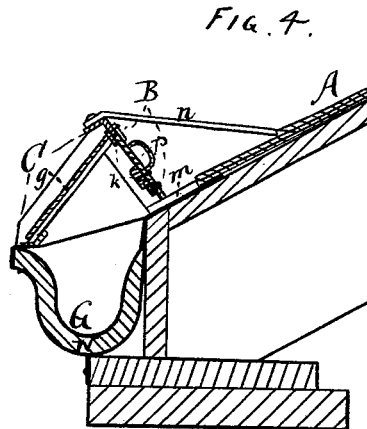
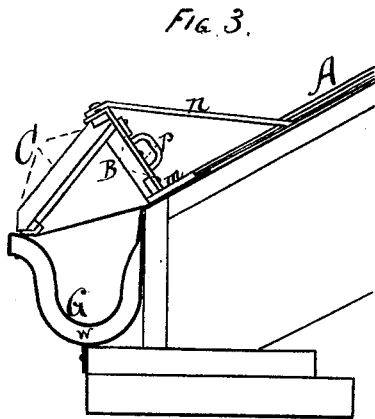
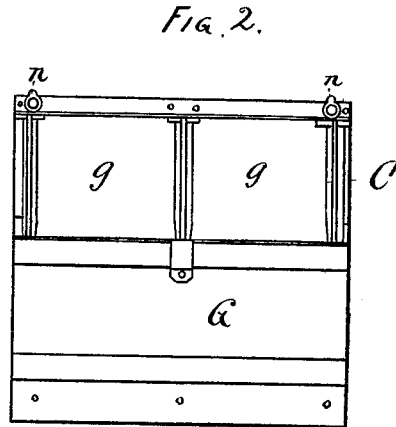
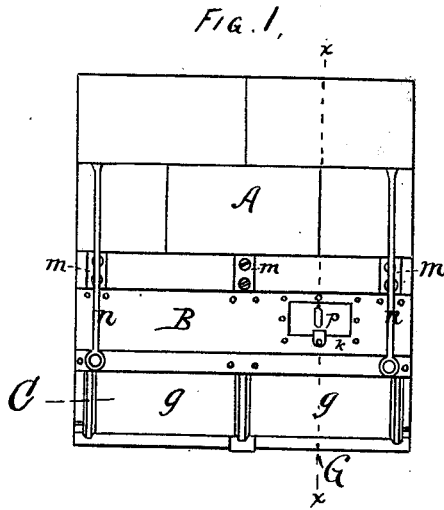


J. R. CREIGHTON.
EAVES-TROUGH COVER.

No. 189,431.

Patented April 10, 1877.



WITNESSES:
Samuel D. Kelley
J. W. Porter

INVENTOR:
James R. Creighton.
By Eugene S. Humphrey
Atty.

UNITED STATES PATENT OFFICE.

JAMES R. CREIGHTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO ALFRED B. HALL, OF SAME PLACE.

IMPROVEMENT IN EAVES-TROUGH COVERS.

Specification forming part of Letters Patent No. 189,431, dated April 10, 1877; application filed March 6, 1877.

To all whom it may concern:

Be it known that I, JAMES R. CREIGHTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Eaves-Trough Cover and Building-Protector, which invention is fully set forth in the following specification, reference being had to the accompanying drawing.

The object of my invention is to protect buildings and their contents from the frequent and often serious damage which occurs in northern latitudes during the cold winter months, from the eaves-troughs or gutters of buildings becoming clogged and frozen, and then, during intervals of thawing, forcing the water back upon the roof and under its covering, and thus causing damage to both the building and its contents from leakage; and my invention consists, first, in an eaves-trough cover, constructed wholly or in part of glass, or equivalent transparent material, whereby the sun's rays are admitted directly into the gutter, and the solar heat is thereby utilized to raise the temperature, within such inclosed space, above the freezing-point; second, in a combined gutter-cover and snow-guard, whereby the snow is kept upon the roof above the gutter, and prevented from sliding into the street or projecting over the gutter and annoying pedestrians, when melting, with its disagreeable dripping; third, in certain details of construction, arrangement, and combination of such gutter-cover and snow-guard, as is hereinafter fully described.

In the accompanying drawings, Figure 1 is a top view of a portion of a building with my invention applied. Fig. 2 is a front elevation of the same. Fig. 3 is an end elevation of the same. Fig. 4 is a vertical section on line *x x*, Fig. 1.

Upon the roof *A* is erected, near the eaves, a snow-guard, *B*, constructed of any suitable material, and firmly secured to the roof by irons *m* and braces *n*, as shown, or in any other suitable manner. Between the eaves and lower edge of said guard sufficient space is left to allow the ordinary flow of rain or melted snow to pass freely from said roof under said guard into the gutter or eaves-trough. Said guard,

which constitutes a part of the eaves-trough cover, is also constructed with convenient openings along the line thereof, like that shown at *k*, to facilitate the clearing of the gutter from such sediment or deposits as may accumulate therein from time to time, said openings being closed by an insertible cover, *p*, or they may have hinged covers arranged to fold back upon the guard, or be closed by a slide, or in any other convenient manner. The guard *B* forms one side of an angular cover to said gutter *G*, the front side *C* being composed of a frame or sash, preferably of metal, in which are inserted lights of glass *g*, which may be plane or convex colored or colorless, as may be most efficient or desirable. This frame *C*, at its upper side or edge is secured to the snow-guard *B*, while its lower side rests securely upon the outer edge or lip of the eaves-trough *G*, thus forming an inclined cover over the entire length of said trough, the ends of which are also covered in any proper manner. Such glazing is designed to facilitate the warming of said inclosed gutter, while excluding snow and any other clogging and obstructive substance from falling into the same by permitting the rays of the sun to pass into said gutter, and thereby utilizing the solar heat thus imparted to re-enforce the radiated heat from the building, and raise the temperature within such inclosed space above the freezing-point.

When the position of the building is such that the sun's rays fall more directly upon the guard *B* than upon the side *C*, said guard may be also glazed.

Said cover, however, may be made exclusively of suitable opaque material, preferably such as will absorb and radiate most readily the heat imparted by the sun, it being obvious that, when a thaw continues in the absence of the sun, there is no more tendency to freezing in the eaves-trough than on the roof; and, when metallic gutters are used in connection with my invention, it is preferred that they should be constructed double, with an intermediate air-space, in place of the wood *w* in the wood and metal gutter *G* shown in Figs. 3 and 4. It is also advisable to use

therewith conductors of similar construction, having an annular air-space, and such as are now in use in some cases.

I do not confine myself to the details of construction and arrangement herein shown and described, as architectural designs and mechanical skill may require and suggest many variations therefrom without departing from the principle of my invention; but I hereby disclaim all methods of warming such inclosed gutter, or the snow-guard, by means of currents of hot air conducted from the interior of the building, or by any other artificial means.

What I claim as my invention is—

1. An eaves-trough cover composed in part of glass, for the purposes specified.
2. A combined snow-guard and gutter-cover, substantially as and for the purposes specified.
3. A combined gutter-cover and snow-guard, constructed with openings through which to clear the gutter from sediment or deposit, substantially as described and shown.

JAMES R. CREIGHTON.

Witnesses:

EUGENE HUMPHREY,
T. W. PORTER.