

Carling Turbine Blower Co.

Worcester, Mass.

Branch Offices

ATLANTA, GA.
BOSTON, MASS.
CHICAGO, ILL.
CLEVELAND, OHIO

DENVER, COLO.
MEMPHIS, TENN.
NEW ORLEANS, LA.
NEW YORK, N. Y.

PHILADELPHIA, PA.
PITTSBURGH, PA.
ST. LOUIS, MO.
SAN FRANCISCO, CAL.

SCRANTON, PA.
LONDON, ENG.
MONTREAL, QUE.
PARIS, FRANCE

PRODUCTS—Carling Turbo Blowers; Motor Driven Under-grate Blowers; Carling Stoker Fans; Turbine Pressure Fans; Gas Producer Blowers; Turbine Volume Fans; Motor Driven Volume Fans; Carling Steam Turbines, and patented Steam Turbine Specialties; Generator Sets.

Also Carling Turbines with Reduction Gears.

Carling Turbo Blowers—Carling Steam Turbine Blowers are made in 10 sizes with capacities ranging up to 30,000 cu. ft. per minute at pressures up to 8-in. static. The Carling Turbo Blower is equipped with a patented safety flange which prevents explosion of the turbine through runaway should the fan wheel become detached from the main shaft.

This feature is covered by Patent No. 1,037,111.

This is an ideal forced draft unit for mechanically stoked and hand fired boilers up to 1000 hp. It is quiet in operation and can be installed quickly and cheaply.

Automatic gravity feed lubrication.

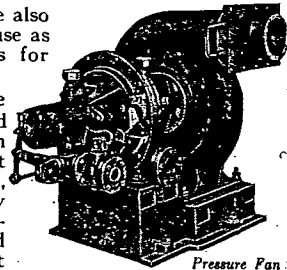
Motor Driven Under-grate Blower—The fan is similar in construction to that in the turbo blower and, like the latter, is made in 10 sizes. It can be furnished equipped with either constant or variable speed motors to suit any size boiler up to 600 hp. Motor speeds are 1750, 2400 or 3450 r.p.m. Capacities of the fan will be mailed on request.



Turbine Pressure Fans—Carling Turbine Pressure Fans are made in 12 sizes with a wide capacity range at high static pressures. They are designed for gas producers and oil furnaces, for conveyors for sawdust and other light materials, and for industrial drying purposes.

They are also made for use as exhausters for gases, etc.

They are furnished either with or without a blast gate, with any angle of discharge and either right or left hand as specified.

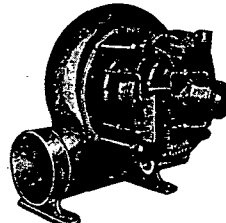


Pressure Fan

Turbine Volume Fan—Designed for delivering a large volume of air at low pressures up to 10-in. static. It is supplied as a blower with two air inlets or as an exhauster with one inlet for pipe connections. The fan may be placed in any position. No special foundation is required as there is no vibration because of special care in balancing. It is built as a unit, the fan wheel being mounted direct on the end of the turbine shaft, thus eliminating the necessity of a coupling. The turbine shaft is mounted on ball bearings, reducing friction to a minimum.

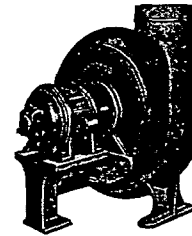
Built for continuous service it requires no attention other than lubrication. All parts are of heavy and substantial design with a wide margin of safety. Ideal unit for hollow blast grates and for many other purposes.

Furnished in 15 sizes with any angle of discharge.



Turbine Volume Fan

Motor Driven Volume Fans—Carling Motor Driven Volume Fans of the centrifugal type are made in 20 sizes from 50 to 20,000 cu. ft. per minute capacity. They are furnished with any type motor and with any angle of discharge either right or left hand.



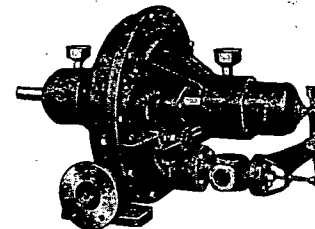
Motor Driven Volume Fan

Carling Steam Turbines Type "A"—Carling Steam Turbines are covered by seven distinct patents which embody the latest engineering developments and design.

Turbine Casing and Cover—Made of solid semi-steel castings of heavy construction to withstand high back pressure and superheated steam. The steam inlet and passages are especially designed for easy flow and tested at 300-lb. hydraulic pressure per square inch. The turbine cover fits into the turbine casing with a ground metal joint, making it absolutely steam-tight.

Rotor—Is of the two-velocity stage, impulse type, cast of solid phosphor bronze, with ten buckets per inch of diameter.

Rotor Blading—Made of monel metal, is cast into the bronze casting by our patented process which makes it impossible



Steam Turbine Type "A"

for the blading to work loose or come out. The blading is further protected by a shroud ring riveted around the entire periphery, top and bottom.

Main Governor—Is of the centrifugal type, mounted on the shaft which operates a balanced steam admission valve. It controls the speed of the turbine within close limits of variation.

Emergency Governor—Is provided to automatically shut off the steam if the

main governor should fail to operate. This governor is adjusted to function at 15 per cent above the set speed of the main governor.

Safety Flange—Is a patented feature of all Carling Turbines. It prevents bursting of the rotor through runaway in case of accident to the governor mechanism.

Nozzles—Made from robin bronze or monel metal and are so inserted that they cannot work loose.

Packing—Is of the patented Q.P. type, consisting of a series of conical fibrous rings. It automatically seals itself, is self-lubricating, requires no adjustment after it is once put in and will withstand 30 lb. back pressure without leaking.

Ball Bearings—Are of the heavy-duty, double-row, precision type, held in removable wearing sleeves. Both bearings can be replaced in less than one hour.

Lubrication—Can be by either light grease or oil, depending on the customer's preference which should be specified when ordering.

Direction of Rotation—Can be either clockwise or counter-clockwise as specified.

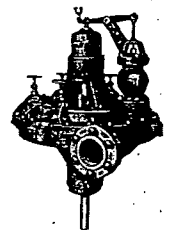
Vertical Steam Turbines—Made in five frame sizes and are furnished complete with bosses and supporting studs.

Refer to Type "A" Carling Steam Turbine for general specifications. With or without governor.

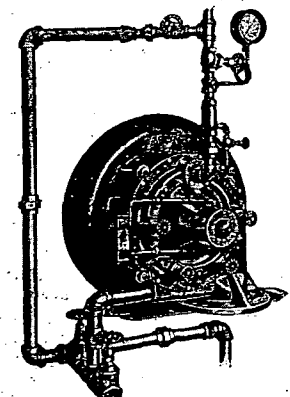
Gas Producer Blower—Will greatly increase the capacity of any type of gas producer and substantially improve the quality of gas output.

Furnished complete with piping, blast gate and valves, ready to mount on any type of gas producer.

250 gas producers now equipped.



Vertical Turbine Type "V"



Gas Producer Blower