

(No Model.)

F. H. PRENTISS.  
INCANDESCENT ELECTRIC LAMP.

No. 488,635.

Patented Dec. 27, 1892.

Fig 1.

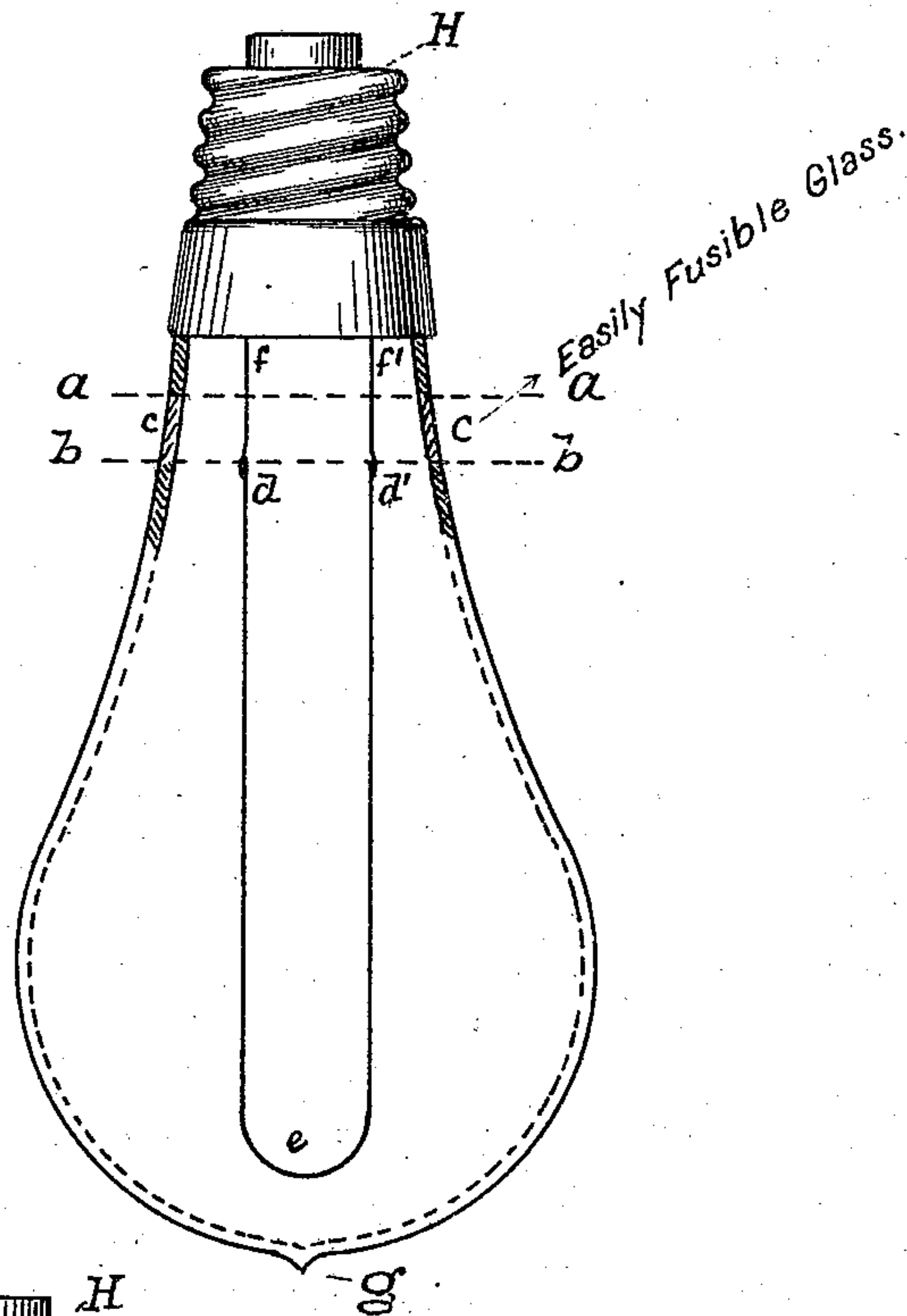
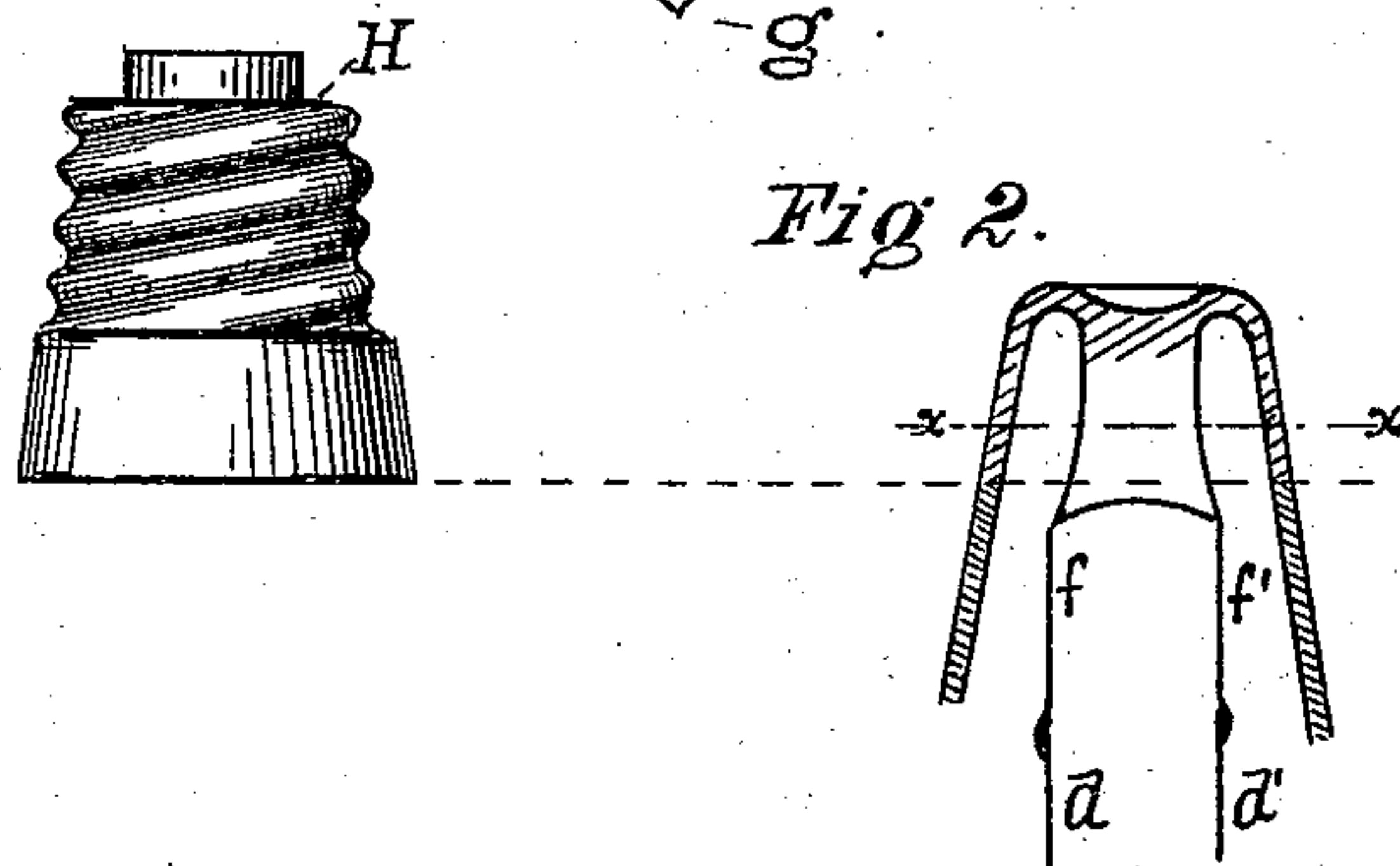


Fig 2.



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# UNITED STATES PATENT OFFICE.

FREDERICK H. PRENTISS, OF NEW YORK, N. Y.

## INCANDESCENT ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 488,635, dated December 27, 1892.

Application filed April 4, 1892. Serial No. 427,650. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK H. PRENTISS, a citizen of the United States, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Incandescent Electric Lamps, of which the following is a specification.

My invention relates to an improved incandescent lamp for electric lighting constructed so as to facilitate the repairing of said lamp by the substitution of a new filament in the place of a burned out or broken filament without the destruction of the lamp, and with the saving of the metal cap, glass globe and platinum wires.

It is well known that the ordinary life of a carbon filament seldom reaches two thousand hours of actual use. That upon the failure of such filament the remaining parts of the lamp, including the metal cap, glass globe and platinum wires, are practically in as good condition as when first made. It follows that if a lamp can be so constructed as to admit of its being repaired by replacing a broken or burned out filament by a new one, a great saving in the cost of manufacture will be effected. I accomplish this by making a portion of the globe of a softer glass than the rest of the globe; that is to say, a glass which will melt or fuse at a lower temperature than the glass of the other parts of the globe, so that the glass bulb being separated into two parts on a line passing through the section or portion of softer glass by means of a diamond, file, revolving wheel, saw, or other suitable cutting tool, or by cracking, may be reunited by fusing, after the substitution of the new filament. The portion of softer glass may form a section of the bulb below the metal cap so placed that after separation through such section easy access can be obtained to the points of connection between the filament and the platinum wires, or the upper portion of the bulb, including the part covered by the metal cap, may be composed of the softer glass and the separation be made through that por-

tion of the bulb uncovered by the removal of the metal cap.

Referring to the drawings, Figure 1 shows a lamp as herein described. *H* is the metal cap; *e* the filament, *f f'* the platinum wires, *d d'* the points of connection between the filament and the platinum wires, *c c* between the lines *a—ab—b* indicates a section of the globe composed of a softer glass than the other parts of the globe. I do not confine myself to the exact location of this section of softer glass between the lines as indicated, as such softer glass may be placed at any portion of the bulb which would give convenient access to the points of connection between the platinum wires and the filament. Fig. 2 represents a form of said lamp with the cap *H* removed. In this form of construction the upper portion of the glass bulb, including the part covered by the removal of the cap, is made of softer glass and the line of separation is made through the portion covered by the metal cap, as at *x—x*.

What I claim and desire to secure by Letters Patent is:

1. An incandescent lamp for electric lighting having a section of the glass bulb below the metal cap composed of a softer glass than the glass of the other parts of the lamp, in combination with the metal top, platinum wires and filament, substantially as and for the purposes described.

2. An incandescent lamp for electric lighting having the upper portion of the glass bulb, including the part thereof covered by the metal cap, composed of a softer glass than the glass of the other parts of the lamp, in combination with the metal top, platinum wires and filament, substantially as and for the purposes described.

Signed at New York, in the county of New York and State of New York, this 31st day of March, A. D. 1892.

FREDK. H. PRENTISS.

Witnesses:

W. J. TOWNSEND,  
LOUIS F. MURRAY.