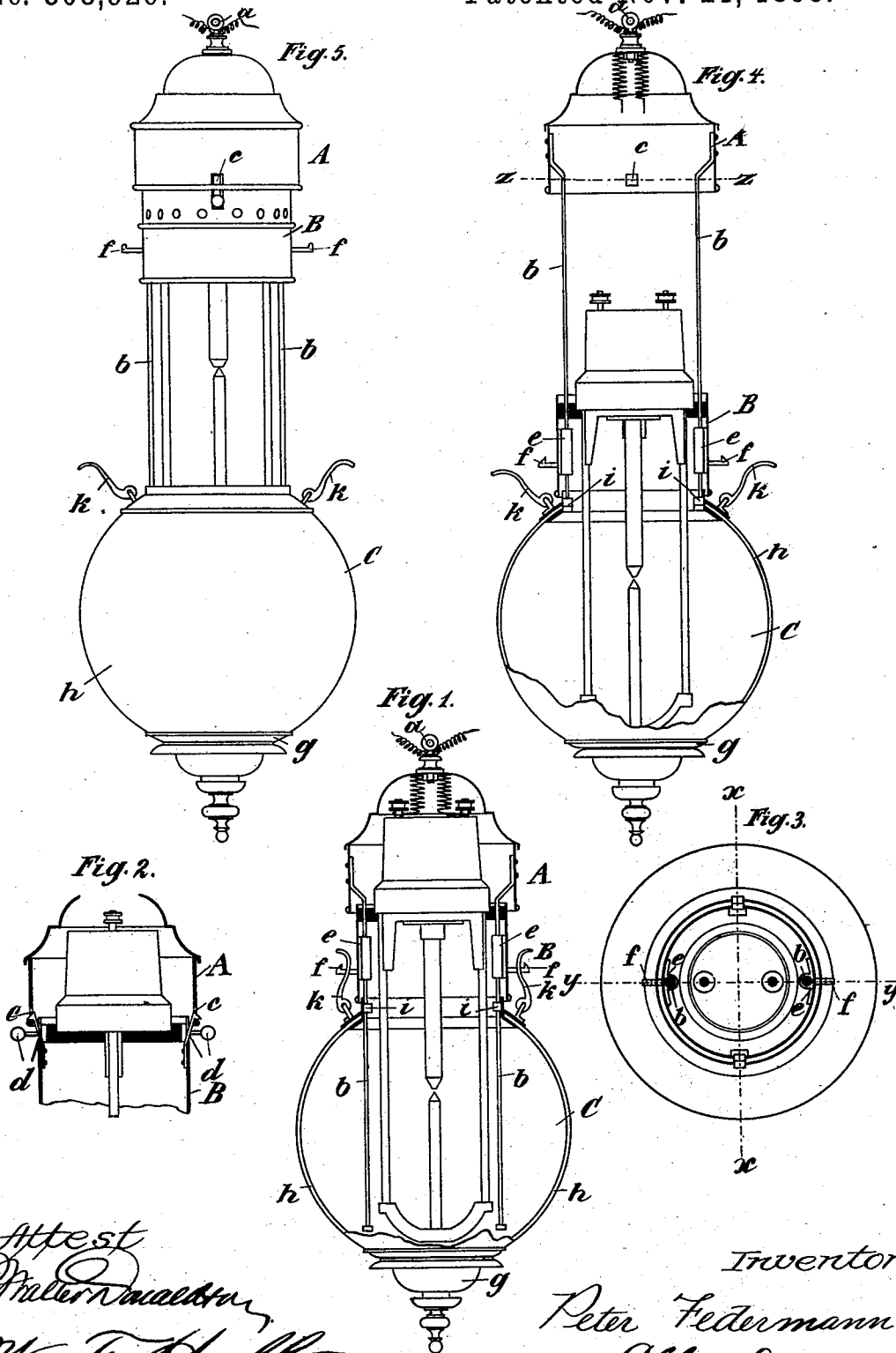


(No Model.)

P. FEDERMANN.
CASING FOR ELECTRIC ARC LAMPS.

No. 508,926.

Patented Nov. 21, 1893.



Attest
Wm. F. Hall

Inventor
Peter Federmann
by *Ellis Spear*
ATTY

UNITED STATES PATENT OFFICE.

PETER FEDERMANN, OF BERLIN, GERMANY.

CASING FOR ELECTRIC-ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 508,926, dated November 21, 1893.

Application filed February 23, 1893. Serial No. 463,478. (No model.)

To all whom it may concern:

Be it known that I, PETER FEDERMANN, of the city of Berlin, in the Kingdom of Prussia and German Empire, have invented a new and useful Improvement in Electric-Arc Lamps, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to electric arc lamps, and its object is to improve the means of access to the carbons and connections and generally to improve the construction of the lamps.

I will describe my invention with reference to the accompanying drawings, in which—

Figure 1 is a vertical section, along the line *y-y*, Fig. 3, of the lamp in its working position and condition. Fig. 2 is a partial vertical section taken at right angles to the section represented by Fig. 1, that is to say, along the line *x-x*, Fig. 3. Fig. 3 is a cross section taken along the line *z-z*, Fig. 4. Fig. 4 is a vertical section along the same plane as Fig. 1, but showing the lower parts of the lamp casing let down so as to allow of the lamp itself being introduced or removed therefrom. Fig. 5 is an external view showing the central part B of the casing in its highest position, and the lower part entirely let down for the purpose of enabling the carbons to be attended to by the man in charge.

In each of the figures similar parts or details of construction are indicated by similar letters of reference.

A, is the upper part of the casing; B, the middle or intermediate part; and C, the lower part including the globe.

The upper part A, is provided with an eye *a*, by means of which the lamp may be suspended, and with two guide rails *b b* on opposite sides. These guide rails have feet or stops at their lower ends. In the upper part A, there are also formed two holes *c c*, into which the spring catches *d d* secured on the intermediate part B may engage. These catches are provided with knobs or handles by means of which they may be disengaged.

The cylindrical intermediate part B, in addition to the spring catches *d d*, carries the fixed catches or staples *f f*, and two internal supporting guides *e e*, for the rails *b b*. The lamp itself is connected with this intermedi-

ate part B, by means of any suitable insulating disk in such a manner that while it participates in the upward and downward motion of the part B, it may be readily lifted out when required.

The lower part C holds the globe and the ash plate *g*. The globe ring has fixed to it, on opposite internal diameters, two additional guides *i i*, for the rails *b b*, and on the outside, two opposite curved pivoted catches *k, k*, which are capable of engaging with the fixed catches or staples *f f*, of the intermediate part B, and thus of securing the parts B and C together.

It is obvious that the bottom part C may thus be moved downward alone or together with the intermediate part B. If the lower part C be disengaged from the part B, and be let down until the guides *i i* rest upon the feet of the rails *b b*, the intermediate part B remaining attached to the upper part A, (Fig. 5) the carbons and their connecting parts are exposed, and may be readily renewed or repaired. Also, if the lower part C and the intermediate part B are both lowered as shown by Fig. 4, the lamp and its connections are fully exposed and the lamp may be withdrawn from the casing through the open space between the parts A and B, which is sufficiently large to allow the lamp to pass freely. The lamp may therefore be removed from its casing without disturbing the globe or the lower part.

Fig. 1 shows the lamp with its casing closed ready for use, the bottom part being suspended by its pivoted catches *k k* from the staples *f f*, fixed on the intermediate part B, this part in its turn being engaged with the upper part A by means of the spring catches *d d* engaging with the holes *c c* in A. The manner in which the spring catches *d d* engage with the holes *c c* is illustrated by Fig. 2, and Fig. 3 shows the relative positions of the guide rails *b b*, and the spring catches *d d*.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A casing for electric arc lamps, consisting of a lower part including the globe and ash plate, a cylindrical intermediate part having opposite internal guides; and an upper part having opposite dependent guide rails passing through the guides of the middle part,

the three parts being co-axial and removably connected together by catches; substantially as set forth.

2. In a casing for electric lamps the combination of a fixed upper part, guide rods depending therefrom, a lower part sliding upon said guide rods, an intermediate part also sliding on said guide rods, catches carried by the intermediate part for securing it to the upper part, and catches for securing the lower part to the intermediate part, substantially as described.

3. In the casing of an electric arc lamp, the combination and arrangement with an upper fixed part and a lower sliding part of an intermediate part provided with an insulating disk into which the lamp is removably fitted; substantially as set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

PETER FEDERMANN.

Witnesses:

PAUL FISCHER,
PAUL BRINKMANN.