Dec. 31, 1940. T. ST. PIERRE 2,226,673

WELDER'S CHIPPER

Filed Dec. 21, 1938

Fig. 2.

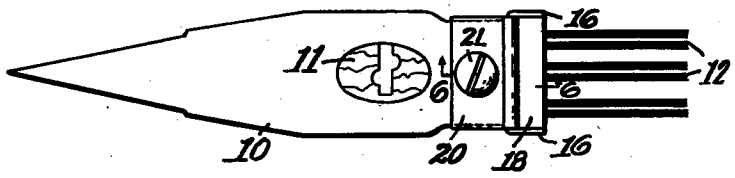
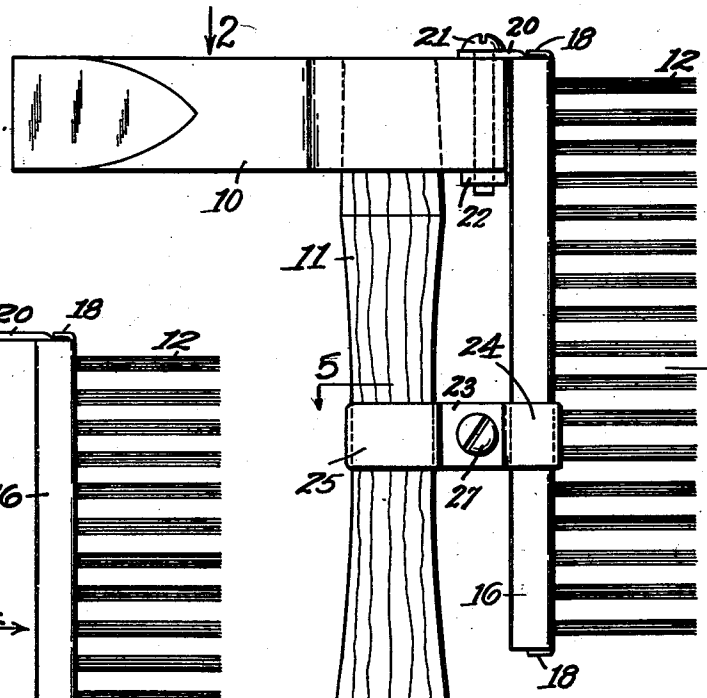


Fig. 1.



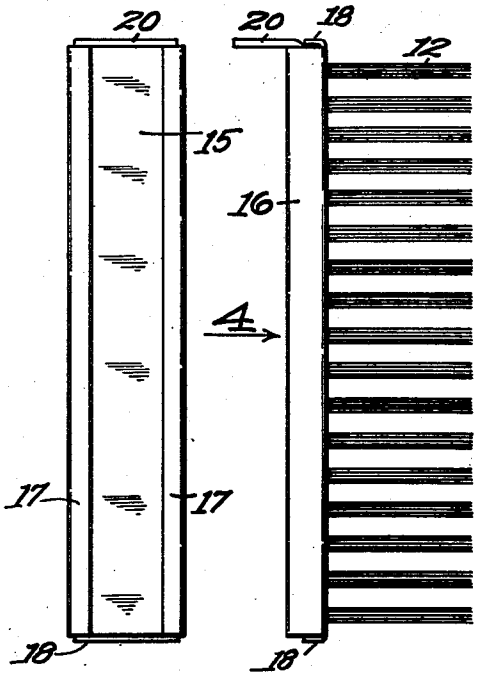
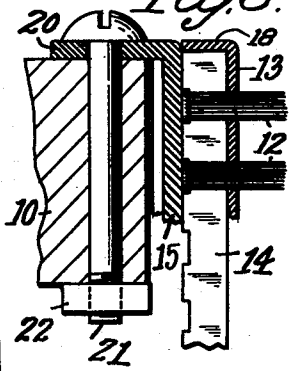


Fig. 4. Fig. 3.

Fig. 6.



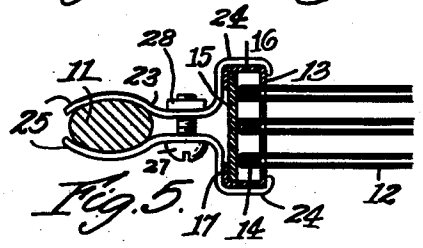
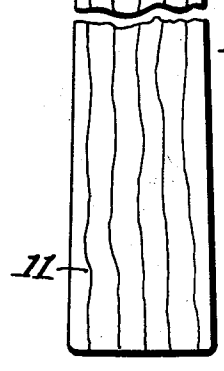


Fig. 5.



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WELDER'S CHIPPER

Thomas St. Pierre, Worcester, Mass.

Application December 21, 1938, Serial No. 247,126

4 Claims. (Cl. 15—105)

This invention relates to a chipper for use by welders in chipping the glazed surfaces of a previously formed weld in order to expose fresh surfaces for welding purposes.

The principal objects of the invention are to provide a convenient and easily operated chipper; to provide for the attachment of a brush directly to a chipper or hammer head, in such a way that the brush will be rigidly located and that the fastening of the brush will not take up much space or employ much metal, thus making the construction more economical, and to provide the brush in a readily removable condition so that it can be replaced very easily when the brush is worn.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing, in which

Fig. 1 is a side view of a complete welders' chipper with a brush attached to it in accordance with this invention;

Fig. 2 is an end view looking in the direction of the arrow 2 in Fig. 1;

Fig. 3 is a side view of the brush itself detached from the chipper;

Fig. 4 is a plan of the same;

Fig. 5 is a sectional view on the line 5—5 of Fig. 1, and

Fig. 6 is a sectional view on the line 6—6 of Fig. 2 on enlarged scale.

As is well understood in this art, it is necessary in some operations of welding to chip off the very hard scale which forms over a weld on account of the welding flux, if it is desired to do any further welding at that point. It is also desirable, in order to remove the scale and have a smooth surface, to brush the same surface with a wire brush, which usually is done by a separate implement. This makes it necessary to have two implements, which are likely to get out of place.

In this case an ordinary chipper or hammer head 10, with a handle 11, is employed without much change from the ordinary hammer used for this purpose. Also, the wire brush 12 is mounted in the same location.

In this case this wire brush consists of wire bristles set into a perforated plate 13 at right angles thereto and formed in loops. The looped end of each tuft of bristles extends below the plate 13 and the whole series of these loops is held by longitudinal bars 14. These bars pass through the looped end of each tuft of bristles at the bottom to hold them down positively in the casing formed of the plate 13 and an under plate 15. These two plates are secured together by two flanges 16 on the opposite ends of the plate 13 which engage the under side of the ends of the plate 15. They have inwardly extending flanges 17 to hold the structure together in a box-like form.

At both ends this box is completed by two flanges 18 on the ends of the plate 13, which are bent at right angles to cover the structure. The plate 15 is provided with a projecting flange 20 at the hammer end of the instrument which extends over the extreme surface of the head. The head is perforated to receive a tightening screw 21 which is fixed by a nut 22 on the other side of the head 10. In this way it is firmly fixed to the head and even the loosening of the handle 11 would not be very apt to loosen the brush casing.

The brush casing is further anchored to the handle by a pair of brackets 23 which have flanges 24 coming over the side walls 16 and gripping them above by being turned inwardly over the surface of the plate 13. These two brackets are provided with suitable gripping jaws 25 to engage and hold the bracket on the handle. The fastening means for these two brackets, which are identical but right and left handed, is simply a screw 27 and nut 28. By this means these brackets can be fastened up closely against the sides of the holder for the brush and the brush is rigidly held at two points a suitable distance apart so it is permanently in position once it is mounted. However, these two screws can be loosened for removing the brush and replacing a new one when it becomes worn.

It has been customary to use a wedge which has to be pounded by a separate hammer, sometimes two hammers being used, but at any rate two tools. By the use of this invention the operation is greatly simplified and one unitary tool employed instead of three.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. As an article of manufacture, a welders' tool having a head and handle, a brush casing, bristles projecting from the casing away from the handle, said casing having a removable inner bottom wall to receive the bottoms of the bristles on its surface, which wall is provided with a flange engaging the outer end surface of the head, and a screw passing through said flange and through the head of the tool for securing the brush in place.

2. In a device of the character described, the

combination with a tool having a head and handle, a plate secured to the head, a sheet metal casing cooperating with and detachable from said plate to form a chamber to receive the heads of a series of bristles, one wall of said chamber being perforated, through which perforations the bristles pass, bars extending along said casing inside and holding the bristles, a pair of brackets, each one gripping one side of said casing and the other end gripping the handle, and means between the two grips for holding said brackets together to firmly attach the casing to the handle at a point at a distance from the head.

3. As an article of manufacture, a tool having a head and a handle, a brush casing comprising an elongated box-like structure extending along said handle and having a rear wall, a flange on one end of said wall, bristles extending from said brush casing in a direction away from said handle, means for securing said flange to said head, said rear wall being separable from said brush casing, whereby the latter may be reversed with respect thereto and resecured in a manner to relocate the bristles remote from said head to a position adjacent thereto.

4. As an article of manufacture, a tool having a handle and a head at one end of the handle, a brush casing and means for removably attaching the brush casing to said handle to extend from said head down along said handle, said casing having a removable rear wall, a flange on said rear wall located so as to engage a face of said head remote from said handle, means securing said flange to said face, said brush casing being separable from said rear wall in a manner whereby said brush casing may be detached from said handle and reversed end for end with respect to said head.

THOMAS ST. PIERRE.