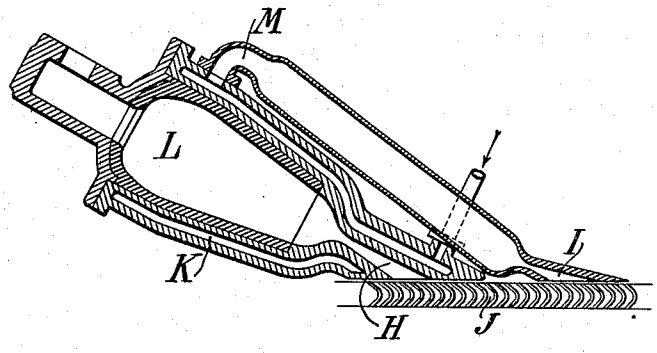
C. LEMALE.

TURBINE.

APPLICATION FILED AUG. 3, 1906.

919,895. **Patented Apr. 27, 1909.**



WITNESSES:

Fred White

René Muine

INVENTOR :

Charles Lemale,

By Attorneys

Arthur & Basset Ostrand

UNITED STATES PATENT OFFICE.

CHARLES LEMALE, OF PARIS, FRANCE.

TURBINE.

No. 919,895. Specification of Letters Patent. Patented April 27, 1909.

Application filed August 3, 1905. Serial No. 272,521.

To all whom it may concern:

Be it known that I, CHARLES LEMALE, a citizen of the Republic of France, residing in Paris, France, have invented new and useful Improvements in Turbines, of which the following is a specification.

The present invention consists of improvements in gas-driven turbines, and relates more particularly to turbines wherein the motive fluid is obtained by the combustion of a gaseous mixture under a continuous pressure in special chambers, and in which steam is projected on to the blades of the turbine.

The embodiment of the invention shown in the single figure of the drawing comprises the combination of a high-temperature gas nozzle H with a steam nozzle I, these being both directed on to the disk J. In this figure the steam is produced in the water jacket K surrounding the combustion or explosion chamber L and the high-temperature nozzle H. The water in the jacket is in a very thin body, so as to be transformed quickly into vapor. The steam collected in an intermediate reservoir or dome M expands through the nozzle I.

What I claim is:—

A hot-blast turbine including in combination a combustion chamber for effecting combustion of a gaseous mixture under continuous pressure, a nozzle for projecting the products of such combustion under pressure upon the blades of the turbine, a steam generator carrying a thin body of water surrounding at least a part of said combustion chamber and nozzle, a nozzle for projecting steam from said generator on to the blades of the turbine, and an intermediate reservoir between the steam generator and said nozzle.

In witness whereof I have hereunto signed my name this 19th day of June, 1905, in the presence of two subscribing witnesses.

CHARLES LEMALE.

Witnesses:

JULES ARMENGAUD, Jeune,

HANSON C. COXE.