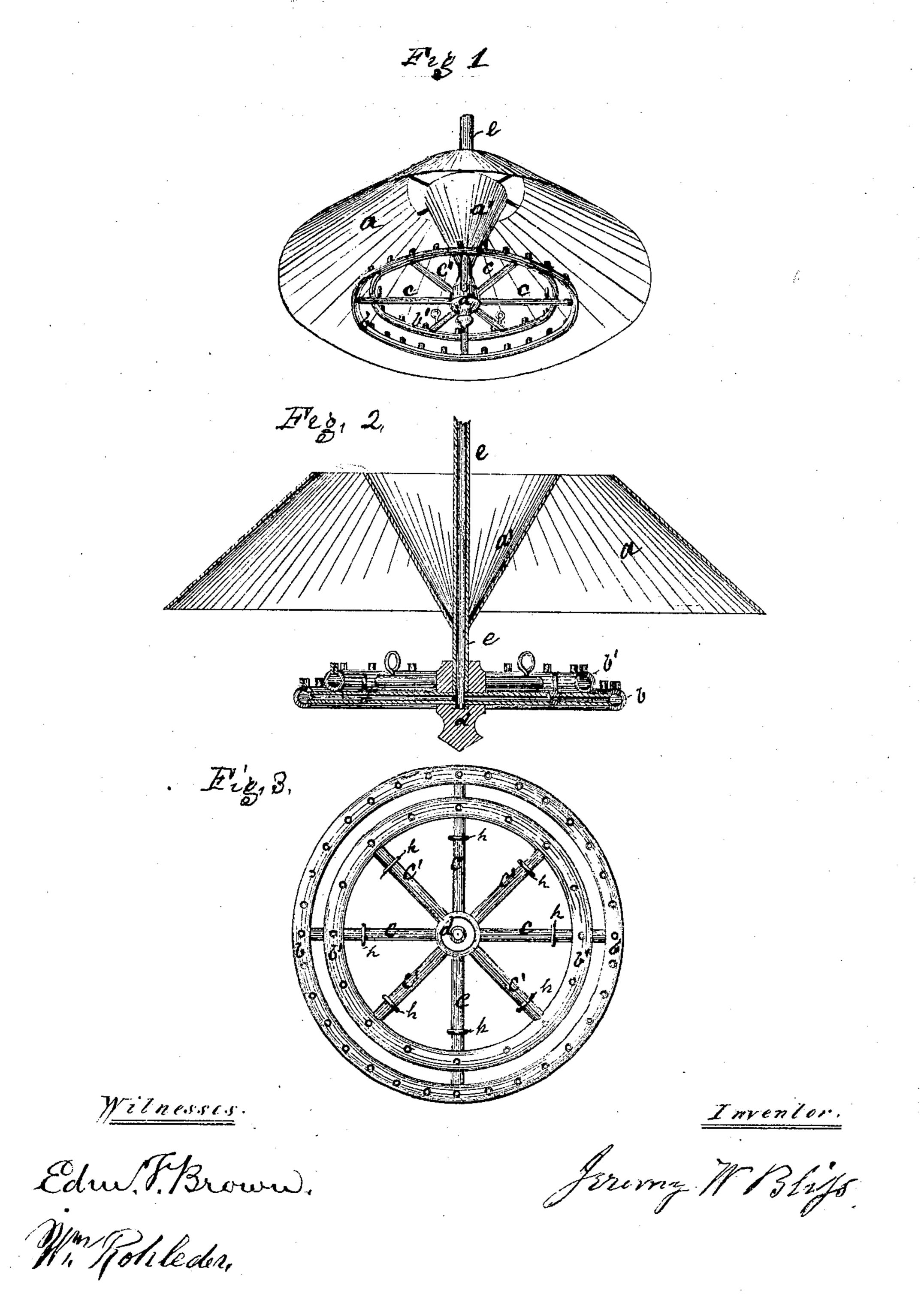
## J. W. BLISS.

## Double-Cone Reflector.

No. 129,088.

Patented July 16, 1872.



## UNITED STATES PATENT OFFICE.

JEREMY W. BLISS, OF HARTFORD, CONNECTICUT.

## IMPROVEMENT IN DOUBLE-CONE REFLECTORS.

Specification forming part of Letters Patent No. 129,088, dated July 16, 1872.

To all whom it may concern:

Be it known that I, JEREMY W. BLISS, of the city and county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Double-Cone Reflectors; and, to enable others skilled in the art to make and use the same, I will proceed to describe, referring to the drawing, in which the same letters indicate like parts in each of the

figures.

The nature of this invention consists of two tubular burner-rings, one of which is smaller in its ring diameter than the other or outer ring. Each of these rings is provided with tubular arms, which connect and conduct gas from the the supply-chamber or hub to the rings. Each ring is supplied with gas from the main supply-pipe, independently one of the other, by means of stop-cocks, so that two rings—one having, say, thirty-six burners—can be used without the other; or the one having, say, eighteen burners can be used without the former; or the two rings may be used at the same time, making, say, fifty-four burners.

By this improvement large rooms, halls, public buildings, churches, &c., can be lighted with less expense of fixtures, less gas, and produce

perfect illumination.

In the accompanying drawing, Figure 1 is a partial perspective view of this improvement, showing nearly the whole device in detail. Fig. 2 is a sectional view. Fig. 3 is a plan view

of the two burner-rings.

a is a double-cone reflector. b is a burner-ring, representing thirty-six burners arranged in the upper side thereof. c are tubular gassupply arms, one end of which is fitted into the inner side of the ring b, and the other end into the supply-chamber or hub d. e is a connecting supply-pipe. One end is secured into the chamber or hub d and passes up through

the center cone a. This device, as thus far described, is in common use and well known to the public. b' is a duplicate burner-ring representing eighteen burners, taking its bearing upon the supply-arms or pipes c, and is smaller in diameter than the ring b; and it is believed it will produce the best effect to make this ring of such diameter that, when secured in its proper relative position with the ring b, their two edges will be in about a parallel line with the outer cone-reflecting surface. This ring is also provided with arms c' which connect it with the supply-chamber or hub d, and through which the gas is introduced to the eighteen burners. Each of these burner-rings is provided with one or more stop-cocks, h.

Now, it will be seen—as has been already fully shown by actual practice in a room sixty by seventy feet square, thirty-three feet ceiling—that by opening the stop-cock of the ring b', a very cheerful light will be produced, so that persons in the furthest corner of this room can clearly read a newspaper; and, by turning out the eighteen burners and lighting the thirty-six burners a still more cheerful light will be produced; and, by again reopening or lighting the eighteen burners, making, in all, fifty-four burners, the room becomes very brilliantly lighted, and is more perfectly accomplished

than by device heretofore used.
I claim—

The concentric rings b b', arranged in the same, or nearly the same, plane relative to each other, provided with arms c c' and suitable stop-cocks, when combined with the double-cone reflector a a', as shown and described.

JEREMY W. BLISS.

Witnesses:
EDM. F. BROWN,
WM. ROHLEDER.