

E. C. Bacon,
Reciprocating Steam Engine,
No. 84,249, Patented Nov. 24, 1868.

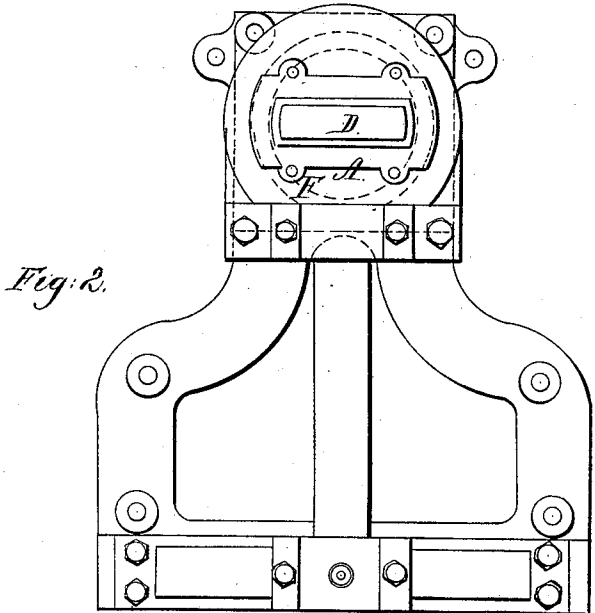


Fig. 2.

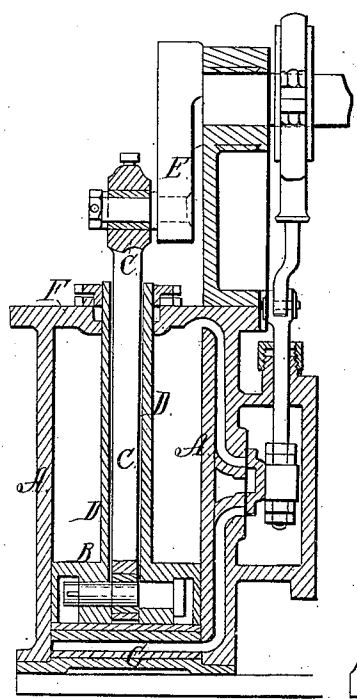


Fig. 3.

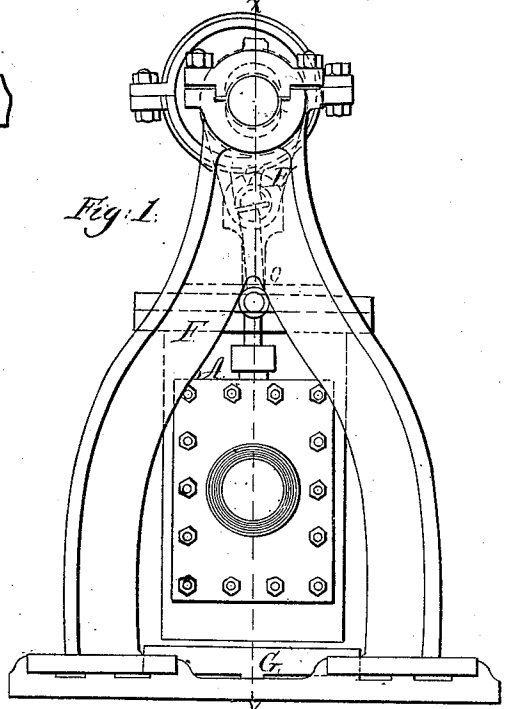


Fig. 1.

Witnesses:
G. M. [Signature]
F. H. Brown.

Inventor:
E. C. Bacon per
his Atty
W. W. [Signature]

United States Patent Office.

EARLE C. BACON, OF NEW YORK, N. Y.

Letters Patent No. 84,249, dated November 24, 1868.

IMPROVEMENT IN STEAM-ENGINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents shall come:

Be it known that I, EARLE C. BACON, of the city, county, and State of New York, have invented a certain new and useful "Improvement in Steam-Engines;" and that the following description, taken in connection with the accompanying plate of drawings, forms a full and complete specification of the same, wherein I have set forth the nature and principles of my said improvement, whereby my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

The present invention relates to that class of steam-engines known as, and commonly called, "trunk-engines;" and the invention consists in making the trunk oblong in cross-section, or, in other words, of a greater diameter in the direction in which the piston-rod swings through the trunk, as it is moved forward and backward in the piston-cylinder, so as to accommodate such movement of the piston-rod, than in the other or opposite direction, whereby the area of the piston-head exposed to the pressure of the steam is greatly increased, and consequently a much more effective action and power obtained.

In the accompanying plate of drawings my "improvement in steam-engines" is illustrated—

Figure 1 being an end elevation of an engine constructed according thereto;

Figure 2, a plan view of the piston-cylinder, showing the open and outer end of the hollow trunk; and

Figure 3, a central vertical section, taken in the plane of the line $x\ x$, fig. 1.

A, in the drawings, represents a piston-cylinder of a steam-engine, to which B is the piston-head, having rod C.

This rod C is hinged to the piston-rod B, and from it is extended through the hollow trunk D, out of the cylinder A, to the crank-arm E, on which it is hung in any suitable manner. The hollow trunk D is of a length sufficient to extend through the entire length of the cylinder, and out of the same, at its head, F, when the piston is at the extreme length of its stroke at the opposite head, G, and in transverse section is made oblong, as shown in fig. 2, more particularly for the purpose of exposing greater surface or area of the piston-head to the steam-pressure, while at the same time the piston-rod is accommodated in its swinging motion, as it is carried from one side to the other by the revolution of the crank-arm.

Having thus described my invention,

What I claim, and desire to have secured to me by Letters Patent, is—

The construction of the oblong hollow trunk D, and its arrangement, with reference to the piston-head B, cylinder A, and cylinder-head F, substantially as described.

The above specification of my invention signed by me, this day of February, A. D. 1868.

EARLE C. BACON.

Witnesses:

ALBERT W. BROWN,
H. L. WATTENBERG.