

F. H. CRITTALL.
JOINTING METAL SASH BARS.
APPLICATION FILED JUNE 22, 1911.

1,016,916.

Patented Feb. 6, 1912.

Fig. 1.

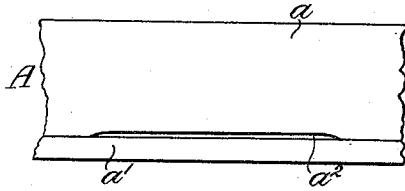


Fig. 2.

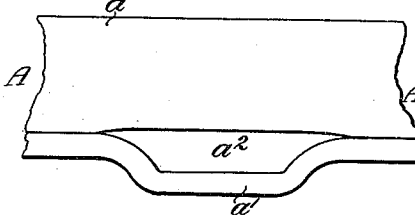


Fig. 3.

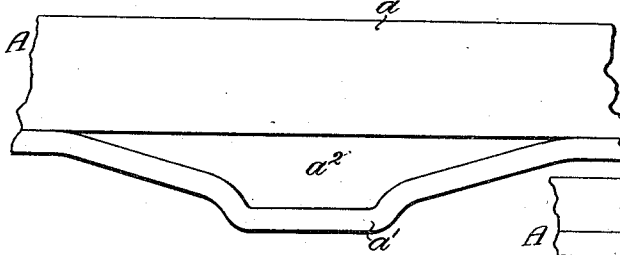


Fig. 4.

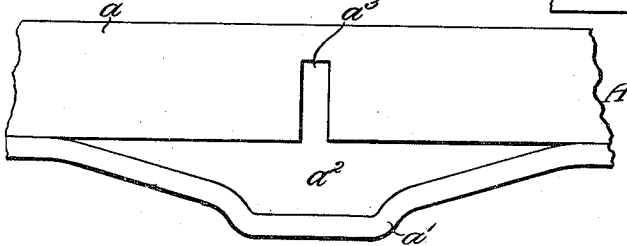


Fig. 5.

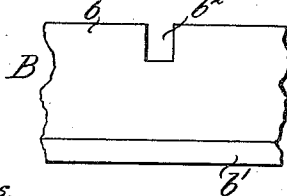


Fig. 6.

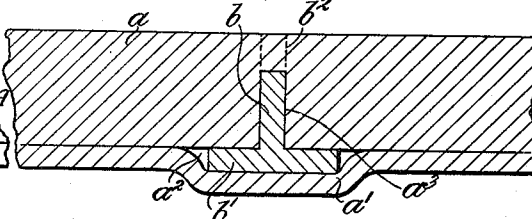
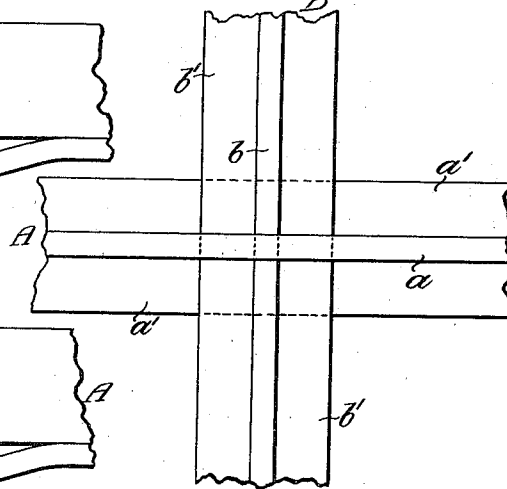


Fig. 7.



Witnesses.
C. B. Swanson
C. F. Early.

Inventor.
Francis Henry Crittall
By his Attorneys.
Medwin Wright

UNITED STATES PATENT OFFICE.

FRANCIS HENRY CRITTALL, OF BRAINTREE, ENGLAND.

JOINTING METAL SASH-BARS.

Specification of Letters Patent.

Patented Feb. 6, 1912.

1,016,916.

Application filed June 22, 1911. Serial No. 634,763.

To all whom it may concern:

Be it known that I, FRANCIS HENRY CRITTALL, a subject of the King of Great Britain, residing at Manor Works, Braintree, in the county of Essex, England, have invented new and useful Improvements in Jointing Metal Sash-Bars, of which the following is a specification.

This invention relates to jointing T section metal sash bars and is particularly applicable to jointing bars of equal size.

In a joint made according to this invention the flange of one bar lies between the flange and the web of the other bar while the web of each bar has a rectangular slot cut in it to receive the uncut portion of the web of the other bar as has before been proposed but the webs are not otherwise slit or deformed in any other way.

In the drawings Figures 1, 2, 3, and 4 show in elevation the steps in preparing one of the bars for the joint. Fig. 5 shows in elevation the other bar for the joint. Fig. 6 is an elevation in section showing the joint, and Fig. 7 is a plan view of the joint.

The drawings show two T section bars A and B of equal size. In making a joint the web a of the bar A is first separated from its flange a' by a slit a^2 as shown at Fig. 1. The slit a^2 is then opened and the flange a' stretched by means of a wedge-shaped punch as shown at Fig. 2. The slit a^2 is next further enlarged and lengthened as shown at Fig. 3. This can be done by pressing the flange a' downward which tears it away from the web a . Lastly the web a has a rectangular slot a^3 cut in it as shown at Fig. 4. The bar B has a rectangular slot b^2 cut in its web b as shown at Fig. 5. The bar B is then threaded through the hole in the bar A, the space between the top of the slot a^3 and the top of the bent flange a' (Fig. 4) being sufficient to allow of this. The slots a^3 and b^2 are then caused to engage with each other and the flange a' is pressed back so as to closely embrace the flange b' of the bar B and to close up the ends of the slit a^2 as shown in section and plan at Figs. 6 and 7.

What I claim is:—

1. A joint between two T section sash bars in which the flange of one bar lies between

the flange and the web of the other bar, the web of each bar having a rectangular slot cut in it to receive the uncut portion of the web of the other bar, such webs being otherwise uncut and having their metal otherwise undisturbed, substantially as described.

2. The process of preparing a T section bar for jointing with a bar of equal size consisting in first separating the flange of the bar from the web by a slit then enlarging the slit by bending the flange away from the web thus stretching it, next further enlarging the width and length of the slit and lastly cutting a rectangular slot in the web substantially as described.

3. A joint between two crossed T-section sash bars of equal cross-section in which the flange of one bar lies between the flange and web of the other bar, the web of each bar having a rectangular slot cut in it to receive the uncut portion of the web of the other bar, such webs being otherwise uncut and having their metal otherwise undisturbed.

4. The process of forming a joint between two T-section sash bars of equal size which consists in first separating the flange of one bar from its web by a slit, then enlarging the slit by bending the flange away from the web thus stretching it, then further enlarging the width and length of the slit, then cutting a rectangular slot in the web, next inserting another bar crosswise in the opening made in the first mentioned bar and then closing the bent flange of the first mentioned bar down upon the flange of the second bar.

5. The process of forming a joint between two T-section sash bars of equal size, which consists in first separating the flange of one bar from its web by a slit, then enlarging the slit by bending the flange away from the web to thus stretch the flange, then cutting a rectangular slot in the web, next inserting another slotted bar crosswise in the opening made in the first mentioned bar, and then closing the bent flange of the first mentioned bar down upon the flange of the second bar.

6. A joint between two T section sash bars in which the flange of one bar is separated from its web by a space occupied by the flange of the other bar and at each side of this space the flange of the first bar being

separated from its web by a narrow slit, the web of each bar having a rectangular slot cut in it to receive the uncut portion of the web of the other bar, such webs being otherwise uncut and undisturbed.

7. A joint between two T section sash bars of equal cross section in which the flange of one bar is separated from its web by a space occupied by a flange of the other bar and at each side of this space the flange

of the first bar being separated from its web by a narrow slit, the web of each bar having a rectangular slot cut in it to receive the uncut portion of the web of the other bar, such webs being otherwise uncut and undisturbed. 15

FRANCIS HENRY CRITTALL.

Witnesses:

JOHN H. WHITEHEAD,
H. D. JAMESON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."