

A. KOMP.  
Improvement in Gas-Heater.

No. 131,280.

Patented Sep. 10, 1872.

Fig. 1.

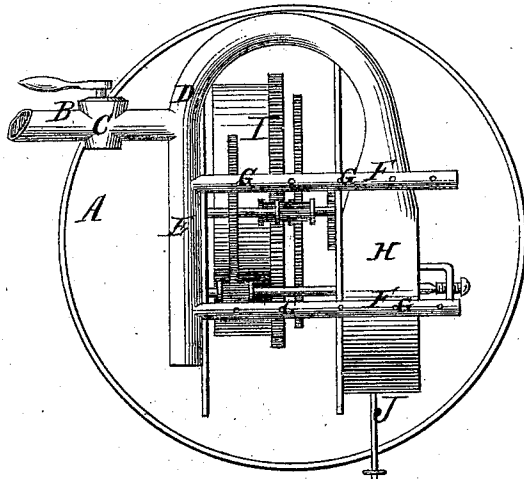
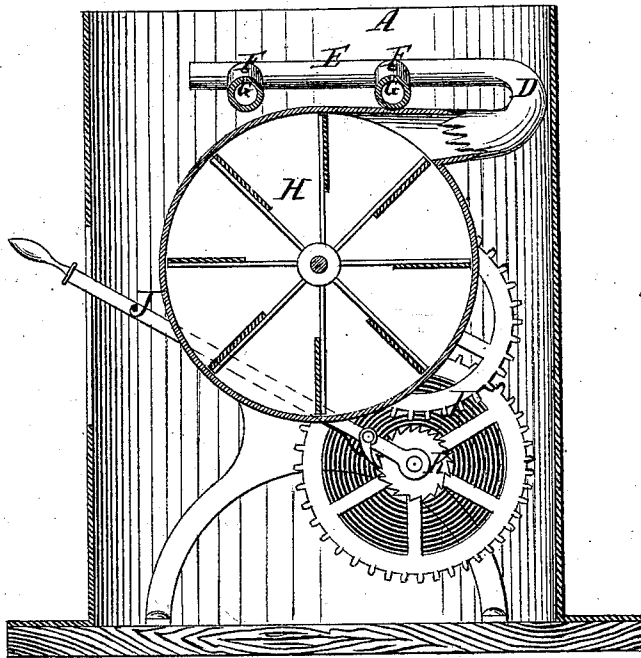


Fig. 2.



Witnesses.  
E. S. Kastenhuber  
Chas. Wahlers.

Inventor.  
Albert Komp  
By  
Van Sandtvoord & Hauff  
Attys

# UNITED STATES PATENT OFFICE.

ALBERT KOMP, OF NEW YORK, N. Y.

## IMPROVEMENT IN GAS-HEATERS.

Specification forming part of Letters Patent No. 131,280, dated September 10, 1872.

*To all whom it may concern:*

Be it known that I, ALBERT KOMP, of the city, county, and State of New York, have invented a new and useful Improvement in Gas-Heaters; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is a plan view of a heater containing my improvement. Fig. 2 is a vertical section.

Similar letters indicate corresponding parts.

This invention relates to gas-heaters; and consists in a mixing-chamber arranged in the gas-pipe between the discharge-cock and the burner, into which air is forced so that the gas and the air are mixed before they reach the place or places of combustion. The air is fed into the mixing-chamber through a pipe which meets the gas pipe beyond the gas-discharge cock, at which point of intersection they communicate with the mixing-chamber, which consists of a prolongation of the gas-pipe, and which communicates, at its further end, with the pipe or pipes composing the burners. The air is impelled into the apparatus by means of pressure put upon it, as for example by compressing air and discharging it as wanted, or by a fan-blower; as I have shown in the present illustration. The fan-blower here shown is situated in a chamber which discharges into the air-pipe, and it is driven by spring-power or clock-work acting upon the shaft of the fan.

The letter A designates the wall of the heater, which can be of any size, shape, or dimensions desired, or made of any suitable material according to the purpose required, whether for domestic or mechanical uses. The letter B designates a pipe for conducting gas (ordinary illuminating-gas being suitable for my purpose) into the apparatus. This pipe is provided with the usual stop-cock, C, beyond

which the gas-pipe receives an air-pipe, D, which is united with the gas-pipe and arranged in such a manner that the current of air coming through the air-pipe will readily coincide and mix with the current of gas. The gas and air pipes are combined into one at their intersection, and prolonged to form a mixing-chamber, E, from which extend pipes F that compose the burners of the apparatus, and which are provided with perforations G G, &c., at suitable intervals for the emission of the mixed gas and air at the points where it is to be consumed. The pipes F are, of course, closed at their outer ends. The air-pipe D proceeds from the drum of a fan-blower, H, of the ordinary construction, whose fan is driven in this example by means of a spring clock-work, I; but it may be driven in any other convenient manner. The spring of the clock-work is wound up by means of a lever stud-pawl, J, which swings on the arbor of the spring, the pawl engaging the teeth of a ratchet-wheel, K, which is fast on the arbor.

My invention can be used in gas-stoves and in gas heaters or furnaces, and in general wherever the combustion of gas can be used for mechanical or other purposes.

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

1. The mixing-chamber E, having the burners or pipes F F formed by prolonging the air and gas pipes B D beyond their point of union, substantially as herein shown and described, for the purpose set forth.

2. The fan-wheel H and its driving mechanism arranged in respect to the air-pipe D and gas-pipe B as set forth, in combination with the prolonged mixing-chamber E and its burners or pipes F F, substantially as herein shown and described.

A. KOMP.

Witnesses:

W. HAUFF,  
E. F. KASTENHUBER.