

H. CHAVOUS.
Rotary-Engines.

No. 151,472.

Patented June 2, 1874.

Fig. II.

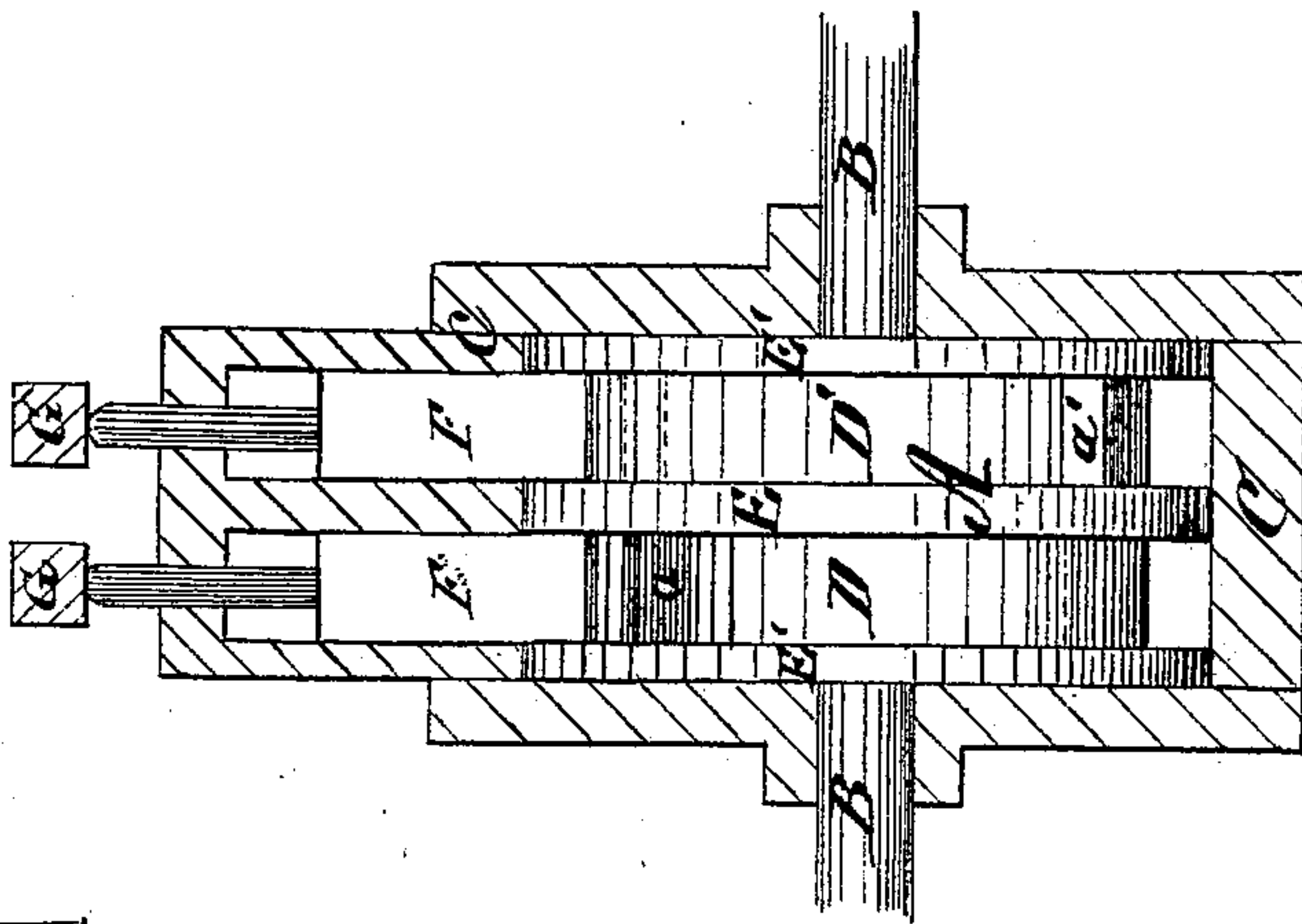
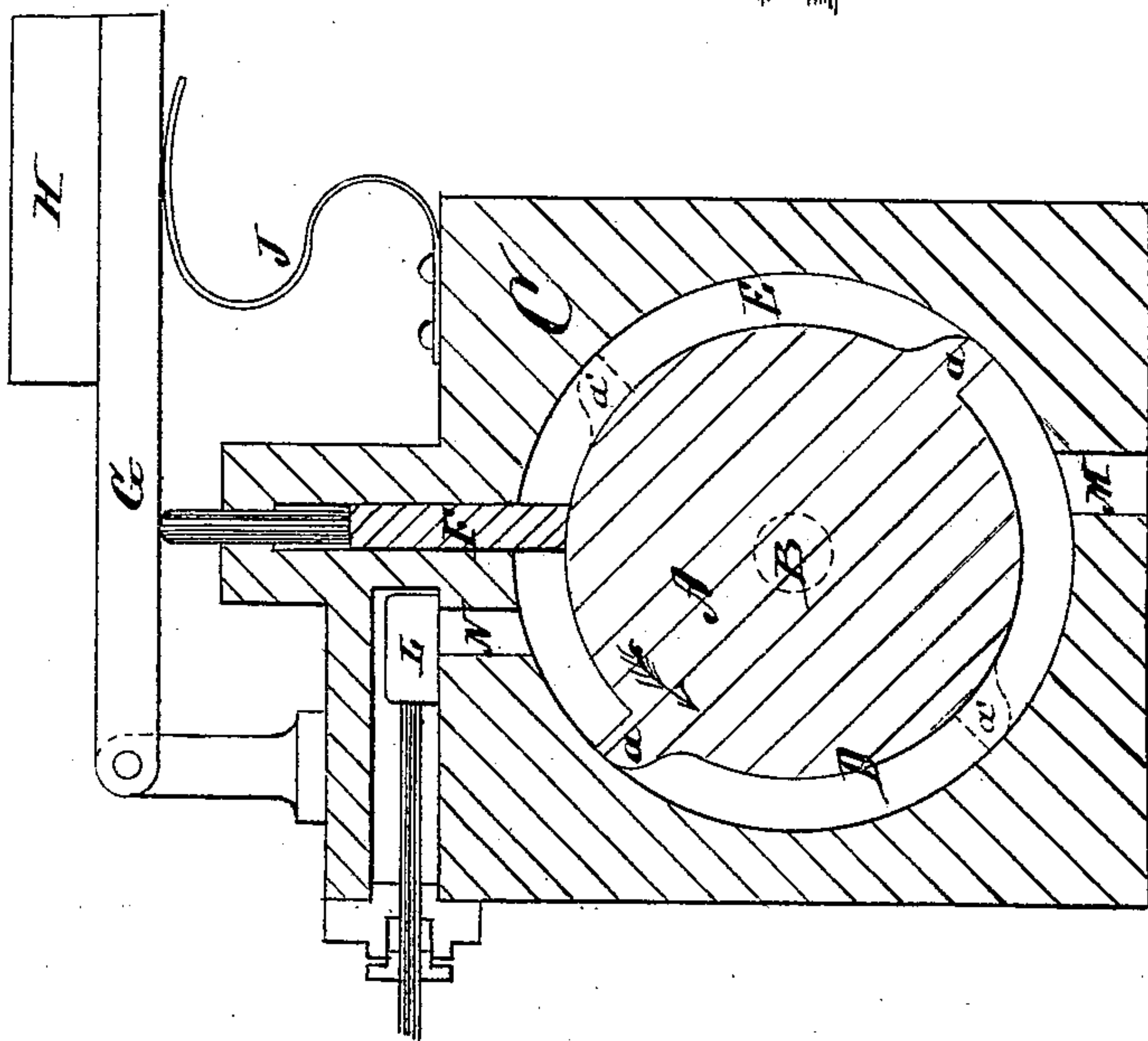


Fig. I.



Witnesses.
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UNITED STATES PATENT OFFICE.

HILLRY CHAVOUS, OF UNION CITY, INDIANA, ASSIGNOR TO HIMSELF AND
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IMPROVEMENT IN ROTARY ENGINES.

Specification forming part of Letters Patent No. 151,472, dated June 2, 1874; application filed
December 17, 1873.

To all whom it may concern:

Be it known that I, HILLRY CHAVOUS, of Union City, Randolph county, State of Indiana, have invented a new and useful Improvement in Rotary Engines, of which the following is a specification:

In the accompanying drawing, Figure I represents a longitudinal section of a rotary engine embodying my invention. Fig. II is a cross-section of the same.

A is the revolving drum, attached to a shaft, B, turning in suitable bearings. C is the casing. The drum A has two grooves or cavities, D D', around its circumference, divided by the partition-ring E, and each cavity is divided in two parts by the cross-pieces *a a* and *a' a'*. The outer surfaces of the cross-pieces *a a' a' a'*, ring E, and outer rings E' E' are provided with suitable packing to work steam-tight against the inner surface of the casing C. Through the casing C slides F F are arranged, fitting steam-tight into the recesses or grooves D D' in the drum A, and acted upon by levers G G, on one end of which a heavy weight, H, either solid or hollow, is attached, and so arranged as to press the slide F tight upon the surface of the grooves D or D'. Below the weight H a spring, J, is arranged, attached to the outside of the casing C, to prevent any thumping when the levers fall down. One side of the cross-pieces *a* and *a'* is made straight

and square with the bottom surface of the grooves D or D', while the other side is beveled or inclined gradually downward to said surface, similar to a cam. N N are the steam-ports, closed by suitable valves or slides L L, operated by cams or eccentrics from the shaft B. M M are the exhaust-openings. Steam being admitted through the port N, the same will act against the square surface of the cross-piece *a*, the slide F acting as an abutment, and cause, thereby, the drum A to revolve in the direction indicated by the arrow. When the opposite cross-piece *a* comes near the slide F the latter will gradually be forced upward through the inclined surface on said cross-piece, and thus allow said cross-piece to pass under the same, when the weighted lever G will again force the slide downward upon the surface in the groove.

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

The drum A, having recesses or grooves D D', divided by cross-pieces *a a'*, in combination with slides F, weighted levers G, and spring J, operating substantially in the manner and for the purpose set forth.

HILLRY CHAVOUS.

Witnesses:

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