L. Peter,

Rotary Steam Engine.

No. 19,100. Patented Jan. 12, 1858.

Fig. 1.

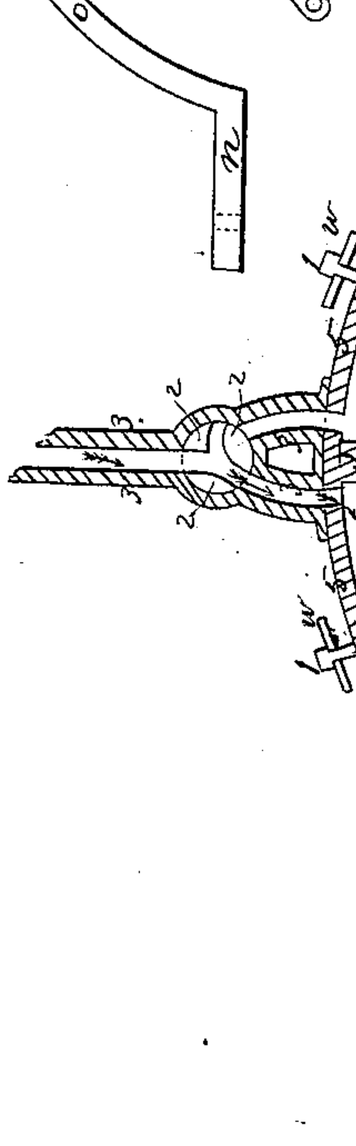


Fig. 2.

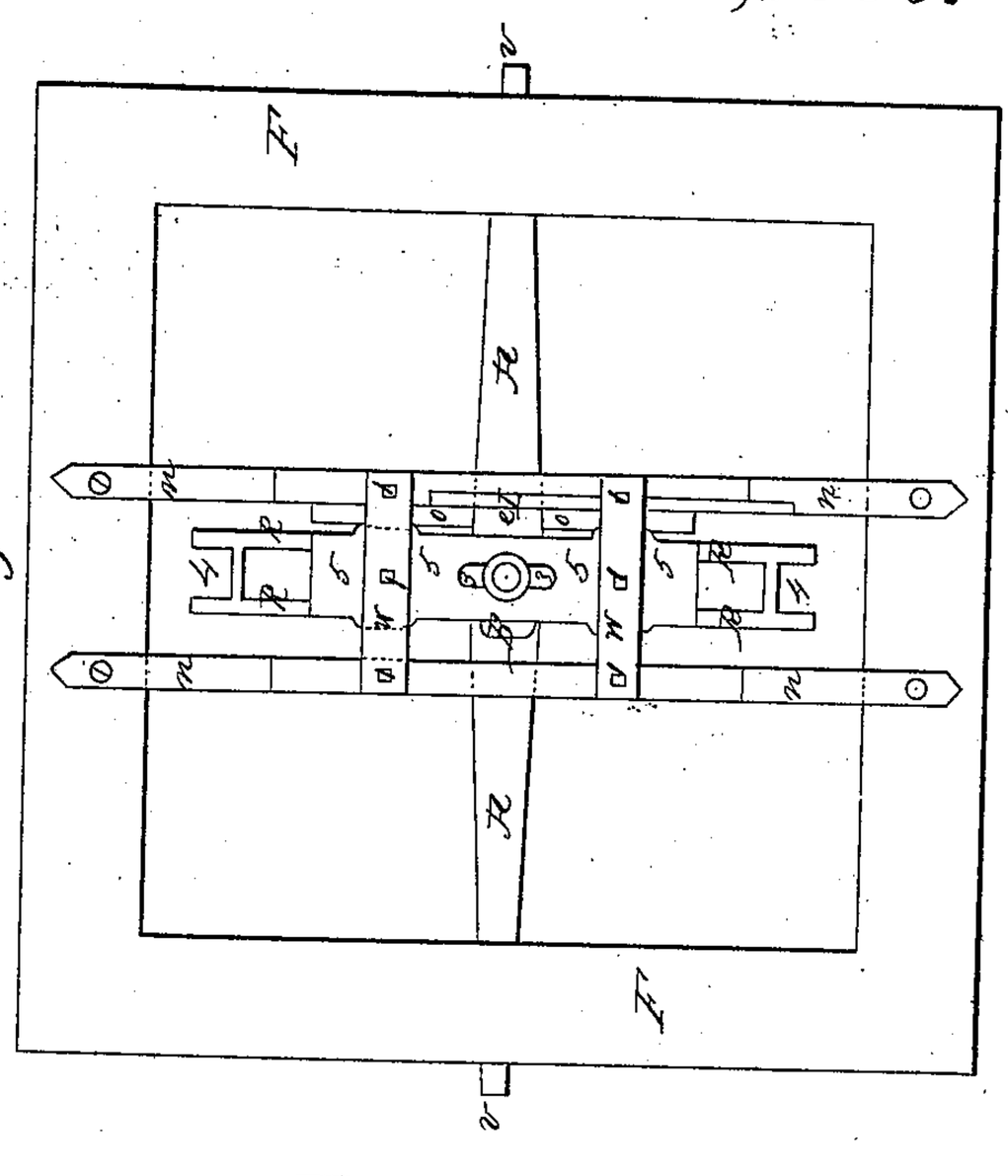


Fig. 3

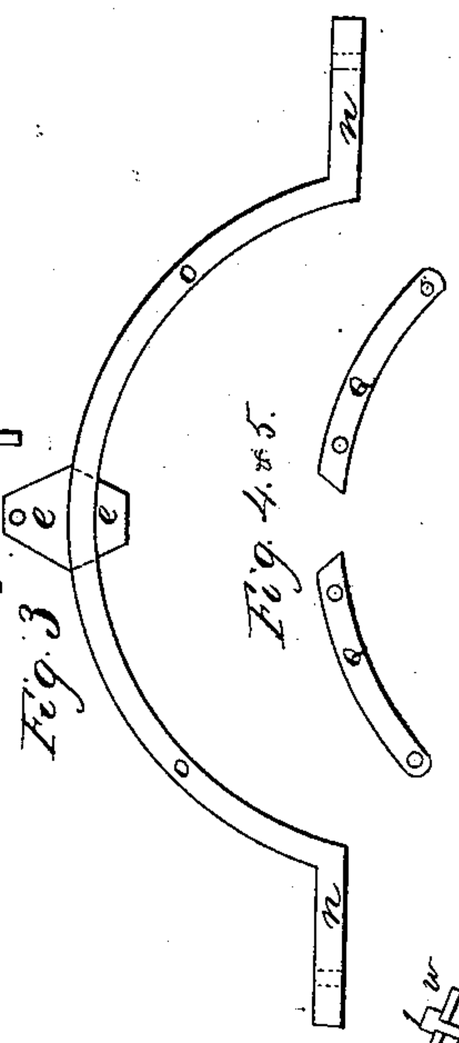


Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

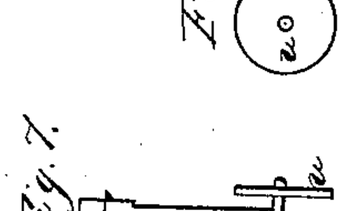
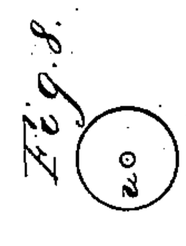


Fig. 8.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEWIS PETER, OF GNADENHUTTEN, OHIO.

ROTARY STEAM-ENGINE.

Specification of Letters Patent No. 19,100, dated January 12, 1858.

To all whom it may concern:

Be it known that I, LEWIS PETER, of Gnadenhutten, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Rotary Engines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, similar letters referring to similar parts.

The nature of my invention consists in movable inclines and springs, or their equivalents to operate upon the sliding pistons of the engine.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, Figure 1, is a side and cut view combined and represents the engine in all its parts. Fig. 2, is a top view of the engine and frame. Fig. 3, represents the arch used in holding the cap of the steam chest in its place, and also used as the support of the pedestal or fulcrum of the lever. Figs. 4 and 5, represent the movable inclines. Fig. 6, represents the lever and its connecting rods. Fig. 7, represents one of the sliding heads as shown in the recess of the wheel in Fig. 1. Fig. 8, represents one of the wheels which are used as friction rollers for the sliding heads.

F, is the frame used for the purpose of supporting the engine.

M, are the legs of the frame.

A, is the axle or shaft.

B, are the arms of the wheel.

R, is the rim of the wheel.

4, is the recess in the rim.

T, are the sliding heads, these sliding heads are fitted to chambers made in the rim of the wheel, (see Fig. 1,) and are thrown back into the chambers by means of the movable inclines O, and they are thrown out and into recess 4, by means of a coil spring which is placed around each piston of these sliding heads. On the end of each piston is placed a small wheel or friction roller. These wheels or rollers pass on the underside of the movable inclines O, the inclines O being arranged so as to draw into the chambers the sliding heads in order that they may pass under the butment J.

N, are the arches used for the purpose of holding the cap 5, in its proper place by means of the straps *w*, and bolts 1, (see Fig. 2.) The bolts in the center of the straps are used for holding the cap 5, down. On the under side of the cap 5 is placed the butment J. The cap, butment and recess in the rim of the wheel (see Fig. 1,) form the open and double steam chest. One of the arches, N, is used for supporting the fulcrum or pedestal of lever L, and also for supporting the movable inclines O.

S, are rods which connect lever L with the movable inclines O.

i, is a rim or flange secured to the arms B, and used for guiding the pistons of the sliding heads. This flange also serves as a base for the springs. The flange shown by dotted lines is used for keeping the wheels or rollers on the pistons in their true position.

e, is the fulcrum or pedestal of lever L.

3, is the steam pipe. This pipe is forked so as to convey the steam on each side of the butment J.

2, is the steam valve, and has three openings. The red arrows show the course of the steam.

V, are counter or set-screws, (see Fig. 2). In Fig. 1, the engine is represented as running toward the left hand. To reverse the motion change the position of the steam valve 2, and lever L. The force or power of the engine is gained by the steam acting against the butment J, and the sliding heads T.

The advantages of my invention are as follows, viz—simplicity in its construction, its cheapness, its power and its durability.

Having thus described the nature, construction, operation, and advantages of my improvement, what I claim as new and desire to secure by Letters Patent of the United States is,

The movable inclines (O) and springs, or their equivalents to operate upon the sliding pistons of the engine, as herein described and for the purpose set forth.

LEWIS PETER.

Attest:

CHARLES B. PETER,

THOS. B. THOMPSON.