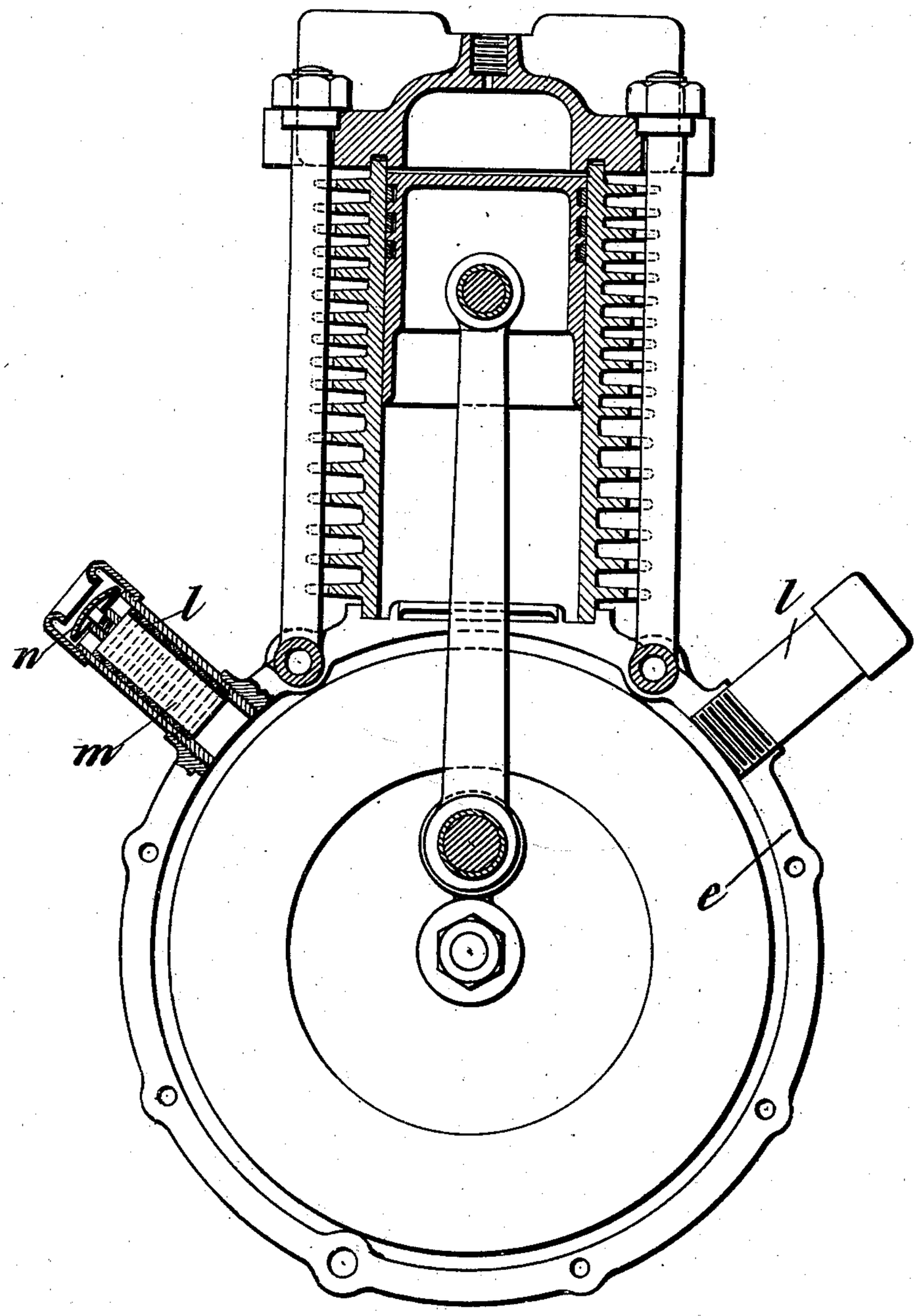
No. 661,854. Patented Nov. 13, 1900.

X. DE LE CROIX.

GAS ENGINE ATTACHMENT.

(Application filed Dec. 20, 1899.)

(No Model.)



Witnesses
G. D. Holdship
G. B. Bleming

Inventor
Xavier de le Croix
by Bakewell & Bakewell
his Attorneys.

UNITED STATES PATENT OFFICE.

XAVIER DE LE CROIX, OF BRUSSELS, BELGIUM, ASSIGNOR TO THE DELE-CROIX MOTOR SYNDICATE, LIMITED, OF LONDON, ENGLAND.

GAS-ENGINE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 661,854, dated November 13, 1900.

Application filed December 20, 1899. Serial No. 740,957. (No model.)

To all whom it may concern:

Be it known that I, XAVIER DE LE CROIX, a citizen of Belgium, residing at 88 Rue Stevin, Brussels, in the Kingdom of Belgium, have invented certain new and useful Improvements in Gas-Engine Attachments, (for which I have applied for a patent in Great Britain, dated August 4, 1899, No. 15,982,) of which the following is a specification.

An oil-motor for propelling a vehicle has in many cases its cylinder, which is open at the bottom, fixed over a casing, in which the crank and fly-wheels revolve.

My invention consists in applying to such a casing tubes for admission and discharge of air as the piston ascends and descends without allowing escape of lubricant, as I shall describe with reference to the accompanying drawing, which is a side view, partly sectional, of a motor having two air-tubes *l*, according to my invention, applied to its fly-wheel casing. These tubes *l*, of which one is shown in section, are fixed on the upper part of the fly-wheel casing *e*, and the interior of each is crossed by a number of wire-gauze partitions *m*, separated from each other by rings. The outer mouth of each tube has an inwardly-turned lip, under which is fixed a deflector *n* of mushroom shape. These tubes *l* allow escape of air when the piston of the motor descends, lessening the capacity of the casing, and allow entrance of air when the piston ascends, increasing the capacity of the casing. The circulation of air has a cooling effect on the lubricant contained in the casing, so that it does not become too fluid. The gauze partitions *m* and the deflector *n* and lip at the outer mouth of each tube, while they prevent oil from being thrown out, also prevent dust and grit from entering the casing.

Having thus described the nature of this invention and the best means I know of carrying the same into practical effect, I claim—

In combination with the crank and fly-wheel casing of an oil-motor, tubes for circulation of air, each provided with wire-gauze partitions and at its outer mouth a turned-in lip and a deflector, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

XAVIER DE LE CROIX.

Witnesses:

ALFRED A. GINGELL,

H. L. BROMHEAD.