(No Model.) 2 Sheets—Sheet 1.

W. A. YOUNG & A. G. NEVILLE.

PROCESS OF MANUFACTURING CENTRAL DRAFT LAMPS.

No. 484,277. Patented Oct. 11, 1892.

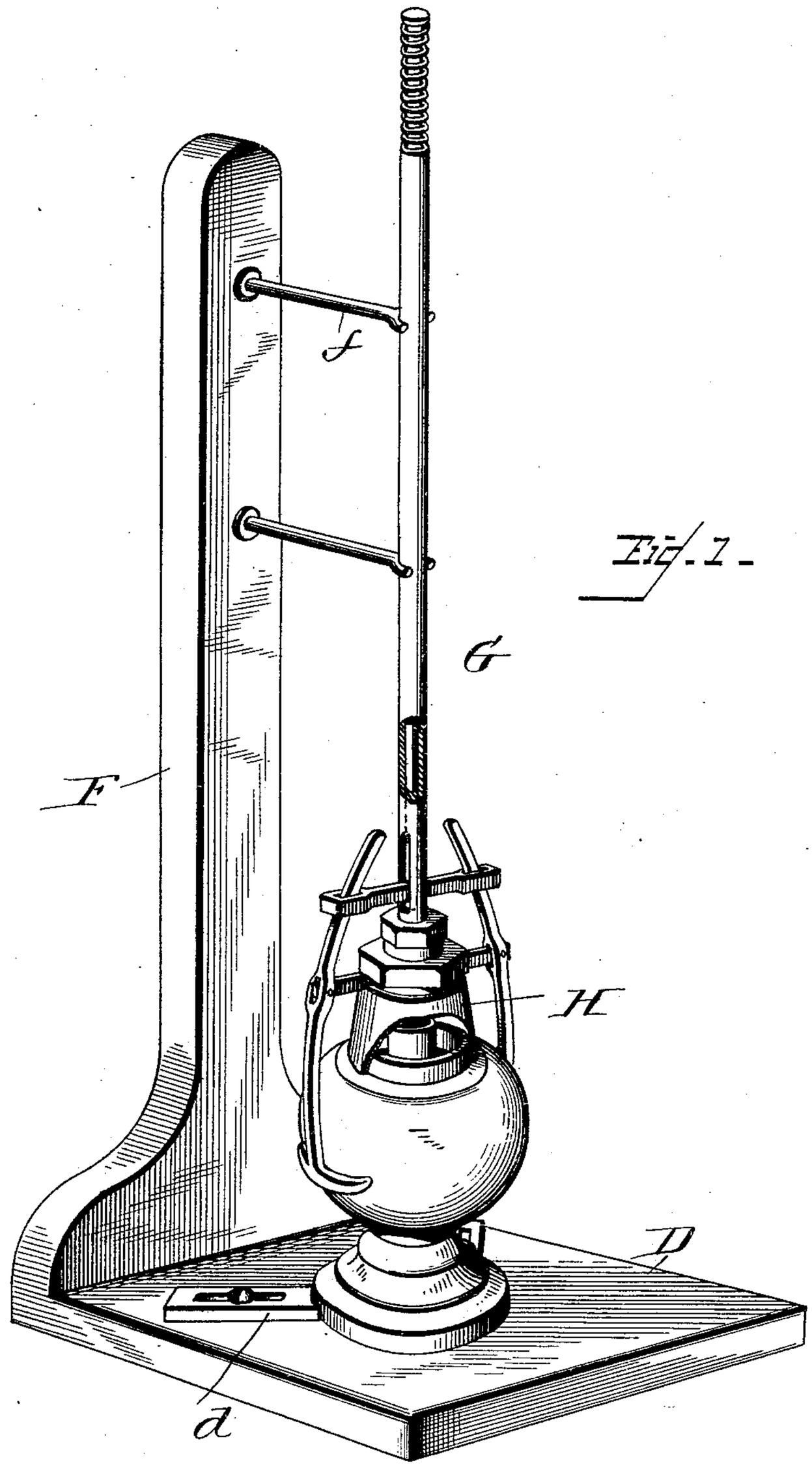

Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

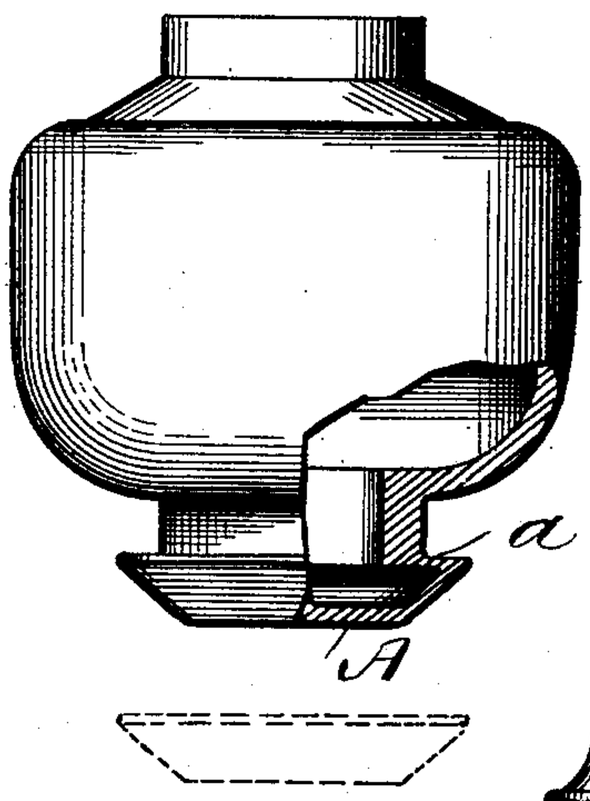


Fig. 3.

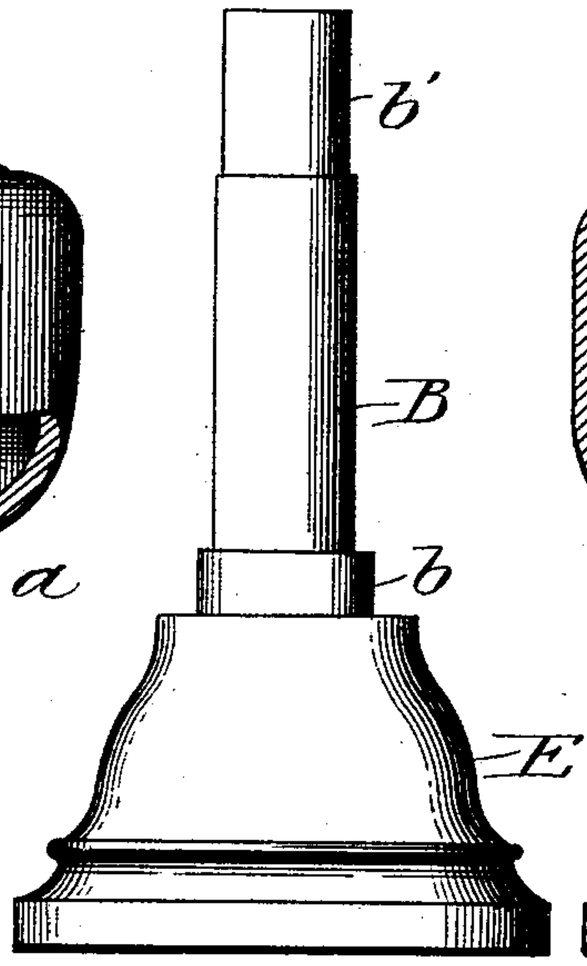


Fig. 4.

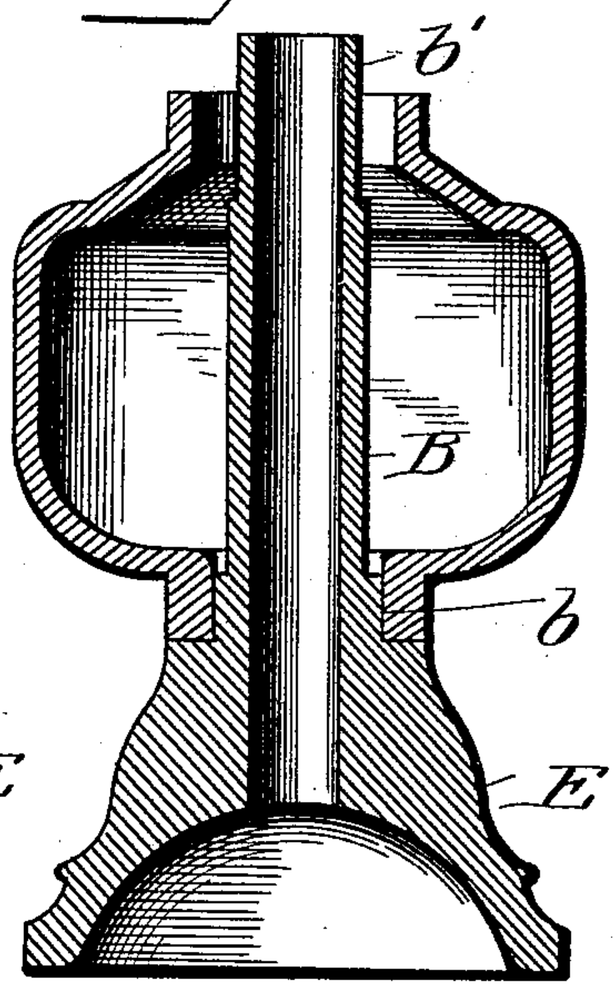


Fig. 5.

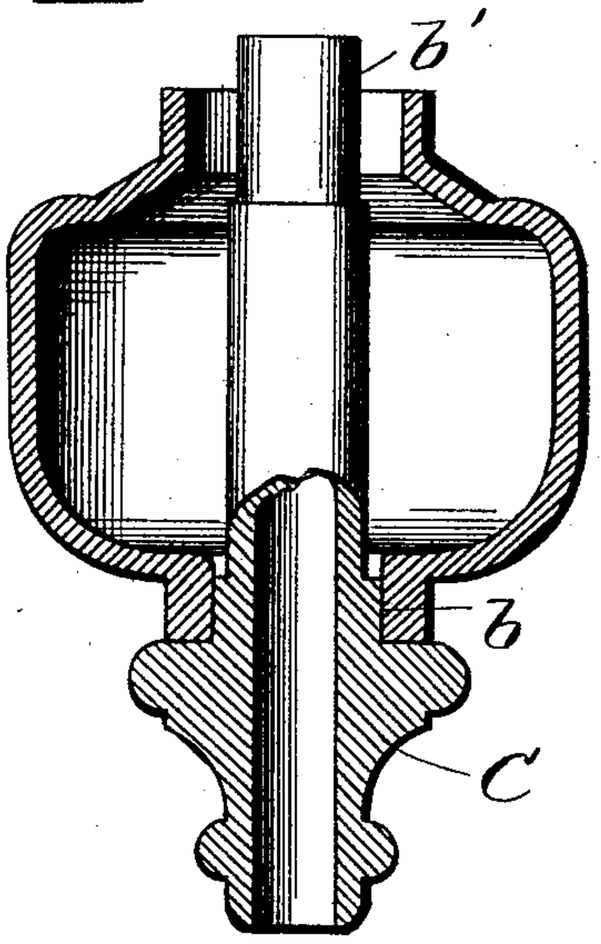
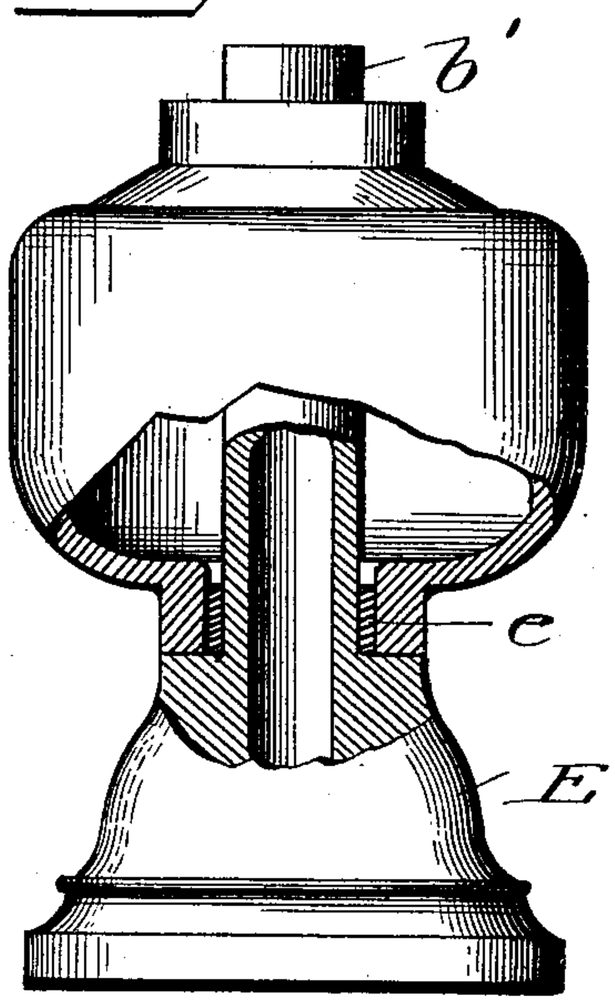


Fig. 6.



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UNITED STATES PATENT OFFICE.

WILLIAM A. YOUNG AND ASA G. NEVILLE, OF BLAIRSVILLE, PENNSYLVANIA.

PROCESS OF MANUFACTURING CENTRAL-DRAFT LAMPS.

SPECIFICATION forming part of Letters Patent No. 484,277, dated October 11, 1892.

Application filed August 6, 1891. Serial No. 401,905. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM A. YOUNG and ASA G. NEVILLE, citizens of the United States, residing at Blairsville, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Processes of Manufacturing Central-Draft Lamps; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to central-draft glass lamps and processes of manufacturing the same.

The object of the invention is to construct central-draft glass lamps in an economical and expeditious manner.

The improvement consists of the novel features and the peculiar construction and combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view of an apparatus for successfully carrying the invention into effect, parts of the snap being broken away to show the construction of the same. Fig. 2 is a side view of the bowl or lamp-body as it comes from the mold, the lower corner being broken away to better show the structural arrangement. The dotted lines show the foot-piece or blow-over A when broken away at *a*. Fig. 3 is a side elevation of the central draft-tube provided with an integral foot or stand. Fig. 4 is a vertical central section of the completed lamp of the stand variety. Fig. 5 is a central vertical section of the completed lamp of the pendent variety, the upper portion of the central draft-tube being shown in full. Fig. 6 is a side elevation of the lamp shown in Fig. 4, parts being broken away, showing a different manner of cementing the bowl or lamp-body to the draft-tube by the interposition of a separate piece of glass.

The gist of the invention is the process of forming, assembling, and cementing the parts of the lamp together. The bowl or lamp-body when taken from the mold is provided with cap or "blow-over" A at its lower end, which is united with the lower end of the lamp-body by the thin portion *a*, as shown most clearly in Fig. 2. This cap is broken off in the usual manner and the bowl or lamp-body presents the appearance illustrated in Figs. 4, 5, and 6. The central draft-tube B, constructed in any manner, being preferably pressed and provided with a base, which may be either a pendant C, as shown in Fig. 5, or a stand E, as shown in Figs. 3, 4, and 6, is thrust through the bowl or lamp-body and simultaneously cemented to the lower edge of the said bowl or lamp-body by reducing the lower edge of the said lamp-body or the base of the draft-tube to a plastic condition by the application of heat thereto or by the interposition of a softened piece of glass *e*. The instant the lower edge of the bowl or lamp-body and the base of the draft-tube come together they become cemented and the softened glass hardens. The piece of glass *e* strengthens the joint between the draft-tube and lamp-body. The same result is attained by enlarging the base of the draft-tube, as shown at *b* in Figs. 3, 4, and 5. The upper end of the draft-tube is reduced at *b'* to receive a metal tube, (not shown,) which is cemented thereto and which prevents the heat of the flame cracking the said draft-tube. The base is provided with an annular shoulder at the foot of the central tube, which forms a stop that limits the distance to which the central draft-tube is inserted within the bowl.

Fig. 1 shows an apparatus for carrying the invention into successful operation, and consists of base D, having adjustable gages *d*, which are slotted and held to the base by binding-screws, and having the standard F rising therefrom and provided with the guide-arms *f*, which are forked at their outer ends, and the snap G, which is of usual construction, except that the lower end of the tubular stem is provided with the flaring collar or cap H to fit over the neck of the lamp-body and receive the end of the draft-tube when the snap and lamp-body are lowered onto the draft-tube, which is supported on the base D, being properly adjusted to receive the lamp-body by the gages *d*. The lamp-body or bowl is held by the snap, and after the lower end of the said lamp-body or the base of the draft-tube is softened, or a piece of softened glass is placed so as to come between the base of

the draft-tube and the lower neck of the lamp-body, the snap is grasped and placed against the guide-arms *f* and lowered. The moment the lower edge of the lamp-body or bowl comes opposite the base of the draft-tube the parts become cemented. The guide-arms give direction to the snap and the lamp-body.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The hereinbefore-described process of manufacturing central-draft glass lamps, which consists in forming the base and the central draft-tube in one piece, then forming the bowl in a separate piece, and subsequently inserting the tube within the bowl and uniting the bowl and the tube together by the application of heat which fuses the glass, substantially as set forth.

2. The hereinbefore-specified process of manufacturing central-draft glass lamps, which consists in forming the base and the central draft-tube in one piece, the base having an exterior annular shoulder, then forming the bowl in a separate piece, and subsequently inserting the tube within the bowl until the said annular shoulder touches the lower edge of the bowl and uniting the bowl and the tube together by a fusion of the surfaces in contact, substantially as described.

3. The hereinbefore-specified process of manufacturing central-draft glass lamps, which consists in forming the base and the central draft-tube in one piece, the base having an exterior annular shoulder, and then placing a piece of fused glass around the tube and supporting it on the said annular shoulder, then forming the bowl in a separate piece and inserting the tube therein until the fused glass surrounding the tube and supported on the said annular shoulder comes in contact with the lower edge of the bowl, when the parts will become united, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM A. YOUNG.
ASA G. NEVILLE.

Witnesses:
RESTORE M. DOUGHTY,
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