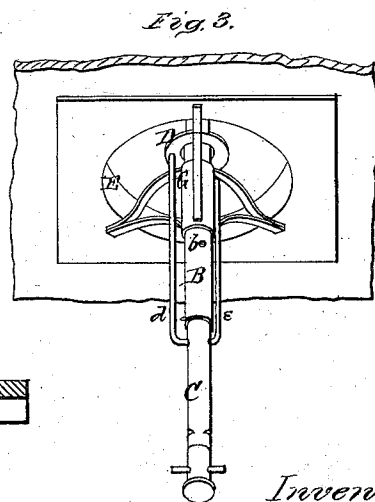
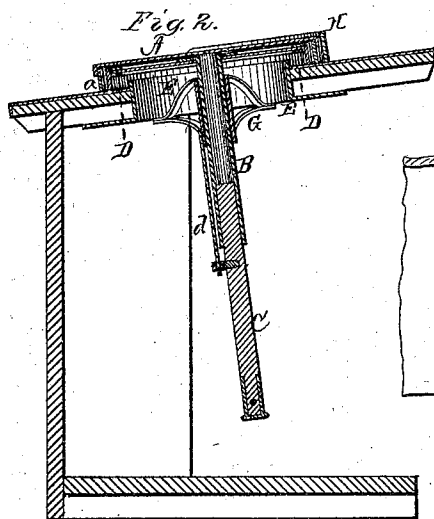
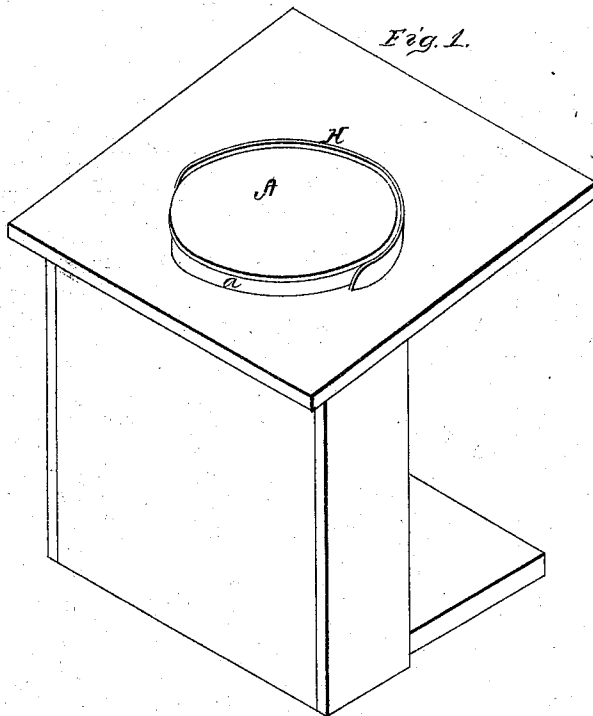


G. B. CLARKE.

Skylights.

No. 135,888.

Patented Feb. 18, 1873.



Witnesses
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Inventor
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UNITED STATES PATENT OFFICE.

• GEORGE B. CLARKE, OF LEONARDSVILLE, NEW YORK.

IMPROVEMENT IN SKY-LIGHTS.

Specification forming part of Letters Patent No. 135,888, dated February 18, 1873.

To all whom it may concern:

Be it known that I, GEORGE B. CLARKE, of Leonardsville, in the county of Madison and State of New York, have invented certain new and useful Improvements in Sky-light Window; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in combining a window frame or sash with a weather hood or cap above, and with a fixed water-tight rim or collar beneath, so that the collar and sash may be inclosed within the cap on the roof; also, in controlling the cap by means of a tube or shaft, in combination with a tubular bracket fixed beneath the roof, by which combination the cap, sash, and collar may be widely separated or closely locked together, as circumstances may require in the case; the object of my invention being to render a sky-light perfectly secure from fire of burning chimneys or buildings, and also free from leakage of water passing down on the roof around it.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view; Fig. 2, a longitudinal section; and Fig. 3, a bottom perspective view of my improved sky-light.

A represents the weather-cap, which may be made of any suitable material or composition of fire-proof material, and its shape may be circular, square, or oblong, and of any required size. It is provided with a deep and curved band, *a*, extending downward at its outward edge. It is also provided with a hollow shaft, B, attached to the center of the cap and extending downward. The shaft B may be fastened directly to the cap, or it may be riveted to a separate piece, and this piece riveted or otherwise firmly fixed to the cap. The shaft may also be provided with a wooden stem, C, at its lower end. In the shaft B are perforations *b b* at the top, beneath the cap, and also near the stem C, for the passage of air through the shaft. D represents the window-sash, which always conforms in shape and in

proportion of size to the cap. The frame of the sash may be made of iron, bronze, or wood, or all of these, with other suitable materials, may be used in its construction. If the sash is made of wood it must be encircled with a metallic band or hoop, and if it is made of metal it may be bent downward around its edge for the purpose of closing the aperture beneath. The sash, if circular in shape, may be provided with a water-tight packing of leather or other suitable material in its hub, through which the hollow shaft B passes, and also contain panes of glass fitted in the usual manner. E represents the collar, which may be made of galvanized iron or tin, and soldered or otherwise firmly set on the roof, so as to be water-tight beneath the sash. The collar extends upward beneath the sash, to which it conforms in shape. G represents a tubular bracket, which may be made of galvanized iron having three or more arms secured to the tube and to the frame beneath the roof directly under the sash and cap. As great strain often will be thrown on the bracket, it may be made of two iron tripods, the tube passing through the disks of each, and fitted to receive and support the shaft B of the cap above, the legs of each tripod being firmly fastened to the roof, as above stated, and thus afford a firm support for the shaft of the weather-cap, and also for the window-sash when one or both are raised to their point furthest from the roof. H represents a water guard or fender, which ordinarily may be made of tin or zinc, and its shape conform to the upper half of the weather-cap. The fender is fastened firmly on or under the roofing, and its upper edge extends upward sufficiently high to turn nearly all of the water running down on the roof above it away from the window. Although this guard or fender is not essential it is yet of great utility, and may be cheaply added to the improvement. To the sash D, on the under side, is attached a downward-projecting hook, *d*, and a similar hook, *e*, is attached to the bracket G. In the shaft B as well as in the stem C are made notches for these hooks. By this means the cap may be raised to any desired height and locked by said hooks, leaving the window down in its place, or the window also may be raised and locked at any desired height. The perforations *b b* in the hollow shaft B are de-

signed for the passage of heated air or steam to prevent frost and ice from filling the space between the sash and cap; and if in any case they are not sufficient the wooden stem C may be removed from the lower end of the tube B and a flexible pipe inserted for passing heated air or steam in sufficient quantity to free the window and cap from all obstructions.

The cap as well as the window may be operated by suitably-arranged cords, weights, and pulleys.

The above is intended for a circular window, which I prefer; yet, in some cases, a square window may be set, when it will be best to cut off the tube or shaft between the bracket and the sash, and close the end and insert four branch tubes, curved and passed through the four corners of the sash, and fastened within the four corners of the cap, with suitable apertures for air.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The cap A, provided with rim *a* and tu-

bular perforated center shaft B, substantially as and for the purposes herein set forth.

2. The combination of the cap A and window D, constructed and arranged substantially as and for the purposes herein set forth.

3. The combination of the cap A, window D, and collar E, constructed and arranged substantially as and for the purposes herein set forth.

4. The combination of the cap A, hollow shaft B, window D, collar E, and bracket G, constructed and arranged substantially as and for the purposes herein set forth.

5. The weather guard or fender H, arranged in combination with the cap A and window D, substantially as and for the purposes herein set forth.

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

GEORGE B. CLARKE.

Witnesses:

H. H. CHILDS,

A. M. WEST.