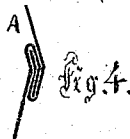
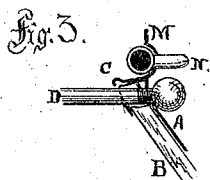
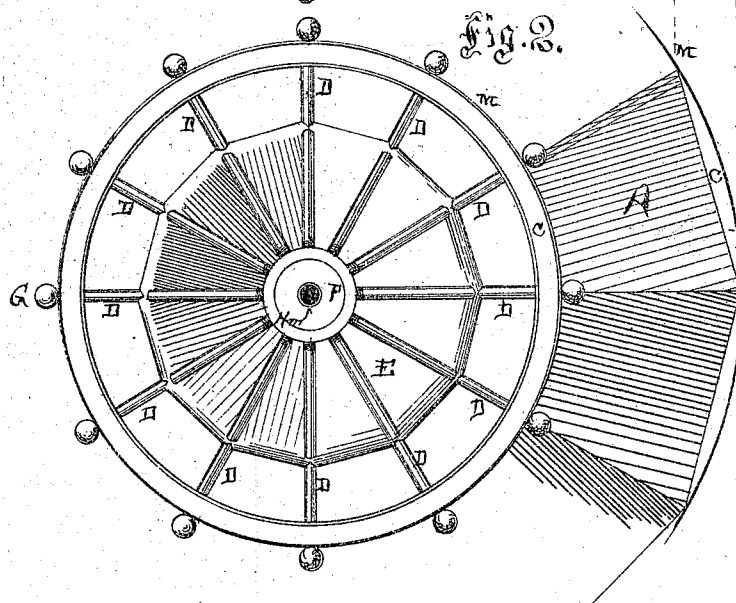
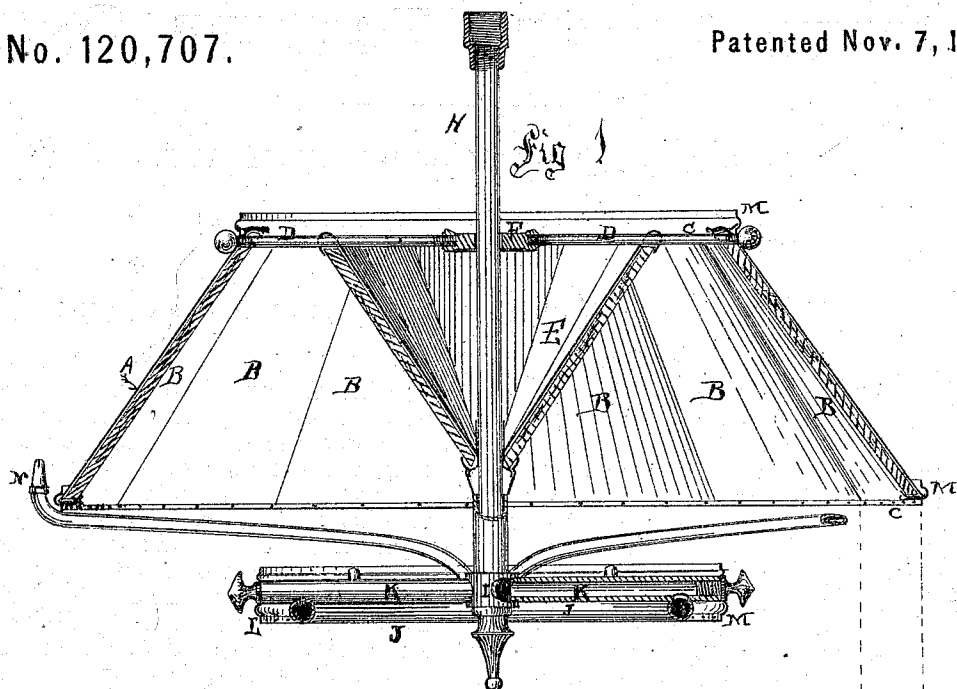


THOMAS BUCKLEY.

Improvement in Chandeliers.

No. 120,707.

Patented Nov. 7, 1871.



Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

THOMAS BUCKLEY, OF NEW YORK, N. Y.

IMPROVEMENT IN CHANDELIERS.

Specification forming part of Letters Patent No. 120,707, dated November 7, 1871.

To all whom it may concern:

Be it known that I, THOMAS BUCKLEY, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Chandeliers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical central section through my chandelier. Fig. 2 is a top plan of the same. Fig. 3 is a section, showing gas-ring in upper rim of reflector-frame. Fig. 4 is a section, showing seam-joint of reflector-frame.

This invention relates to an improvement in the chandeliers for which Letters Patent were granted to me on the 4th day of January, 1870, to the schedule of which patent reference is hereby made for a description of the general features of the chandelier which forms the subject of this invention, which consists in an improved manner of constructing the frame of the reflector and the mode of constructing and attaching the pendent rings.

In my drawing I represent my chandelier in its simplest form. It has been found that the solder heretofore used to unite the parts of the frame of the reflector to the central rod or pipe would frequently yield to the heat of the gas-flames and the said frame would separate from its support. I have therefore devised the herein-described improved mode of construction.

In the drawing, A A represent the reflector-frame made of sheet metal, and provided with a gallery, C, at top and bottom, to receive and support the reflecting mirrors B B, which are placed within said frame. The edges of the separate parts of the frame A are secured or grooved together similar to the manner of tinners' work, as shown in Fig. 4, instead of being simply lapped and soldered, as heretofore. The grooved seam is much stronger, and stiffens the frame much more than the soldered seam, and is unaffected by heat. The frame A is connected to the central support by rods D D, which pass through said frame beneath the upper gallery and into the central cone E, where they may be secured by riveting or by screwing the ends of said rods into a solid ring, F, or its equivalent, as shown in the drawing. The modes of rigidly attaching the

rods D to the central portion of the structure may be various, but I prefer to secure an attachment by screws, as shown. The round bosses or buttons G, at the outer ends of the rods D, I prefer to make screw-nuts, so that after the frame is all together its form may be slightly altered by tightening some of said nuts and loosening others. This adjustment is advantageous in fitting the mirrors B, which are not always flat and cannot be cut with perfect uniformity as to size, and are therefore subjected to unequal strains when expanded by heat, from which cause they frequently crack and break. They are with difficulty replaced in a large chandelier. The gas descends through the central pipe H to the chamber I, from which it is conveyed to the burner-ring J by one or more lateral tubes, K, as shown in Fig. 1. The pendent ring L is supported at the ends of the lateral branches or tubes K, being screwed to said branches, as shown. Pendants may be suspended also from the lower gallery, small perforations being shown in the lower edge of said gallery, as well as in the edge of the pendent ring L, for the purpose of attaching them. Heretofore the upper and lower rims or galleries C have been constructed of metal spun into shape; but it is found to be impracticable to make said rims of sufficient strength in that way to support a large reflector, and I therefore construct said galleries of corrugated hoops M M, which may be made of any desired degree of strength, combined with internally-projecting annular flanges to support the edges of the reflector-plate B.

When ornamental panels or reflectors are inserted upon the outer side of the reflector-frame A they may be directly illuminated by burners N at the ends of the branches carried out from the main pipe, or the lower or upper rim of the reflector-frame A may be formed with an annular gas-ring pipe, in which the exterior burners or branches may be set, as shown in Fig. 3.

Having described my invention, what I claim as new is—

1. The frame A of a double cone-reflector chandelier, constructed with the radial supporting-rods or arms rigidly secured by screws or riveting, as and for the purpose set forth.

2. The reflector-frame A constructed with compressing screws D for the purpose of slightly

changing the form of said frame when required, as set forth.

3. The reflector-frame A constructed with its parts united by seaming, as shown in Fig. 4, instead of by solder.

4. The rims and pendent ring of the reflector-frame A constructed with corrugated hoops M, as set forth.

5. The pendent ring hoop L, attached by screws to the ends of the radial arms or pipes K, at a distance from the burner-ring J, as and for the purpose set forth.

THOMAS BUCKLEY.

Witnesses:

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