2371X

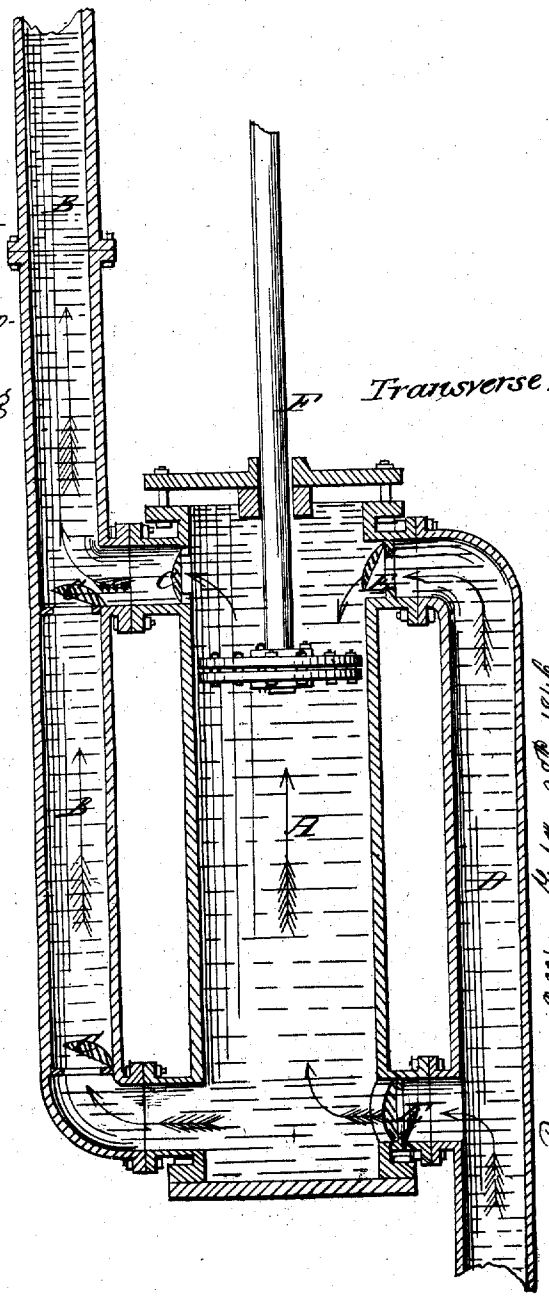
2 Sheets—Sheet 1.

J. SMALLMAN

AIR PUMP.

Patented Aug. 29, 1815.

Reference.
A. double stroke working barrel.
B. rising main.
C.C. valves in rising main.
D. supply pipe.
E.E. valves in supply pipe.
F. representing the piston.



Patent Office July 28th 1846.
made under the direction of the Commissioner of Patents in conformity with the act of 3d of March 1837.

Commissioner of Patents

2 Sheets—Sheet 2.

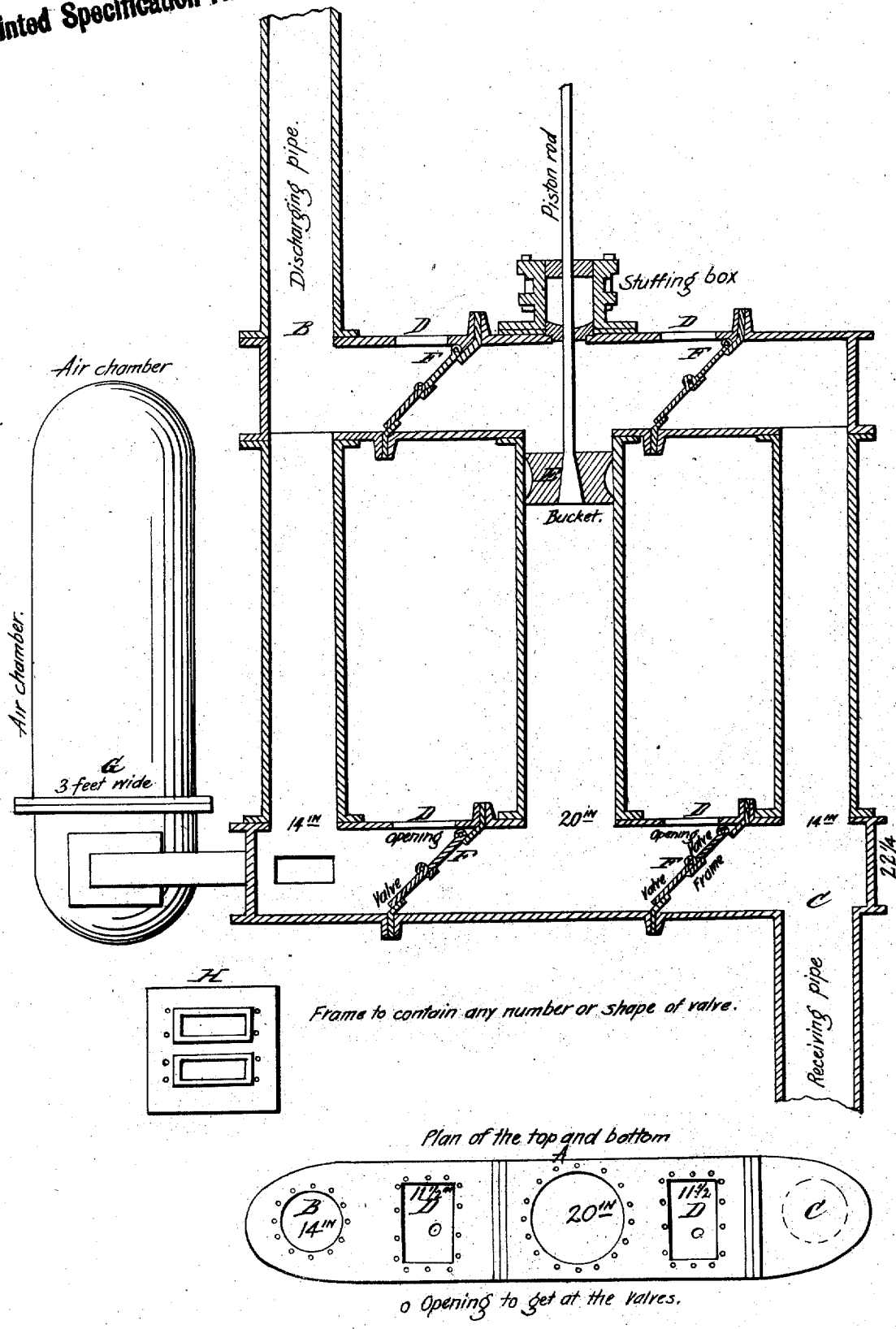
2371X

J. SMALLMAN.

AIR PUMP.

No Printed Specification Available

Patented Aug. 29, 1815.



2371 X

James Smallman
Aug. 29, 1815

Letters Patent

The Schedule referred to in these Letters Patent, and making part of the same, containing a description in the words of the said James Smallman himself of his double Air and Water Pump.

The principles of this pump are as follows, viz. It works a double stroke of water in one working barrel by forcing the length of its stroke of water out below, and the same above, by the use of two or more valves in the rising main the one at the bottom near the other at the top; once two or more valved, according to the size of the pump, for the suction or supplying piece. It is so constructed as to work in a perpendicular, or any angle down to 45 degrees with any number or shape of valves in each opening according to the size of the pump, as the more valves the more easy their motion. It can also be worked with one or more horizontal valves of a conical shape

The double Pumps works very well either with or without an air vessel, as I have them in actual operation from 3 inches to 20 inches, and from 30 to 98 feet in depth without any aid derived from an air vessel

James Smallman

Witnesses
A Wilmans
Joseph W. Davis

(235 words) (Patented August 29th 1815)

Drawing Made

To all to whom these presents shall come, Greeting:
I certify that the annexed is a true copy of a Patent granted to James Smallman for a Double Air Pump for Steam Engines Dated August 29th 1815.
In testimony whereof I, Richard Rush, Attorney Secretary

