J. D. HOUSEMAN, Jr.

MACHINE FOR COILING HOOPS.

No. 174,818. Patented March 14, 1876.

Fig. 1.

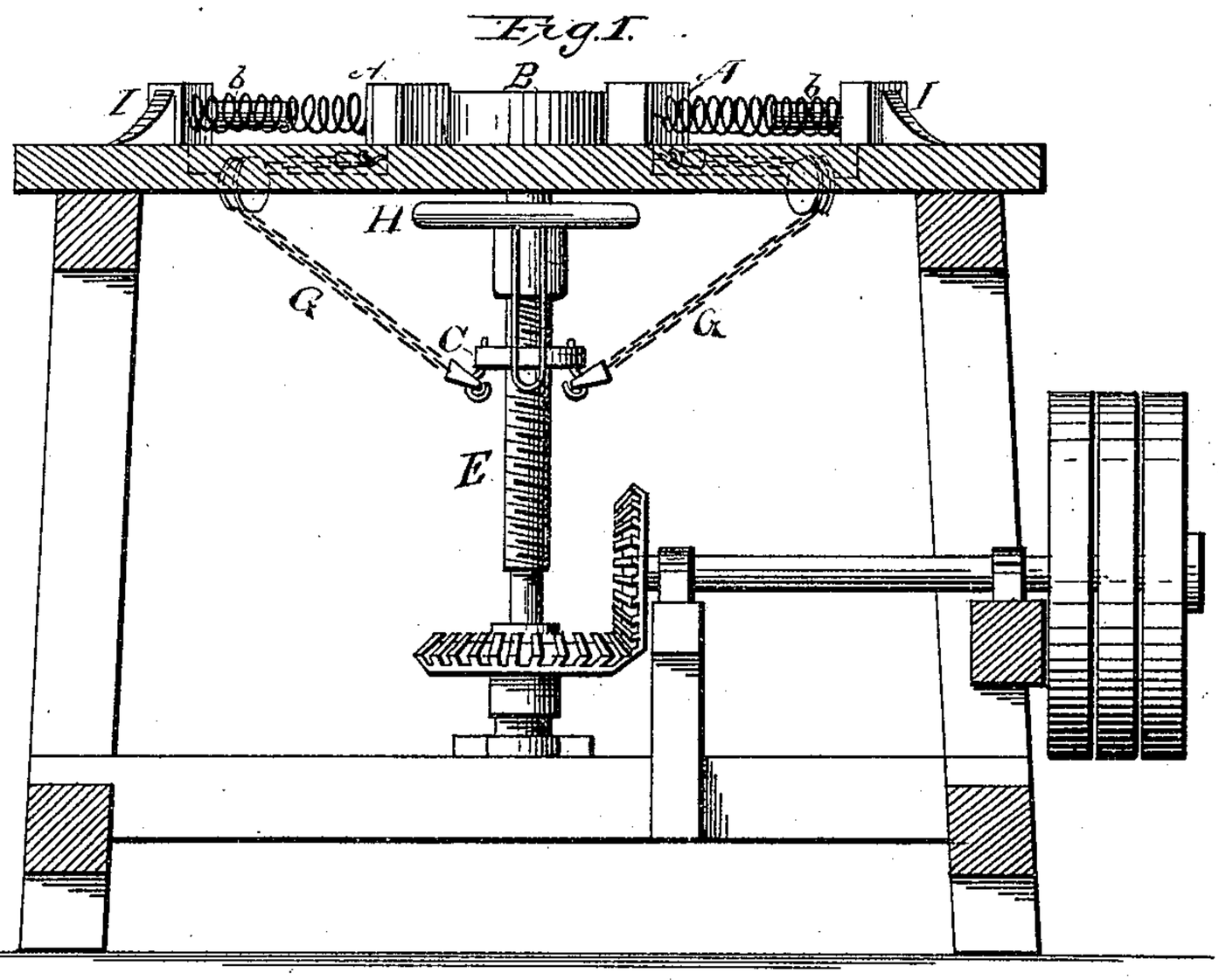
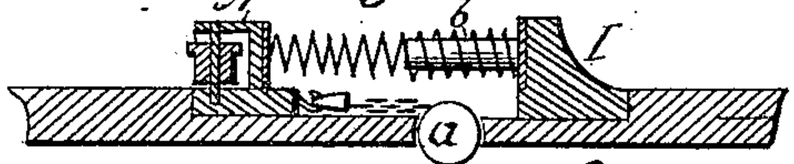


Fig. 2.

Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES D. HOUSEMAN, JR., OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN MACHINES FOR COILING HOOPS.

Specification forming part of Letters Patent No. **174,818**, dated March 14, 1876; application filed August 31, 1875.

To all whom it may concern:

Be it known that I, JAMES D. HOUSEMAN, Jr., of the city and county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Machines for Coiling Hoops for barrels and other cylindrical vessels, to be called "Hoop-Coiler;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of the specification, in which—

Figure 1 is a perspective view; Fig. 2, a top view; Fig. 3, a section.

In Fig. 1, A represents the uprights with their attached rollers and springs. E represents the spindle on which a pulley, B, to coil the hoops on, is placed. C is an iron collar, large enough to move up and down over the thread on the spindle E, and it is provided with five hooks on the bottom, to which the five chains G are attached, connecting at the other end to boxes F, (shown in Fig. 2.) H is a hand-wheel with a long hub, which has a thread cut on the inside to work on the thread upon the shaft E, for the purpose of holding the collar C in any position that may be required, and also of causing it to be forced down, thereby forcing the rollers shown in Fig. 3 from the coil, in order to take the pulley B (with the coil on) off of the spindle E, and also, by turning the wheel in a contrary way, allow the boxes to be returned to their places, as represented in Fig. 2.

Fig. 2 represents the top of the machine, showing the working of the five rollers contained in the boxes F. I are lugs bolted to the table, which the springs brace against, and to which is attached a thimble for the purpose of holding the springs in the proper place. The pulley B, on which the hoops are coiled, is provided with a slot cut in the rim, in which the end of the first hoop is inserted when starting the coil, in order to hold the hoops and prevent them from slipping. After two revolutions of the pulley, the end of the second hoop is placed between the remaining portion of the first hoop and the coil on the pulley, and so on until six hoops are coiled, at the end of which nails are used to secure the coil. H, C, and G, heretofore mentioned, are used to release the pressure of the rollers on the coil, in order to lift the pulley and coil off the spindle. Iron slides are attached to the top of the table, in which the boxes F slide to and from the pulley. K is an iron block bolted to the table. A slot is cut into the block for the purpose of guiding and keeping the hoops straight on the pulley.

Fig. 3 represents a sectional view of the springs, block, lug, roller, and thimble, and also showing the sheave on which the chain works. *a* is the sheave mortised into the table, for the chain to form its angle and roll upon. The pulley contained in box F may be constructed with a flange on top, for the purpose of keeping the hoop in its place on the pulley B. *b* is a thimble screwed to the lug I, on which the springs close.

Having thus described my invention, I claim, and desire to secure by Letters Patent, the following:

A machine for coiling hoops, having its several parts constructed, arranged, and operating substantially as set forth.

JAMES D. HOUSEMAN, JR.

Witnesses:

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