T. Scott.

Steam Balanced Valve.

No. 20,094. Patented Apr. 27, 1858.

Fig. 1

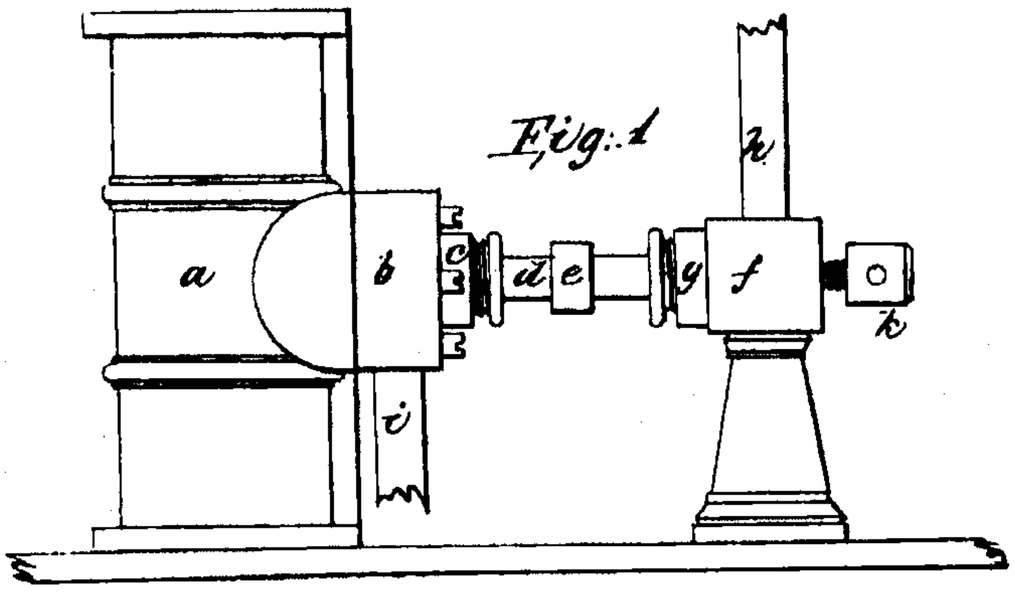


Fig. 2

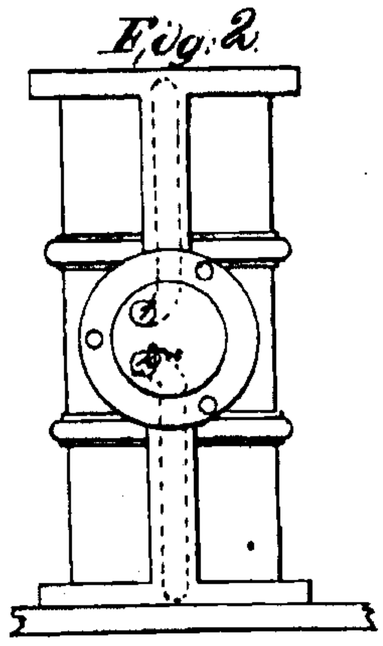


Fig. 3

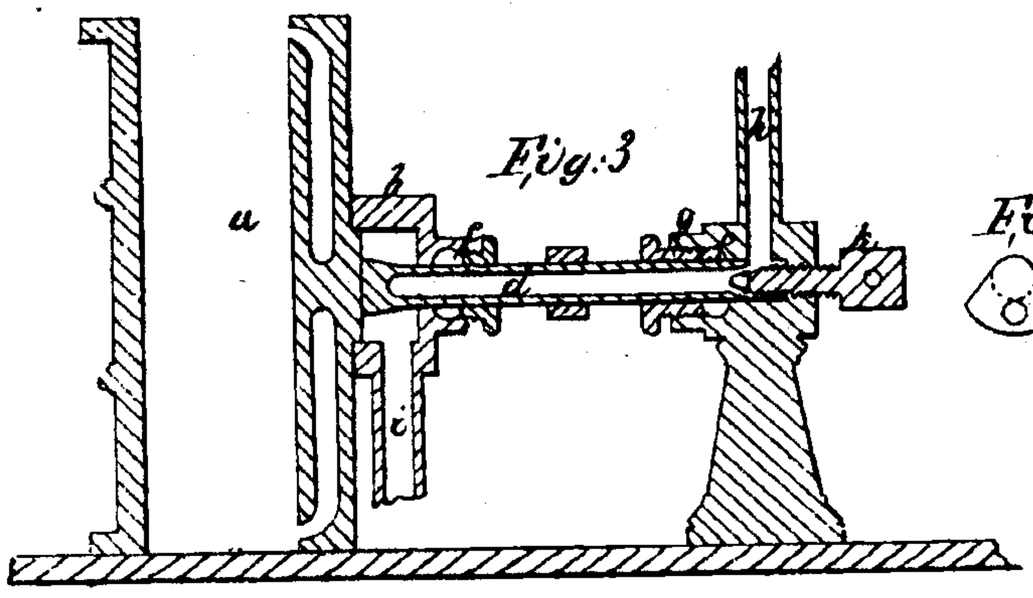


Fig. 4

Fig. 5

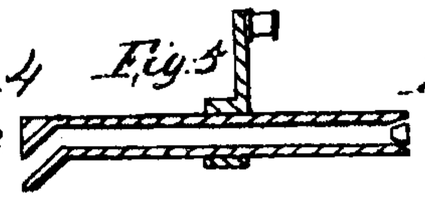


Fig. 6

Fig. 7.

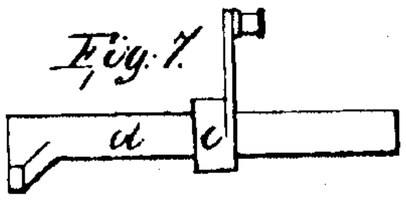
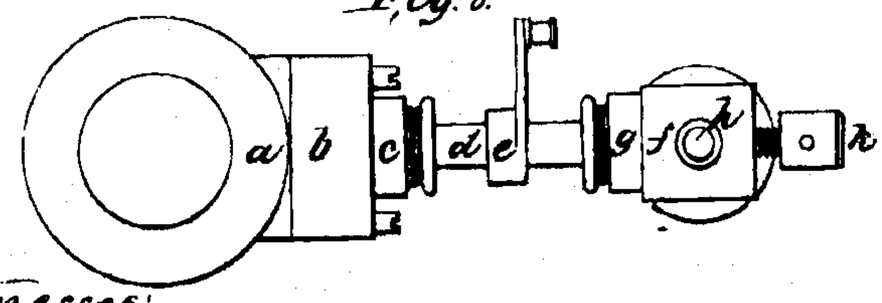
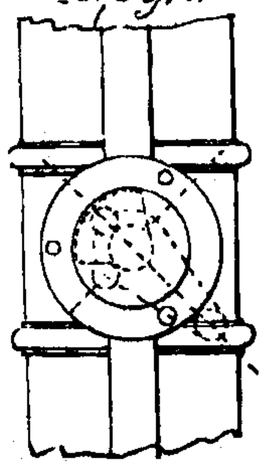


Fig. 8.



Witnesses:
Wm. L. Baytand
G. W. Chapman.

Fig. 9.



Inventor
Thos. Scott

UNITED STATES PATENT OFFICE.

THOMAS SCOTT, OF SAN FRANCISCO, CALIFORNIA.

STEAM-VALVE.

Specification of Letters Patent No. 20,094, dated April 27, 1858.

To all whom it may concern:

Be it known that I, THOMAS SCOTT, of San Francisco, in the county of San Francisco, in the State of California, have invented a new and Improved Slide-Valve for Steam-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.

The nature of my invention consists in constructing the valve in such a way that the steam is admitted into the cylinder from the inside of the valve and through it, the valve acting as its own rock shaft, and the steam exhausted from the cylinder by simply exposing the openings alternately.

To enable others to make and use my invention I will proceed to described its construction and operation.

a in the accompanying drawing is the cylinder having a circular face with two openings 1 and 2 as shown on Figure 2 communicating with the top and bottom of the cylinder respectively; *b*, the exhaust steam chest furnished with a stuffing box *c*, through which the valve *d* projects; *e*, a wiper keyed fast on the valve; *f*, a column to support the steam pipe *h*; *g*, a stuffing box on the side of the column through which the end of the valve passes; *i*, the exhaust steam pipe, and *k* a set screw to keep the valve in its place.

Fig. 3 is a section of the whole. Fig. 4 the face of valve with one opening 3. Fig. 5 a section of the valve with wiper attached. Fig. 6 the end of valve showing provision for set screw *k*. Fig. 7 a full view of valve and wiper and Fig. 8 a plan of the whole.

The valve is worked in the usual manner by an eccentric or its equivalent or made to revolve by gearing or its equivalent.

When the wiper *e* is depressed as shown by the dotted lines Fig. 9 the steam entering by the pipe *h* passes through the valve and enters the cylinder by the opening 1 while the opening 2 is exposed and the exhaust steam passes away through the pipe *i*. And again when the wiper is raised the steam enters the cylinder by the opening 2 while the opening 1 is exposed and the exhaust passes away as before.

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

The reciprocating or revolving valve substantially as herein described, whereby the steam enters at or near the axial center of the valve, and is thence conveyed obliquely through the valve to the cylinder, the valve and hollow stem united and acting as a rock shaft or center.

THOMAS SCOTT.

Witnesses:

VAN L. EASTLAND,

G. W. CHAPMAN.