

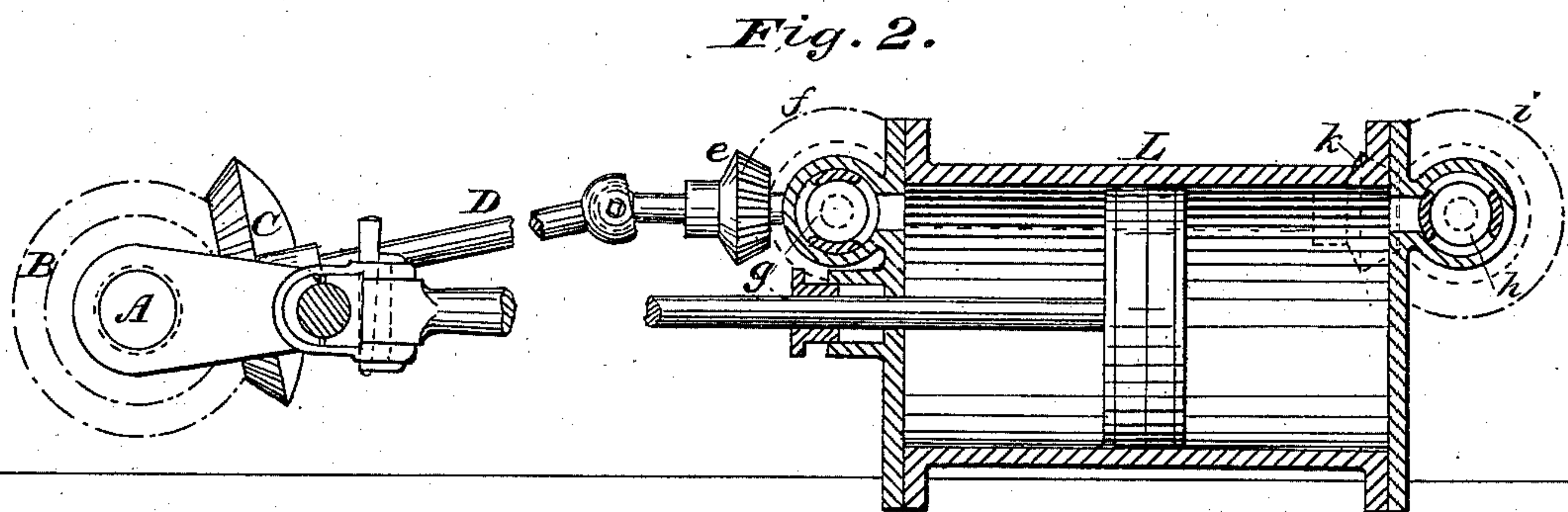
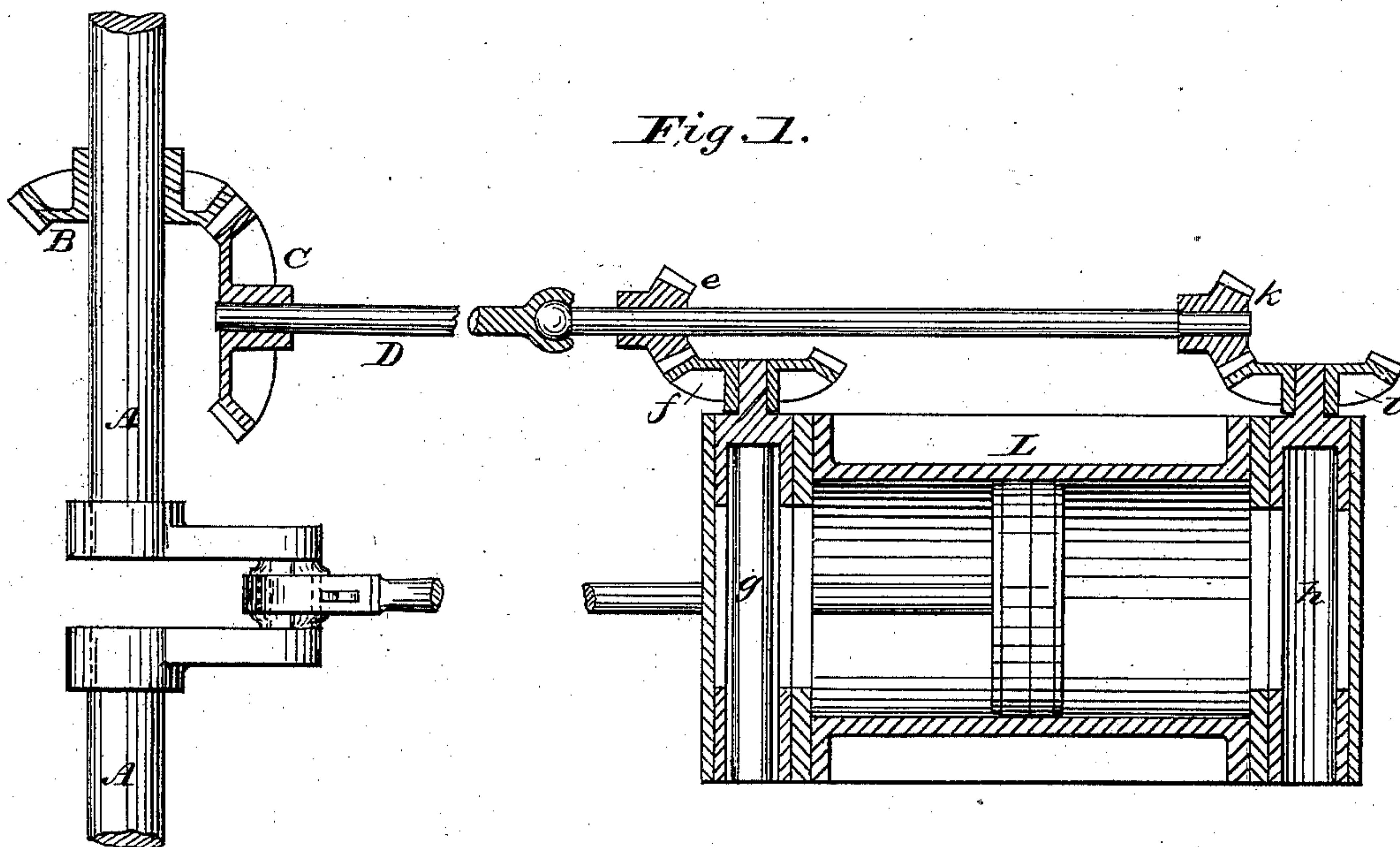
(No Model.)

D. B. OVERTON.

AIR COMPRESSOR.

No. 263,207.

Patented Aug. 22, 1882.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

DANIEL B. OVERTON, OF DOVER, N. J., ASSIGNOR OF THREE-EIGHTHS TO
EDMUND B. BARNUM AND JOHN ASHCROFT, OF BROOKLYN, N. Y.

AIR-COMPRESSOR.

SPECIFICATION forming part of Letters Patent No. 263,207, dated August 22, 1882.

Application filed February 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, DANIEL B. OVERTON, of Dover, Morris county, New Jersey, have invented a new and useful Improvement in Air-Compressors, of which the following is a specification, reference being had to the accompanying drawings, wherein—

Figure 1 is a longitudinal section taken through the center of the induction-valves of the air-cylinder, the gearing driving them, and the shaft of the steam motor. Fig. 2 is cross-section taken through one of the induction-valves.

My invention applies more particularly to the operation of the rotary valves shown, and which, with their co-operating mechanism, are the subject of another application by me now pending.

This invention relates particularly to the manner by which the power is taken from the main shaft of the motor and communicated to the induction-valves.

In the drawings, A is the main shaft, driven by the engine. On it is placed a bevel-gear, B, arranged to engage a corresponding bevel-gear wheel, C, on the end of a shaft, D, which shaft revolves by the arrangement of the gears B and C at right angles to the main shaft A. This shaft D runs to and along the side of the air-cylinder L, which latter is provided at either

head with a suitable chamber, in which a hollow rotary valve, *g* or *h*, revolves at right angles to the shaft D, the stems of the valves *g* and *h* being respectively provided with beveled-gear wheels *f* and *i*, so constructed and arranged as to engage beveled-gear wheels *e* and *k* respectively located on the shaft D. It will thus be seen that the plane of motion is changed twice at right angles between the main shaft and the valves.

The advantages of this invention consist mainly in the positiveness of the motion of the valves and the increased certainty, ease, quietness, and speed with which the apparatus can be run.

There is shown in the drawings a universal joint in the shaft D; but I make no claim upon it here, as I intend to make it the subject of another application.

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

In an air-compressor wherein the induction-valves are cylindrical and rotary, the combination of the said valves and the beveled gearing with the shafts A and D, substantially as described.

D. B. OVERTON.

Witnesses:

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