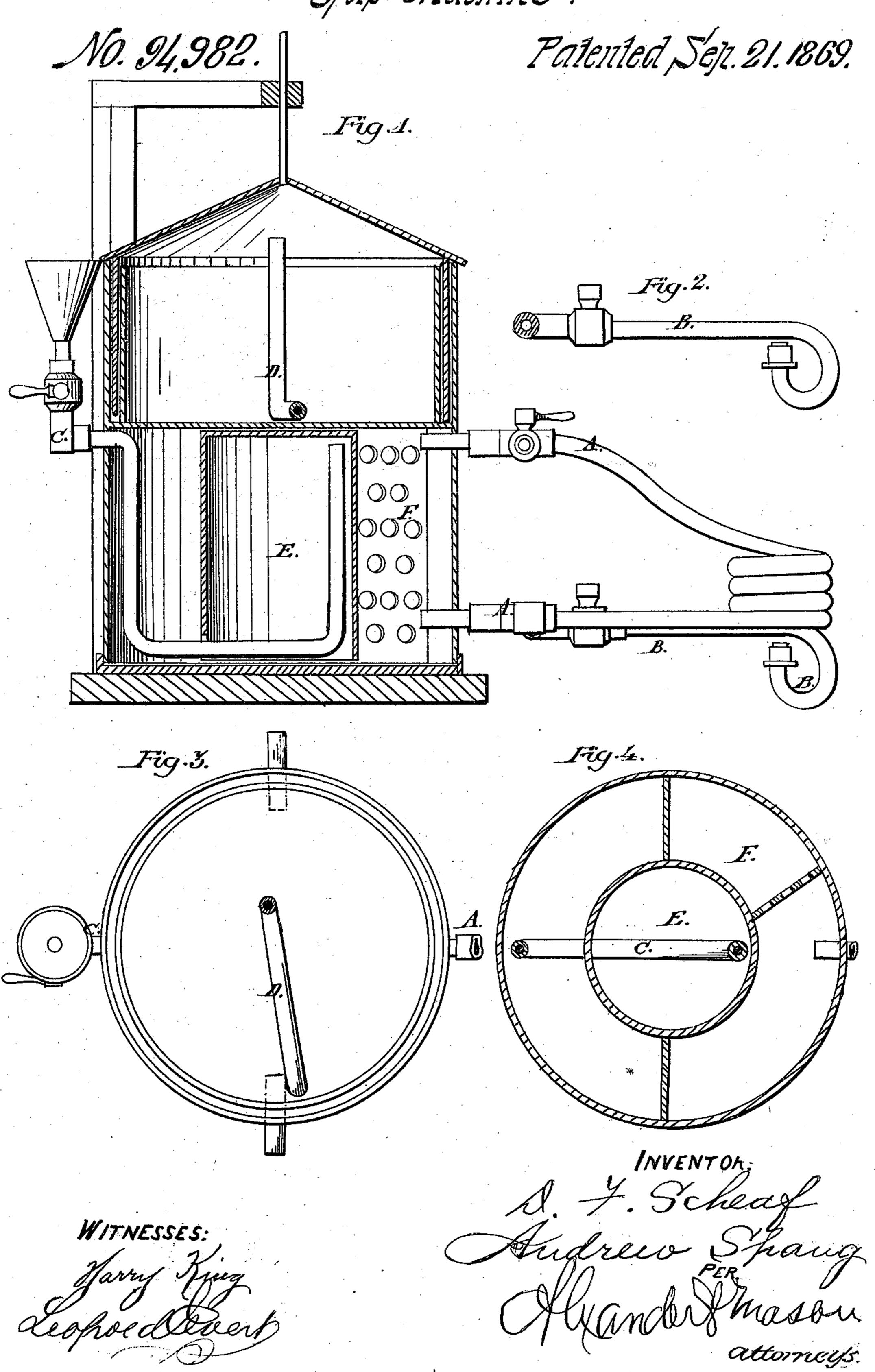
## Stand & Scheaf,

Gast Machine.



## Anited States Patent Office.

## ANDREW R. SPANG AND DANIEL F. SCHEAF, OF DAYTON, OHIO.

Letters Patent No. 94,982, dated September 21, 1869.

## IMPROVED GAS-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, Andrew R. Spang, and Daniel F. Scheaf, of Dayton, in the county of Montgomery, and in the State of Ohio, have invented certain new and useful Improvements in Gas-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Our invention is intended as an improvement on the gas-machine patented by Daniel F. Scheaf, January 7, 1868; and consists in so arranging the heatingcoil that it will receive its requisite supply of fuel from the gasoline itself, instead of passing it through a stove, as in the patent referred to.

In order to enable others skilled in the art to which our invention appertains, to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation, showing the machine itself in section;

Figure 2 is a side view of the pipe and burner under the heating-coil;

Figure 3 is a plan view with the gasometer or cap removed; and

Figure 4 is a horizontal section, showing the interior arrangement of the lower part of the machine.

O represents the pipe, with a funnel at the top, through which gasoline is introduced into the tank E.

The gasoline passes out through the pipe A near the bottom of the machine, which pipe is provided with a branch-pipe and burner, B, so placed that the burner will be directly under the coil of the pipe A. Thus the burner receives its supply from the heavier

part of the gasoline, while the balance is heated in the coil making the gas, which passes through the upper end of the box A into the chamber F, which is filled with sponge, or other suitable material, then through pipe D into the gasometer, from gasometer back into the oil-tank, and then to the place where it is to be used.

By the arrangement of the pipe A, forming a coil outside of the machine, and providing the lower part of said pipe with a branch-pipe and burner, B, it will be seen that the heating coil receives the requisite supply of fuel from the gasoline itself, thus manufacturing the gas whenever the burner is lighted.

We do not claim heating the fluid in a coil outside of the generator, so as to cause a circulation of the fluid and the generation of gas, as this is described in the patent of Oakes Tirrell, of June 5, 1866.

Having thus fully described our invention,

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

1. So arranging the heating-coil of a gas-machine, that it will receive its requisite supply of fuel from the heavier part of the gasoline, substantially as herein set forth.

2. The arrangement of the pipe A and branch-pipe and burner B, substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing, we have hereunto set our hands, this 1st day of March, 1869.

AND. R. SPANG. DANIEL F. SCHEAF.

Witnesses:

NECLES JACOBS, D. REGAN.