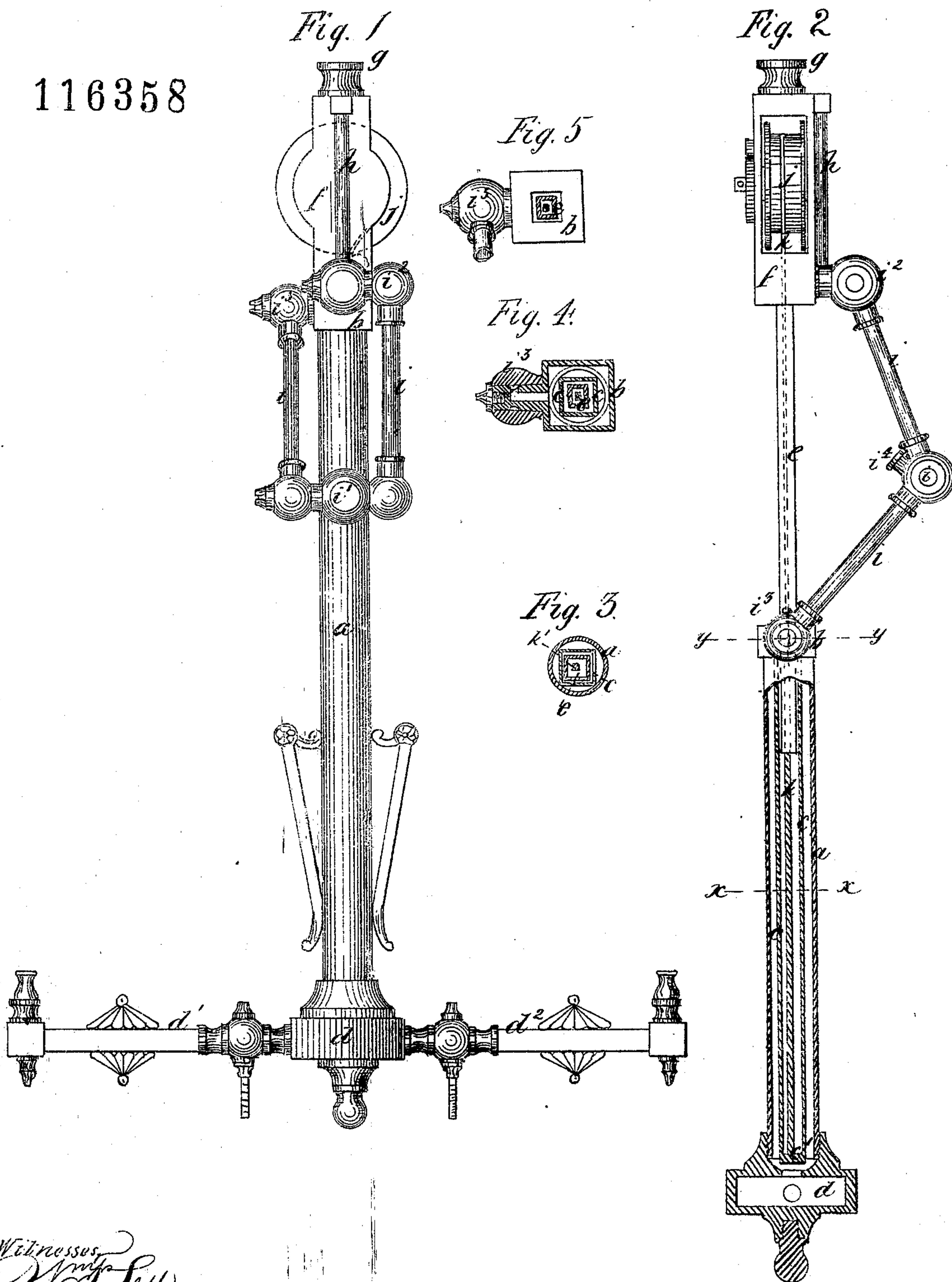


John H. Seaman's Imp^{vs} Gasaliers.

PATENTED JUN 27 1871

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Witnesses
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Inventor
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UNITED STATES PATENT OFFICE.

JOHN H. SEAMAN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN GASALIERS.

Specification forming part of Letters Patent No. 116,358, dated June 27, 1871.

To all whom it may concern:

Be it known that I, JOHN H. SEAMAN, of the city of Brooklyn, county of Kings and State of New York, have invented certain new and useful Improvements in Gasaliers, Pendants, and other similar Fixtures for Burning Gas; and I do hereby declare that the following is a full and correct description thereof, reference being had to the annexed drawing and to the letters of reference thereon.

My said invention relates to gasaliers or chandeliers for burning gas, that are suspended from a gas-pipe in the ceiling, and are adjustable at different heights by means of a sliding stem.

The sliding stems of gas-fixtures heretofore used have required packing or a water-sealed joint, because the gas-way is through the fixed pipe upon which the stem slides up and down; but whether packing or a water-joint is used in such fixtures they are undesirable because of the disagreeable smell from the exposed surface of the fixed pipe when the gasalier is lowered, and also because of the escaping gas from such necessarily imperfect means of confinement.

In my improved gasalier I cut off the gas entirely from the sliding joint within the stem, by a sheath or guide suspended within the stem, and use the vertical fixed pipe merely as a guide for the sliding of the stem, and obtain an extensible gas-way by a folding-pipe which connects the sliding stem with the fixed upper part of the fixture attached to the supply-pipe projecting from the ceiling.

The first part of my invention consists in combining with the sliding stem an inner guide or sheath cut off from the gas within the stem, a fixed guide projecting downward from the fixed part of the gasalier and received in the inner guide or sheath within the stem, the fixed guide and its corresponding guide or sheath within the stem forming no part of the gas-way of the stem, the gas-way of the stem being the annulus or space or spaces between the internal guide and the stem, and not connected with the interior of the fixed guide, so that the stem slides loosely and freely up and down upon the fixed guide, said combination being substantially as hereinafter described; and my invention further consists in combining with a stem and guide, constructed as above described, a folding gas-pipe, having a central folding joint, said pipe being connected

with the stem and with the gas-way of the fixed upper part of the gasalier attached to the supply-pipe, the whole substantially as hereinafter described. My invention also consists in combining and arranging with the sliding stem and hollow fixed guide a cord and spring barrel, to counterbalance the weight of the movable part of the pendant or chandelier, substantially as hereinafter described.

Figure 1 of the drawing represents a front elevation of a pendant or two light gasaliers, constructed with my improvements; Fig. 2, a side elevation of the same, partly in section; Fig. 3, a transverse section through dotted lines *x x*, Fig. 2; Fig. 4, a transverse section through dotted lines *y y*, Fig. 2; Fig. 5, top view of the stem-cap, showing a section of hollow guide and cord.

a represents the stem; *b*, a cap on top of the stem, with a square hole in the middle, which embraces the top of the internal guide or sheath *c*, which is a pipe suspended within the stem, and open at the top to receive the guide, and hermetically sealed at the bottom *c'* to prevent the escape of gas upward through it. The lower part of the stem is open and connected by a screw-joint to the cast center *d*, which is chambered, as usual, to continue the gas-way to the branches *d¹ d²*, which carry the gas-burners. The internal guide or sheath is made of square pipe, as shown in the drawing, to correspond with the fixed guide *e*, which is also four-sided; but both may be made of round pipe, if desired. In either case, the gas-way of the stem is the annulus or space or spaces between the internal guide or sheath and the stem. The interior of the internal guide or sheath is entirely cut off from the gas-way of the stem by the closed lower end, and by the cap that holds its upper end and covers the gas-way of the stem. *f* represents the fixed part of the pendant to be attached by the stiff screw-joint *g* to a supply-pipe projecting downward from the ceiling. The gas-way of this fixed part is through the stiff joint *g*, a chamber in the upper part of the fixed part, and a small pipe, *h*. The folding gas-pipe *i* has a central folding joint, *i¹*, and connects with the pipe *h* by a turning joint, *i²*, and with the stem by another turning joint, *i³*, which connects with the cap of the stem, as shown in the drawing, the cap being chambered, as shown, to connect the gas-way with the stem. The folding pipe *i* has a folding

joint near the middle of its length, making one of the members of the folding pipe sufficiently shorter than the other to admit of the folding of the pipe close to the stem of the burner. There should also be a stop, *i*⁴, projecting from the folding joint *i*¹ toward the stem, which will come in contact with the stem when the folding pipe is folded to prevent the joints from being brought into line so as to impede the downward movement of the sliding parts. A spring barrel, *j*, placed in the fixed part *f* of the pendant counterbalances the weight of the sliding parts, being connected thereto by a cord or chain, *k*, which passes down through the fixed guide, made hollow for that purpose, and may be secured at the bottom of the internal guide *e*; but I prefer to make part of the connection of wire, the wire forming the lower part *k'*, being secured to the bottom of the internal guide, and connected to the cord or chain by a hook and loop (not shown in the drawing) at a point a little above the top of the stem, which may be done by putting the cord down below the vertical guide before making the connection.

I do not claim as my invention anything described or shown in the patent to Charles Deans, July 19, 1870.

I claim as my invention and improvement in

suspended gasaliers or chandeliers for burning gas, that are adjustable at different heights by a sliding stem—

1. In combination with a fixed guide projecting downward from the fixed part of the gasalier, a sliding stem to which the branches are connected, and which has within it an internal sheath or guide cut off from the gas-way of the stem, and open at the top to receive the fixed guide, substantially as hereinbefore described.

2. In combination with the fixed guide and the sliding stem with its internal guide, the folding gas-pipe, which connects the gas-way of the stem with that of the fixed part connected with the source of supply, substantially as described.

3. The arrangement of the spring barrel and cord-connection, in combination with the hollow fixed guide and sliding stem, substantially as described.

4. A folding gas-pipe connection, in combination with a sliding-pipe and guide, when the folding pipe has a single middle joint, and is so arranged as to fold close to the stem, substantially as hereinbefore described and shown.

JOHN H. SEAMAN.

Witnesses:

ARTHUR D. WILLIAMS,
WM. F. LETT.