

J. SCOTT.

Improvement in Reciprocating-Engines.

No. 133,260.

Patented Nov. 19, 1872.

Fig. 1

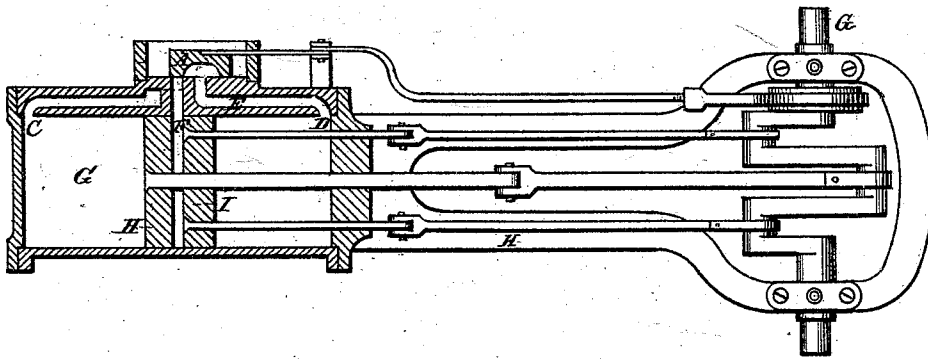


Fig. 2

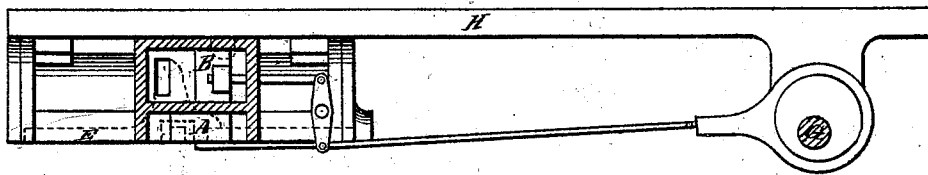
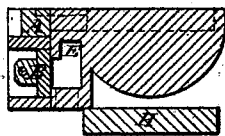


Fig. 3



Witnesses
Thomas W Clapham
Henry Watson

Inventor
John Scott

UNITED STATES PATENT OFFICE.

JOHN SCOTT, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN RECIPROCATING ENGINES.

Specification forming part of Letters Patent No. **133,260**, dated November 19, 1872.

To all whom it may concern:

Be it known that I, JOHN SCOTT, of Brooklyn, Kings county, State of New York, have invented a new and useful Improvement in Steam-Engines, which I declare to be fully described and set forth in the following specification and accompanying drawing, in which—

Figure 1 is a horizontal section of the engine. Fig. 2 is a longitudinal section, showing the valves, chests, posts, channel-ways, and valve-gear. Fig. 3 is a transverse section of cylinder and valve-chests.

This invention belongs to that class of steam-engines which employ two or more pistons in the same cylinder. The invention has for its object to improve an engine of this kind in such manner that the same steam used first to force the pistons apart is then used expansively to force the pistons together. To this end the invention consists in the construction and arrangement of parts, which I will now proceed to describe.

The cylinder shown is made in the usual form. It has two valve-chests on one side, at the center in which are valves A B. It has three steam-posts, two of them, C and D, being at the ends of the cylinder, which are in

direct communication with each other through channel-way E, and the third being at the center of the cylinder.

The operation of the engine thus constructed is as follows: Steam being admitted at port F, acts equally upon both pistons, driving them apart to the ends of the cylinder. It is then cut off and the same steam which is in the cylinder is admitted through chamber in valve A to ports C and D, through channel-way E, to the opposite sides of the pistons, driving them back to the center of the cylinder by expansive force. The steam is then exhausted into the atmosphere or condenses through channel-way E and valve B, which are in direct communication with each other, and the movement of the engine is completed.

I claim as my invention—

The cylinder and pistons herein described, in combination with the valves A B, ports C D, channel-way E, and port F, all arranged as and for the purpose specified.

JOHN SCOTT.

Witnesses:

CHARLES WEST,
THOMAS W. CLAPHAM.