

(No Model.)

A. W. JACKSON.

STEAM ENGINE.

No. 285,271.

Patented Sept. 18, 1883.

Fig. 1.

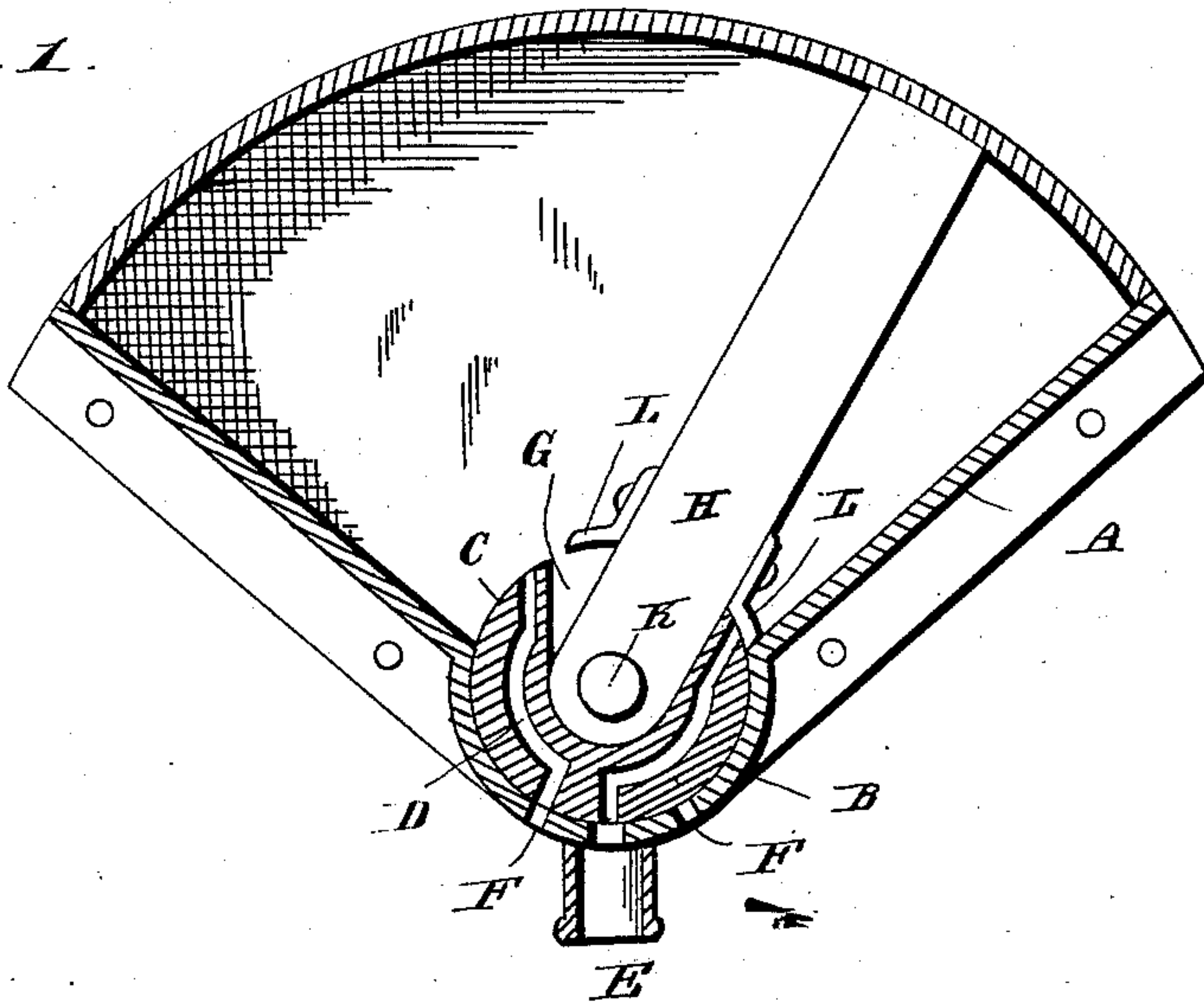
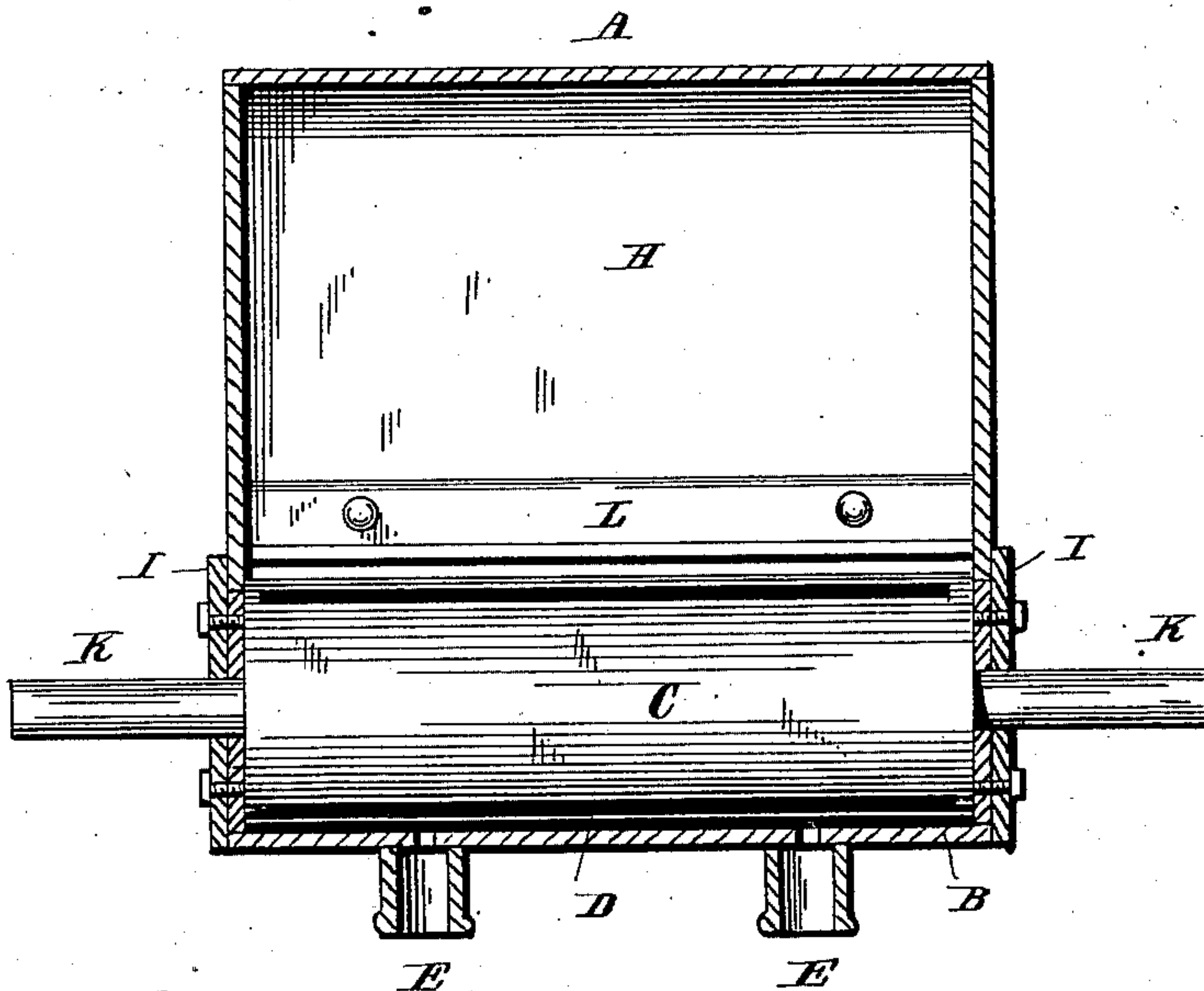


Fig. 2.



WITNESSES

Edwin L. Jewell
J. J. McCarthy.

INVENTOR

Amariah W. Jackson
By C. A. Alexander
Attorney

UNITED STATES PATENT OFFICE.

AMARIAH W. JACKSON, OF CHICAGO, ILLINOIS.

STEAM-ENGINE.

SPECIFICATION forming part of Letters Patent No. 285,271, dated September 18, 1883.

Application filed July 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, AMARIAH W. JACKSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Rotary Steam-Engines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain improvements in steam-engines; and it has for its objects to provide a simple, durable, cheap, and efficient engine, as will be more fully hereinafter specified.

15 My invention is an improvement upon the invention set forth in Letters Patent granted to A. W. Jackson and C. S. White, May 1, 1883, No. 276,970. These objects I attain by the means illustrated in the accompanying drawings, in which—

20 Figure 1 represents a transverse vertical section of my improved engine, and Fig. 2 a longitudinal vertical section of the same.

25 The letter A indicates a segmental shell, having a longitudinal semicircular recess or valve-seat, B, at its bottom, in which is located and adapted to oscillate a valve, C, which is provided with curved ports D at each side, which are adapted to connect alternately with the induction-ports E and eduction-ports F at each side thereof. The shell is provided with suitable heads bolted thereto in such manner that the joints will be steam-tight. The valve has a longitudinal recess, G, in which is located and adapted to oscillate a piston, H, which travels in the shell, as will be perceived, the valve also having a slight oscillating motion in its seat, which takes place at the end of each stroke of the piston, for the purpose more fully here-

inafter specified. The casting is provided with plates I, bolted to each end, in which are formed bearings for the projecting journals K, which may be supplied with any convenient mechanism for transmitting power to machinery. To the piston, at each side, are secured curved plates L, which work alternately over the ends of the ports in the valve, and open and close the same, so as to admit and discharge the steam to and from each side of the piston alternately, and thus give motion to the same. 40 45 50 55 For instance, when the steam enters the induction-port, the parts being in position shown in Fig. 1 will create a pressure on the under side of the plate L, at the right, giving the piston its initial movement, so as to uncover the port and admit steam to the right side of the piston. When the piston has finished its stroke, the valve is moved so as to reverse the action.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, in an oscillating engine, of the segmental closed casing, having a longitudinal semi-cylindrical casing or valve-seat and suitable induction and eduction ports, an oscillating valve working in said seat, provided with ports at each side, and with a longitudinal recess, and an oscillating piston provided with curved plates adapted to cover and uncover the upper ends of said ports alternately, the whole arranged to operate substantially as specified. 60 65 70 75

In testimony whereof I affix my signature in presence of two witnesses.

AMARIAH W. JACKSON.

Witnesses:

FREDERICK A. HERRING,
WILLIE McMULLEN.