICE.

FRED ALDRED, OF GLENCOE, ONTARIO, CANADA.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 238,017, dated February 22, 1881.

Application filed December 20, 1880. (Model.) Patented in Canada July 15, 1880.

*To all whom it may concern:*

Be it known that I, FRED ALDRED, of Glencoe, Province of Ontario, Dominion of Canada, have invented a new and useful Improvement in Churns, (for which I have received Letters Patent in Canada, No. 11,498, dated July 15, 1880,) of which the following is a specification.

Figure 1 is a sectional side elevation of the improvement. Fig. 2 is a sectional end elevation. Fig. 3 is an end elevation.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish churns so constructed that they can be easily operated and will bring the butter in a very short time.

A represents the churn-body, the bottom and top of which are horizontal, the sides vertical, and the ends semi-cylindrical in form. In the middle part of the top of the churn-body A is formed a large opening for convenience in putting in the milk and taking out the butter, which opening is surrounded by a flange, B, and is closed by a cover, C, fitting into the space within the flanges B and resting upon the top of the churn-body at the sides of the opening. The cover C is provided with a knob or other handle, D, for convenience in removing and replacing the said cover.

To the ends of the churn-body A, and above its central line, are attached two sockets, E, to receive the ends of the springs F. If desired, the sockets E can be made in the form of pairs of hooks to receive the end parts of cross-pins N, attached to the ends of the springs F. The latter construction is shown in the drawings, and is preferred, as giving the lower ends of the springs F are secured, by bolts or other suitable means, to a frame or platform, G, which rests upon the floor or other suitable support, and may be secured to the floor by hand-screws H or other convenient means, to prevent it from moving when the churn is being used.

The springs F are made S shape, as shown in Fig. 1, the upper ends being so formed as to correspond with the curves of the ends of the churn-body A to give greater elasticity to the springs, and to allow the churn-body to have a longer swing.

To the upper parts of the ends of the churn-body A are attached handles I, for convenience in operating the churn.

In the inner surface of the sides of the churn-body A, at the corners of the opening in the top of the said churn-body, are formed short vertical grooves J to receive the ends of one or more cross-bars, K.

To the cross-bars K are attached parallel bars or fingers L, which project to, or nearly to, the bottom of the churn-body A, as shown in Figs. 1 and 2.

If desired, the dashers K L may be made in the form of perforated or slotted boards or plates, in which case the grooves J may extend to, or nearly to, the bottom of the churn-body A. The dashers K L are secured in place by the cover C, or they may be permanently attached to the churn-body; but I prefer to make them removable for convenience in cleaning the churn-body.

In using the churn the milk is poured in, and the cover C is put on. The operator then takes hold of one of the handles I, and moves the churn-body A forward and back longitudinally, which change of motion, in connection with the semi-cylindrical form of the ends of the churn-body, causes the milk to rise and fall or be thrown back toward the middle part of the churn-body, and the dashers K L, through the openings of which the milk has to pass, throw the milk into violent agitation and bring the butter in a very short time. When the churning has been finished and the butter taken out, the butter-milk is drawn out through an aperture in the lower part of the side of the churn-body A, which aperture is closed by a plug, M, a faucet, or other suitable means.

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

1. In a swinging churn, the supporting-springs F, made in S shape, and attached to the ends of the churn above the central line, substantially as herein shown and described, whereby the churn-body is supported and allowed to vibrate, as set forth.

2. In a swinging churn, the combination, with the churn-body A, of the S-shaped supporting-springs F, provided with cross-pins N, and the hook-sockets E, substantially as herein shown and described, whereby the churn-body is allowed to vibrate freely, as set forth.

FRED ALDRED.

Witnesses:

J. P. McMILLAN,  
E. C. SWAISLAND.