## E. M. BAKER. SASH STRUCTURE.

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987,034.

Patented Mar. 14, 1911.

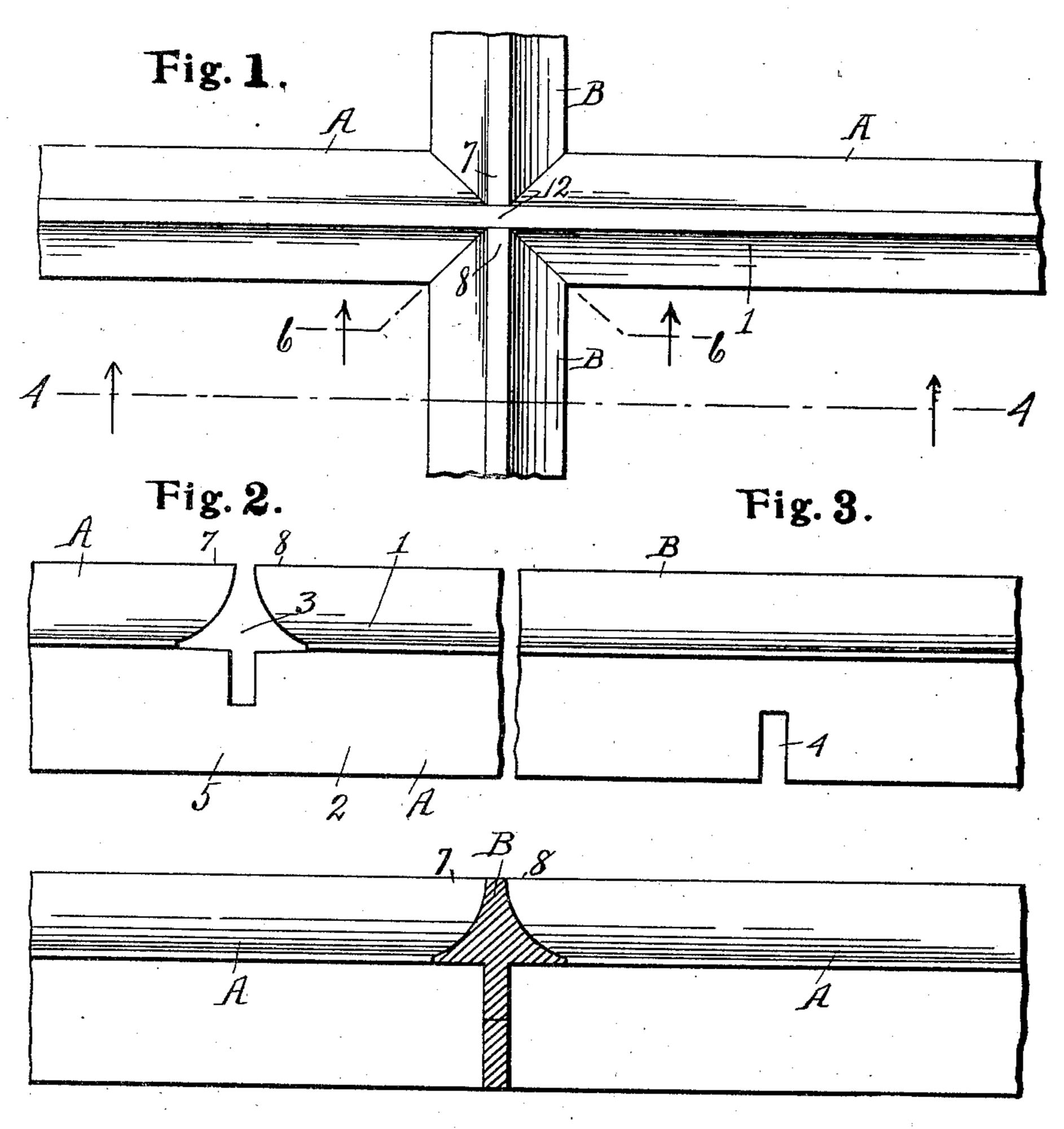
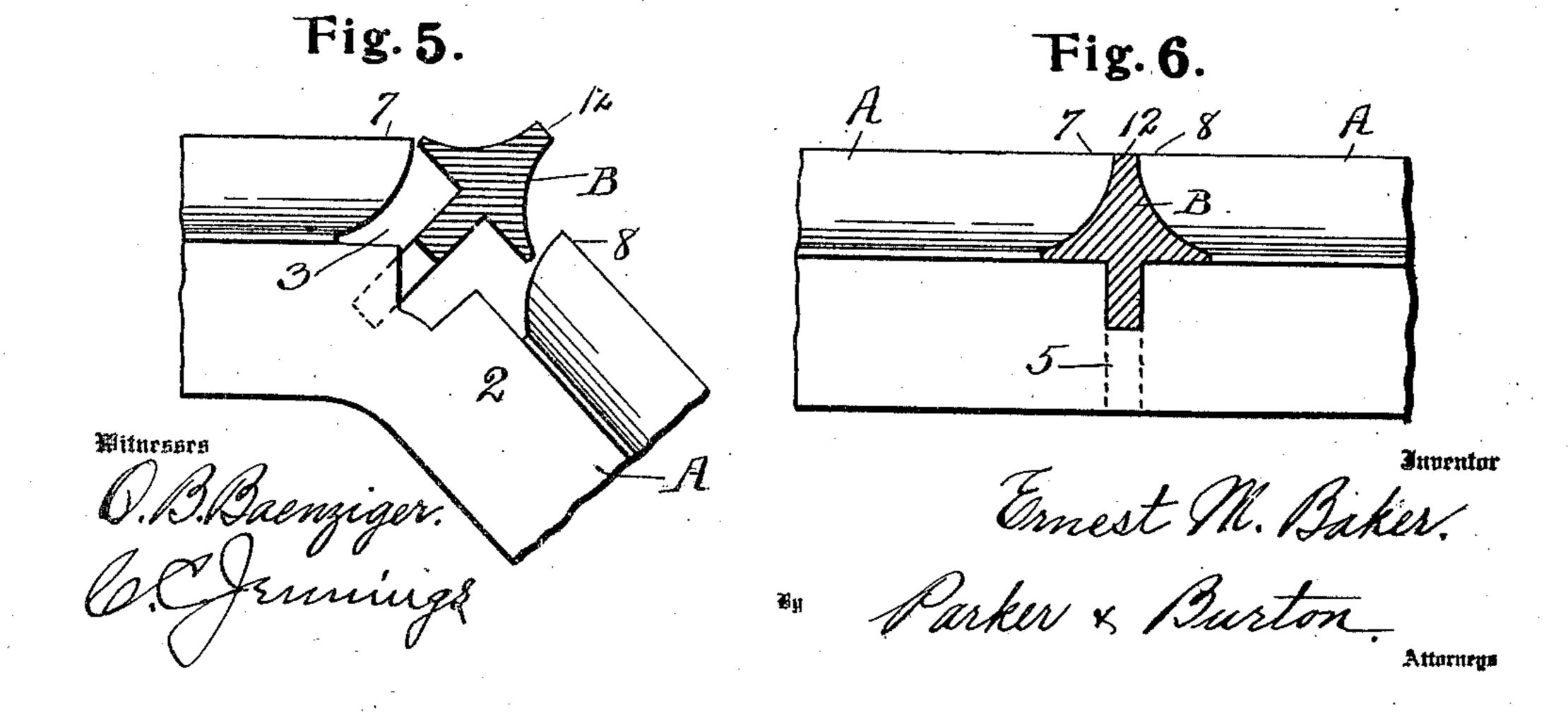


Fig. 4.



## UNITED STATES PATENT OFFICE.

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## SASH STRUCTURE.

987,034.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed November 18, 1909. Serial No. 528,697.

To all whom it may concern:

Be it known that I, Ernest M. Baker, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Sash Structures, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a sash adapted to hold glass or tile, and has for its object an improved construction of metal sash arranged to produce a symmetrical cross shaped figure on the flanged side of said sash, and a symmetrical cross shaped figure on the webbed side of said sash with the parts interlocking, and so locked together as to be strong, durable and extremely neat

The sash structure is made from T iron in which the cross part of the T is concaved or coved on each side of the axis and the two arms of the T form a seat for the sides of the sheet of glass, while the web, which projects from the two arms and forms the stem of the T forms a bearing for the edges

In the drawings:—Figure 1, shows a finished joint. Fig. 2, is a side elevation of one member used in making a finished joint. Fig. 3, is a side elevation of the second member used in making a finished joint. Fig. 4, is a cross section on the line 4—4 of Fig. 1. Fig. 5, shows a process in construction of the joint. Fig. 6, shows a cross section of the joint.

The T iron A of Fig. 2 is punched through the flange 1 and through a part of the web 2 to produce an opening 3 that corresponds as nearly as possible with the cross section of the flange, and of about half of the web.

The T iron of the member 3 is punched with a notch 4 to engage over that part of the

web 2 which lies between the bottom of the

opening 3 and the edge to 1 the member. The member of Fig. 2 is then bent to spread the upper boundaries 7 and 8 of the opening 50 3, which are spread only sufficiently to enable the member B to be slipped into or inserted into the opening 3 with the slot 4 engaging over the web 2. The member A is then straightened, reshaping the opening 55 3 to its original shape over the now inclosed member B. The obverse or flanged side of the sash is now symmetrical in appearance at the joint with the apparent meeting faces of the incurved surface of the flange diverg- 60 ing from what is substantially a common center at 12 and the faces are in the same plane. The obverse side presents the same uniform appearance, and the surface of both lie in the same plane.

What I claim is:— An interlocked metallic structure for sashes and the like comprising two bars crossing each other, each of said bars being provided with a web and a flanged head, 70 the base of which is relatively wider than the top thereof, the flanged head of one of said bars being severed and a part thereof removed to produce an opening corresponding to the cross section of the flanged 75 head of the other bar, and the portion of the web of said first bar underlying the opening formed in the head thereof being provided with a downwardly extending notch for substantially half its depth, the web of 80 the crossing bar being provided with a notch extending upwardly from the lower edge thereof for substantially half its depth, the webs of the two bars being halved together and crossing one another and the flanged 85 head of one bar passing through the opening formed in the flanged head of the other bar.

In testimony whereof, I sign this specification in the presence of two witnesses.

ERNEST M. BAKER.

Witnesses:

CHARLES F. BURTON, VIRGINIA C. SPRATT.

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