(No Model.)

L. N. BÉGIN.

ROTARY STEAM ENGINE.

No. 342,562. Patented May 25, 1886.

Fig. 1.

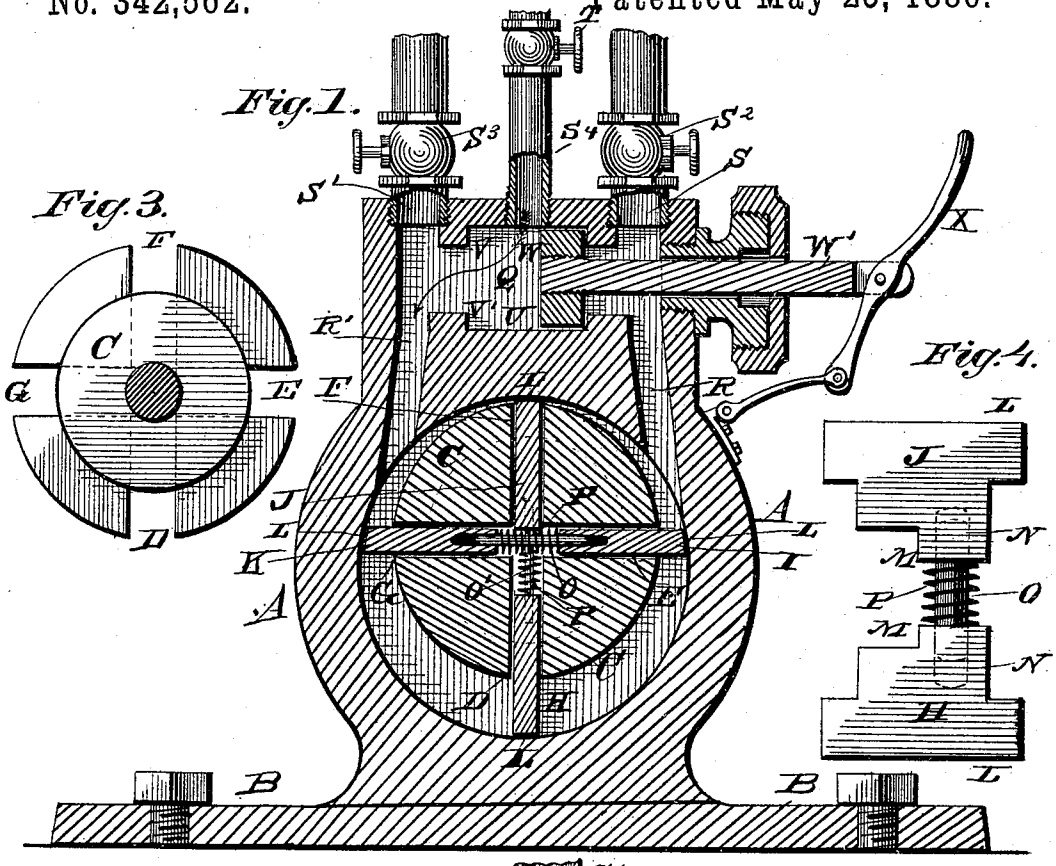
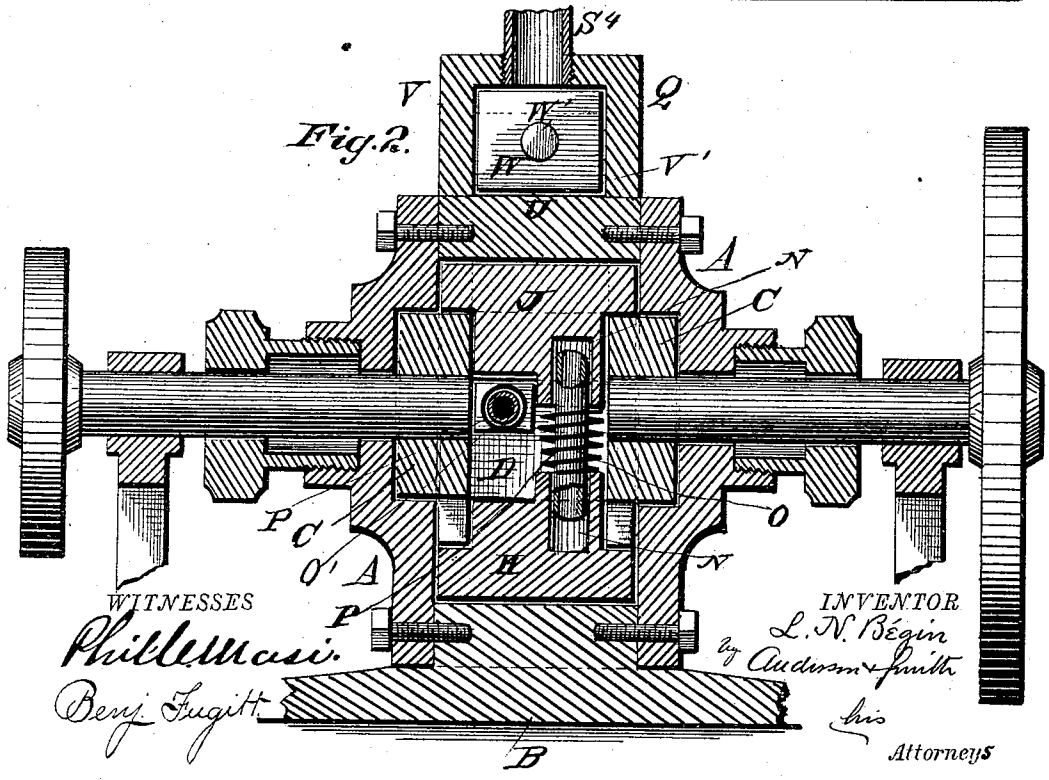


Fig. 3.

Fig. 4.

Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

LOUIS N. BÉGIN, OF FARIBAULT, MINNESOTA.

ROTARY STEAM-ENGINE.

SPECIFICATION forming part of Letters Patent No. 342,562, dated May 25, 1886.

Application filed April 1, 1886. Serial No. 197,417. (No model.)

To all whom it may concern:

Be it known that I, LOUIS N. BÉGIN, a citizen of the United States, residing at Faribault, in the county of Rice and State of Minnesota, have invented certain new and useful Improvements in Rotary Steam-Engines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a vertical transverse section. Fig. 2 is a vertical longitudinal section. Fig. 3 is a face view of the piston-head; and Fig. 4 is an enlarged view of one of the pistons.

This invention relates to rotary steam-engines; and it consists in the construction and novel combination of parts, as hereinafter set forth, and pointed out in the claim.

Referring by letter to the accompanying drawings, A designates the steam-cylinder, which is securely bolted to place on the bed-plate B at the place where it is desired to be operated.

C designates the piston-head, which is provided with four radial seats, D E F G, said seats being ninety degrees apart in said piston-head. Each of these radial seats is provided with a sliding piston. (Shown at H I J K.) The outer ends, at L, of each of said pistons are equal in length to the width of the piston-head. At M said pistons are reduced and provided with short hollow stems N, in which stems the ends of the short connecting-rods O O′ are seated. Each of said rods O O′ is encircled by a spiral spring, P, the ends of which rest on the adjacent opposite ends of the piston-sections and tend normally to force the pistons out against the inner periphery of the steam-cylinder.

Q is the steam-chest, which is located above the steam-cylinder and is connected therewith by the steam-ports R R′.

S S′ are the exhaust-ports, which are provided with stop-valves S^2 S^3, which may be alternately opened to permit the escape of steam, so as to drive the engine in either direction.

S^4 is the steam-pipe, which is provided with a steam-cock, T, by which to admit or shut off steam.

U is the valve-seat, which is located between the steam-ports, and is provided with shoulders or stops V V′ at opposite ends thereof, between which the slide-valve W may be reciprocated.

W′ is the valve-stem for the slide-valve.

X is the jointed hand-lever by which the slide-valve is shifted to permit steam from the steam-pipe S^4 to enter either port, as may be desired. The jointed hand-lever is fulcrumed to the cylinder-casing, and the valve-stem is properly packed to make its seat steam-tight.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the steam-cylinder having the alternating steam and exhaust ports, of the piston-head provided with radial seats having spring-pressed sliding pistons, the valved steam-pipe, the alternating valved exhaust-pipes, the slide-valve, and its operating-lever, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS N. BÉGIN.

Witnesses:
M. H. KEELEY,
S. C. DUNHAM.