

(No Model.)

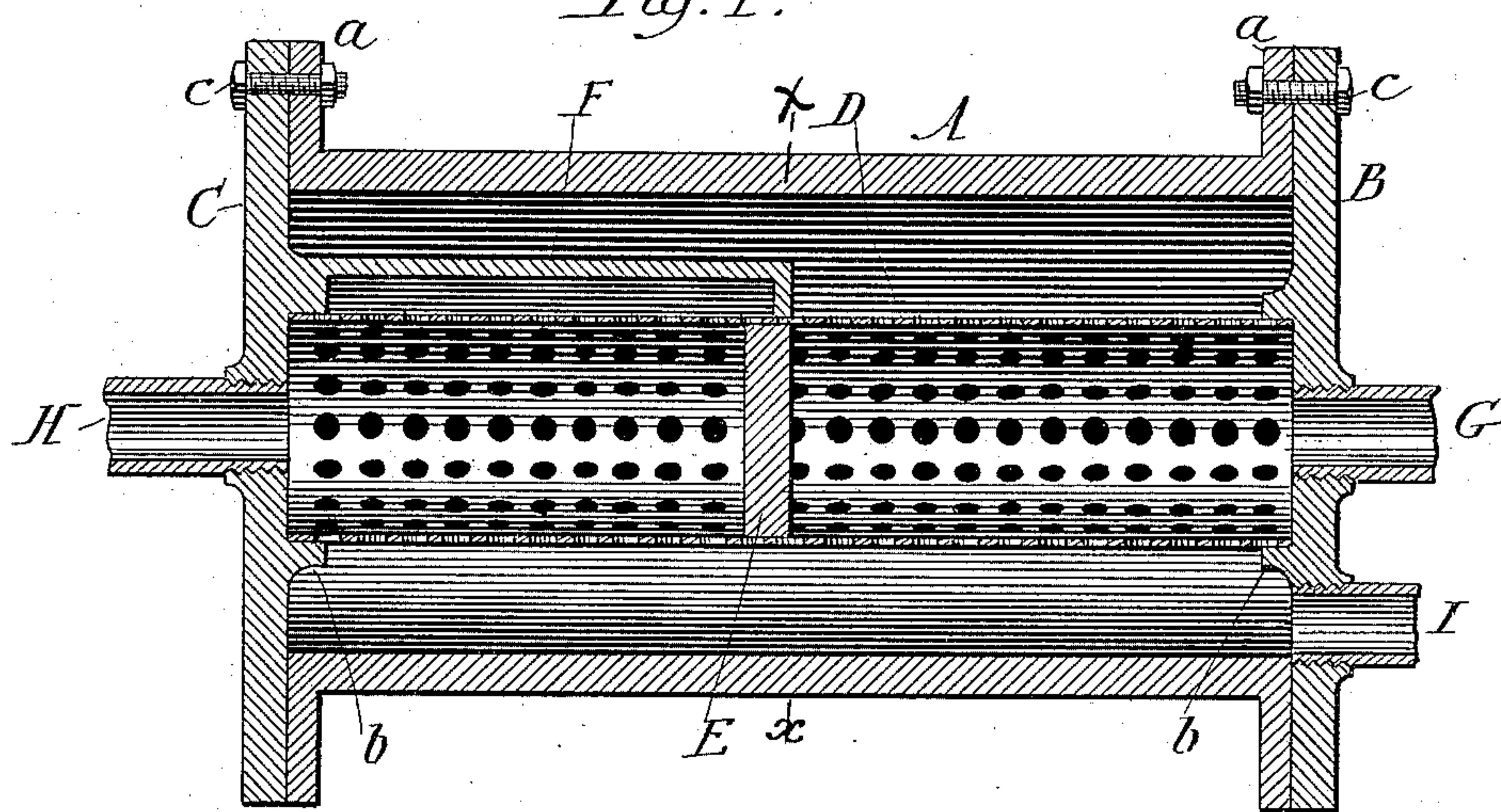
G. JONES.

SEPARATOR.

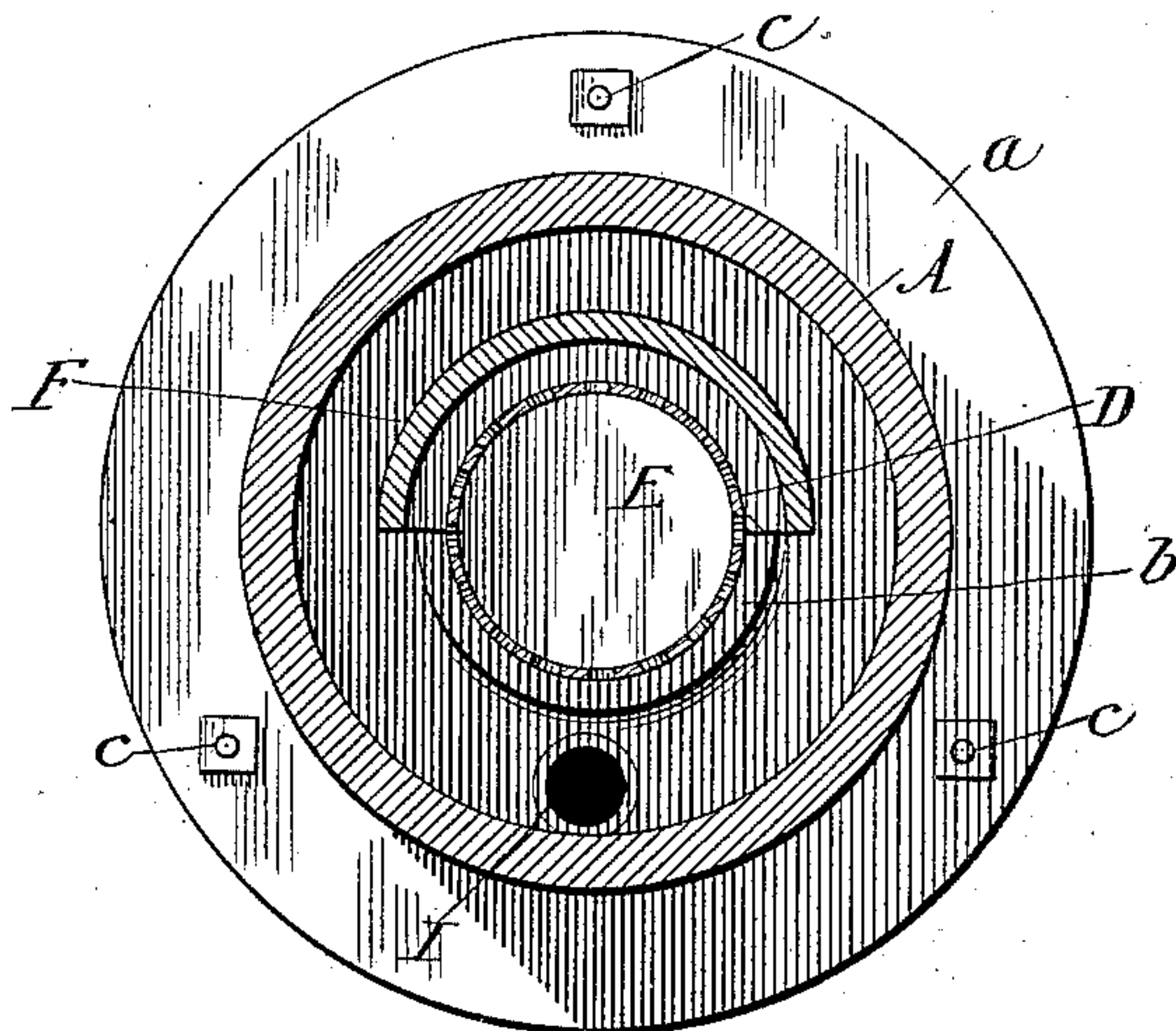
No. 391,850.

Patented Oct. 30, 1888.

*Fig. 1.*



*Fig. 2.*



Witnesses:

E. A. West  
Harry T. Jones.

Inventor:

Geo. Jones.



# UNITED STATES PATENT OFFICE.

GEORGE JONES, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND ALFRED SWADKINS, OF SAME PLACE.

## SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 391,850, dated October 30, 1888.

Application filed February 3, 1888. Serial No. 262,888. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE JONES, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Separators, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section.

Fig. 2 is a section at line *x* of Fig. 1.

The leading object of my invention is to provide an improved device by means of which water will be separated from steam before the latter reaches the engine, which I accomplish as illustrated in the drawings, and hereinafter described.

That which I claim as new will be set forth in the claims.

In the drawings, A represents a cylinder provided, as shown, with a flange, *a*, at each end.

B C are two heads, each of which, as shown, is provided with a flange, *b*, on its inside.

D is a perforated cylinder, which may be made of perforated sheet metal. This cylinder is held in place and supported by the flanges *b*, and the cylinder A and the heads B C are secured together by bolts *c*.

E is a solid partition in the perforated cylinder D.

F is a shield or guard over one half of the perforated cylinder.

G represents a steam pipe leading from the boiler to my device, and H a steam-pipe leading from my device to the engine.

I is a return-pipe.

In use my device is to be located at any suitable point between the boiler and the engine, and may be supported in any suitable manner. Steam from the boiler will pass through the pipe G into the perforated cylinder D, but cannot pass in such perforated cylinder beyond the partition E, and from the right-hand half of the perforated cylinder steam will pass

through the perforations into the cylinder A, and the water will be there mostly separated from the steam and will fall to the bottom of the cylinder A, from which it can be returned either to the boiler or feed-water heater through the pipe I. The steam separated from the water will pass through the perforations in the left-hand end of the perforated cylinder, passing into such end of this cylinder and thence to the engine through the pipe H. If any of the water condenses in the upper portion of the cylinder A, it cannot fall into the left-hand end of the perforated cylinder, but will fall upon the shield F and be conducted away from the perforated cylinder.

I have shown my device in a horizontal position; but it may be used in a vertical position, if desired, without any material change, but the shield F would not be required.

My device is also well adapted to be used between a boiler and a steam-radiator for the purpose of separating the water from the steam before it passes to the radiator.

I am aware that devices are in use for separating water from steam on its passage from the boiler to an engine, and therefore do not claim, broadly, means for accomplishing this result; but

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

1. The combination of a cylinder, A, heads B C, perforated cylinder D, provided with a partition, E, inlet steam-pipe G, outlet steam-pipe H, and return-pipe I, substantially as and for the purposes specified.

2. The combination of a cylinder, A, heads B C, perforated cylinder D, provided with a partition, E, shield F, inlet steam-pipe G, outlet steam-pipe H, and return-pipe I, substantially as and for the purposes specified.

GEORGE JONES.

Witnesses:

E. A. WEST,  
O. W. BOND.