

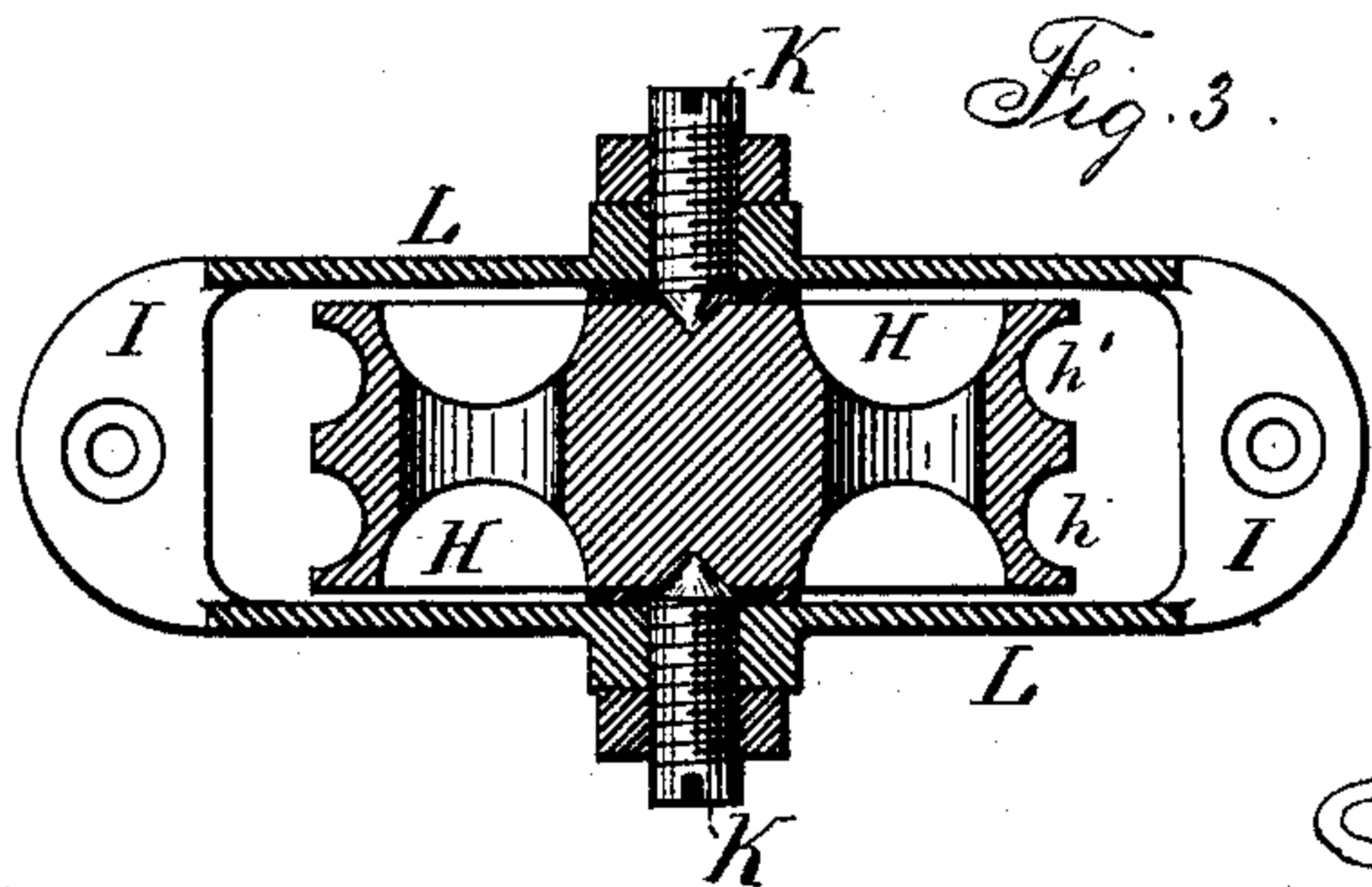
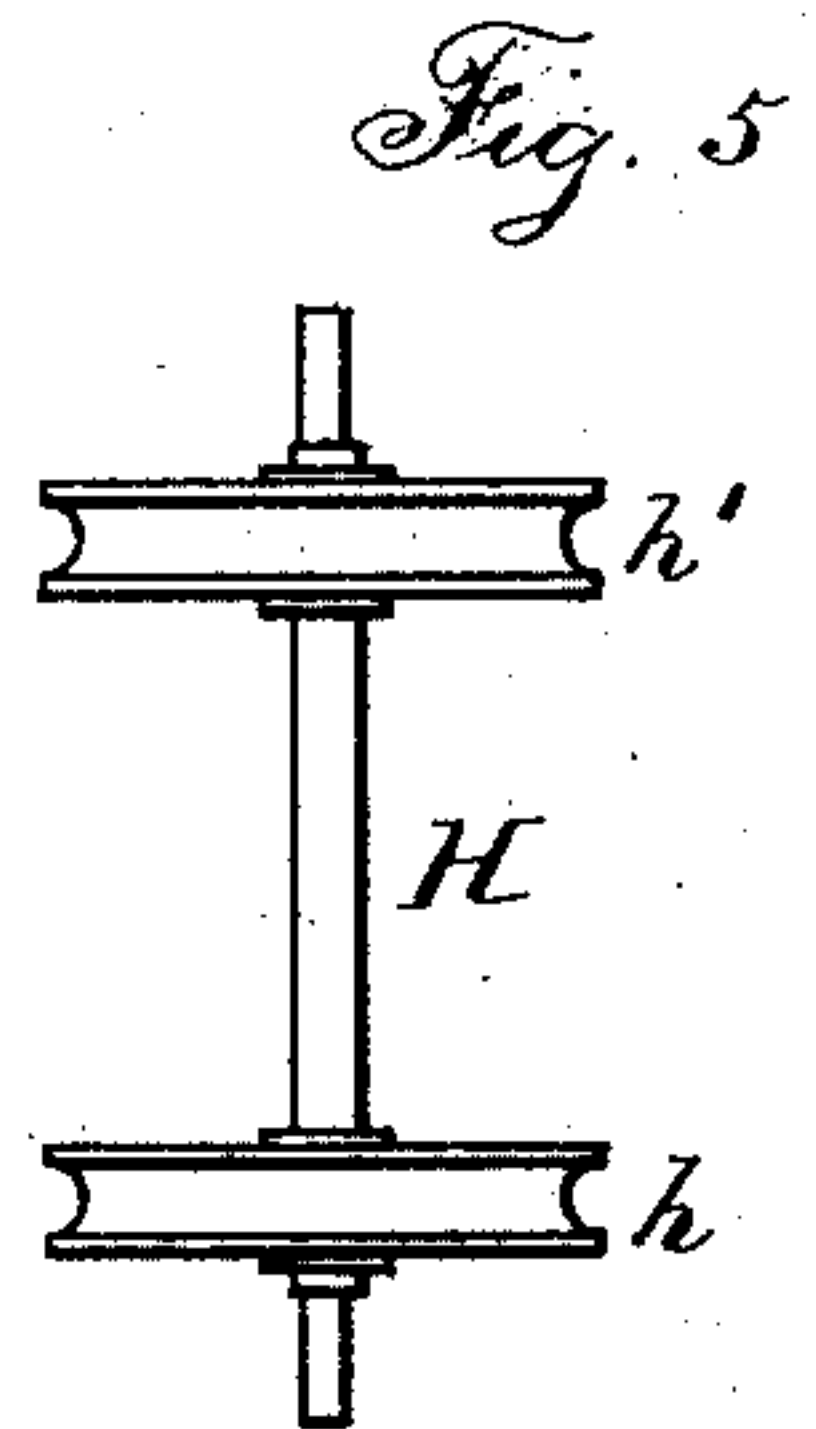
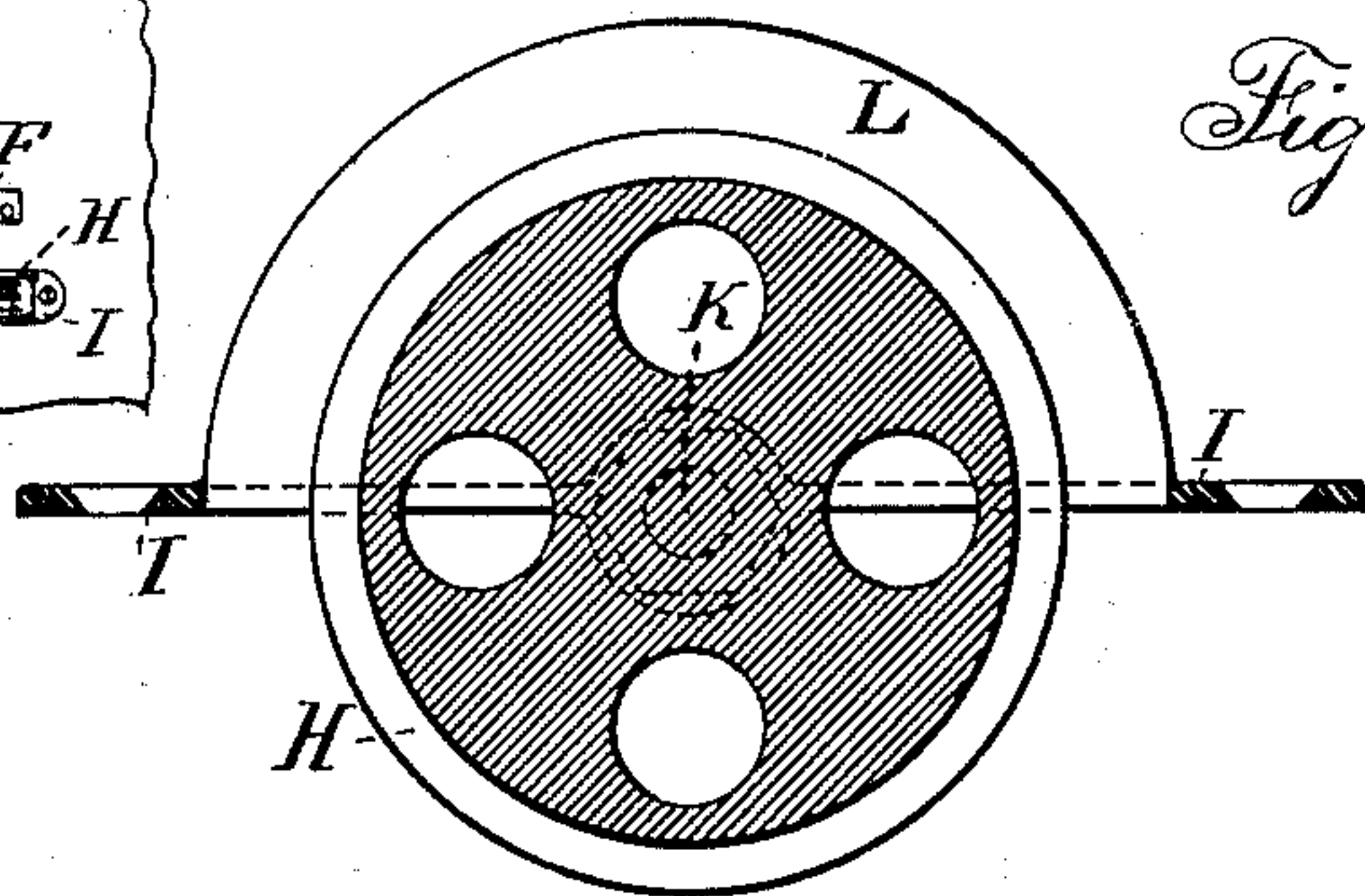
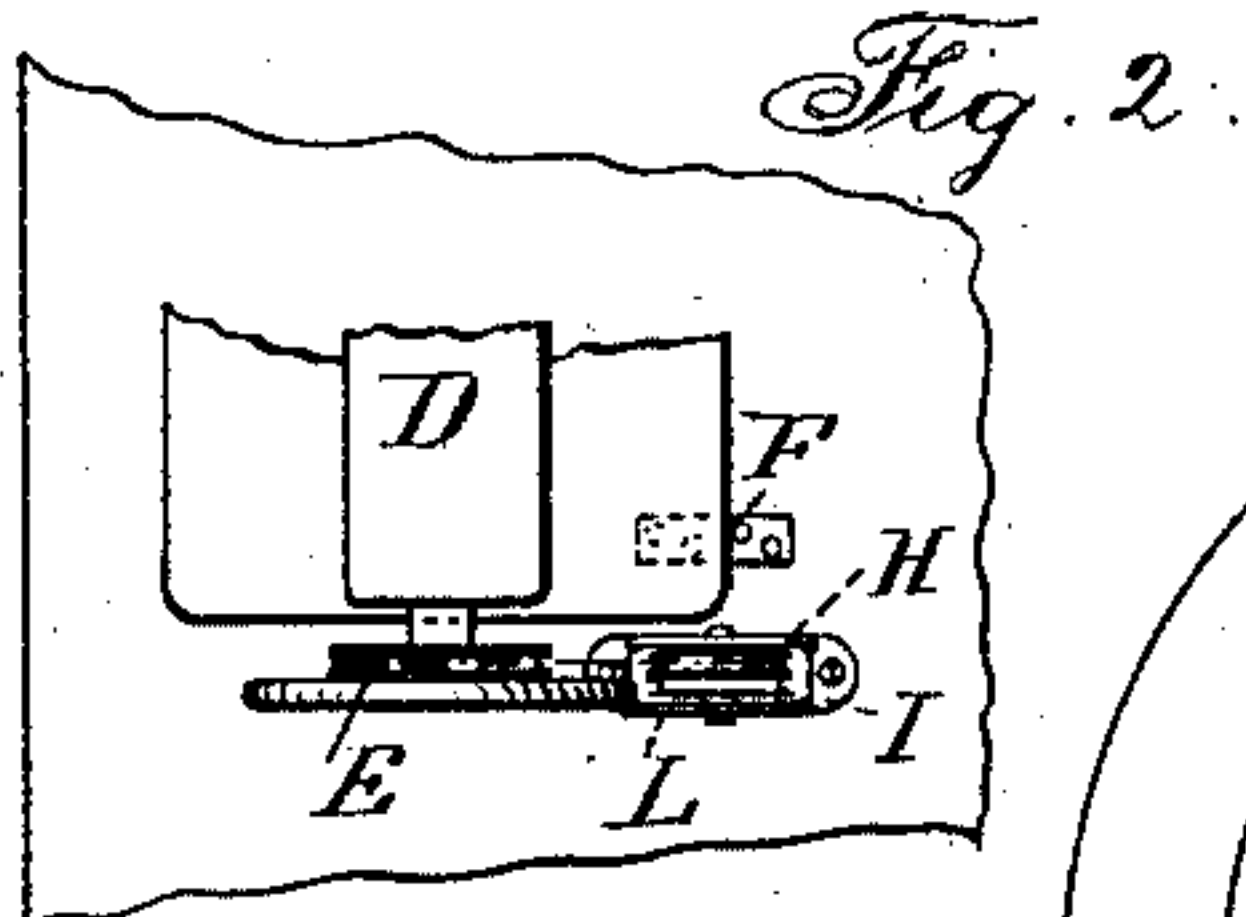
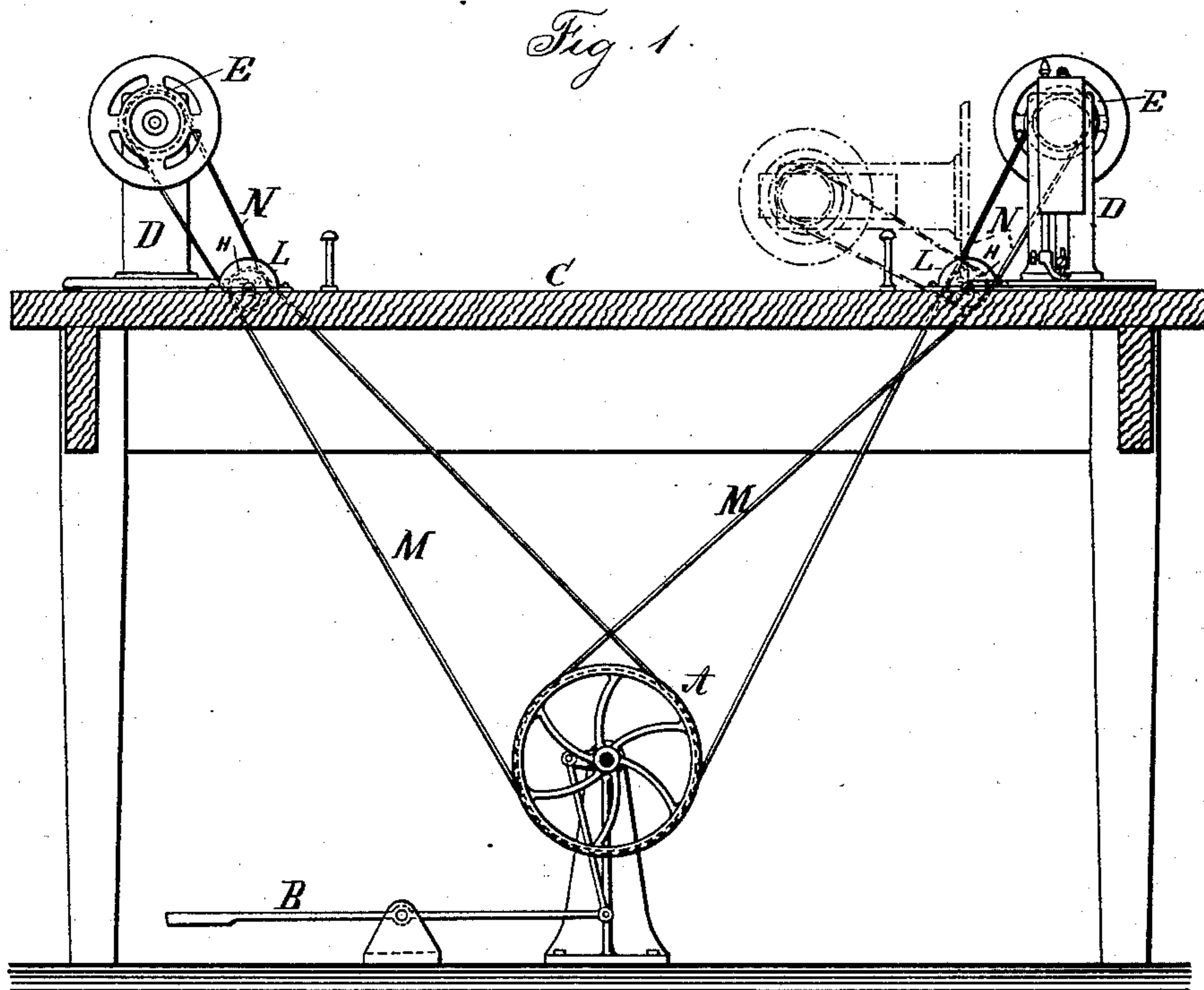
(No Model.)

C. T. JONES.

DRIVING MECHANISM FOR SEWING MACHINES.

No. 336,648.

Patented Feb. 23, 1886.



Witnesses:
J. Stair
Chas. H. Smith

Inventor:
Charles T. Jones
per Lemuel W. Ferrell atty.

UNITED STATES PATENT OFFICE.

CHARLES T. JONES, OF UTICA, NEW YORK.

DRIVING MECHANISM FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 336,648, dated February 23, 1886.

Application filed November 12, 1885. Serial No. 182,509. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. JONES, of Utica, in the county of Oneida and State of New York, have invented an Improvement in
5 Driving Mechanism for Sewing-Machines, of which the following is a specification.

Sewing machines are extensively manufactured in which the bed of the sewing-machine is hinged to the table in order that said sewing-machine may be swung backwardly to give
10 access to the mechanism beneath the bed. In machines of this kind the driving-shaft is usually above the bed and supported by the arm of the machine, and the belt-pulley is at
15 the end of the driving-shaft; hence, whenever the machine is turned up, the driving-belt becomes loose and misplaced. This is a source of inconvenience and delay, especially in some classes of button-hole machines that require to
20 be turned up frequently.

My present invention is for allowing the sewing-machine to be swung up without the belt becoming loose and misplaced. With this object in view I make use of the compound pulley, the axis of which is in line,
25 or nearly so, with the pivot or hinges upon which the machine swings as it is turned up, and from this compound pulley one endless belt passes to the motor and the other endless belt passes to the pulley upon the driving-shaft of the sewing-machine, so that both
30 belts are under the same tension, or nearly so, whether the machine is in its normal position or not.

In the drawings, Figure 1 is a section of a table with two sewing-machines in position and with my compound pulleys in place. Fig. 2 is a plan at one end of the sewing-machine. Fig. 3 is a sectional plan of the
40 compound pulley in nearly full size, and Fig. 4 is a vertical section of the same; and Fig. 5 is a detached view in smaller size of the compound or double pulleys.

The fly-wheel A may be driven by steam-power, or by a treadle, B, of any suitable character.

C is the table supporting the sewing-machine D, and E is the belt-pulley upon the main shaft of the said machine.

The bed of the sewing-machine D is piv- 50
oted or hinged to the table C at F, so that the sewing-machine can be swung back into the position shown by dotted lines, Fig. 1, to give access to the parts beneath the bed of the machine.

My compound pulley is composed of a 55
grooved sheave, H, received within the open frame I, through which the screws K pass to form the axis upon which the pulley H revolves, and there are guide-flanges L extend- 60
ing up from the frame I at each side of the pulley H, to prevent contact therewith of any article upon the table, and the endless belt M passes from the driving-pulley or fly-wheel A around the pulley H in one of the 65
grooves of the same, and the endless belt N passes around the pulley H in the other groove thereof and over the driving-pulley E of the sewing-machine. It will now be apparent that the motive power is readily transmitted 70
by these belts to the sewing-machine, and that, the axis of the compound pulley H being in line with the pivots or hinges F upon which the sewing-machine swings, the belt M will always remain tight, or nearly so, whether 75
the sewing-machine is in its normal position or not, and the belt M will not slip off its pulleys.

By varying the size of the two parts of the compound pulley H, the speed of the ma- 80
chine in its relation to the motor can be easily changed, in which case the portion of the pulley upon which the belt M passes may be larger than the portion of said pulley receiving the belt N, so as to drive the sewing-ma- 85
chine slower than it otherwise would be driven by the motor; or these connections can be reversed.

In some cases it may be most convenient to separate the two parts *h h'* of the pulley 90
H and to place them upon a shaft, as seen in Fig. 5, instead of making the pulleys in one piece. In any instance the axis of the double or compound pulley is in line with the axis on which the sewing-machine swings when 95
turned up.

I claim as my invention—

The combination, with the sewing-machine

and the pivots or hinges by which it is connected to the table, of a compound pulley the axis of which is in line with the said pivots, and two endless belts, one passing from the
5 compound pulley to the motive power and the other from the compound pulley to the pulley upon the driving-shaft of the sewing-machine, substantially as set forth.

Signed by me this 3d day of November, A.
D. 1885.

CHARLES T. JONES.

Witnesses:

W. P. CARPENTER,
F. C. LOCKE.