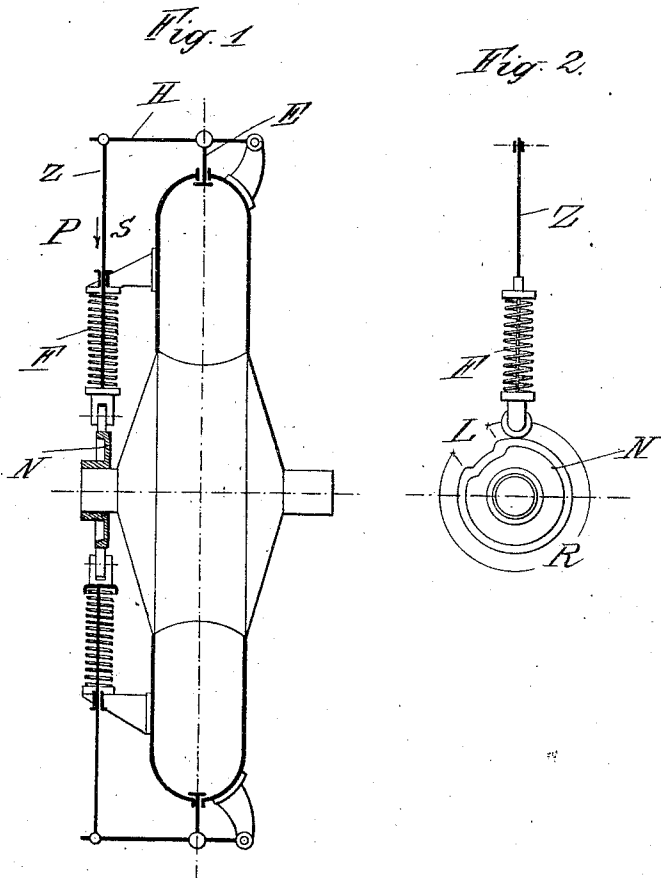


H. WINDHOFF.
ROTARY MOTOR.
APPLICATION FILED JULY 27, 1911.

1,055,005.

Patented Mar. 4, 1913.



Witnesses:

John C. Sanders
Leon Spring

Inventor:

Hans Windhoff
BY *Wm. M. Kite*
ATTY.

BEST AVAILABLE COPY

UNITED STATES PATENT OFFICE.

HANS WINDHOFF, OF BERLIN, GERMANY.

ROTARY MOTOR.

1,055,005.

Specification of Letters Patent.

Patented Mar. 4, 1913.

Application filed July 27, 1911. Serial No. 640,783.

To all whom it may concern:

Be it known that I, HANS WINDHOFF, engineer, a citizen of the Kingdom of Prussia, residing at Bennigsenstrasse 21, Berlin-Schöneberg, Germany, have invented a certain new and useful Improvement in Rotary Motors, of which the following is a specification.

It is one of the principal disadvantages of combustion-motors with rotating cylinders that if the motor is suddenly released without shutting off the supply of fuel it will suddenly attain an excessively rapid action, causing such wear and tear of the parts in consequence of the high centrifugal strain that the motor is in danger of bursting.

The present invention is intended to prevent this abnormally rapid action of the rotating cylinder and remove the danger of the motor bursting.

In the accompanying drawings Figure 1 is a vertical sectional view of the motor, and Fig. 2 is a part view in end elevation.

Referring to the drawings the inlet-valve E is actuated by the connecting-member Z engaging the cam-disk N and connected with the lever H in such a manner that the free end is pressed against the cam-disk N by means of the spring F. The inlet-valve consequently remains closed so long as the end of the connecting member Z moves along the edge R of the gap-disk N and can only be opened when the spring presses the connecting member downward into the gap L. The pressure p of the spring is counteracted by the centrifugal action of the connecting member. If this increases with the increasing number of revolutions and finally becomes equal to the pressure of the spring, the latter will no longer be able to hold the connecting member down in the gap and the inlet valve will remain closed.

The supply of gas being throttled by this means the speed of revolution of the rotating cylinder is reduced, the centrifugal action of the connecting member being at the same time decreased so that the spring presses the connection member down again into the gap, thus actuating the inlet-valve. The maximum limit of revolution of the rotating cylinder can of course be regulated by adjusting the spring to the required pressure.

What I claim is:—

In a rotary motor, in combination, a fixed shaft, a cylinder rotatably mounted thereon, an inlet valve for said cylinder, a cam disk mounted on said shaft and provided with a depressed portion, a valve rod for actuating said valve, said rod being positioned radially with respect to said shaft and having its free end engaging said cam disk, said parts being so arranged that when the free end of said rod engages the depressed portion of said disk, said valve will be opened, and when said rod engages the remaining portion of said disk, said valve will be closed, and a spring normally urging said valve rod into engagement with said cam disk, the tension of said spring being so adjusted that when the speed of the motor attains a predetermined value centrifugal force will counteract the tension of the spring, whereby the valve will be held closed during the time that the free end of the rod passes over the depressed portion of said disk.

In testimony whereof I have hereto affixed my signature in presence of two witnesses.

HANS WINDHOFF.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.