G. HILLS.

Clock Dial Sash.

No. 45,497. Patented Dec. 20, 1864.

Fig. 3

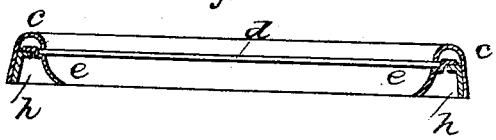


Fig. 2

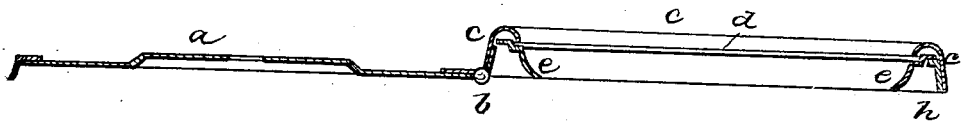
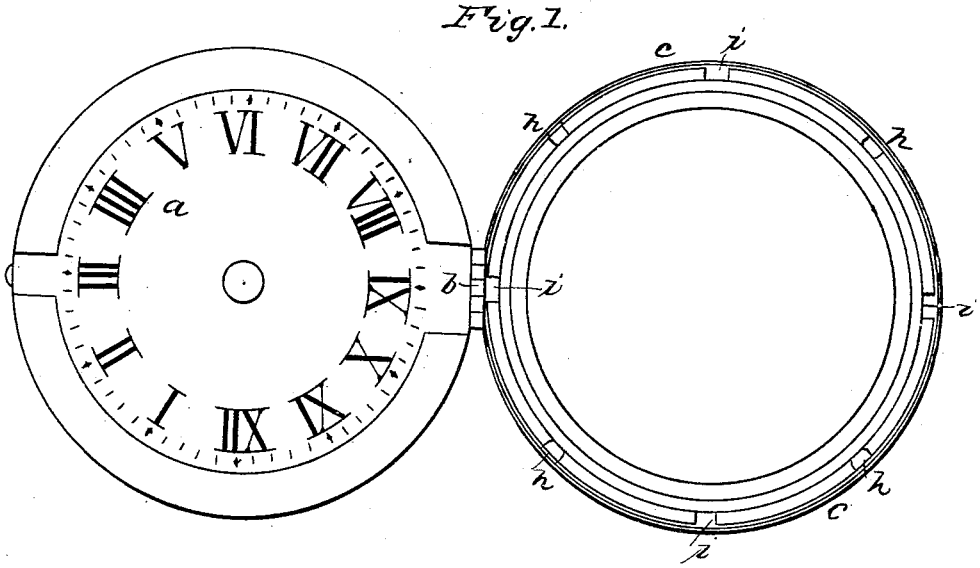


Fig. 1.



Witnesses

E. R. Burnham

Jerry W. Blys.

Inventor

George Hills.

UNITED STATES PATENT OFFICE.

GEORGE HILLS, OF PLAINVILLE, CONNECTICUT.

IMPROVEMENT IN CLOCK-DIAL SASHES.

Specification forming part of Letters Patent No. **45,497**, dated December 20, 1864.

To all whom it may concern:

Be it known that I, GEORGE HILLS, of Plainville, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Clock-Dial Sash; and I do hereby declare that the same is described and represented in the following specification and drawings, and to enable others skilled in the art to make and use the same, I will proceed to describe its construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures, the nature of which will readily be understood from the accompanying drawings and specification.

The object of which is to avoid the use of glaizers' materials—such as mastic substances, sprigs, &c.—in fastening the glass into the sash, so that the glass may be easily and quickly removed and replaced when desirable, and at the same time render the face of the clock more ornamental and attractive; or, in other words, it produces a close rim finish around the outer edge and between the glass and dial.

Figure 1 is a clock-dial having its sash thrown open so as to show the inside. Fig. 2 is a sectional view of the same. Fig. 3 is a section view of the sash detached from the dial.

a is the dial. *b* is the hinge by which the dial and sash are secured together. *c* is the sash. *d* is the glass. *e* is a ring or rim, made of metal or other suitable material. *h* are dogs, made of metal, the lower end of which is bent at about a right angle and secured onto the inside of the rim of the sash, so as to hold the edge of the ring *e* firmly down onto the edge of the glass *d* between the ring *e* and the sash proper. The rim-edge of this ring *e* is provided with notches *i*, in number and position more or less to correspond with the number and position of the dogs *h*. These dogs may be formed in the metal before the sash is forced into shape, or while it is in a flat sheet before it is struck up in the forming-die. By punching or cutting the sides and lower end and forcing the said lower end inward after the sash has been forced into its proper shape, thus avoiding the necessity of making additional pieces of metal whenever it may be thought advisable to do so.

Thus it will be seen that by simply laying the glass into its place in the sash and placing the ring or rim *e* directly over the glass, with its notches *i* over the dogs *h*, then carefully press and turn the rim or ring *e* so as to have its flange-edge come under the dogs *h*, when both the ring and glass will be secured in place, and form a neat, rich design for a clock, sash, and dial, and so that the glass can be readily secured and removed therefrom when desirable without the use of the ordinary materials used by glaziers.

I believe I have thus described the nature, construction, and operation of my invention so as to enable a person skilled to make and use the same.

What I claim, therefore, as of my own invention, and desire to secure by Letters Patent, is—

The combination of the ring or rim *e*, dogs *h*, with the sash, glass, and dial *c d a*, substantially as and for the purpose described.

GEORGE HILLS.

Witnesses:

E. R. BURNHAM,

JEREMY W. BLISS.