

(No Model.)

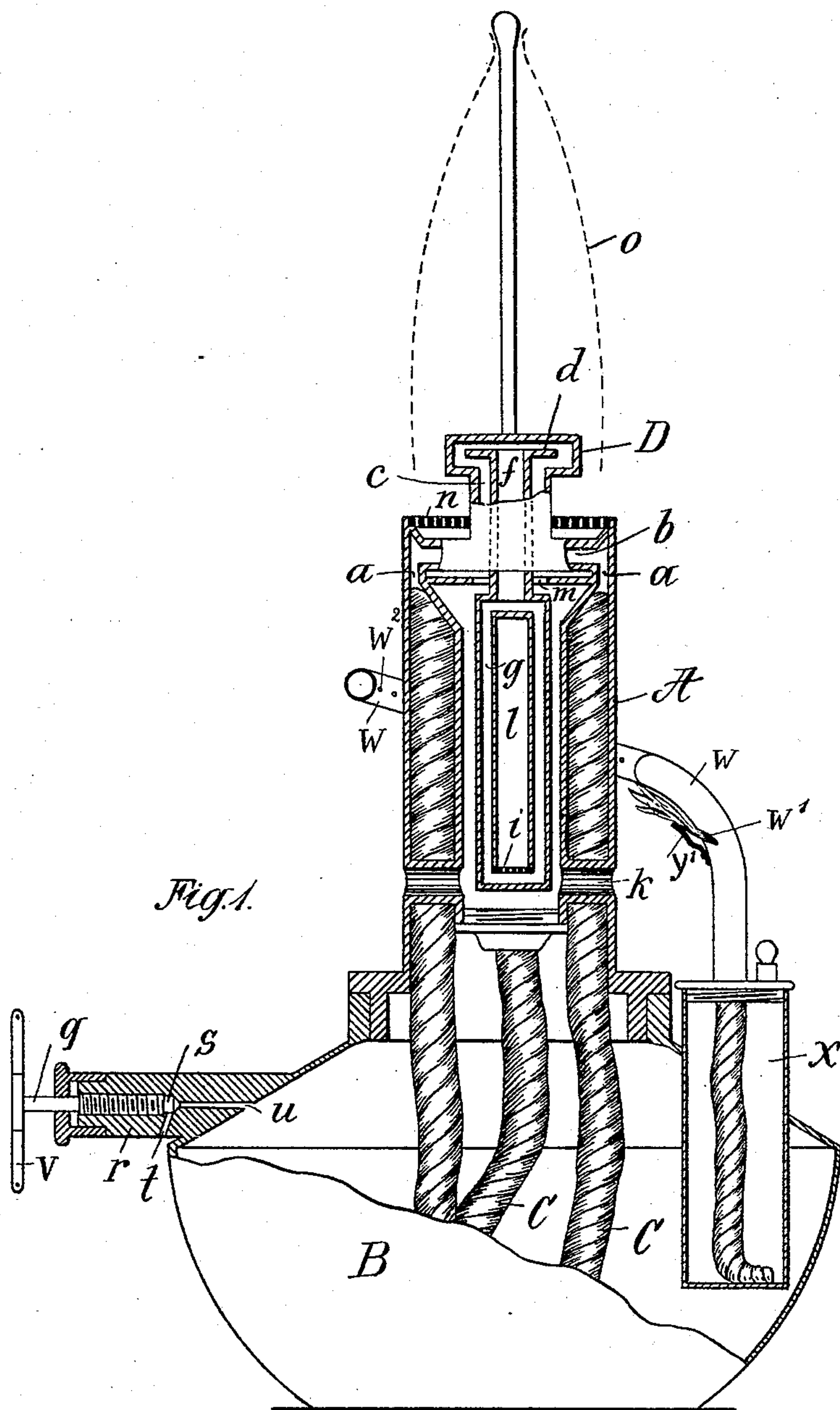
2 Sheets—Sheet 1.

A. PERLICH.

BURNER FOR SPIRIT GAS INCANDESCENT LIGHTS.

No. 572,565.

Patented Dec. 8, 1896.



Witnesses:

Theodor Schopper  
Hermann Jurentz

Inventor:

Albin Perlich  
per Person & Sachse  
his Attorneys.

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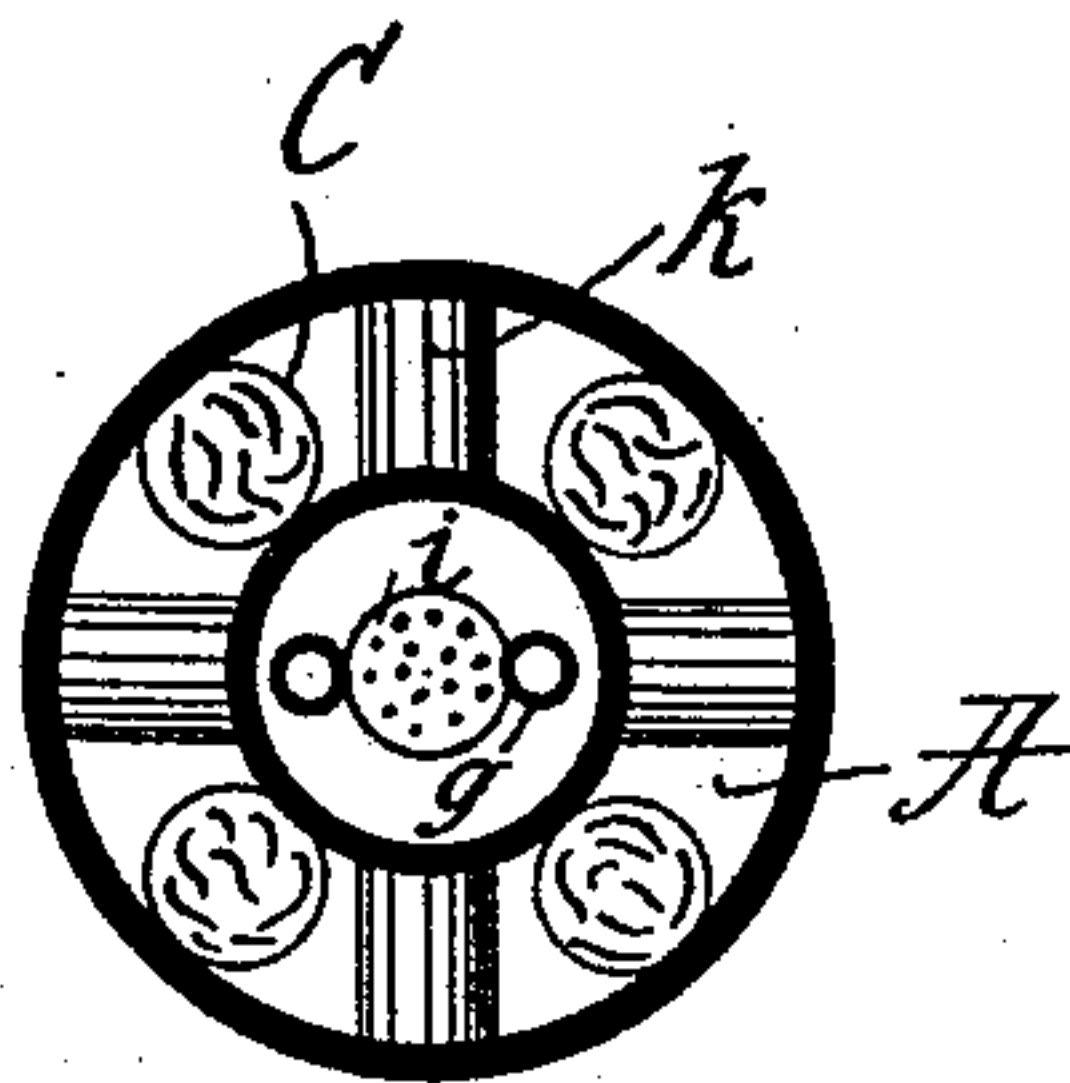


Fig. 2.

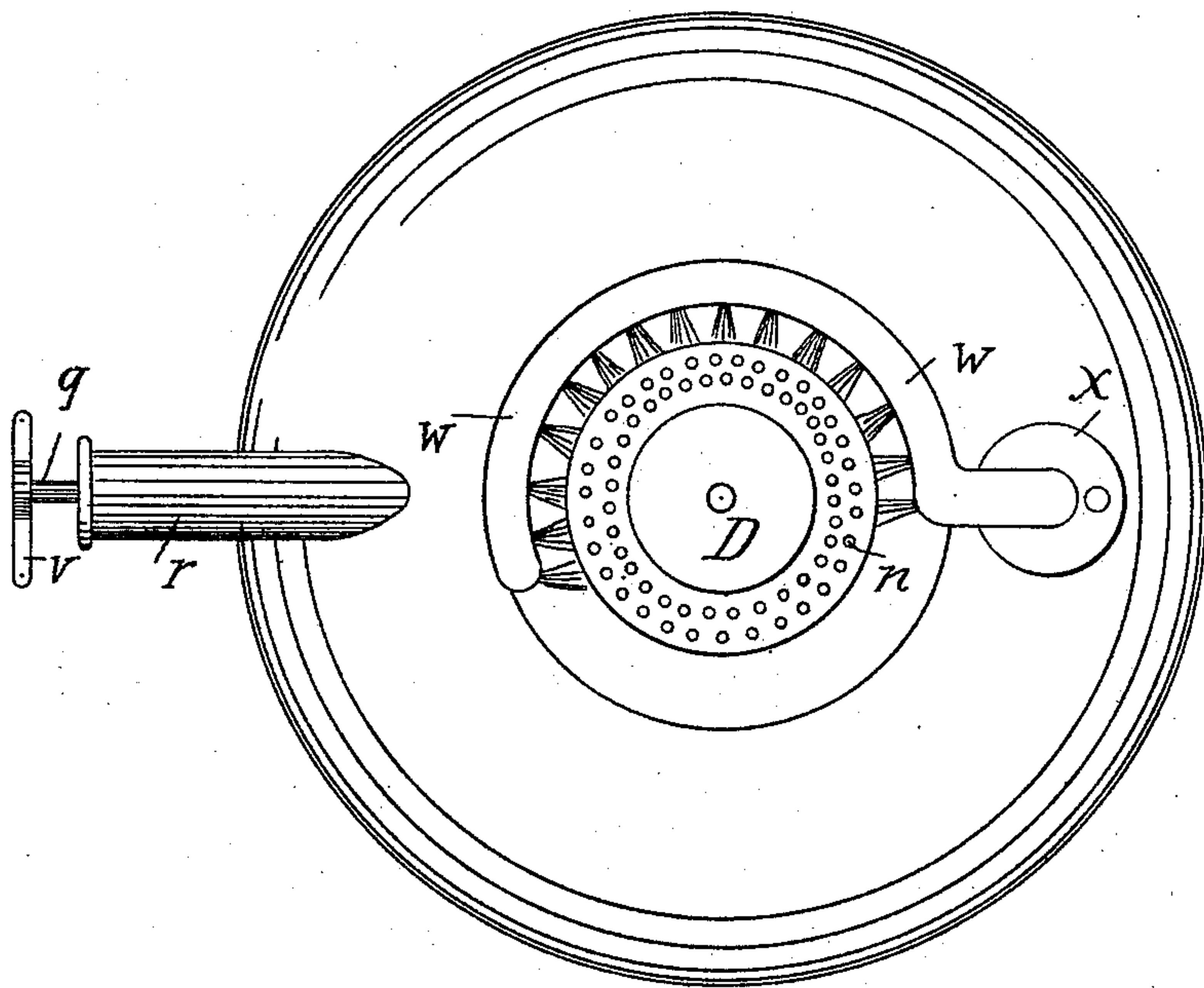


Fig. 3.

Witnesses

Hermann Jurensz  
Alex. Kirke

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Albin Perlich  
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his Attorneys



# UNITED STATES PATENT OFFICE.

ALBIN PERLICH, OF LEIPSIC, GERMANY.

## BURNER FOR SPIRIT-GAS INCANDESCENT LIGHTS.

SPECIFICATION forming part of Letters Patent No. 572,565, dated December 8, 1896.

Application filed June 29, 1895. Serial No. 554,512. (No model.) Patented in Switzerland June 10, 1895, No. 10,460; in Luxemburg June 10, 1895, No. 2,317; in Belgium June 11, 1895, No. 116,020; in France June 13, 1895, No. 248,141; in Sweden June 13, 1895, No. 6,833; in Norway June 14, 1895, No. 4,389; in Italy June 17, 1895, XXX, 39,050, and LXXVI, 356; in England June 17, 1895, No. 11,726; in Hungary June 26, 1895, No. 3,110; in Canada June 28, 1895, No. 51,035, and in Austria September 20, 1895, No. 45/3,398.

*To all whom it may concern:*

Be it known that I, ALBIN PERLICH, a subject of the Emperor of Germany, residing at Leipsic, in the Empire of Germany, have invented a new and useful Burner for Spirit-Gas Incandescent Lights, of which the following is a specification, and for which I have obtained a patent in Switzerland, numbered 10,460 and dated June 10, 1895; in Luxemburg, numbered 2,317 and dated June 10, 1895; in Belgium, numbered 116,020 and dated June 11, 1895; in France, numbered 248,141 and dated June 13, 1895; in Sweden, numbered 6,833 and dated June 13, 1895; in Norway, numbered 4,389 and dated June 14, 1895; in Hungary, numbered 3,110 and dated June 26, 1895; in Canada, numbered 51,035 and dated June 28, 1895; in Italy, numbered Reg. Gen., Vol. XXX, No. 39,050, and Reg. Att., Vol. LXXVI, No. 356, and dated June 17, 1895; in Great Britain, numbered 11,726 and dated June 17, 1895, and in Austria, numbered, Reg. B., 45, Reg. S., 3,398, and dated September 20, 1895.

The burner, which forms the object of the present invention and is illustrated on the drawings in Figure 1 in longitudinal section, in Fig. 2 in cross-section, and in Fig. 3 in top view, serves for the purpose of producing gas from spirit and with it to heat a glowing substance.

In the long hollow ring A, which is fastened upon the spirit-receptacle B, are the wicks C, which suck the spirit into the hollow ring A. At its upper end the spirit is generated into gas at first through warming by means of a semicircular burner *w*, filled with a wick fed from a special spirit-receptacle *x*, then while in use by heat which is radiated from the burner-head D. This burner-head has further the office to heat the generated spirit-gas before mixing with the air and before its consumption.

The first warming of the burner *w* takes place at the slanting hole *w'*. At the latter the spirit is vaporized by warming with a

match and ignited. The small flame thus produced ignites then, by means of the plate *y'* upwardly slanting, a flame at the holes *w*<sup>2</sup> of the burner *w*, which suffices to induce the gasification in the hollow ring A. This done the burner *w* is extinguished. The gas developed at the upper end of the hollow ring A passes through the fine openings *a* into the cross-pipe *b*, from this into the short pipe *c*, leading to the burner-head D, then into the burner-head D itself over the flange *d*, and into the downward-leading internal pipe *f*. To this is attached a four-cornered tubular frame *g*, out of the opening *i* of which the gas escapes in order at *l*, inside the hollow ring A, to mix with the air streaming in through the pipe *k*. The mixture of air and spirit-gas penetrates through the circular intermediate space *m*, crosses over the pipes *b* to the sieve-surface *n*, on which the flame burns that heats the burner-head D and puts the glowing substance into a state of incandescence.

In the case of the burner being used for combustible fluids the extinguishing arrangement described below can be used.

To the receptacle B, above the fluid-level, a short stem *r* is arranged, the bore *u* of which, at its front end, is provided with a quick-pitch thread in which the spindle *q* can be adjusted by means of the lever *v*. On screwing the spindle inward the cone situated at its front end closes the channels *u* and *t*. On screwing the spindle outward the two channels *u* and *t* are connected with each other, so that the outside air is brought into connection with the interior of the receptacle.

In the latter case the spirit-gas developed in the wick-space A, Fig. 2, no longer takes the previously-described long way, but the shorter, by simply going downward into the receptacle B, where an equalization of pressure with the outer air through the channels *u* *t* now takes place. There being now no escape of spirit-gas through the holes *n* the flame is extinguished.

What I claim is—

In a burner for spirit-gas incandescent light the combination of the hollow ring A, forming a Bunsen burner and containing the wicks C, with the cross-pipe *b*, the short pipe  
5 *c*, the flange *d*, the internal pipe *f*, the burner-head D, the tubular frame *g* with openings *i* for discharging the heated spirit-gas and the

openings *k* for the admission of air as and for the purpose set forth.

ALBIN PERLICH.

Witnesses:

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