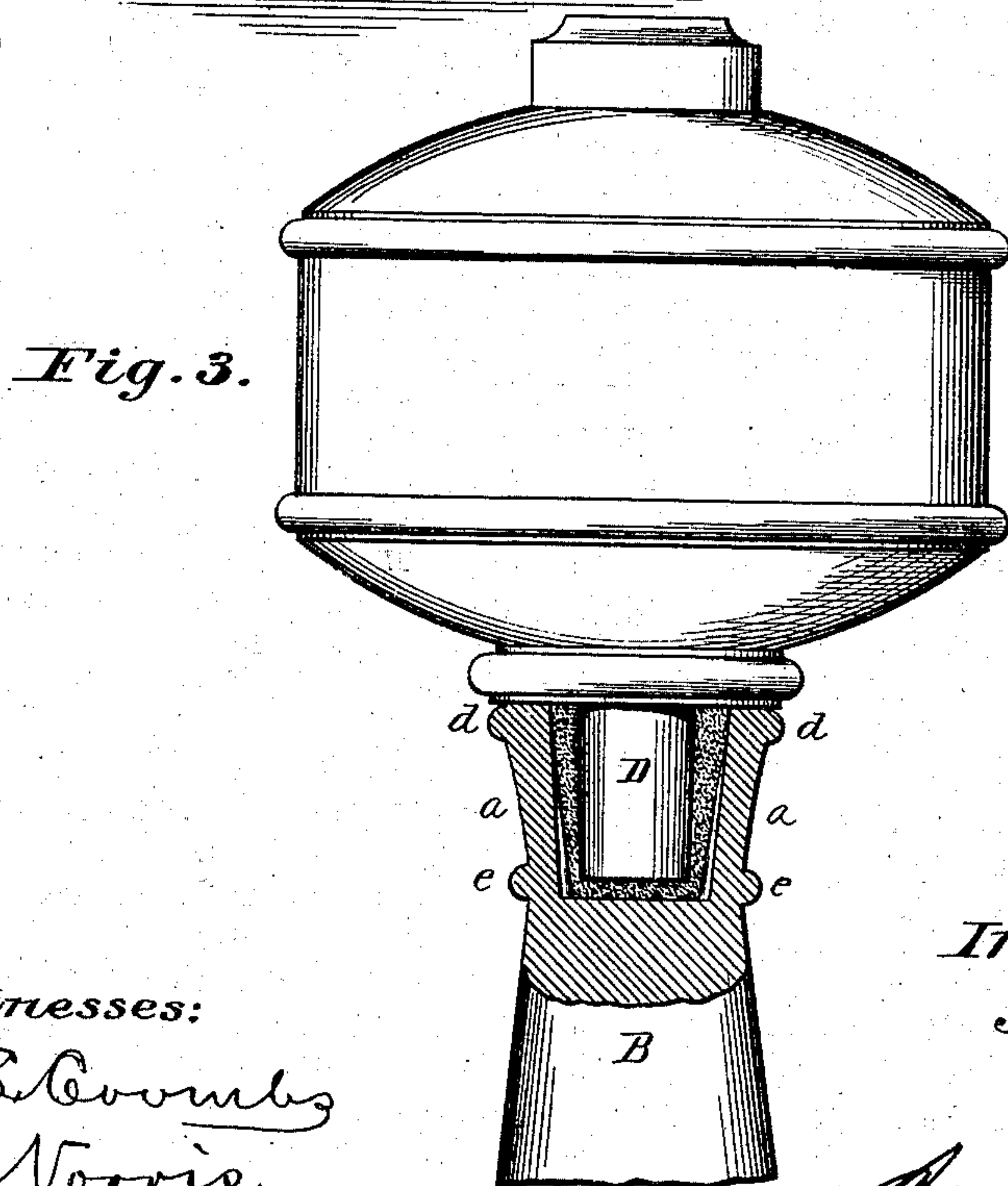
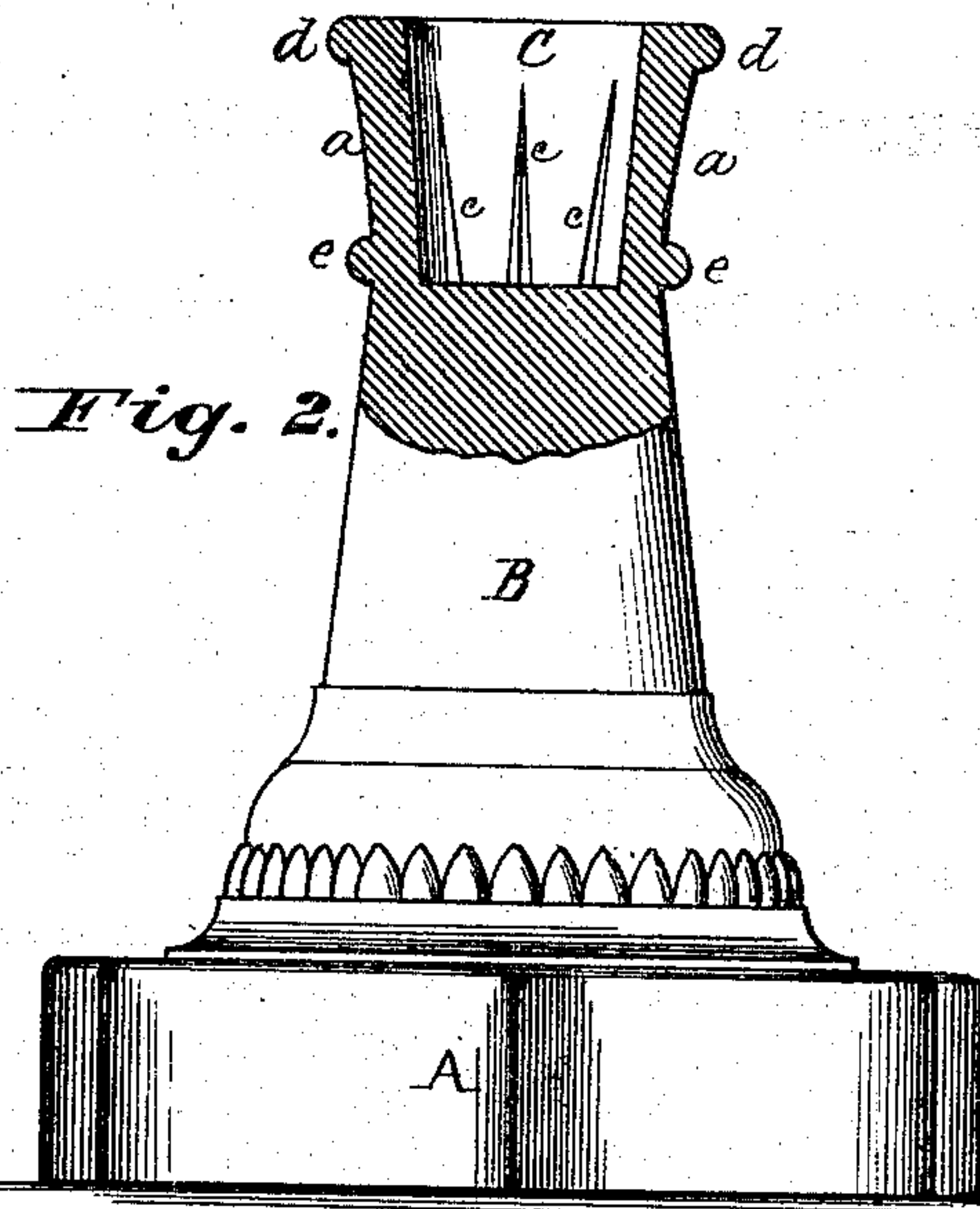
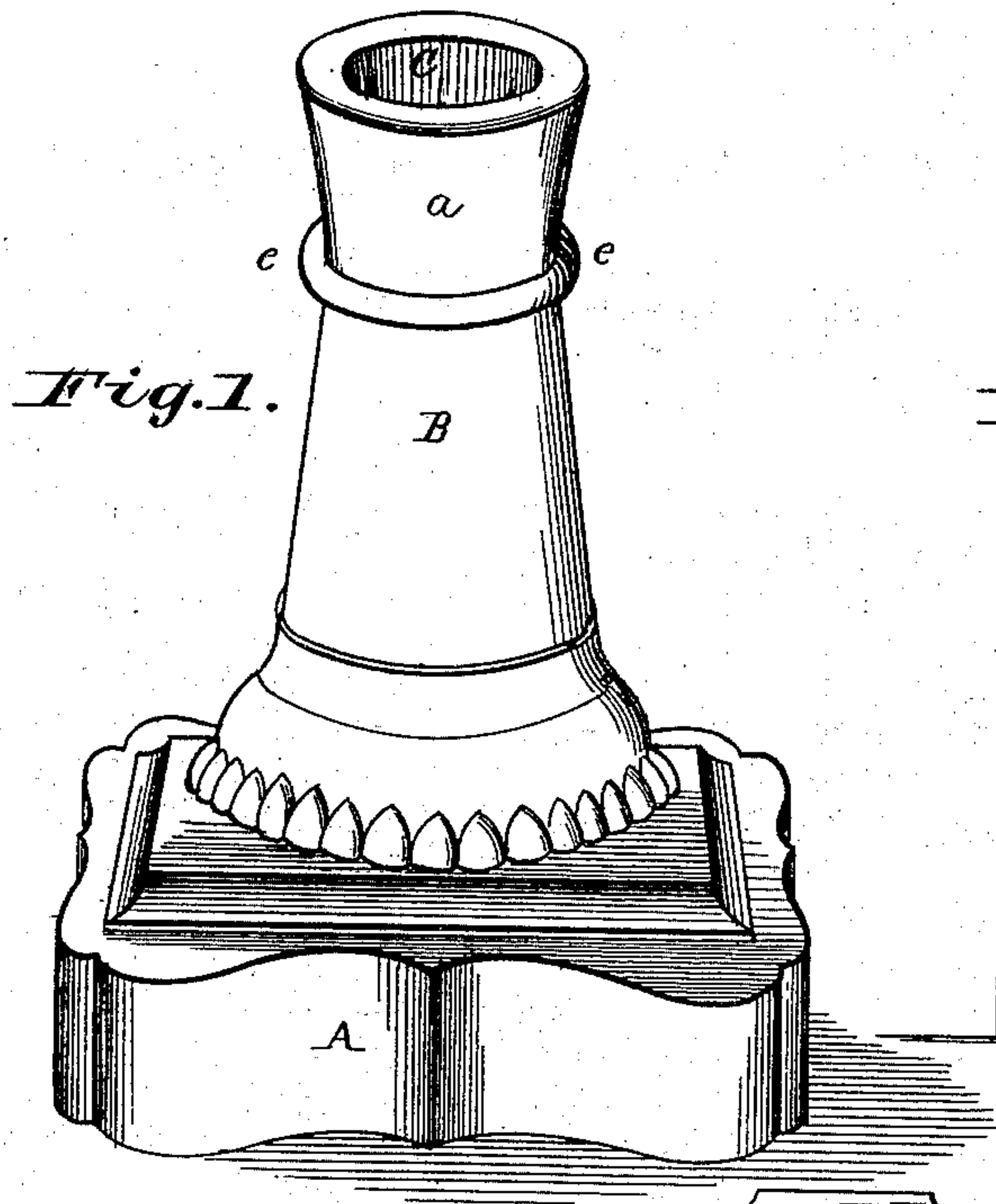


J. BRYCE.

Manufacture of Glass-Lamp Pedestals.

No. 156,976.

Patented Nov. 17, 1874.



Witnesses:

J. S. Coombs
A. H. Norris.

Inventor.

John Bryce.

By his Attorney,

James L. Norris.

UNITED STATES PATENT OFFICE.

JOHN BRYCE, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN THE MANUFACTURE OF GLASS-LAMP PEDESTALS.

Specification forming part of Letters Patent No. **156,976**, dated November 17, 1874; application filed November 11, 1874.

To all whom it may concern:

Be it known that I, JOHN BRYCE, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in the Manufacture of Glass-Lamp Pedestals, of which the following is a specification:

The object of my invention is to dispense with the usual metallic ferrule, band, screw-ring, and other such independently-constructed device now generally employed for connecting a bowl, fount, or oil-reservoir with its pedestal, since such connections, by their expansion and contraction, (due to being converted from a cool to a heated condition, and vice versa,) soon cracks and otherwise impairs the character and solidity or density of the cement employed, the result being soon accidental detachment of the fount from its pedestal. Therefore, to obviate such, and produce a cheaper, safer, and more durable mode of connection between the fount and pedestal of lamps than heretofore, I will state that the eminent distinguishing feature of my invention over such construction consists in constructing the base or pedestal of glass, or other vitreous material, with a socket or cavity upon the upper end, during the process of manufacture of each pedestal, of an adequate size and depth to receive the usual peg or stem depending or projecting from the fount or oil-reservoir of the lamp, the wall surrounding such socket being of considerable determinate thickness, greater or less, according to the grade and size of fount to be supported, so that, when the peg or stem of a fount or oil-reservoir is inserted and secured therein, by a suitable cement, the two—that is to say, the fount and pedestal—will be directly, firmly, and substantially united together, an intervening coat of cement thus being between the peg and the interior of the socket, the result being that the employment of separate fastening devices are dispensed with, they not being essential. The surrounding wall, which rises above the bottom of the socket or cavity, preferably of a gradual decrease in thickness from such bottom to the top, the extreme edge of said walls being faced after the pedestal, with its socket, is formed, so as to impart to the same a seat corresponding with that por-

tion of the external surface of the lamp-body which comes in contact with the same, whereby is secured a neat finish and almost imperceptible joint.

It is preferred to provide the interior of this socket, while being formed with the pedestal, with one or a series of inwardly-projecting shoulders or ribs, constructed vertically therein, such shoulders or ribs being formed during the process of forming the pedestal and socket in one piece, the essential object of such being not solely to strengthen the walls of the socket against a lateral or downward crushing-weight imparted at times by the fount or bowl, but also to form partitions to separate the cement employed, and present an interrupted surface, so as to enable the cement to surround and adhere intimately to such ribs, and thus establish a close direct connection between the cement, the interior of the socket, and the peg or stem of the fount or reservoir.

Thus it will be seen by the foregoing brief recital of my invention that the pedestal with its socket to receive the peg or stem of a fount or reservoir of a lamp are formed of the same material, in one piece of glass, or other vitreous material, during the process of manufacture, which can be accomplished either by a plunger, core, or in any other manner readily suggestive to those skilled in the art or manufacture of glass articles.

Having recited the state of the art up to the present time, as far as known by me, and specified the nature and object of my invention, I will now proceed to describe the same, in connection with the accompanying drawings, so as to enable others skilled in the art to make and use the same.

Figure 1 is a perspective view of the base or pedestal of a lamp, illustrating my invention. Fig. 2 is an elevation of the same with a portion of the socket broken away. Fig. 3 is an elevation, illustrating my improved pedestal and socket supporting a lamp-body, a portion of the socket being broken away to expose the peg, cement, and form of the socket.

In the accompanying drawings like letters indicate the same parts in each figure.

Referring to the drawings, the letter A designates the base proper of a lamp, B, the

standard or column of the same forming a pedestal, which may be of any of the well-known forms, either plain or ornamented, and which may be of various sizes, such depending upon the form, dimension, and character of fount, bowl, or oil-reservoir desired to be supported. Such pedestal is formed, during the process of manufacture, with a socket or cavity, C, upon its upper end, either by the use of a plunger, cone, or other well-known means, which will readily suggest itself to those who are skilled in the art of manufacturing glass articles. The socket or cavity C is formed with the pedestal in one piece, so as to constitute an integral, and the same is produced from glass, porcelain, or other desired vitreous material, which may be made to assume such a character or quality as to impart to the pedestal and socket when completed either a transparent, or a translucent or semi-translucent condition, as may be desired. The wall *a*, forming the socket or cavity, is produced by a continuation of the column portion of the pedestal, and such wall rises from the bottom of the socket, which should be formed simultaneously with the pedestal and its socket during the process of manufacture, and be at such a distance from the top edge of the wall as to admit of the peg or stem D of a lamp of considerable length being inserted into the socket, to have the external surface of the lamp bear directly upon the upper edge of the wall of the socket, as illustrated in Fig. 3, where a lamp-fount is connected and supported by my improved pedestal. The upper edge of the wall of the socket has imparted to it during the process of forming the pedestal a seat or face corresponding with that portion of the external surface of the fount or reservoir with which it is to be in contact, so as to effect a smooth and true seat, and thus secure a close joint and neat appearance of a finished lamp.

It is evident that such edge of the wall may be ground or faced so as to secure such seat for the fount after the pedestal and socket have been formed, though it is preferred to impart during the process of manufacture a shape or contour to the edge of the wall approximating to that portion of the lamp against which it is to be placed in contact.

It is preferred, but not absolutely essential, that the wall *a* decrease gradually in thickness minutely from the bottom of the socket to the extreme edge of the wall, so that the same will be enabled to more successfully resist all downward weight of the lamp-fount, and at the same time enable the socket to be more easily formed with the pedestal. The extreme edge of the wall may be made to flare slightly outwardly, so as to present quite an extended seat or base for the lamp-fount, especially when the pedestal and socket are formed with a view of constructing large lamps; but I prefer that the walls forming the socket be in a line with the column of the pedestal, so that the weight of the lamp-fount,

and all jars vertically received by the same, will be conveyed perpendicularly through the wall, and transmitted to the column and base of the pedestal, and, by such construction, the danger of cracking or chipping the socket will be avoided.

When it is desired to attach the fount or bowl of a lamp to a pedestal constructed with a socket according to my invention, the socket or cavity is supplied with a determinate quantity of plastic cement, such as plaster-of-paris, and the depending or projecting peg D of the lamp bowl or fount forced or inserted therein, so as to compress the cement and cause a coating or layer of the same to surround the peg, and thus intervene between the peg or stem and the interior of the walls of the cavity or socket, which, when set, will bind the parts—the pedestal and fount—firmly and substantially together.

In order to re-enforce or strengthen the wall of the socket, and enable it to more fully resist a downward or a lateral pressure, there should be constructed upon the interior of its wall one or more vertically-arranged ribs or shoulders, *c*, and which should also be constructed with the pedestal and socket during the process of forming the article. Such ribs or shoulders will also be found of eminent practical value in uniting the lamp-fount with the pedestal, since the same will, to some extent, increase the internal surface of the socket, thus presenting a greater surface to the action of the cement; and, further, when such shoulders or ribs are employed by me, they serve to interrupt the cementing surface, and by so doing the cement surrounds the same and attaches itself firmly thereto in a much better manner than if the cement only acted or had a binding with a plain internal surfaced socket.

In most instances the pedestal and socket will be formed with an annular bead or rim, *d*, which will materially increase the strength of the socket, and at the same time, if such be constructed directly upon the edge of the wall, it will afford an extended substantial base for the lamp-fount to rest upon, and will impart to a completed lamp a neat, attractive, and finished appearance; besides, it will effect a greater security and firmness of connection between the lamp-fount and pedestal. Other beads may be formed with the socket—for instance, as at *e*, which particular one serves to strengthen the socket and column portion of the pedestal at or about the point of commencement of the socket with the column.

By the construction above described, it will be perceived that a pedestal and socket are formed of the same material in one piece during the process of manufacture, which can be accomplished with comparative ease and facility by those the least skilled in the art of glass manufacture, so that all employment of screw-fastenings, metal rings, ferrules, and analogous separate fastening devices are dis-

pensed with; and by such I am enabled to construct a pedestal for market upon a cheaper scale than heretofore, and have the same fashioned and adapted to receive the peg or stem of any ordinary lamp fount or bowl.

It is evident that since the socket and pedestal are formed together any desired depth can be imparted to the socket, and, further, that the form of the socket upon its interior or exterior may be of circular, square, or polygonal shape, in which case the peg of the lamp should be correspondingly formed.

What I claim is—

1. A pedestal made of glass or other vitreous material, formed in one piece, with a socket upon the upper end to receive the peg of a lamp fount or bowl, said pedestal and socket being simultaneously formed during the process of manufacture, substantially as set forth.

2. The socket formed in one piece with internal ribs, and with a pedestal or base, during the process of manufacture, to receive the peg of a lamp-bowl and cement, substantially as described.

3. A pedestal for lamps, constructed during the process of manufacture, with a socket at its upper end, having a bead or face formed upon the extreme edge of its wall for supporting a lamp bowl or fount, substantially as herein shown and described.

In testimony that I claim the foregoing I have hereunto set my hand.

JOHN BRYCE.

Witnesses:

DAVID K. BRYCE,
ANDREW HUMBERT.