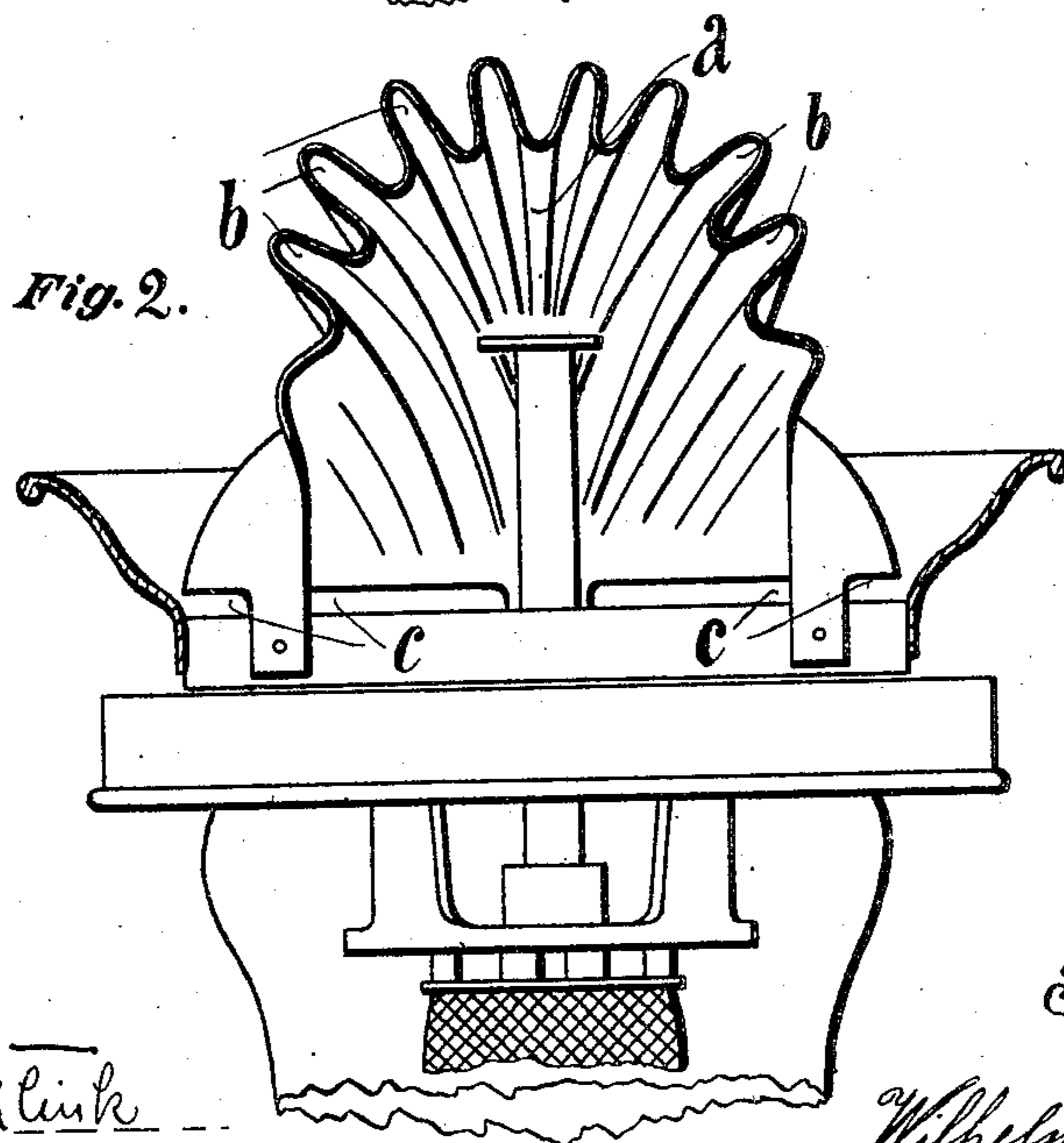
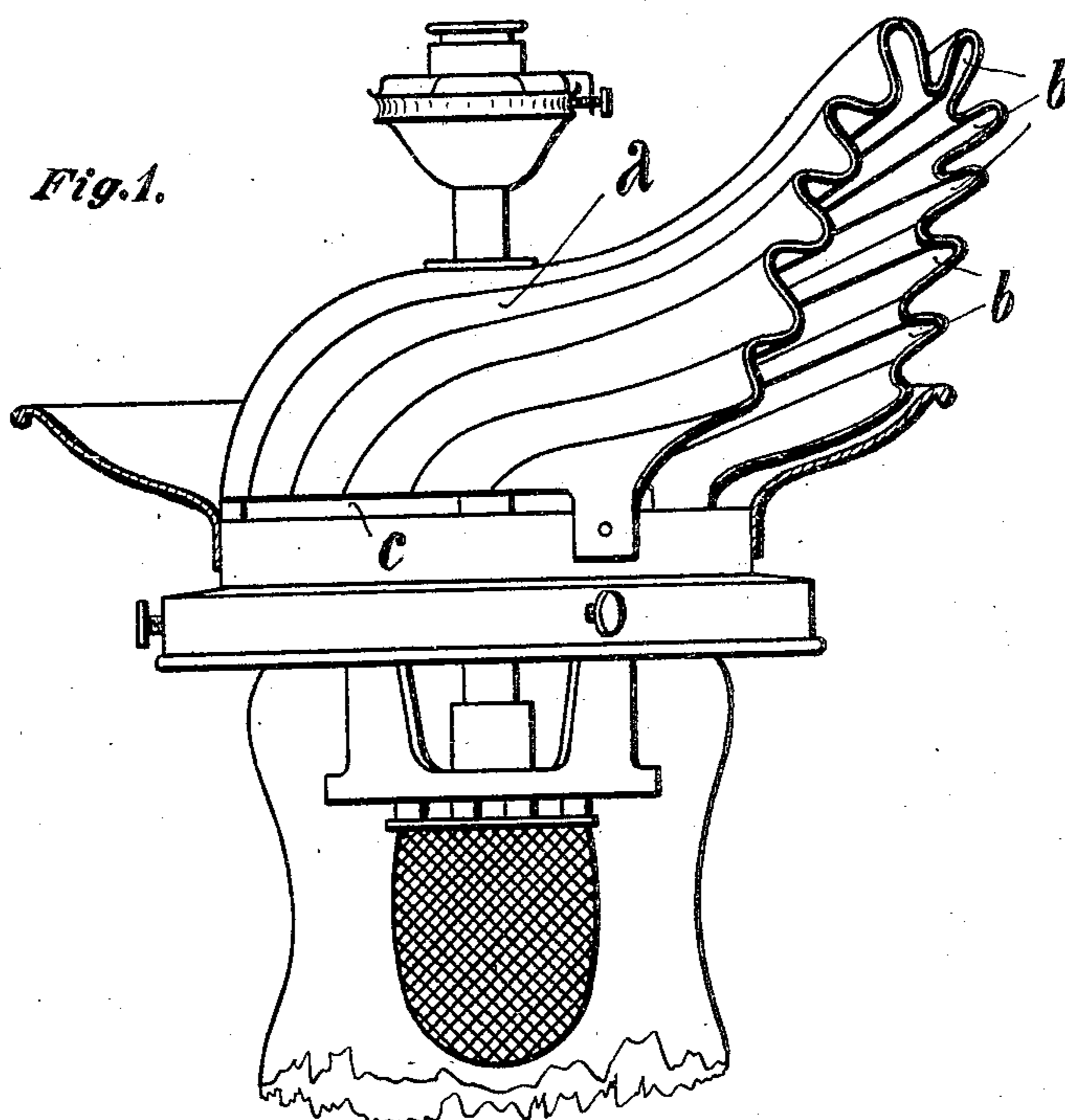


No. 877,667.

PATENTED JAN. 28, 1908.

W. SCHMITZ.  
INCANDESCENT GAS BURNER.  
APPLICATION FILED FEB. 5, 1907.



Witnesses:  
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O. H. Boyens

Inventor:  
\_\_\_\_\_  
Wilhelm Schmitz

# UNITED STATES PATENT OFFICE.

WILHELM SCHMITZ, OF HAMBURG, GERMANY.

## INCANDESCENT GAS-BURNER.

No. 877,667.

Specification of Letters Patent.

Patented Jan. 28, 1908.

Application filed February 5, 1907. Serial No. 355,795.

*To all whom it may concern:*

Be it known that I, WILHELM SCHMITZ, subject of the German Emperor, and resident of No. 33-34, Valentinskamp, Hamburg, Germany, have invented certain new and useful Improvements in an Incandescent Gas-Burner, of which the following is a specification.

Object of the present invention is a flue with a cooling device, for inverted incandescent gas-burners, which has the purpose of conducting fresh air continually into the burner so that the gases and the particles of smoke which rise are taken off and distributed to one direction by which means the said gases and smoke cannot touch the illuminating body.

The flue consists of a shell like cap which is provided with deep undulated walls.

The accompanying drawing shows a form of construction of the invention in two figures.

Figure 1 is a side view of the flue projecting from the burner. Fig. 2 is a front view of the same.

The flue *a* is provided with channels *b* and the slits *c* for allowing the gases and smoke which rise to distribute themselves, after the

combustion, into the channels *b* of the flue whereby the rising draft of air draws the cold air through the slits *c* cooling itself thereby, and is further cooled on the surface of the flue which is considerably larger owing to the same being shaped like a shell with deep undulated walls.

In order to prevent the rising gases touching the incandescent body through a rush of wind, the opening of the flue may be diverted in the direction required so that only fresh air goes through the slits *c*.

I claim:

In an incandescent gas burner, a flue having curved folds slanting sidewise and partially projecting from the burner so as to be adapted to cool the rising hot gases in the folds thereof, and the said flue having longitudinal openings at the sides horizontally for letting the outer air go into the inner folds of the flue cool and withdraw the rising hot gases, substantially as described.

Dated this 27th day of June, 1907.

WILHELM SCHMITZ.

Witnesses:

N. PARTOV,

M. HEUHLAN.