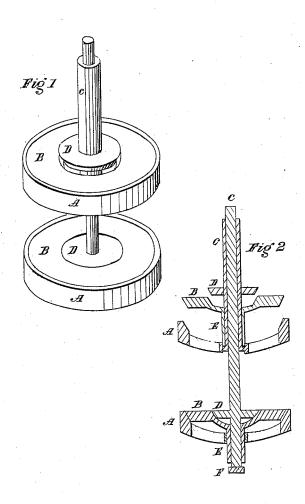
## S. Talbott, Steam Puppet Valve. Nº 23,931. Patented Feb.28,1845.



## UNITED STATES PATENT OFFICE.

SAMUEL TALBOTT, OF RICHMOND, VIRGINIA.

## STEAM-VALVE.

Specification of Letters Patent No. 3,931, dated February 28, 1845.

To all whom it may concern:

Be it known that I, SAMUEL TALBOTT, of the city of Richmond, county of Henrico, and State of Virginia, have invented a new 5 and useful improvement on steam - valves used in large engines to admit steam to the cylinder to produce a reciprocating motion; and I do hereby declare the following is a full and exact description.

The nature of my invention consists in providing and arranging in the center of the main steam valves a small valve, to be opened sufficiently in advance of the main valve to allow the steam to fill the vacuum 15 between the piston and head of cylinder, and thereby produce an equilibrium of pressure upon the top and bottom of the same, before the lifting rod acts upon it, thereby allowing it to be raised by an amount of power 20 sufficient to raise the weight of the same.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, reference being had to the annexed drawings, 25 making a part of this specification, in which—

Figure 1, is a perspective view of the two valves and valve seats as usually arranged for large engines; representing my 30 improved valve in the center of each and the

top one up. Fig. 2 is a section through the center of the same valves and valve seats, representing the two top valves as open.

A, A, valve seats, B, B, main valves, C, C, lifting rods, D, D, small valves, perma-35 nently attached to lifting rods e, e. E, E, stems to main valves, which are hollow, to allow the lifting rods to pass through and slide in them—each lifting rod has a collar on its lower end F, F, \(\frac{3}{4}\) of an inch below 40 the end of the stem of each main valve, which allows the small valve to rise that much before the lifting rod acts upon the main valve. The whole operated as such valves are operated without my improve-45 ment.

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

The use of the small valves, operating in the center of the main valves and by the 50 same motions, substantially as above described: by which arrangement much of the power required to open the valves in the old way is saved for the direct action of the engine.

## SAMUEL TALBOTT.

Witnesses:
Wm. Sinton,
Thos. H. Wynne.