

No. 640,668.

Patented Jan. 2, 1900.

J. W. LAMBERT.
GAS ENGINE CYLINDER.

(Application filed May 13, 1899.)

(No Model.)

Fig. 1.

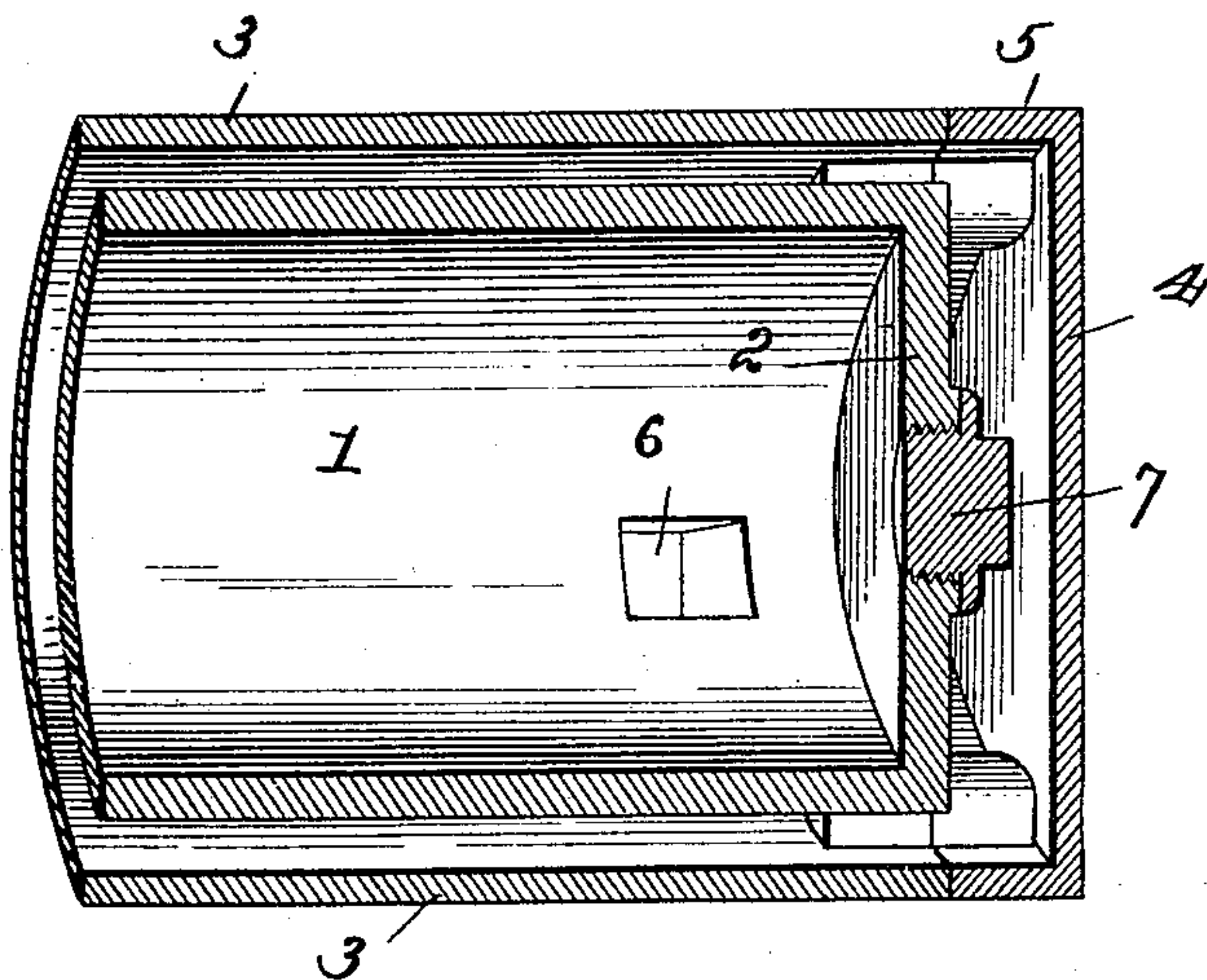
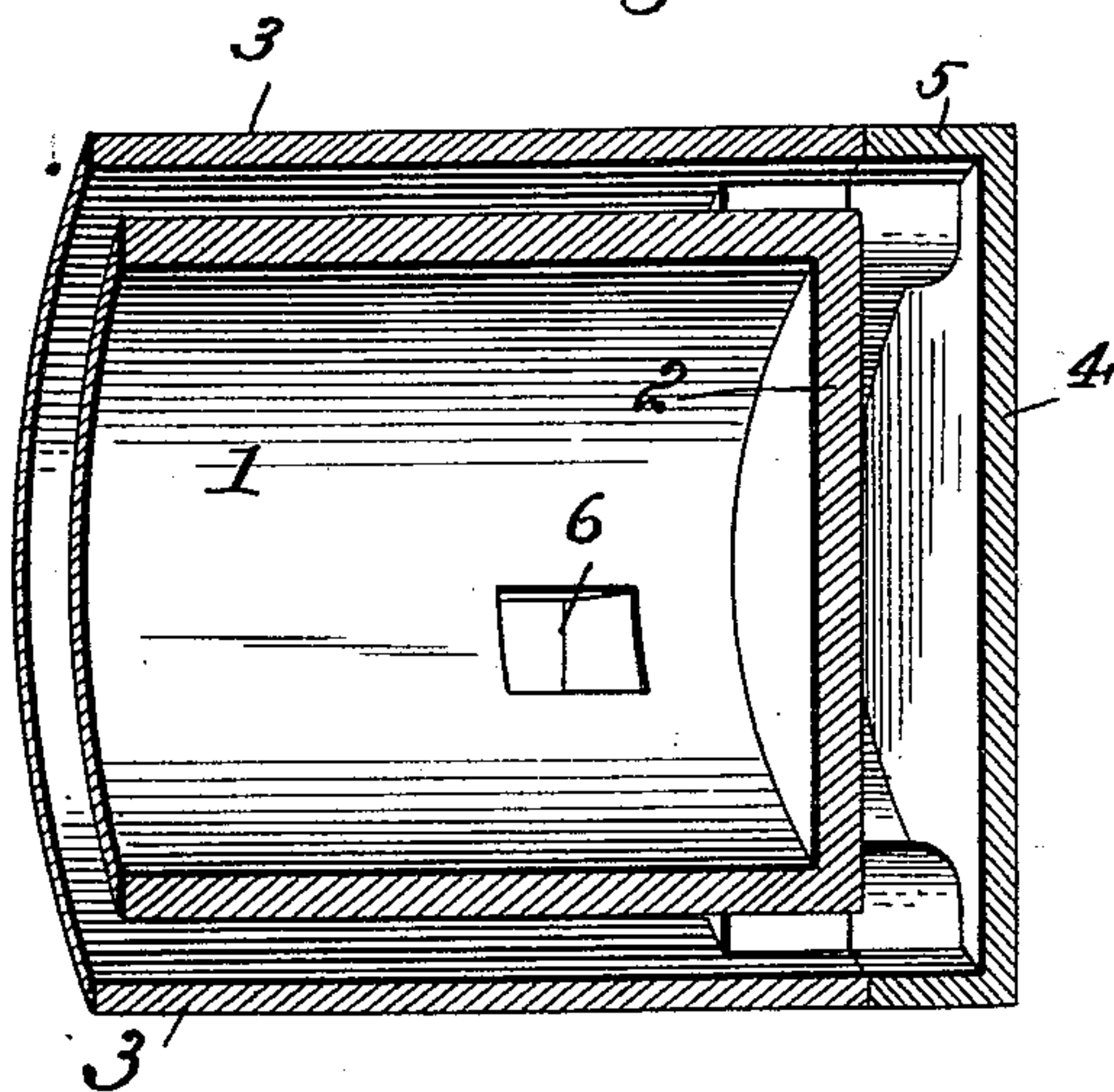


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN W. LAMBERT, OF ANDERSON, INDIANA, ASSIGNOR TO THE BUCKEYE MANUFACTURING COMPANY, OF SAME PLACE.

GAS-ENGINE CYLINDER.

SPECIFICATION forming part of Letters Patent No. 640,668, dated January 2, 1900.

Application filed May 13, 1899. Serial No. 716,737. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. LAMBERT, a citizen of the United States, and a resident of Anderson, county of Madison, State of Indiana, have invented certain new and useful Improvements in Gas-Engine Cylinders, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

10 Figures 1 and 2, respectively, represent longitudinal perspective views of the two preferred forms of my invention.

This invention has particular reference to that class of gas-engine cylinders covered by my patent of December 3, 1895, No. 550,832, in which provision is made for the removal of the head of the water-jacket independently of the cylinder proper and its sparker-plate, whereby the necessity of packing the jacket-head against explosive pressure is avoided, the lime incrustation may be readily removed without disturbing the other parts of the cylinder or engine, and the end of the cylinder in which the explosion takes place is more effectively cooled; and the invention consists of certain novel features hereinafter described, and particularly pointed out in the claims.

30 In the drawings, the numeral 1 designates the engine-cylinder proper, its forward end being open and its rear end being entirely closed by an integral head 2. Also cast integral with the cylinder is a water-jacket 3, whose rear end terminates even with the rear end of the cylinder. The end of the water-cylinder is formed by a cap 4, whose flange 5 is bolted against the rear end of the water-jacket, forming a water-chamber which entirely incloses and obscures the cylinder-head, the sparker-passage being formed through the side of the chamber, as at 6. The edge flange of the cap is flush with the surface of

the water-jacket, so that the end of the cylinder will have no projections except the bolt heads or nuts.

For the purpose of easy access to the interior of the cylinder the rear end of the cylinder may be provided with a removable screw plug or plate 7 at the center of its head.

It will be observed that by this construction the explosion end of the cylinder is entirely enveloped by the water-chamber and that access may be had to the water-chamber for removing the lime incrustation without disturbing the cylinder proper or any gas-tight packings or other parts except the cap, it being evident that the cap need only be packed against the water-pressure, which is slight.

I claim—

1. A gas-engine cylinder consisting of the cylinder proper having a solid head and a sparker-passage entering one side, a water-jacket surrounding the cylinder and terminating at or near its solid head, and a cap removably bolted to the rear end of the water-jacket and entirely inclosing the solid end of the cylinder, substantially as set forth.

2. In combination with the cylinder proper having one end open and its other end closed by a solid, integral head, a removable part or plate inserted centrally in said head, a water-jacket on the cylinder and terminating at or near its closed end, and a cap entirely inclosing the end of the cylinder and its removable part and removably bolted to the end of the water-jacket.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 1st day of May, 1899.

JOHN W. LAMBERT.

Witnesses:

G. S. KING,

G. H. LOCKWOOD.