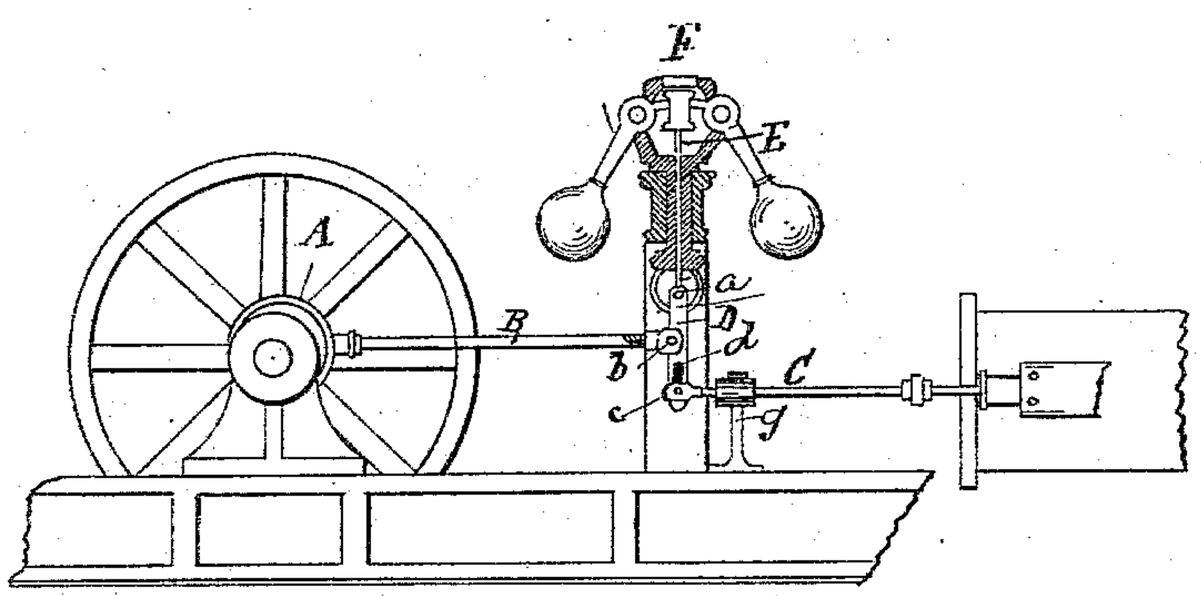
(No Model.)

J. P. BENOIT.

CUT-OFF VALVE GEAR.

No. 288,297. Patented Nov. 13, 1883.



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UNITED STATES PATENT OFFICE.

JOHN P. BENOIT, OF DETROIT, MICHIGAN.

CUT-OFF-VALVE GEAR.

SPECIFICATION forming part of Letters Patent No. 288,297, dated November 13, 1883.

Application filed April 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. BENOIT, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Cut-Off-Valve Gears; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms a part of this specification.

This invention refers to an improvement in cut-off-valve gears; and it consists in the peculiar arrangements and construction of the parts, all as more fully hereinafter described.

In the accompanying drawing a diagram elevation of my improved cut-off-valve gear is shown, wherein A is the eccentric-rod, while C is the valve-rod connected to the cut-off valve. D is a lever of the third degree, with its fulcrum at *a*, where it is pivoted to the lower end of the governing-rod E. At *b* the eccentric-rod B is pivoted thereto, and at *c* the valve-rod C is pivoted. This latter pivot runs in a slot, *d*, in the lever D. F is a governor, of known construction and operation, and it is so arranged as to actuate the governing-rod E in a positive manner, so as to raise or lower the lever D in the same degree as the rod E is acted upon.

In practice the action of the governor will automatically control the length of the leverage between the fulcrum *a* and the pivot *c*, which is prevented from following the movement of the lever D by a guide or journal, *g*, holding the end of the valve-rod C in position. The interposition of a third-degree lever, hung from the governor and between the eccentric and the valve rod, gives to my device the necessary latitude for cutting off, and renders the device both simple and efficient. It is clear that this cut-off-valve gear may be applied to any kind of valve.

What I claim as my invention is—

In a cut-off-valve gear, the combination of the eccentric-rod B, the valve-rod C, the lever D, interposed between them, and hung from the lower end of the rod E of a governor, F, and connected near its middle to the eccentric-rod, and near its lower end to the valve-rod, substantially as and for the purposes described.

JOHN P. BENOIT.

Witnesses:
H. S. SPRAGUE,
E. W. ANDREWS.