

Arch formers

This invention relates to an arch former for use in building arches.

A former which has achieved wide acceptance is described in our British patent application No. 45733/77 (1590298 published 28 May, 81) and comprises an arch former comprising at least one pair of similarly shaped members made of expanded metal, each member having a curved wall to one edge of which is attached a vertical wall by bending and interlocking adjacent margins of the curved wall and vertical wall, the curved walls forming the ceiling of the arch and the vertical walls forming the corner pieces.

The interlocking of the margins was made in practice on a "Pittsburgh" lock jointing machine.

We have found that plasterers would prefer to have what is known as a "plaster stop" which gives the plasterer a rib at the corner of the joint which will stand proud of both adjacent surfaces viz. the vertical surface and the underneath curved arch surface. Such a projecting rib will serve to indicate depth of plaster and an edge to the plaster.

Arch formers provided with plaster stops are known. US—A—1782147 discloses a complex plaster stop formed from the lateral edges of the curved wall and US—A—1979701 discloses a plaster stop formed from the vertical wall. US—A—2005572 describes an arch former comprising sheets of expanded metal connected by means of prongs or lugs to a corner bead formed from a strip of sheet metal.

The object of the present invention is to provide such a rib in a manner which is relatively simple and cheap.

We tried various possibilities before arriving at the present invention. Thus we tried attaching wire to the curved edge by means of loops attached by welding but this was too time consuming and the wire had to be rolled to the exact curvature before welding. We tried also making a strip with two flanges for welding but it was necessary to cut V-shaped openings in the flanges to permit bending to the required curvature and this again was too time consuming. We further tried what is known as "edge beading" but this cannot be bent to a smooth curve.

We finally had the idea of the present invention which has proved highly satisfactory.

According to the present invention we provide as arch former having an vertical flat part provided with a recess having a curved edge and a curved part at right angles to the vertical part the two parts being joined together by a curved joint at said edge and a separately formed edge beading extending partly or wholly around said joint made of a strip of perforated sheet metal bent to a cross-sectional shape having a flange attached to the underneath

curved surface of said curved part and provided with a beading that extends downwardly, laterally and upwardly so as to provide a plaster stop both below and laterally of the joint around said edge.

The strip is preferably expanded metal sheet that has been flattened. The entire former may be made of such sheet. The sheet may have 2.5 to 3.5 openings per centimetre and is made from steel sheet, openings being punched, the sheet then being stretched and the sheet being finally flattened by passing through rollers or by other means.

The joint may be made by means of a Pittsburgh lock joint forming machine. The strip may be formed with its flange in a Pittsburgh seam machine which is normally used for flanging solid metal sheet for forming ducting, and has suitable flange bending wheels different from those used on a Pittsburgh lock joint forming machine.

The invention will be further described by way of example with reference to the accompanying diagrammatic drawings wherein:—

Figure 1 is a perspective view showing the general design of a four-part arch former; and

Figure 2 shows the fitting of one of the parts with the beading strip in accordance with the invention.

As shown in Figure 1 the former is made of four identical parts 10 each having a vertical flat wall 11 having a recess which has a curved lower edge 12 and a curved wall 13 at right angles to the vertical wall joined to the lower edge 2 by a Pittsburgh lock joint 16 (Figure 2).

A bead strip is formed on a Pittsburgh seam machine with a flange 19 and a beading 20. The beading 20 has a downwardly extending part 21, a laterally extending part 22, and an upwardly extending part 23.

The strip is arranged on the former so as to extend partly or wholly around the joint and the flange is spot welded at 25 to the part 13. The strip is then bent along the joint 16 and spot welded at intervals along the entire length of the joint.

The beading thus provides a depth A for vertical plaster and a depth B for underneath plaster while at the same time providing the plaster stop in both directions.

The strip also provides additional strength of the former which facilitates handling and transport.

The beading may be provided on either or both sides of the arch former.

Claims

1. An arch former for use in building an arch comprising a vertical flat part (11) provided with a recess having a curved edge (12) and a curved part (13) at right angles to the vertical part the

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Claims

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two parts being joined together by a curved joint (16) at said edge characterized by a separately formed edge beading (20) extending partly or wholly around said joint (16) made of a strip of perforated sheet metal bent to a cross-sectional shape having a flange (19) attached (25) to the underneath curved surface of said curved part (13) and provided with a beading that extends downwardly (21) laterally (22) and upwardly (23) so as to provide a plaster stop both below and laterally of the joint around said edge.

2. An arch former as claimed in claim 1 having two said vertical parts with the curved part between them, all these parts and the edge beading being made of flattened "expanded" perforated metal sheet, the flange (19) being attached to the curved part (13) by spot welding (25).

Patentansprüche

1. Bogenformer zur Verwendung bei der Herstellung eines Bogens, mit einem vertikalen, flachen Teil (11), der mit einer einen gekrümmten Rand (12) aufweisenden Ausnehmung versehen ist, und mit einem gekrümmten Teil (13) rechtwinklig zum vertikalen Teil, wobei beide Teile über eine gekrümmte Verbindung (16) an diesem Rand miteinander verbunden sind, gekennzeichnet durch einen getrennt ausgebildeten Randwulst (20), der sich teilweise oder vollständig um die Verbindung (16) erstreckt und der aus einem Streifen perforierten Blechmetalles hergestellt ist, welcher zu einem Querschnitt mit einem Flansch (19) gebogen ist, der an der unteren gekrümmten Fläche des gekrümmten Teiles (13) befestigt (25) und mit einem Wulst versehen ist, der sich abwärts (21), seitlich (22) und aufwärts (23)

erstreckt, um so eine Verputzbegrenzung sowohl unterhalb als auch seitlich zur Verbindung entlang des Randes zu bilden.

2. Bogenformer nach Anspruch 1 mit zwei vertikalen Teilen und dem gekrümmten Teil dazwischen, wobei alle diese Teile und der Randwulst aus verflachtem "expandiertem" perforiertem Metallblech hergestellt sind und der Flansch (19) mit dem gekrümmten Teil (13) durch Punktverschweißung (25) verbunden ist.

Revendications

1. Coffrage perdu en arc destiné à être utilisé dans la construction d'une arche, comprenant une partie verticale plane (11) pourvue d'une échancrure ayant un bord incurvé (12) et une partie incurvée (13) perpendiculaire à la partie verticale, ces deux parties étant réunies entre elles par un joint incurvé (16) le long dudit bord, caractérisé par une baguette marginale (20) réalisée séparément, s'étendant partiellement ou en totalité autour dudit joint (16), et constituée sous forme d'une bande de tôle d'acier perforée pliée de manière à présenter en coupe transversale une forme comprenant une bride (19) fixée en (25) contre la surface courbe inférieure de ladite partie courbe (13) et pourvue d'un bourrelet qui s'étend vers le bas (21), latéralement (22) et vers le haut (23), de manière à constituer une butée pour le plâtre tant au-dessous que latéralement par rapport au joint autour dudit bord.

2. Coffrage perdu en arc selon la revendication 1, comportant deux parties verticales avec la partie incurvée placée entre elles, toutes ces parties et le bourrelet du bord étant réalisés en tôle d'acier perforé "expansé", la bride (19), étant fixée à la partie incurvée (13) par soudage par points (25).



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