

No. 730,676.

PATENTED JUNE 9, 1903.

G. MACLOSKIE.
LUBRICATING DEVICE.
APPLICATION FILED OCT. 17, 1901.

NO MODEL.

Fig. 1.

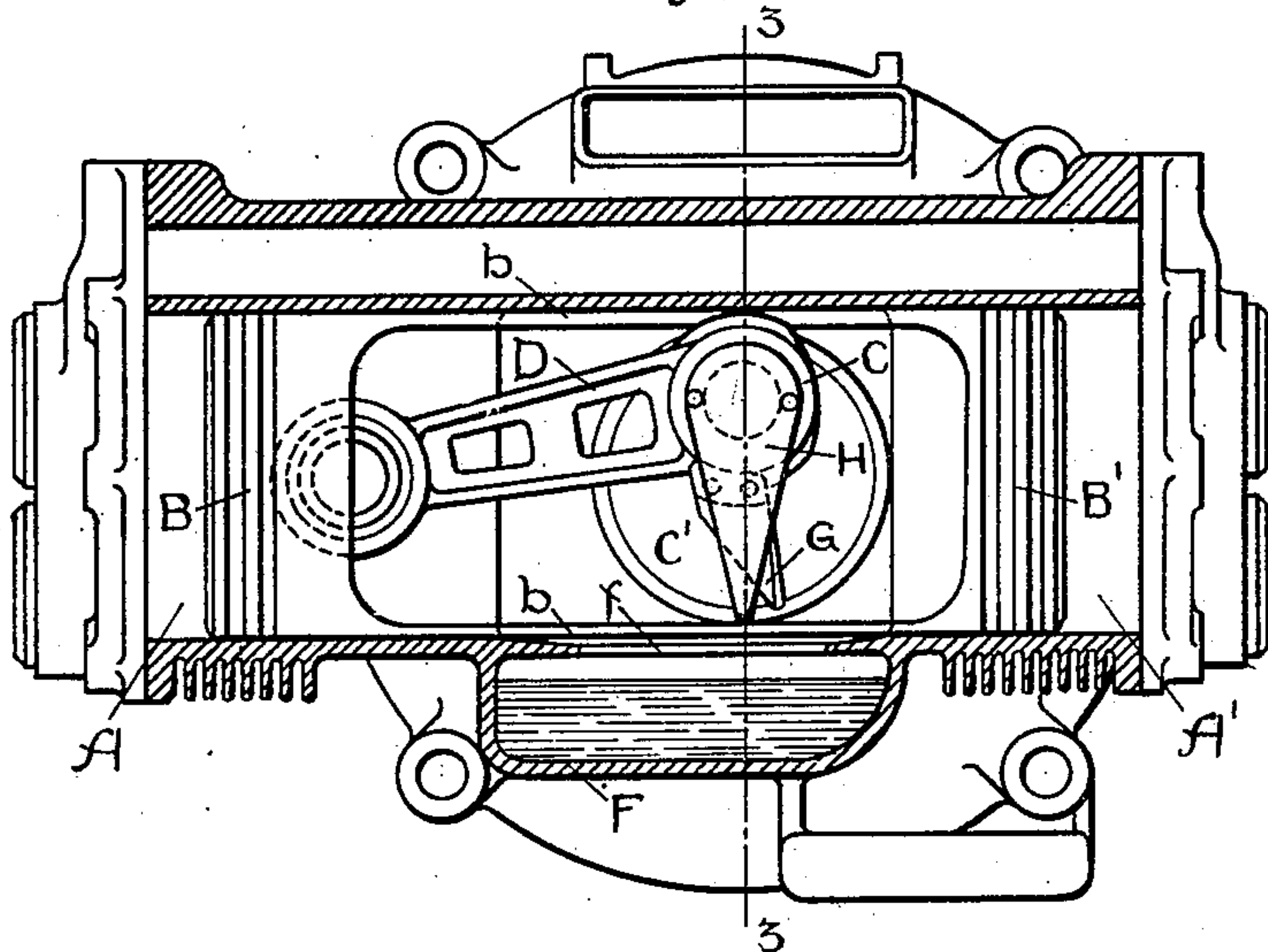


Fig. 4.

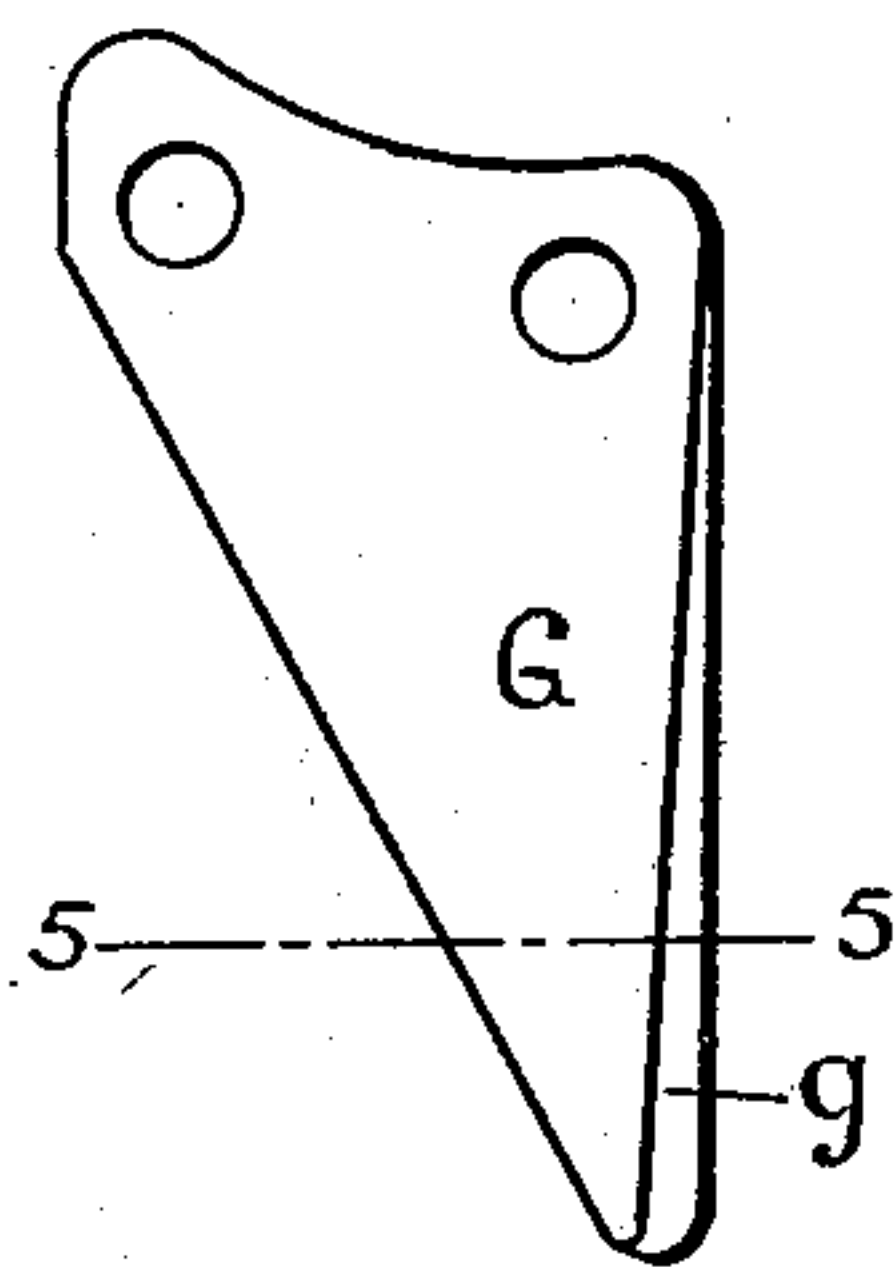


Fig. 5.

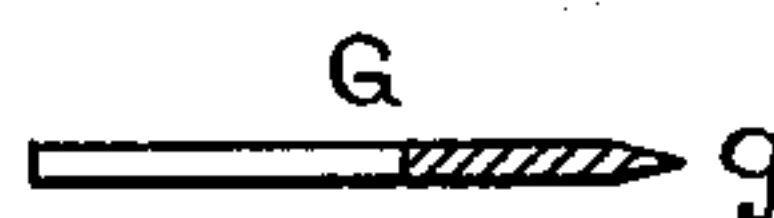


Fig. 2.

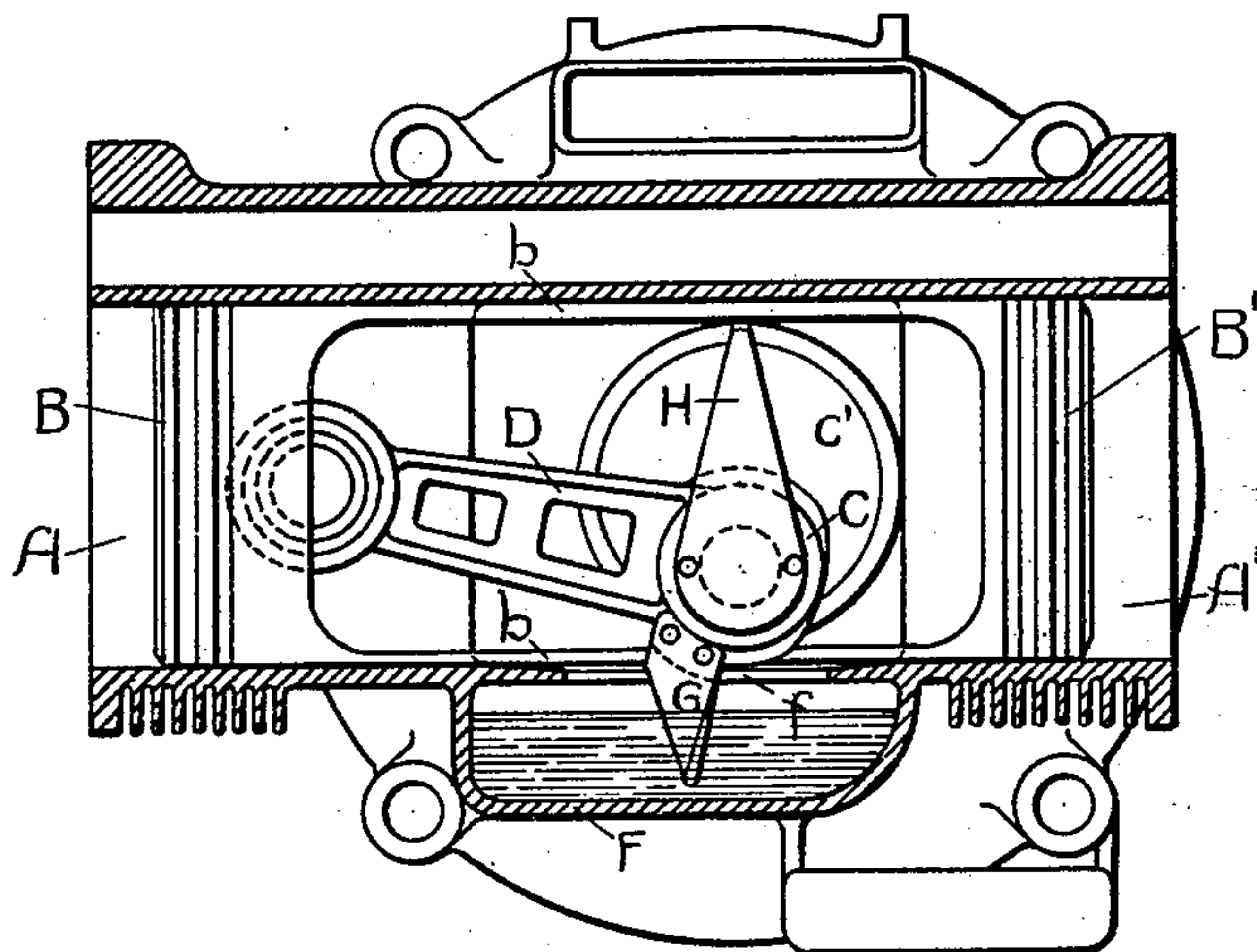
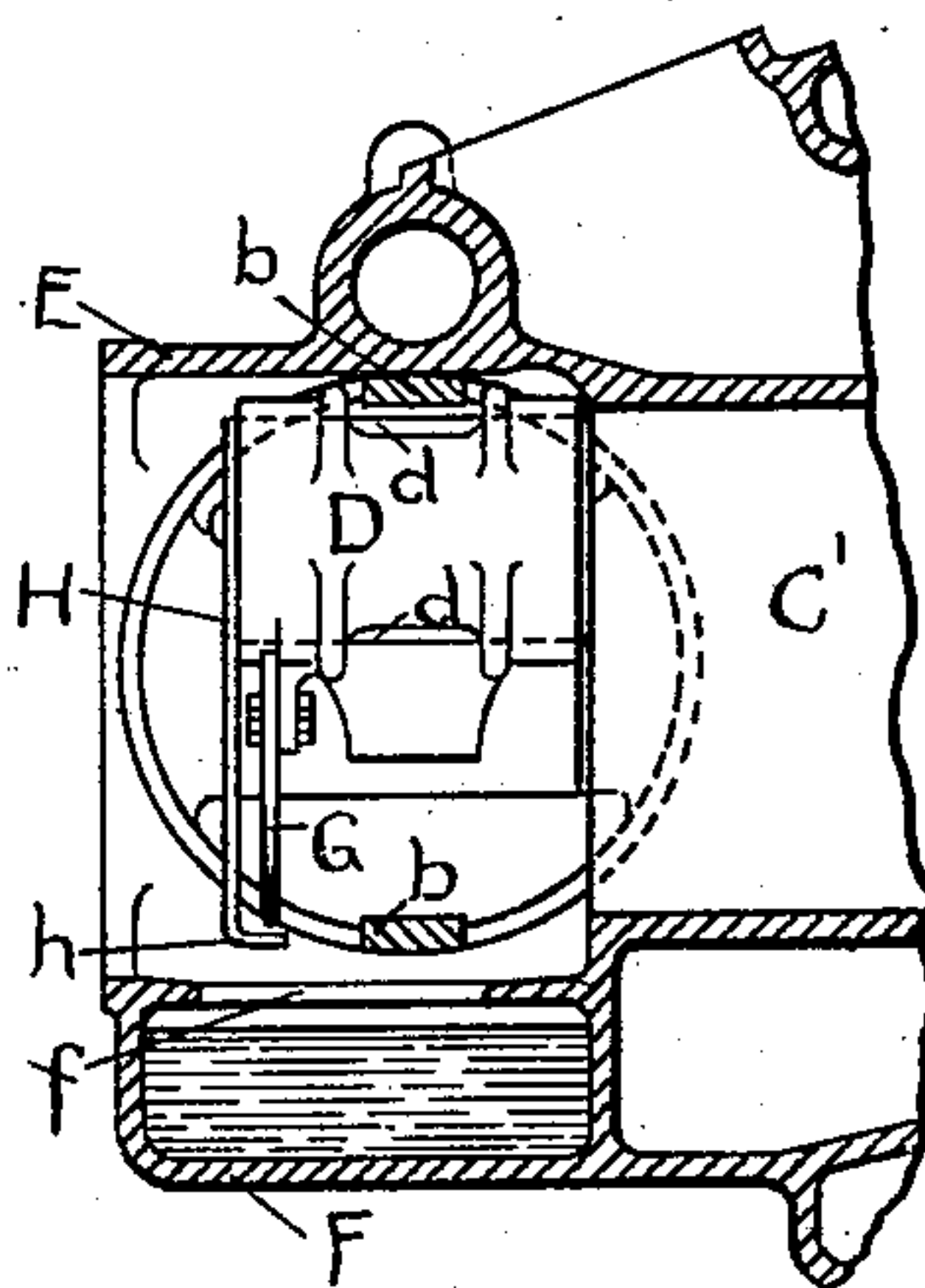


Fig. 3.



Witnesses:

Robt. C. Chapman
Benjamin B. Hill

Inventor.

George Macloskie.
by *Alb. B. Davis*
Atty.

UNITED STATES PATENT OFFICE.

GEORGE MACLOSKIE, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

LUBRICATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 730,676, dated June 9, 1903.

Application filed October 17, 1901. Serial No. 78,982. (No model.)

To all whom it may concern:

Be it known that I, GEORGE MACLOSKIE, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Lubricating Devices, of which the following is a specification.

This invention relates to devices for lubricating, and especially those used in connection with crank-pins and connecting-rods.

I shall illustrate the invention as applied to a double-cylinder air-compressor in which the two pistons are united into an integral structure and the crank-pin revolves in the space between them, being connected with them by a pitman.

My oiling device comprises a distributor rotating with the crank-shaft and a feeder attached to the pitman and arranged to convey oil at regular intervals from a suitable reservoir to the distributor.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation of an air-compressor equipped with my invention, the crank-pin being on the upper quarter. Fig. 2 is a similar view with the pin on the lower quarter. Fig. 3 is a cross-section on the line 3 3, Fig. 1. Fig. 4 is a side view of the feeder on an enlarged scale. Fig. 5 is a cross-section of the same on the line 5 5.

The air-compressor illustrated is fully shown and described in the application of Asa F. Batchelder, Serial No. 74,244, filed September 3, 1901. For the purposes of this case it is sufficient to say that the two pump-cylinders A A' stand in line with pistons B B', cast in one piece, with connecting tie-bars *b* above and below. Into the space between said bars projects the crank-pin C on the end of the driving-shaft C'. A pitman D is pivotally attached at one end to the piston B, and its other end fits on the crank-pin. The rotation of the driving-shaft causes the pistons to reciprocate in their cylinders, drawing in air on one stroke and compressing it on the other. The cylinders are preferably cast integral with a central chamber E, in which the crank-pin works. Below said chamber is an oil-cellar F, having an open top *f*.

On the under side of the pitman, near its

crank end, is fastened a flat sheet-metal finger G, projecting downwardly and long enough to dip into the oil at each descent as the pitman sways or reciprocates up and down. To avoid churning up the oil, the forward edge *g* of the finger is sharpened.

Fastened to the end of the crank-pin is a distributor H, consisting of a strip of sheet metal extending diametrically across the circle described by the outer edge of the crank-pin and having at the end opposite said pin a hook *h*. This hook passes under the end of the finger G when the crank passes the upper quarter, as shown in Fig. 1.

The operation is as follows: The distributor revolves in a vertical plane parallel with the axis of the cylinders. The finger dips into the oil at each revolution of the shaft and brings up a drop or two of oil, which is caught by the hook when it passes under the end of the finger. The rapid revolution of the distributor throws the oil by centrifugal force to all parts of the space between the pistons, thoroughly lubricating the cylinders, pitman-bearings, and crank-pin. The crank end of the pitman is cut away at *d* to expose the pin and give the oil access thereto.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A lubricating device consisting of the combination with a crank-pin, of a centrifugal distributor attached to and revolving with said pin, and a reciprocating feeder supplying oil to said distributor.

2. The combination with a crank-pin, of a strip of sheet metal attached to said pin, and reciprocating means for supplying oil to said strip.

3. The combination with a crank-pin and pitman, of a strip of sheet metal attached to said pin, and a finger on the pitman adapted to pass near said strip at each revolution.

4. The combination with a crank-pin and pitman, of a hooked centrifugal distributor secured to said pin, and a finger on the pitman adapted to pass near the hook on said distributor at each revolution.

5. The combination with a crank-pin and pitman, of a strip of sheet metal having one end secured to said pin and the other end provided with a hook, and a finger attached to

the under side of the pitman adapted to pass over said hook at each revolution.

6. The combination with a crank-pin and pitman, of a strip of sheet metal secured to the pin and extending diametrically across the path of said pin, a hook on the end of said strip diametrically opposite said pin, a sheet-metal finger having a sharpened forward edge, secured to the under side of the pitman, adapted to pass over and near to said hook at each revolution, and an oil-cellar into which said finger dips at each revolution.

7. The combination with a crank-pin, of a

pitman having its crank end cut away on top to expose said pin, a centrifugal oil-distributor attached to said pin, a finger attached to said pitman, and an oil-cellar into which said finger dips at each revolution and from which it conveys a drop of oil to said distributor.

In witness whereof I have hereunto set my hand this 15th day of October, 1901.

GEORGE MACLOSKIE.

Witnesses:

BENJAMIN B. HULL,
CHARLES STEINER.