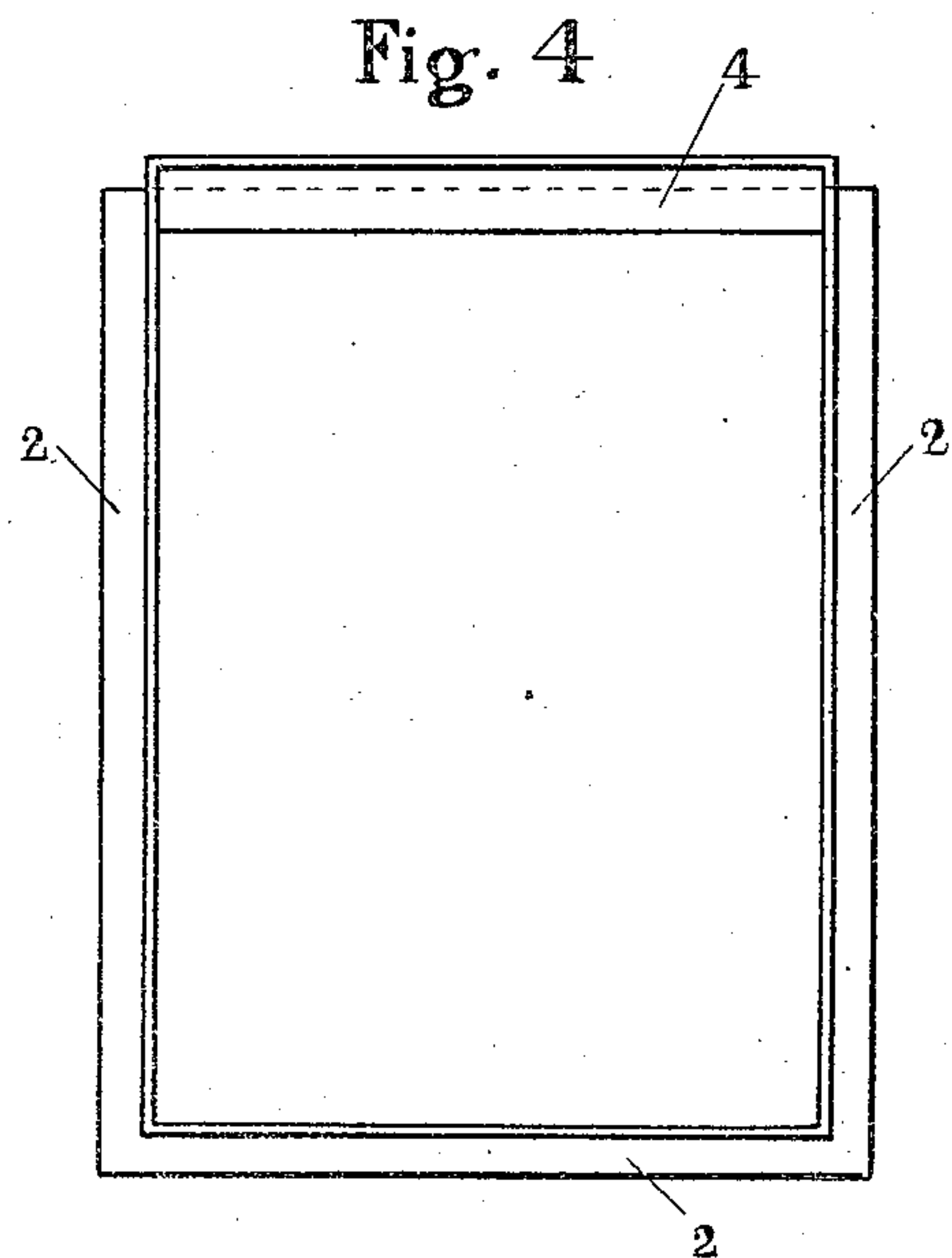
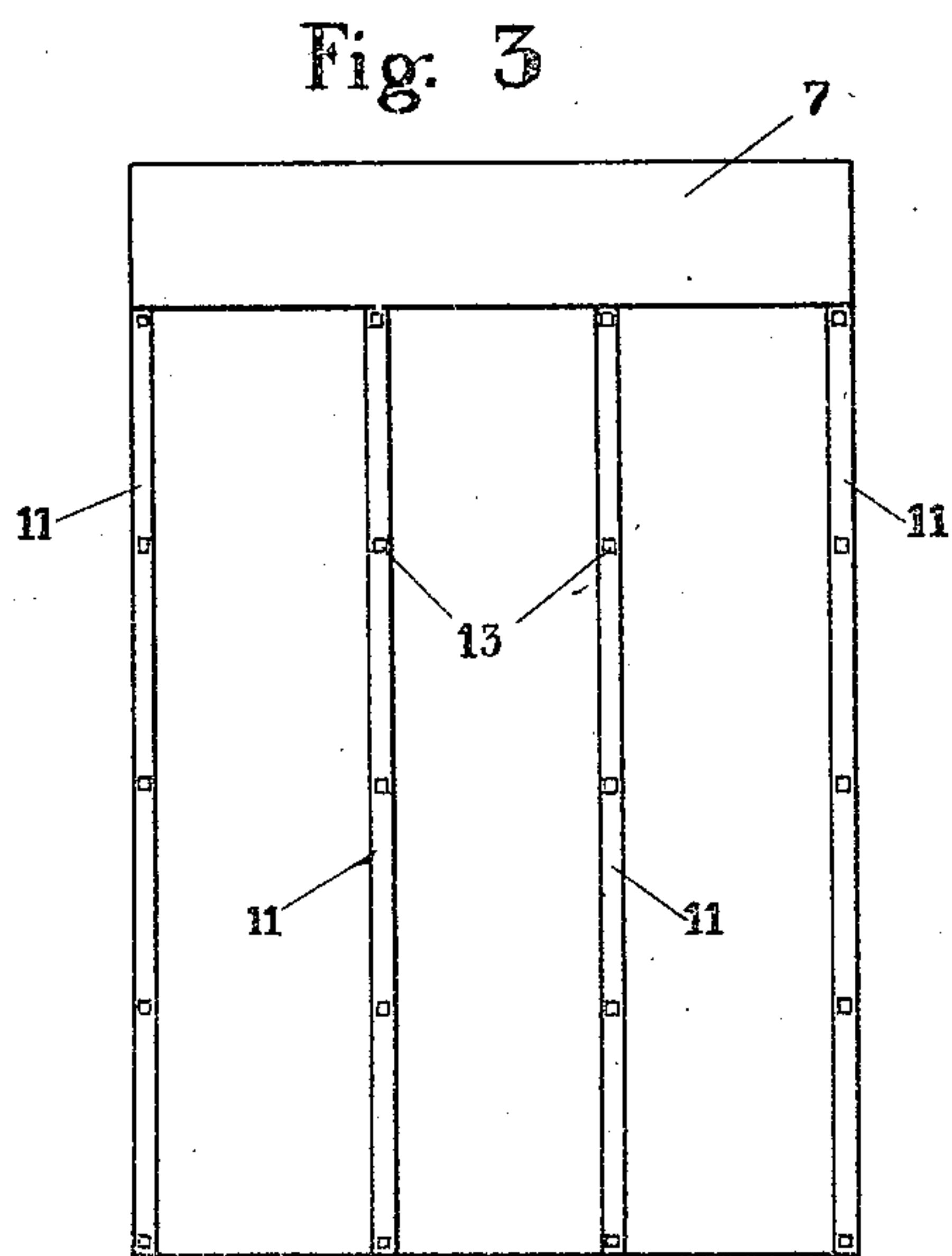
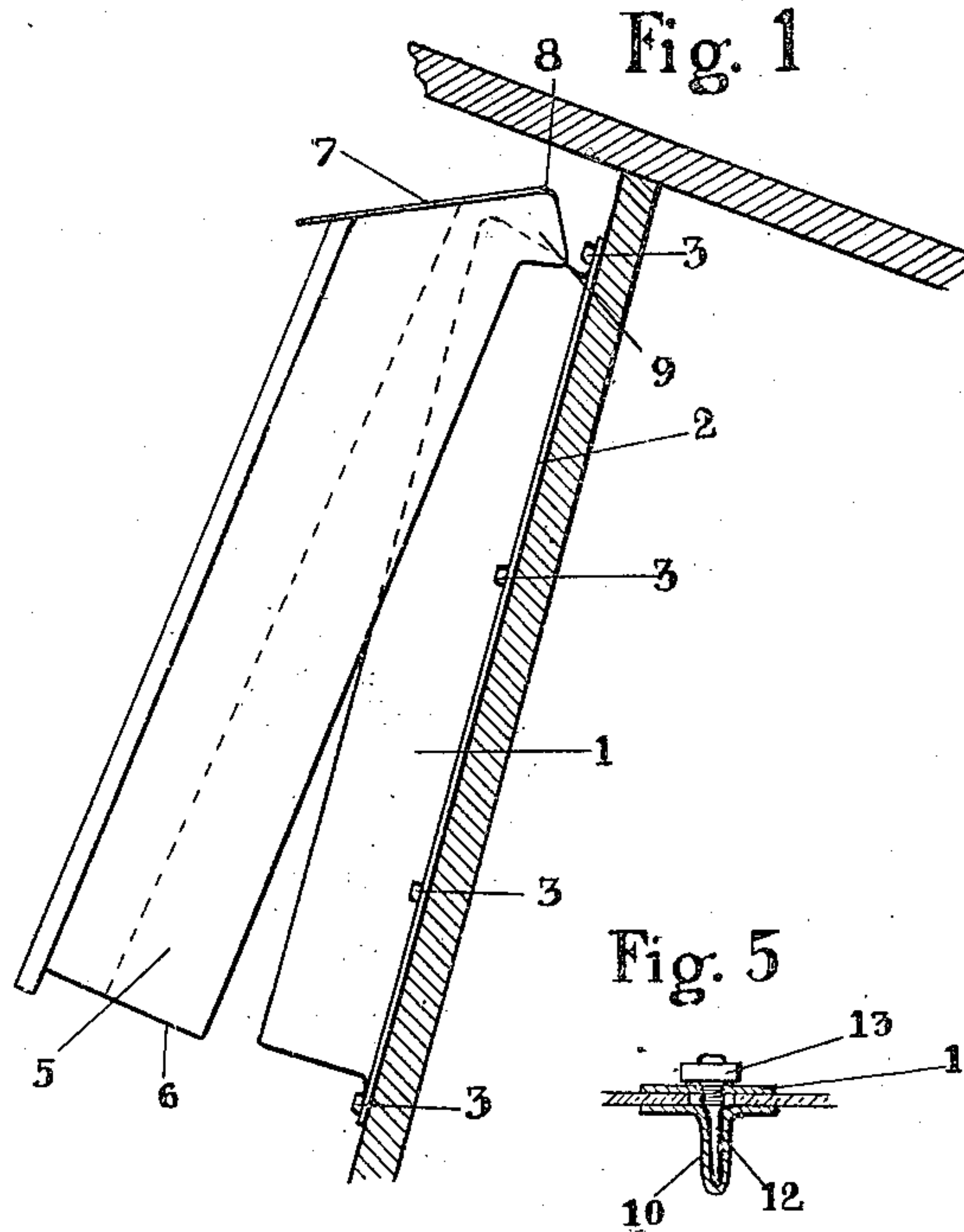
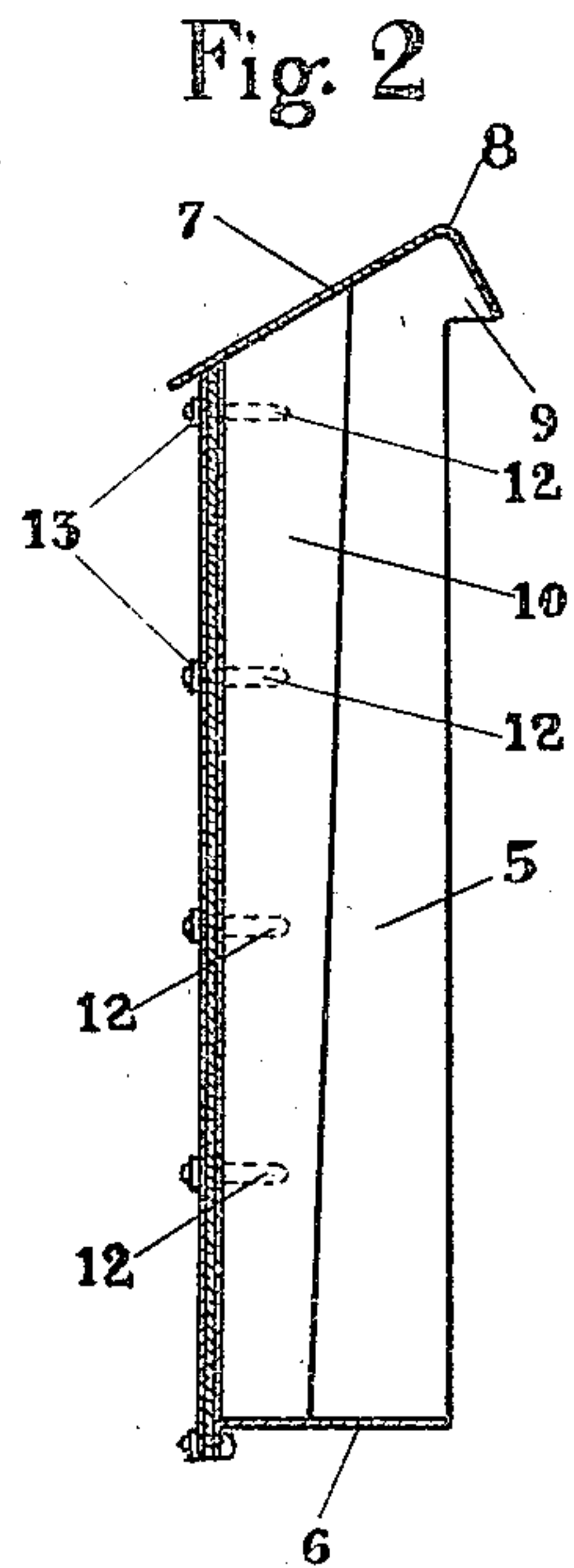


L. WINTER.  
SKYLIGHT.  
APPLICATION FILED MAR. 13, 1909.

945,891.

Patented Jan. 11, 1910.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

LOUIS WINTER, OF DETROIT, MICHIGAN.

SKYLIGHT.

945,891.

Specification of Letters Patent.

Patented Jan. 11, 1910.

Application filed March 13, 1909. Serial No. 483,119.

*To all whom it may concern:*

Be it known that I, LOUIS WINTER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Skylights, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to sky lights and more especially to those adapted for steep pitch of the so-called "saw-tooth" roofs common in factories, and likewise available in ordinary roof construction.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

Referring to the drawings, Figure 1 is a view in side elevation of a sky-light embodying features of the invention and applied to the side of a roof. Fig. 2 is a view in longitudinal section through the sash. Fig. 3 is a plan view of the sash. Fig. 4 is a plan view of the casing, and Fig. 5 is a view in detail of a sash, rib and stop bolt.

Referring to the drawings, a substantially rectangular casing 1 is formed of sheet metal with marginal flanges 2 adapted to be secured against the roof by bolts 3 or like suitable means. The upper end member 4 of the casing is outwardly inclined instead of being at substantially right angles to the flange. A sash having side members 5 and a lower end member 6 of the same depth as the sash is adapted to close tightly thereover and is provided with a hood 7 at its upper end which is in the form of a sheet metal plate bent at right angles along the line 8 near its inner margin and so secured to the sash that it hooks over the oblique end 4, the sides 5 of the sash having ears 9 at the upper end which support and form a close joint with the hood. The inner edge of the hood forms a bearing which rests against the oblique upper end casing. Suitable ribs 10 extend longitudinally of the sash for carrying the glazing. Preferably the ribs are each constructed of a sheet metal plate folded centrally on itself to form a web member with its marginal portions outturned as indicated. As a desirable feature the ribs 10 are deepest at the upper end of the sash and decrease regularly toward the lower end.

Stops preferably in the form of sheet metal bars 11 are used to hold glass in place

on the sash, being secured by studs whose bodies 12 are fastened between the walls of the web of each rib. In glazing the sash, putty is laid on the flanges of the ribs, the glass placed thereon and the strips clamped home over the putty which comes up between edges of the panes. The outer threaded ends of the bolts are provided with nuts 13 for securing the strips.

In operation, the casing is secured as indicated and the sash is then placed in position by merely hooking the end over the upper end and lowering the lower end of the sash over the sides of the casing. If it is desired to clean the sky-lights it is only necessary to swing out and unhook the sash from the casing without the use of tools of any sort. For ventilating purposes a suitably disposed prop or any proper fixture may be used to hold the sash swung out at the bottom as indicated in Fig. 1.

The main feature of the invention is the water tight construction formed by the overlapping hood and inclined upper end of the sash which precludes the entrance of water at that point as in the ordinary hinge form frequently used, coupled with the telescoping or sliding engagement of the sash and casing which prevents the dislodgment of the sky-light if it is left open the wind being unable to shift the sash laterally.

The preferable construction is the one herein shown wherein members of both sash and frame or casing are sheet metal but they may be of wood or similar material.

What I claim as my invention is:—

1. A sky light comprising the combination with a rectangular casing having an outwardly inclined upper end of a sash whose sides and lower end close over the casing, and whose upper end consists of a transverse plate bent near its lower margin at right angles, with the upper face oblique to the plane of the sash, said plate forming at its ends a close joint with the sides of the sash and bearing along its lower margin on the oblique end of the casing.

2. A sky light comprising the combination with a rectangular casing having an outwardly inclined upper end of a sash whose sides and lower end close over the casing, and whose upper end consists of a transverse plate bent near its lower margin at right angles with the upper face oblique to the plane of the sash, said plate forming at its

ends a close joint with the sides of the sash  
and bearing along its lower margin on the  
oblique end of the casing, intermediate ribs  
extending from end to end of the sash each  
5 consisting of a sheet metal strip folded along  
its medial line on itself as a web with out-  
turned margins, bolts whose bodies are se-  
cured between the sides of the web of the

rib, and stops secured against the marginal  
flanges by the bolts.

10

In testimony whereof I affix my signature  
in presence of two witnesses.

LOUIS WINTER.

Witnesses:

C. R. STICKNEY,

OTTO F. BARTHEL.