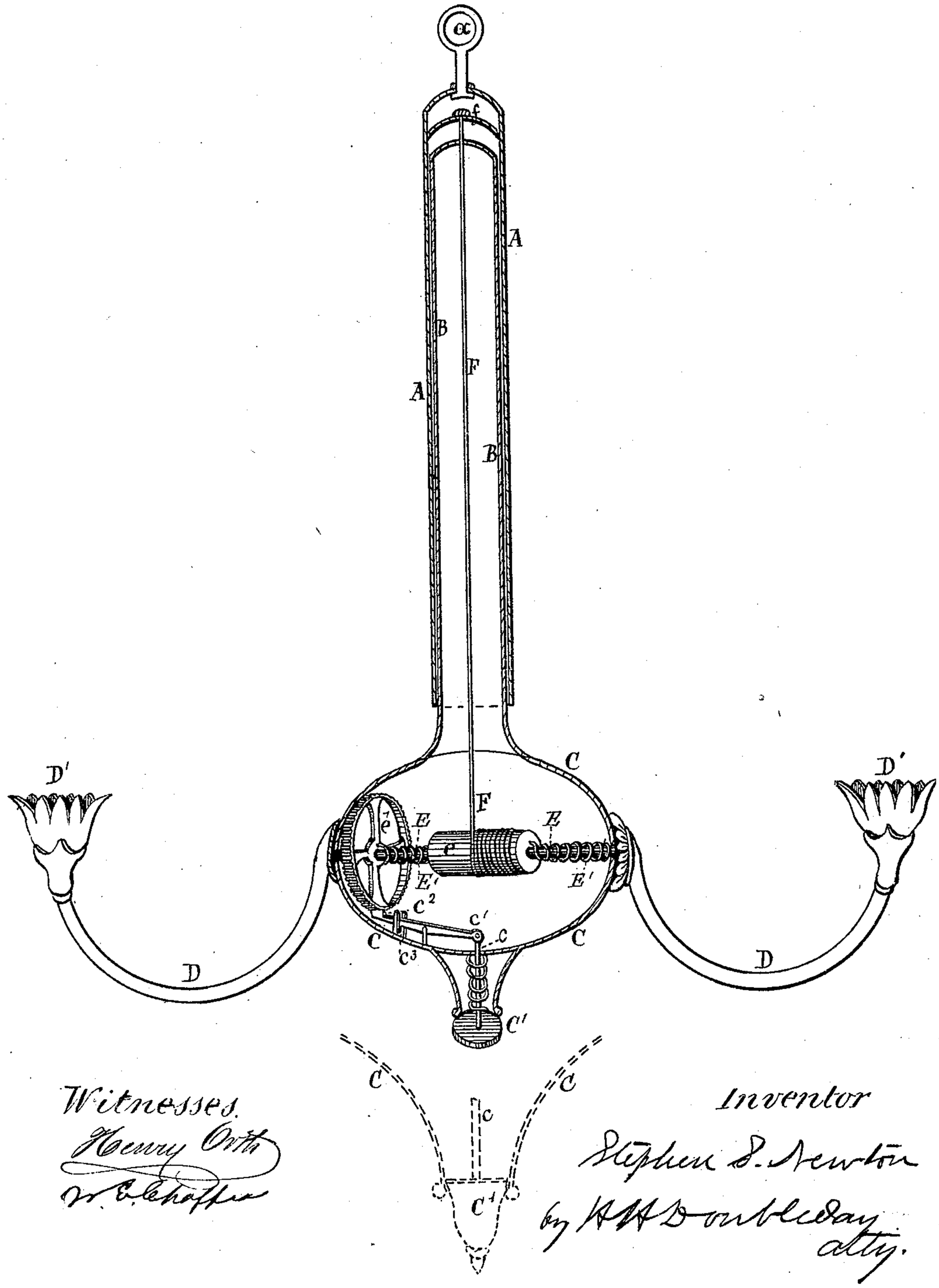
S. S. NEWTON.

CHANDELIER.

No. 174,841. Patented March 14, 1876.



Witnesses.
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UNITED STATES PATENT OFFICE.

STEPHEN S. NEWTON, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN CHANDELIERS.

Specification forming part of Letters Patent No. **174,841**, dated March 14, 1876; application filed February 19, 1876.

To all whom it may concern:

Be it known that I, STEPHEN S. NEWTON, of Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Chandeliers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to construct a chandelier in such manner that the lower portion, to which the arms or brackets carrying the lamps are attached, may be readily adjusted upon the upper stationary portion, and shall remain at any desired height, whether the lamps be in their sockets or supporting arms or brackets, or be removed therefrom, the devices or mechanism by means of which adjustment and support are effected being inclosed within the base or bulb of the chandelier, and therefore hidden from sight, as will be hereinafter fully explained.

In the drawing, which is a vertical section of a chandelier embracing my invention, A is an outer tube, provided at its upper end with a swiveled hook, loop, or eye, *a*, to be attached to a hook, chain, or cord, depending from the ceiling. B is an inner tube. By preference I so construct these tubes that the inner one shall slide up and down freely within the outer one, but shall not rotate within it; this latter motion being prevented by providing the inner one with an external feather or spline, working in a corresponding groove formed upon the inner face of the outer tube A, or by making both tubes hexagonal or fluted, or in any other suitable shape. C is a globe, bulb, shell, or casing, of any preferred configuration, ornamental or otherwise, attached to the lower end of tubing B. D D are arms or brackets attached to either the shell C or the lower end of tube B, which may project into the shell. There may be any requisite number of these arms, each provided with a socket, D′, to receive the lamp. E is a shaft journaled in shell C, or in boxes attached thereto. E′ is a coiled spring connected with shaft E and the shell in such manner that rotating the shaft in a certain direction shall wind up the spring. *e* is a spool or drum secured to shaft E. *e′* is a toothed wheel keyed to shaft E, or when the drum *e* is flanged one of the flanges may be notched or toothed. C′ is a thumb-piece attached to a stem, *c*, which is arranged in the lower part of the shell C, or when preferred the shell may be expanded into an ornamental tip at this point, constructed with a telescopic joint, the stem *c* being connected to the detached portion as indicated in dotted lines. c^1 is a lever pivoted at c^2. One end of this lever is connected with the stem *c*, and the other, supported in a slotted standard, c^3, carries a dog or detent, c^2, which takes into the toothed wheel *e′*. F represents a cord, chain, or a metallic band connected at the upper end to the tube A by means of a swivel at *f*, and at the lower end to the spool or drum *e*. c^3 is a spring employed to keep the detent c^2 engaged with the toothed wheel *e′*, when said detent is not held forcibly from such contact. The detent may be operated by other equivalent means.

Of course any of the well-known methods of ornamentation may be employed in decorating the tubing, the arms, or the shell.

From the above description and an examination of the drawings, it will be seen that the suspension band, cord, or chain, F, as well as the shaft E, its spring, spool, and other accessories, are entirely concealed from view, and that by pressing upon the thumb-piece C^1, or upon the tip shown in dotted lines, where such construction is used, the detent will be withdrawn from the toothed wheel and the shell C and arms D can be raised or lowered, as occasion may require, and it is also apparent that by releasing the thumb-piece C^1 the parts will be instantly locked in position, the spring E′ winding the cord F upon the spool *e* as is customary in this kind of device.

One of the advantages growing out of this construction of parts is this: the change made in the weight suspended upon the chandelier by the removal of the lamps, by filling them, or by the consumption of the oil, will not, of itself, effect any change in the height of the

lamps or arms. Another advantage is, a very light spring may be used; hence a neat, compact construction can be adopted for the shell C or C C^1, as the weight of the rising and falling part of the chandelier is supported upon the toothed wheel, the shaft, and the detent.

I do not wish to be limited to any specific construction of device for locking the shaft E in position.

What I claim is—

The combination, in a chandelier, of the following elements, namely: two vertical telescopic tubes, an inclosing-shell, which carries the arms that support the lamps, a cord, or its equivalent, connecting the telescopic tubes and the shell, a spring-shaft, upon which the lower end of the cord is wound, and a detent which controls the movement of the spring-shaft, the shaft and detent being arranged within the inclosing-shell, substantially as set forth.

In testimony that I claim the foregoing as my own, I affix my signature in the presence of two witnesses.

STEPHEN S. NEWTON.

Witnesses:

P. P. ROGERS,

D. K. GOODENOUGH.