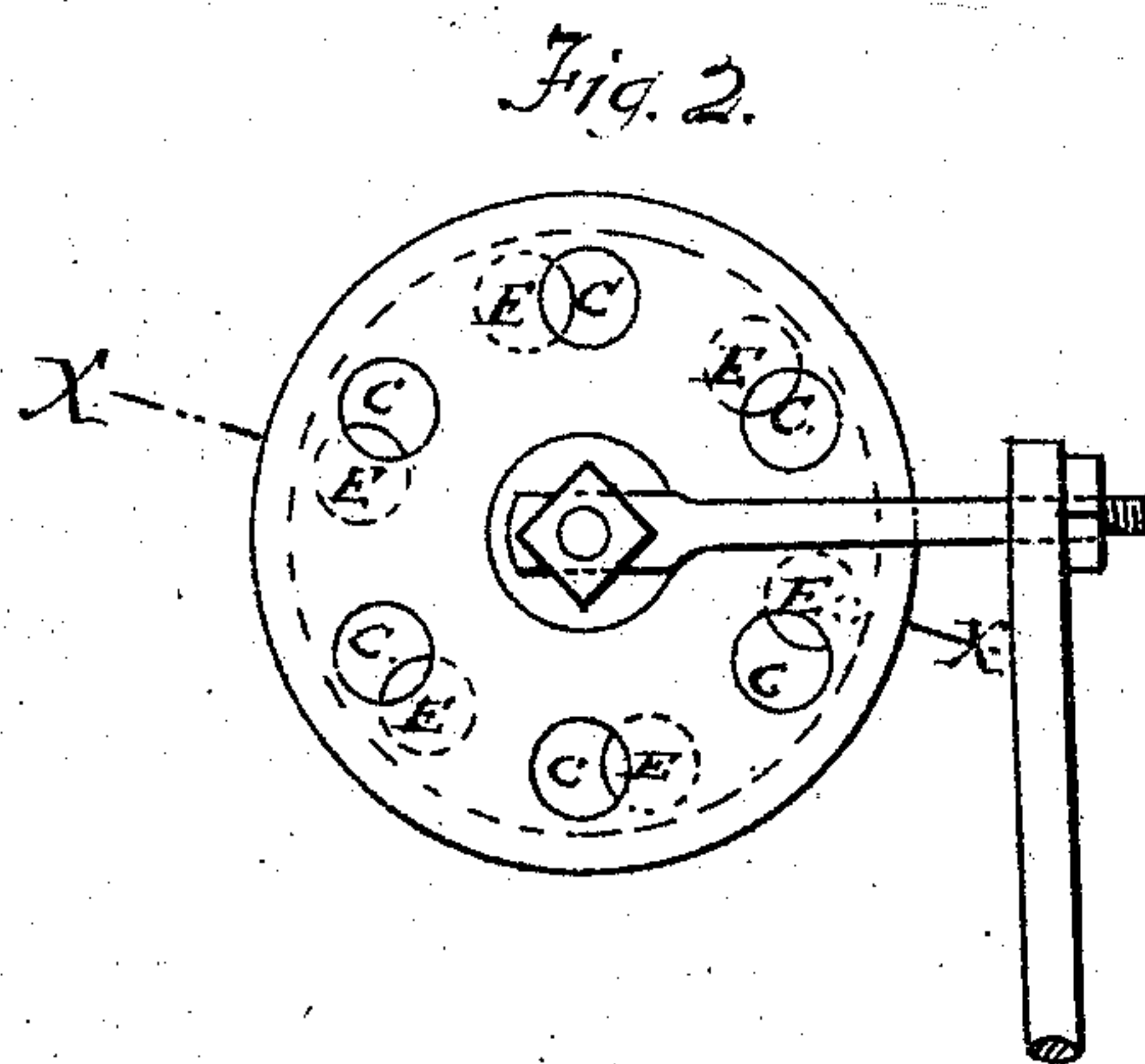
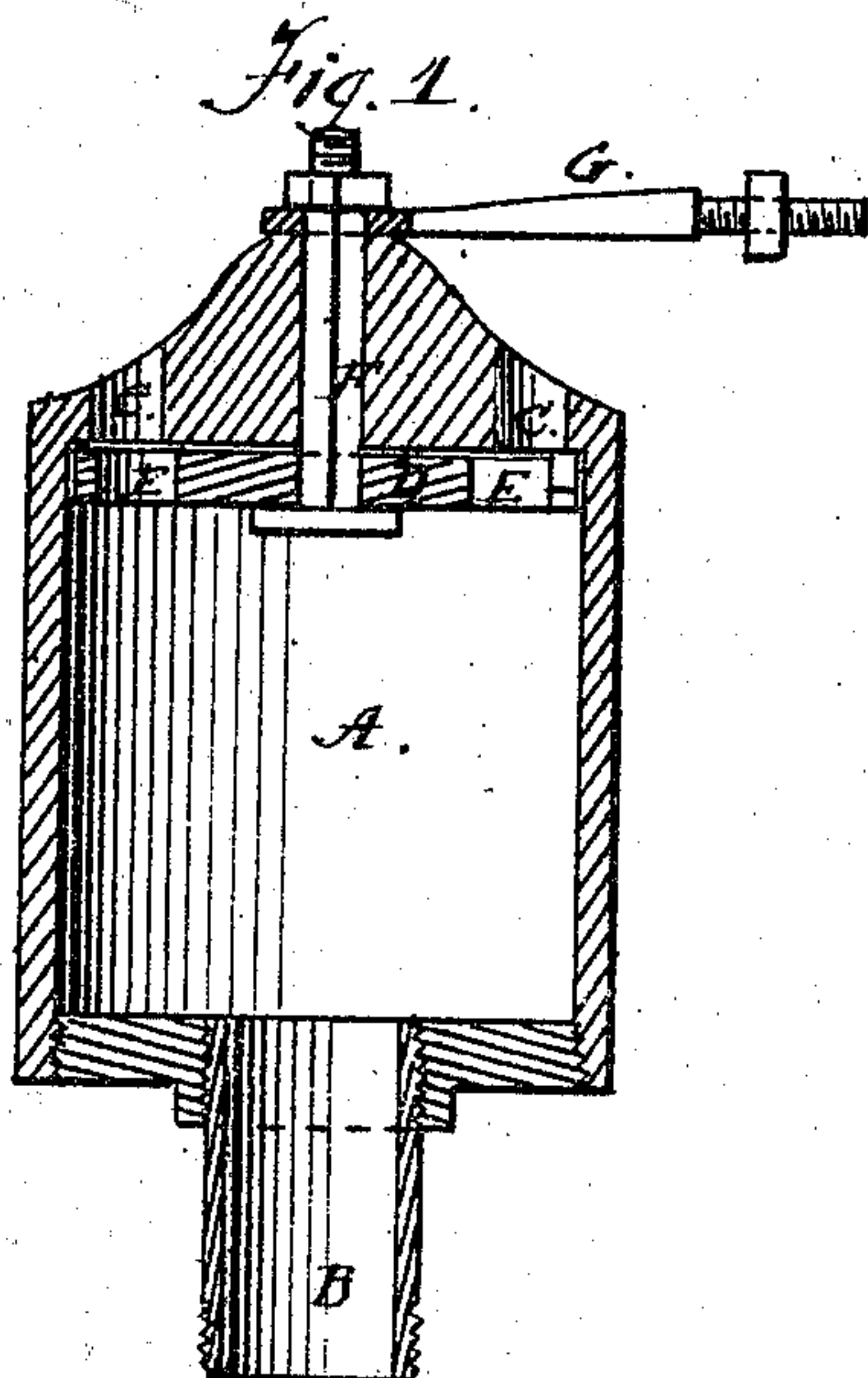


J. H. Baker.

Variable Exhaust for Non-Condensing Engine

N<sup>o</sup> 75723

Patented Mar. 24, 1868.



Attest;  
Theo Fische  
J. A. Service.

Inventor;  
James H. Baker  
Per Munroe &  
Attorneys.

# United States Patent Office.

JAMES H. BAKER, OF SARATOGA SPRINGS, NEW YORK.

*Letters Patent No. 75,723, dated March 24, 1868.*

## IMPROVEMENT IN VARIABLE EXHAUSTS FOR NON-CONDENSING ENGINES.

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

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES H. BAKER, of Saratoga Springs, in the county of Saratoga, and State of New York, have invented a new and useful Improvement in Variable Exhaust; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention consists in the arrangement of a chamber in the smoke-stack or chimney of a high-pressure steam-engine, which chamber shall have apertures through its upper end for the discharge of steam; and in the device for regulating the discharge of the steam, having apertures through it, as will be hereinafter more fully described, the object being to control the draught of the furnace by discharging exhaust steam into the smoke-stack or chimney.

Figure 1 represents a vertical section of the arrangement through the line *xx* of fig. 2.

Figure 2 is a top view.

Similar letters of reference indicate like parts.

A represents the chamber, which is cylindrical in shape, and of suitable length and diameter for the purpose desired. B is a pipe, which connects with the exhaust-pipe of the engine. The upper end of the chamber is conical in form, as represented in the drawing. C represents perforations through the end of the chamber, the arrangement of which is seen in fig. 2. D is a disk-valve, having apertures or perforations through it, which apertures are also seen in fig. 2, in dotted lines, and which are marked E. F is a bolt, which passes through the valve, (with a square on the shank,) and up through the conical end of the chamber A. G is a lever, which is attached to the bolt, and by which the valve is operated by rods and levers, which are at all times under the control of the engineer.

It will be seen that by turning the valve, the holes C through the chamber may be entirely closed, or entirely opened, or only partially opened, as may be required by the engineer, so that the draught may be increased or diminished whenever desired.

What I claim as new, and desire to secure by Letters Patent, is—

The arrangement of the lever G, bolt F, disk-valve D, chamber A, and pipe B, substantially as herein described.

JAMES H. BAKER.

Witnesses:

GEORGE B. SLOCUM,  
R. WARINER.