

No. 651,616.

Patented June 12, 1900.

H. THORMEYER.
ROTARY STEAM ENGINE.

(Application filed Oct. 20, 1899.)

(No Model.)

Fig. 2

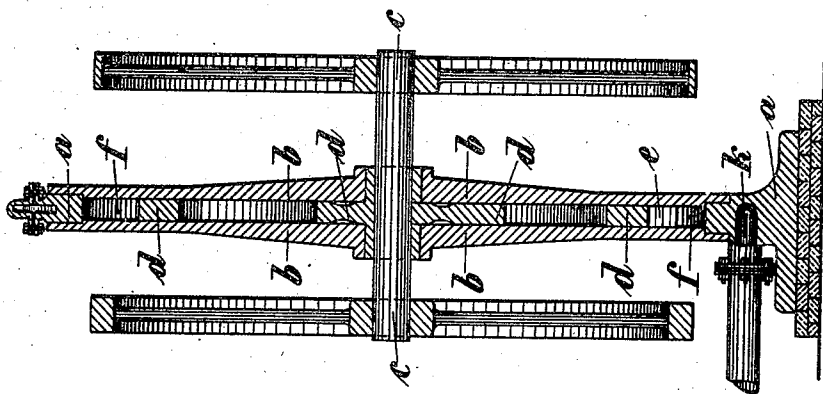
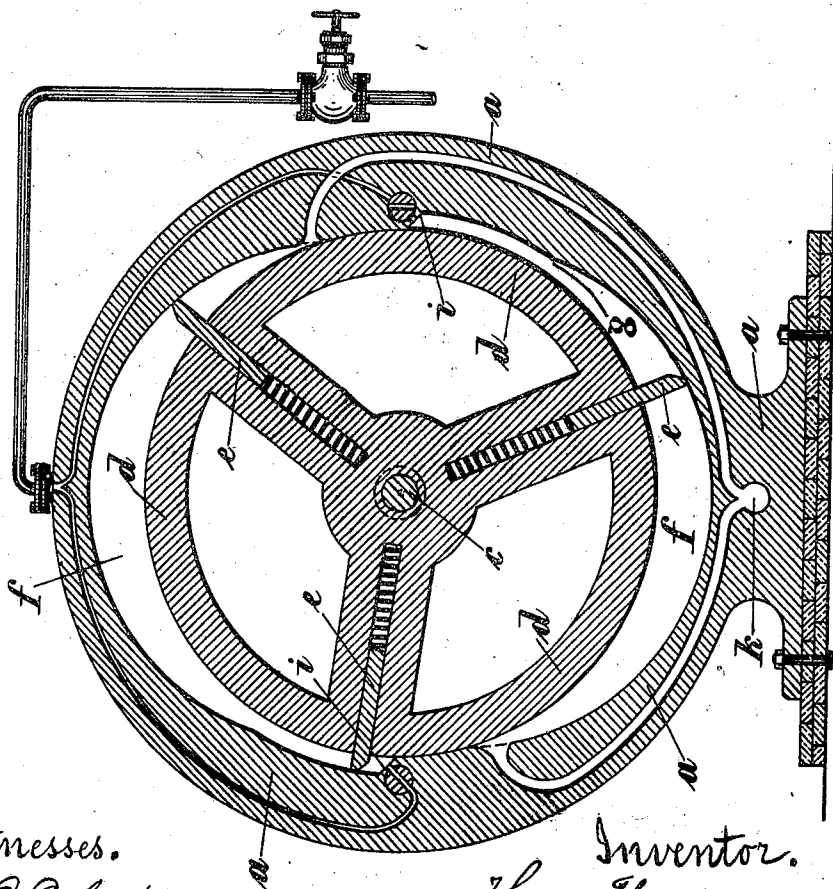


Fig. 1



Witnesses.

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HANS THORMEYER, OF BINGARTESMÜHLE, GERMANY.

ROTARY STEAM-ENGINE.

SPECIFICATION forming part of Letters Patent No. 651,616, dated June 12, 1900.

Application filed October 20, 1899. Serial No. 734,155. (No model.)

To all whom it may concern:

Be it known that I, HANS THORMEYER, a subject of the King of Prussia, Emperor of Germany, residing at Bingartesmühle, near Hiersfeld, Hesse, Germany, have invented a new and useful Rotary Steam Engine, of which the following is a specification.

My invention relates to improvements in rotatory steam-engines in which the pressure-spaces are formed in such a manner that the slide-wings offer the entering steam a larger surface than in devices hitherto made and in which the slide-wings after closing the entrance-port through which the steam enters are pushed farther outward toward the periphery, so as to offer a still larger surface for better utilizing the expansion of the steam.

In the accompanying drawings, Figure 1 shows in section a side elevation of my improved engine; and Fig. 2 is an end elevation thereof, also in vertical section.

Referring to the drawings, in an annular casing *a*, closed at both sides by the covers or end pieces *b*, is revolvably mounted a shaft *c*, on which is secured the disk *d*, carrying the slide-wings *e*. These wings are pressed outward by a spiral spring or the like against the outer wall of the casing, so as to follow the form of the pressure-spaces *f*. Those parts of the spaces (or steamways) which are under high pressure and in which the filling takes place are parallel with the outer surface of the disk *d*.

It will be seen that from the inlet-port *i* to the point *g* there will be no outward movement of the wings *e*, as the chamber remains the same in size. The moment the wing reaches *g* the steam is automatically cut off

from *i*, and as it continues to expand as the chamber *f* enlarges so does the surface of the wings *e* acted on by such expanding steam also enlarge. The outlet-ports connecting the steam-chamber with the exhaust *k* are of large size comparatively, as is also the passage *k* itself, whereby almost instantaneous clearance of the exhaust-steam is had and back pressure prevented.

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

In a rotary steam-engine, the combination with a casing forming an inclosed chamber, of a disk or drum, revolvably mounted in such chamber, and carrying slide-wings *e*, means for keeping the slide-wings *e* pressed outward against the wall of the chamber, two inlet-ports *i*, *i*, a steam-passage leading to each of said ports *i*, a valve located in each of said passages, an exhaust-outlet port adjacent to each of the inlet-ports, the wall-spaces from the outlets to the next inlet abutting against the periphery of the disk or drum, so as to leave no steam-space, and steam-spaces between the drum and casing extending from each of the inlet-ports to the next exhaust-port having the first portion from *i* to *g* of the same size throughout, and the portion from *g* to the next exhaust-port first gradually enlarged, and then gradually contracted, substantially as shown and described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

HANS THORMEYER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.