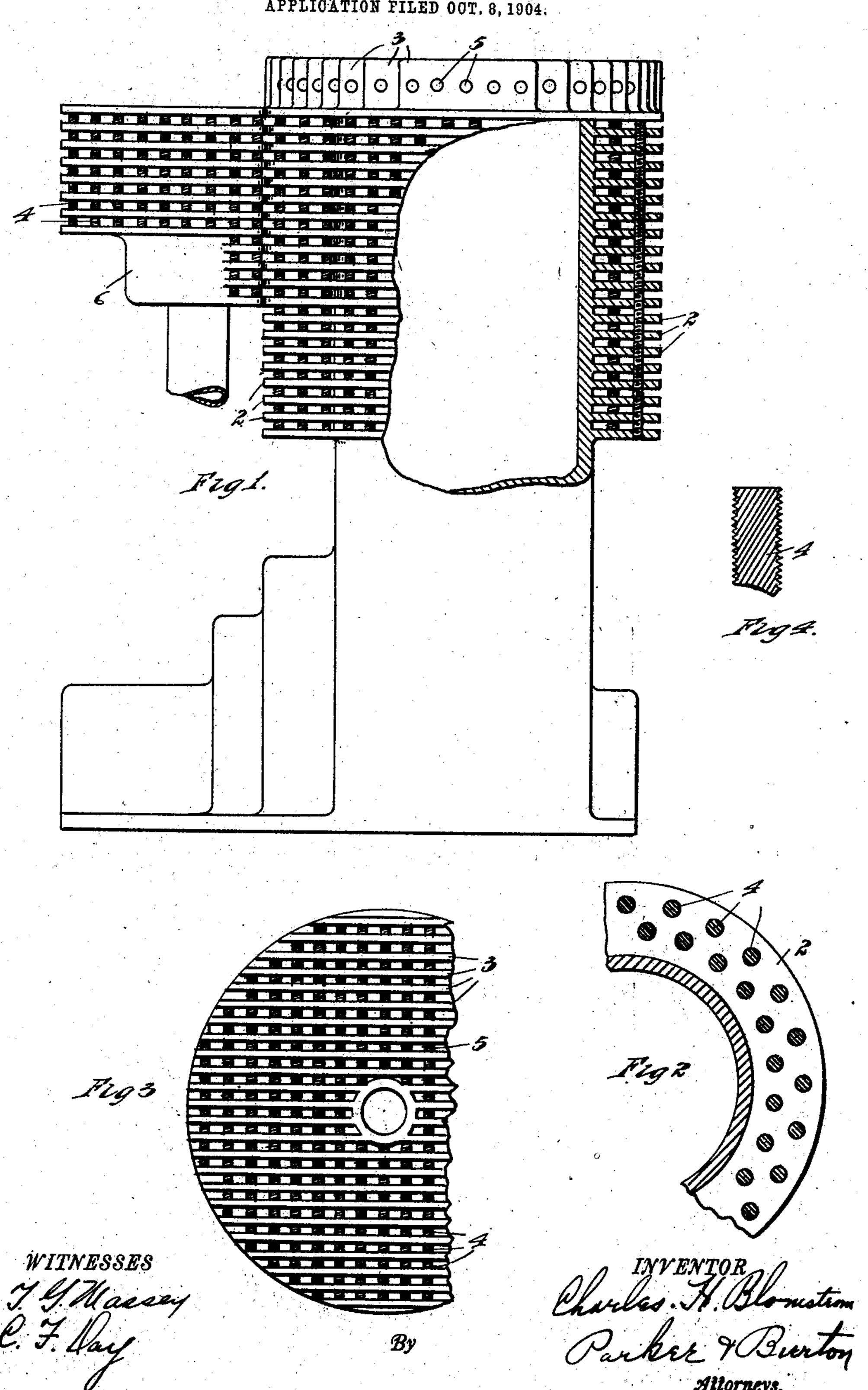
C. H. BLOMSTROM. COOLING DEVICE FOR CYLINDERS. APPLICATION FILED OCT. 8, 1904.



UNITED STATES PATENT OFFICE.

CHARLES H. BLOMSTROM, OF DETROIT, MICHIGAN, ASSIGNOR TO C. H. BLOMSTROM MOTOR COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

COOLING DEVICE FOR CYLINDERS

No. 815,257.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed October 8, 1904. Serial No. 227,691.

To all whom it may concern:

Be it known that I, Charles H. Blomstrom, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Cooling Devices for Cylinders; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to explosive-en-

15 gines.

It has for its object an improved construction of the engine-cylinder adapted and intended to effect the cooling of the cylinder by a bath of air, and provision is made to furnish a large radiating-surface to the action of the air.

In the drawings, Figure 1 is an elevation of the cylinder, partly in section. Fig. 2 is a section across a part of the cylinder. Fig. 3 is a view of a part of an end of the cylinder. Fig. 4 is a section of one of the ends of the

rod 4.

The cylinder is made from cast metal, with projecting flanges 2 cast integral with the cylinder. Through the flanges are rods, preferably threaded. Those rods which pass through the circumferential flanges 2 are parallel with the axis of the cylinder. Those rods which pass through the end flanges 3 are parallel with the diameter of the cylinder and at right angles to the flanges themselves. These rods 4 are laid into the mold at the time the cylinder is cast, and the metal of the cylinder is poured and the flanges are cast around the rods, thus making an intimate

connection between the metal of the casting and the metal of the rod, and the screwthreads not only serve to hold the rod very securely in its place, but they furnish an increased radiating-surface for the escape of 45 heat which accompanies the use of the engine. The rods 5, which pass through the end flanges, are also preferably screw-threaded, and they lie in parallel relation to each other and at right angles to the flanges 3. 50 The valve-chamber 6 is also surrounded with flanges and provided with the rods.

What I claim is—

1. A cylinder for combustion-engines having in combination with the cylinder-walls, 55 flanges cast integral therewith and projecting therefrom and rods passing through the flanges and contacting the same so as to receive heat therefrom by conduction, substantially as and for the purpose described.

2. A cylinder for combustion-engines, having in combination with the cylinder-walls flanges cast integral therewith and project ing therefrom, and a threaded rod passing through the flanges and engaging therewith 65 so as to receive heat therefrom by conduction, substantially as and for the purpose described.

3. A cylinder for combustion-engines having in combination with the cylinder-walls, 70 flanges on the walls and rods passing through the flanges, the cylinder and flanges being cast integral about the rods, substantially as described.

In testimony whereof I sign this specifica- 75 tion in the presence of two witnesses.

CHARLES H. BLOMSTROM.

Witnesses:

MAY E. KOTT, CHARLES F. BURTON.