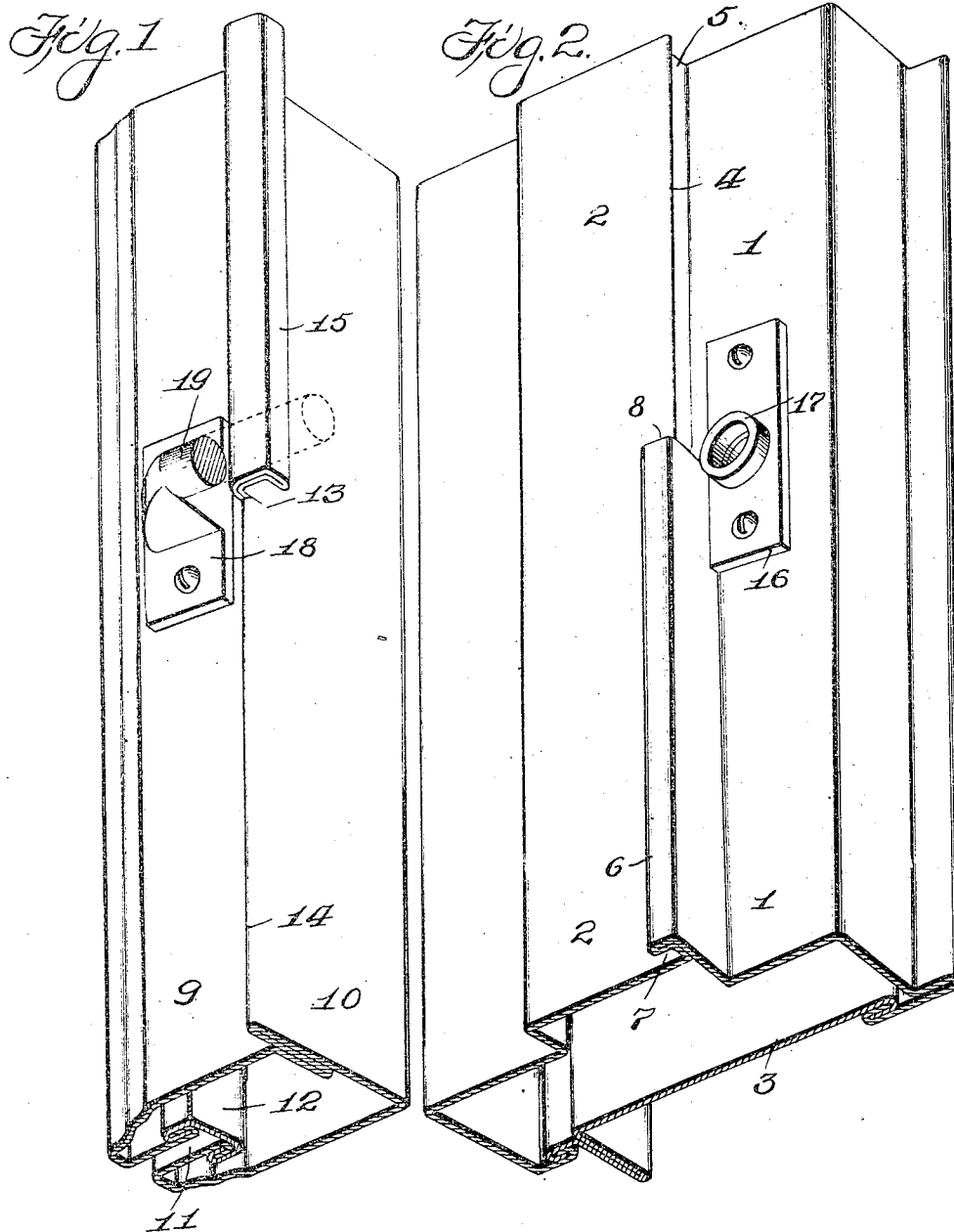


J. F. RUTH.
METALLIC PIVOTED SASH WINDOW.
APPLICATION FILED MAY 31, 1911.

1,055,493.

Patented Mar. 11, 1913.

2 SHEETS—SHEET 1.



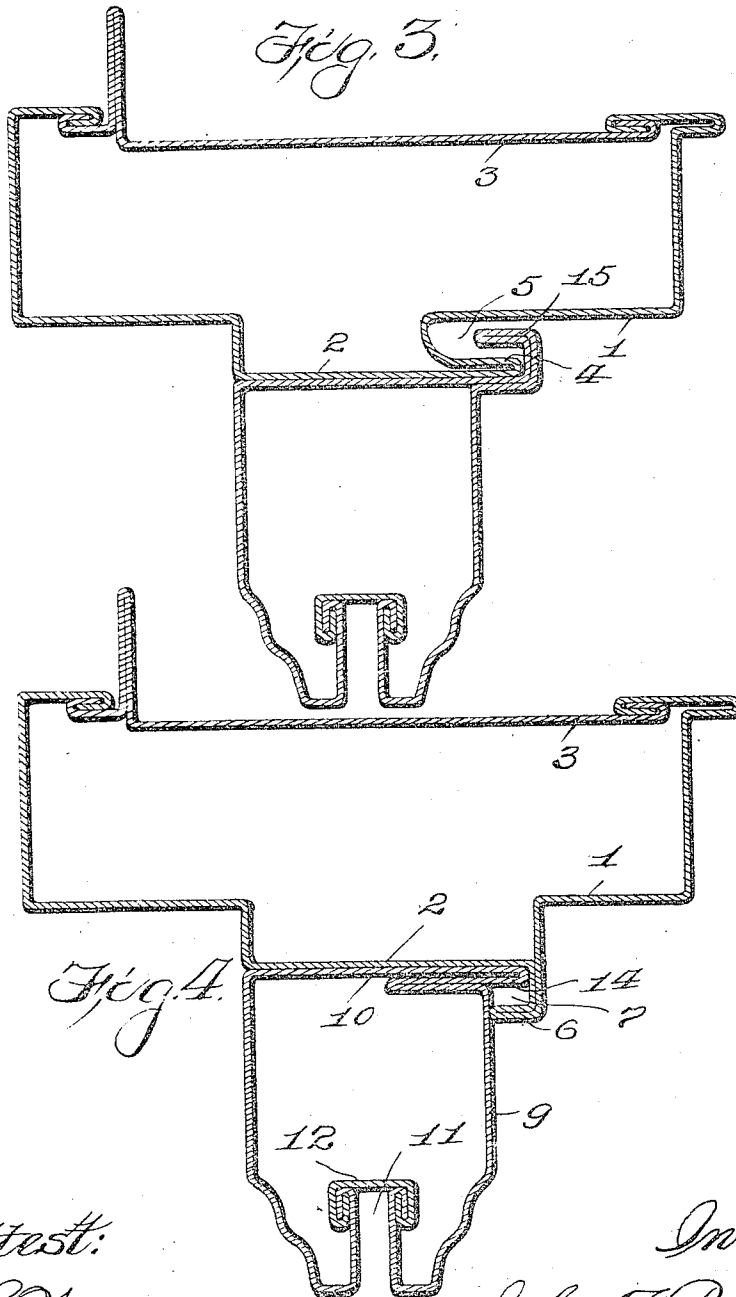
Attest:
E. L. Wallace
N. G. Butler.

Inventor
John F. Ruth
by Higdon Longworth & Co.

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UNITED STATES PATENT OFFICE.

JOHN F. RUTH, OF ST. LOUIS, MISSOURI.

METALLIC PIVOTED-SASH WINDOW.

1,055,493.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed May 31, 1911. Serial No. 630,481.

To all whom it may concern:

Be it known that I, JOHN F. RUTH, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Metallic Pivoted-Sash Windows, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in metallic pivoted sash windows and has for its object to construct the jambs and stiles each of a single piece of sheet metal with integral interlocking tongues and flanges above and below the pivotal connection between the sash and the frame, the meeting faces of the stiles and jambs being seamless to obviate dust and fire spaces as well as to construct the stiles and jambs with the least possible amount of material.

With the above purposes in view my invention consists in certain novel features of construction and arrangement of parts as will be hereinafter more fully described, pointed out in the claims and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective of the central portion of one of the stiles; Fig. 2 is a perspective of the central portion of one of the jambs; Fig. 3 is an enlarged, sectional plan of one of the stiles and one of the jambs taken on a line beneath the pivotal connection between the sash and the jamb; and Fig. 4 is a view similar to Fig. 3 taken on a line above the pivotal connection.

Referring by numerals to the accompanying drawings: 1 designates the body of the jamb.

2 designates the central portion of the jamb which stands in a plane laterally removed from the body portion.

3 designates a sheet metallic member which connects the ends of the jamb proper 1 to form a substantially rectangular, hollow jamb.

The central portion 2 above the pivotal connection has an integral tongue 4 which is a continuation of the face of the central portion 2 and extends over the body portion 1 to form a channel 5. Beneath the pivotal connection the central portion 2 has an integral hook-shaped flange 6 which forms a channel 7 standing in a plane laterally removed from the channel or groove 5. The

tongue 4 and the flange 6, it is to be observed, are formed out of the material of the central portion 2, there being a transverse cut 8 which permits of the formation of the tongue 4 and the flange 6. For the reason that the flange 6 takes up more material than the tongue 4, or at least the projecting portion of the tongue 4, the extra material of the tongue 4 is placed to the rear or inside of the jamb, as clearly shown in Fig. 3. In this manner the entire face of the central portion 2 of the jamb is formed seamless so that when the sash is fitted thereagainst there are no dust cracks or fire spaces.

9 designates the body portion of one of the stiles, 10 the face of the stile which abuts the central portion 2 of the jamb.

11 designates a groove formed to receive the glass and 12 a channel-shaped member connecting the ends of the material forming the stile.

The face 10 and the body portion 9 together with the portions forming the groove 11 are constructed of a single piece of sheet metal.

13 designates a cut which is formed in the stile at a point adjacent the pivotal connection, the material of the stile beneath the cut 13 is bent to form a tongue 14 which projects beyond the body portion 9. The material of the stile above the cut 13 is shaped to form a flange 15. The tongue 14 is arranged for interlocking with the flange 6 of the jamb and the flange 15 is arranged for interlocking with the tongue 4 of the jamb.

16 designates a plate which is secured to the body portion 1 of the jamb and is provided with a journal bearing 16.

18 designates a plate which is secured to the body portion 9 of the stile and carries a journal 19, the journal 19 being fitted in the bearing 17 so that the window may be tilted as required to open or close the same.

I am aware that windows have been constructed having tongues and flanges which interlock to make dust and flame tight connections between the stile and jamb but, so far as I am advised, the tongues and the flanges were constructed of separate pieces and secured to either the stile or jamb. In other instances, where the tongues and flanges were formed integral with the stiles and jambs there were seams extending lengthwise of the stile and jamb in the faces

thereof which abutted. These seams not only formed dust or flame spaces but were unsightly.

I claim:

5 1. In a pivoted sheet metal window, a window jamb, a pivot bearing secured to the face of the jamb, there being a cut in the jamb adjacent said bearing, an integral tongue standing in the plane of the face of
10 the jamb which the sash engages and being a smooth uninterrupted continuation of said face of the jamb, there being a channel to the rear of said tongue, both channel and tongue being to one side of said pivotal point;
15 a tongue formed integral with said jamb beneath said pivotal point and there being a channel between said last mentioned tongue and the said face of the jamb, the said face of the jamb beneath said pivotal point being
20 seamless and continuous.

2. In a sheet metal window, a jamb the face of which which engages the window sash, is seamless and unbroken, a bearing formed in said jamb and there being a cut formed in the jamb adjacent said bearing, a tongue to
25 one side of said cut in the plane of the face of the jamb, there being a channel to the rear of said tongue, there being an integral tongue beneath said cut standing in a plane
30 removed from said face of the jamb, and there being a channel between said last mentioned tongue and said face of the jamb.

3. In a pivoted sheet metal window, a jamb the face of which, which is engaged by the window sash, is uninterrupted and seamless, a sash-bearing carried by the jamb,
there being a transverse cut adjacent said bearing, the material of the jamb on each
40 side of said bearing forming an integral tongue and a channel, one tongue being

in the plane of the sash-engaging face of the jamb and the other tongue being removed from the plane of said face.

4. In a pivoted metal window, a sash, a bearing carried by said sash, there being
45 a transverse cut in said sash adjacent said bearing, an integral tongue carried by said sash in the plane of the jamb-engaging face of the sash and on one side of said cut, an
50 integral tongue carried by the sash on the other side of said cut and removed from the plane of said face of the sash, said face of the sash being uninterrupted and seamless throughout its length.

5. In a pivoted metal window, a jamb, a
55 bearing carried by the jamb, there being a transverse cut in the jamb adjacent said bearing, a tongue carried by the jamb to one side of said cut in the plane of the face of the jamb, a second tongue carried by the
60 jamb on the opposite side of said cut, there being channels in the jamb to the rear of each of said tongues, a stile, a journal carried by said stile, there being a transverse
65 cut in said stile alining with said journal, a tongue carried by said stile in the plane of the face of the stile to one side of said cut, a second tongue carried by said stile on the opposite side of said cut, there being
70 channels formed in said stile in front of each of said tongues, the engaging faces of both jamb and stile being uninterrupted and seamless.

In testimony whereof, I have signed my name to this specification, in presence of
75 two subscribing witnesses.

JOHN F. RUTH.

Witnesses:

EDWARD E. LONGAN,
E. L. WALLACE.