

(No Model.)

I. LOJDA.
ROTARY ENGINE.

No. 265,332.

Patented Oct. 3, 1882.

Fig. II.

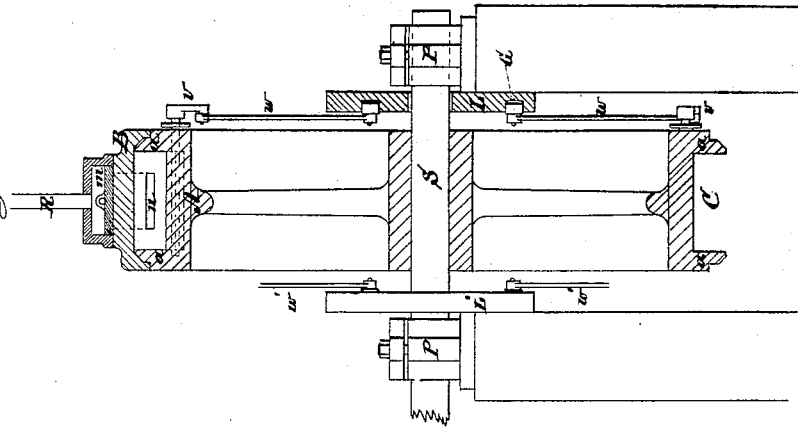
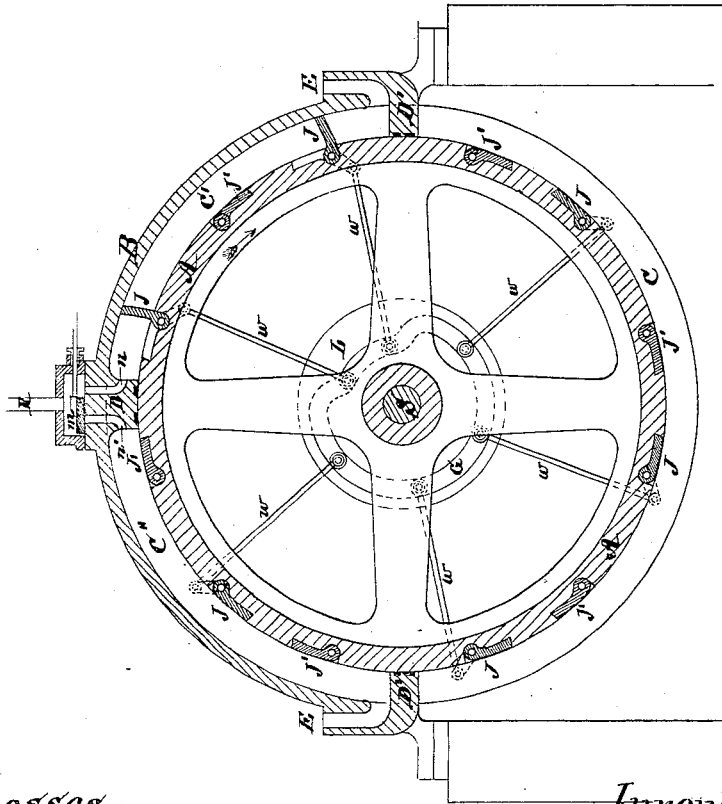


Fig. I.



Witnesses.

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ROTARY ENGINE.

SPECIFICATION forming part of Letters Patent No. 265,332, dated October 3, 1882.

Application filed January 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, IGNATZ LOJDA, a citizen of Austria, residing at New York, in the State of New York, have invented a new and Improved Rotary Engine, of which the following is a specification.

In the accompanying drawings, Figure I is a vertical section of my improved rotary engine. Fig. II is a cross-section of the same.

Similar letters represent similar parts.

A is a wheel fast to a shaft, S, running in suitable bearings, P. The circumference of this wheel is provided with projecting flanges *a a*, forming a deep recess, C. In the inner surface of this recess C hinged valves J and J' are arranged, the valves J opening in one direction and the valves J' opening in the opposite direction. The upper half of the periphery of this wheel is inclosed in a stationary casing, B, provided with a central abutment, D, at top, and two side abutments, D', at the end of the casing, near the center of the wheel, so as to form, with the recess C of the wheel, two tight chambers, C' and C'', one on each side of the abutment D. The abutments D and D' are provided with suitable packings at their ends and sides to make each chamber steam or air tight. In the central top abutment, D, passages *n n'* are arranged, one of them leading to the chamber C' and the other to the chamber C''. These passages *n n'* are covered by a suitable slide-valve, *m*, working in a valve-casing attached to the top of the case B, so as to direct the pressure entering the valve-casing through pipe R into the one or the other chamber, C' or C'', as desired. Near the lower end of the casing B, at each side, openings E are arranged for the exhaust or escape of the pressure, to which pipes may be attached, leading the same in any desired direction. The spindles of the valves J pass at one side through the wheel A, and are provided with levers *v*, connected through rods *w*, having suitable

rollers at their ends, with a groove, G, in a stationary wheel, L. This wheel L is attached to the support carrying the bearing P, and held stationary, and its groove G is made of such a shape that its action through the rods *w* and levers *v* will cause the valves J, while passing into the casing C', to open as soon as the valve has passed the abutment D, remain open while passing through the same, and close again just before arriving at or near the end abutment, D', and then remain closed till passing again the abutment D. When these valves J are open they fit tight and fill the internal area of the case C', and the pressure admitted through the passage *n* will act against the same, and thus turn the wheel A around in the direction shown by the arrow. When it is desired to have the wheel turn in the opposite direction the position of the valve *m* is changed, so as to admit the pressure through passage *n'* into the chamber C'', when the valves J', operated by a stationary cam, L', and the rods *w'*, will be made to open similarly as above described.

What I claim as my invention, and desire to secure by Letters Patent, is—

A wheel, A, with projecting flanges *a a* and hinged valves J J', opening in opposite directions, and arranged to operate through levers *v* or *v'*, rods *w* or *w'*, and stationary wheels having cam-shaped grooves G or G', substantially in the manner described, in combination with a stationary casing, B, inclosing the upper half of said wheel A, and provided with abutments D and D', and passages *n n'* in the central abutment, D, closed by a suitable valve, the whole being arranged to operate substantially in the manner and for the purpose herein specified.

IGNATZ LOJDA.

Witnesses:

HENRY E. ROEDER,
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