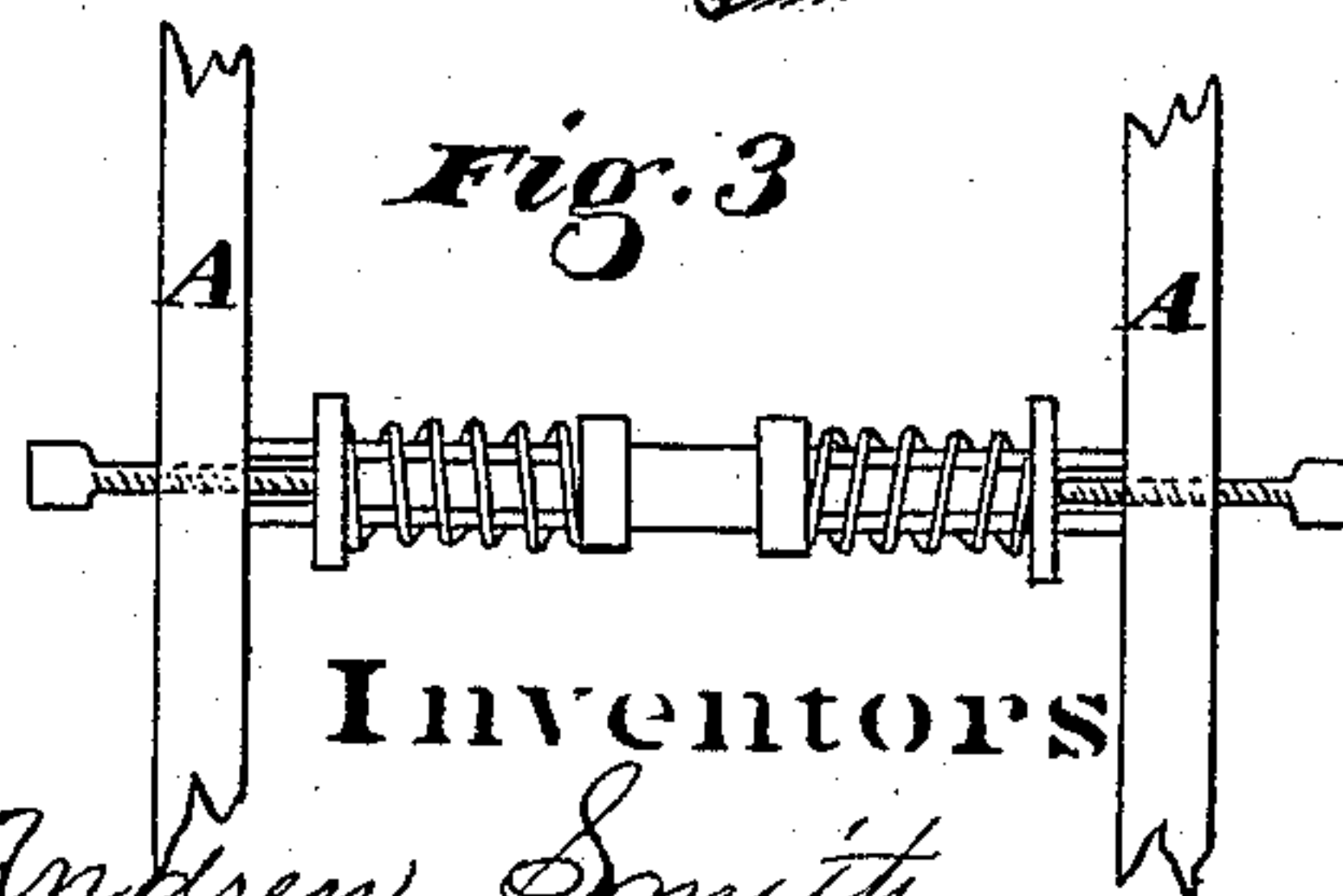
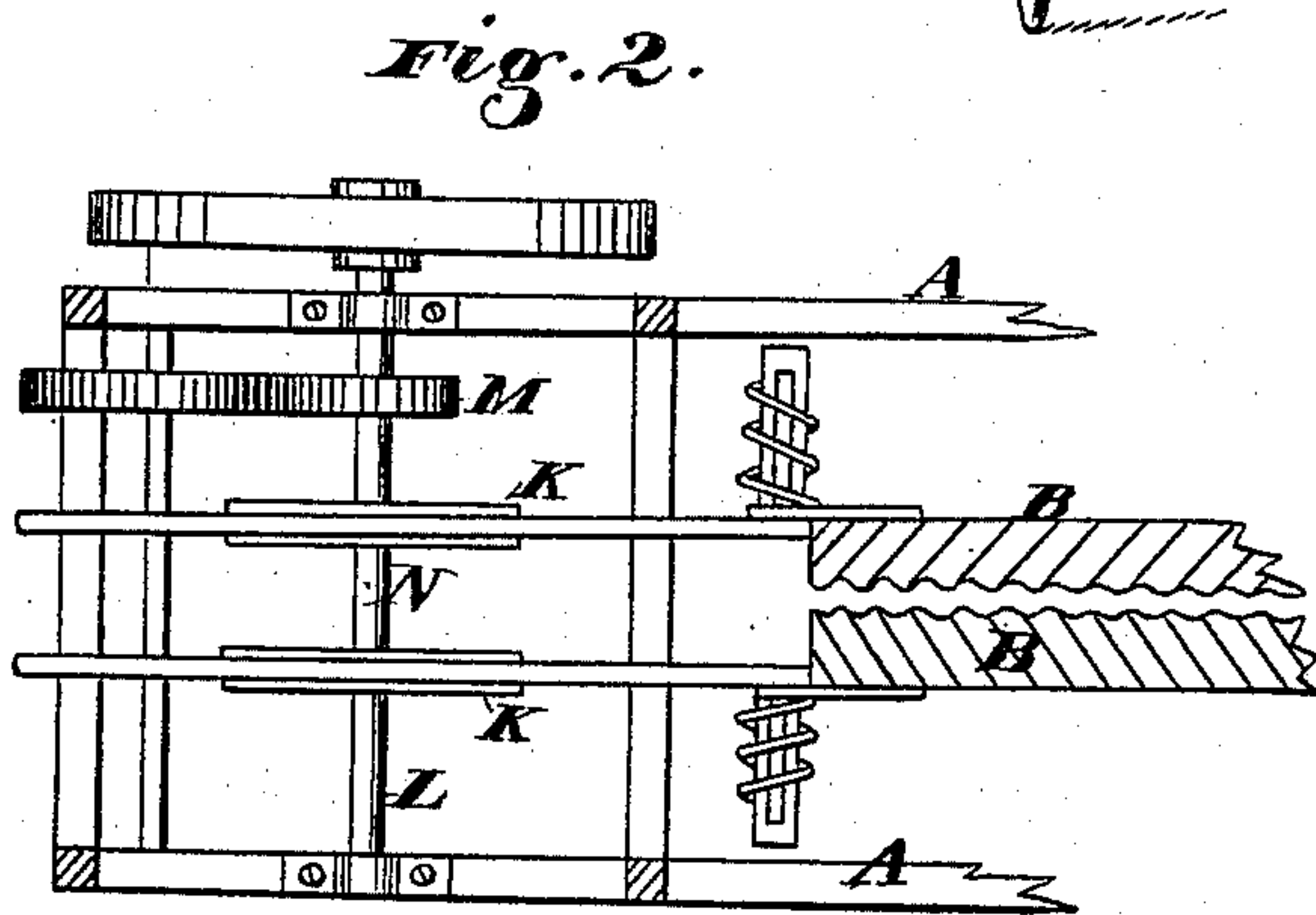
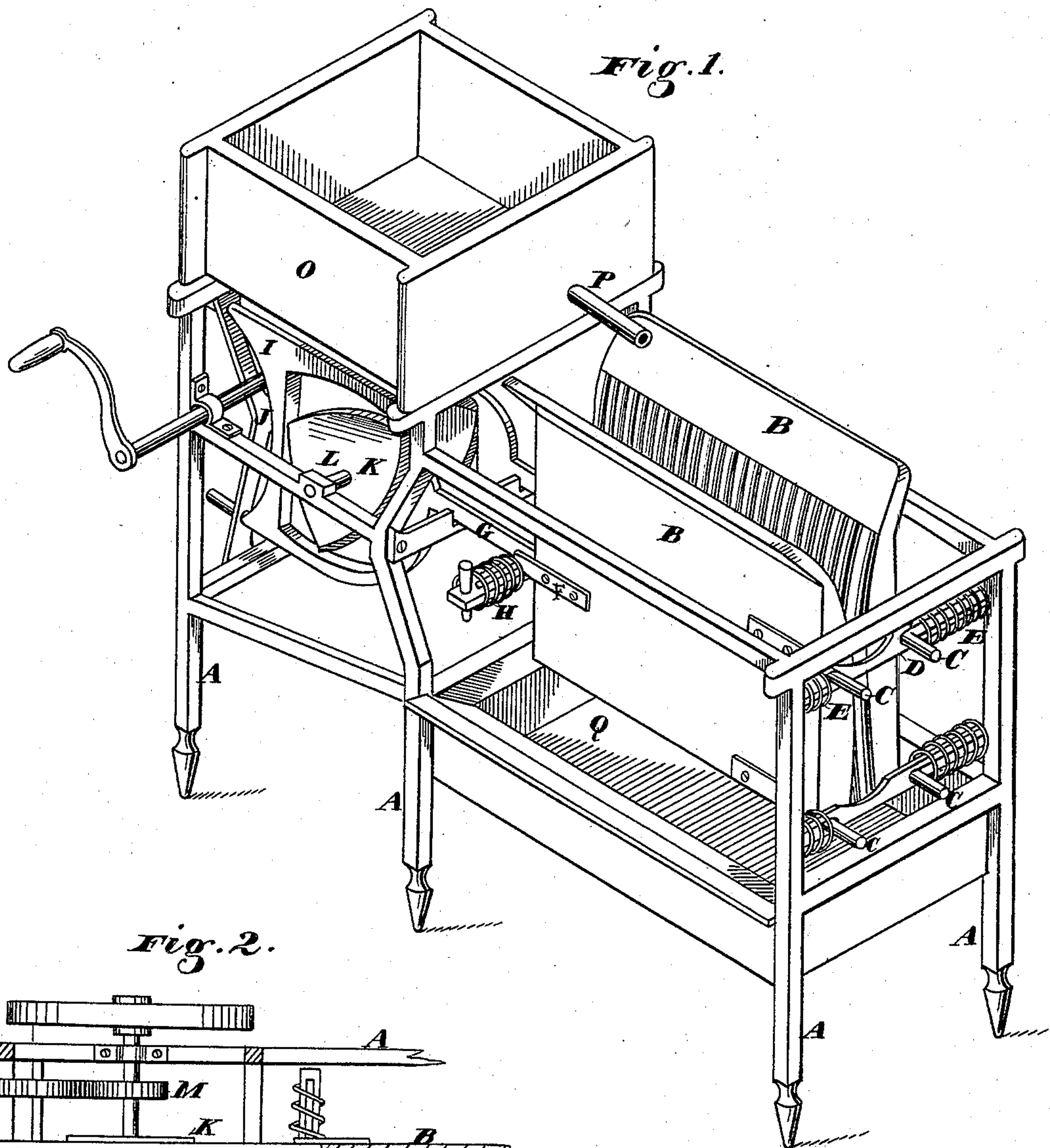


A. SMITH & J. S. ROY.

WASHING-MACHINE.

No. 169,737.

Patented Nov. 9, 1875.



Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW SMITH AND JOHN S. ROY, OF SHERIDAN, NEVADA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **169,737**, dated November 9, 1875; application filed August 11, 1875.

To all whom it may concern:

Be it known that we, ANDREW SMITH and JOHN S. ROY, of Sheridan, Douglas county, State of Nevada, have invented a Washing-Machine; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention without further invention or experiment.

Our invention relates to certain improvements in machines for washing clothes; and it consists in the use of two parallel vertical rubbing-boards, which are moved forward and backward by suitable mechanism, and are provided with devices for adjusting them to or from each other to accommodate the clothes. Fresh water is furnished from a tank above the rubber.

Referring to the accompanying drawings for a more complete explanation of our invention, Figure 1 is a perspective view of our machine. Fig. 2 is a plan of the cams and section of the rubbers. Fig. 3 is an enlarged view of the springs.

A is a frame, which supports the different parts of the machine. The rubbing or wash boards B B are placed vertically, so that their inner corrugated faces lie together. Two guiding-arms, C, project from each of these boards at the rear end and pass through slots in the guides D. Springs E surround the guides, and, extending from the sides of the frame inward, they press against the arms C, and thus exert a force to hold the boards B B together, while they are at the same time elastic enough to allow the boards to adjust themselves as the clothing passes between them. Plates at each end are operated by set-screws, so as to compress or extend the springs, and vary the pressure, as may be desired. At the opposite ends of the boards are rods F, bent so as to hook into slots in the transverse arms G, and springs H, similarly arranged to those at E, serve to adjust the wash-boards at this end.

The arms G are connected with, or are a part of, the cam-yokes I, the opposite ends of which are guided by rods passing through the guides J, so that when the cam-yokes are moved forward and backward they will operate the wash-board, and produce a rubbing motion between them.

In order to operate these cam-yokes we employ the triangular cams K, which are mounted upon the shaft L. This shaft has a pinion, which is operated by the gear-wheel M upon the driving-shaft N. Above the cams is the water-tank O, and a pipe, P, leads water as it is wanted into the space between the rubbing-boards, these latter being provided with flaring tops for the purpose of admitting it, and also to allow the clothes to be easily put into the machine. Below the rubbing-boards is a box, Q, for receiving the clothes and the suds.

By the use of the cams we are enabled to obtain the required oscillation of the rubbing-boards without too greatly increasing the gearing.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In combination with the vertical rubbing-boards B B, as shown, the cam-yokes I, with their guides J, and the triangular operating-cams K, when constructed to operate substantially as herein described.

2. A washing-machine, consisting of the vertical flaring rubbing-boards B B, guided and adjusted as shown, and operated by the cams K, together with the water-tank, O, with its pipe P and the receiving-box Q, the whole arranged to operate substantially as herein described.

ANDREW SMITH.
J. S. ROY.

Witnesses:

GEO. H. STRONG,
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