Jan. 10, 1939. G. W. WIESE 2,143,339

ROOF SEAMING TOOL

Filed March 23, 1938

Fig. 1.

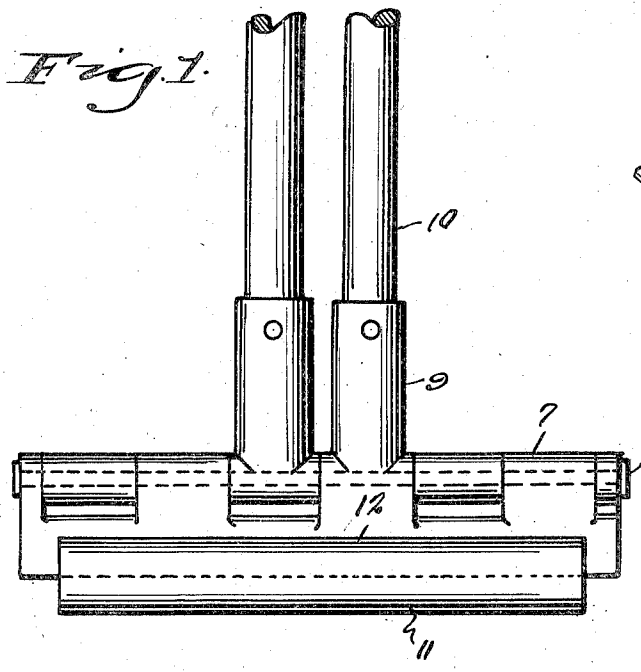


Fig. 2.

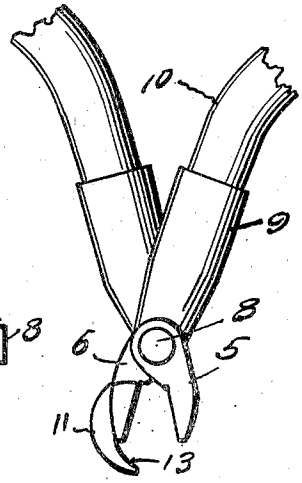


Fig. 6.

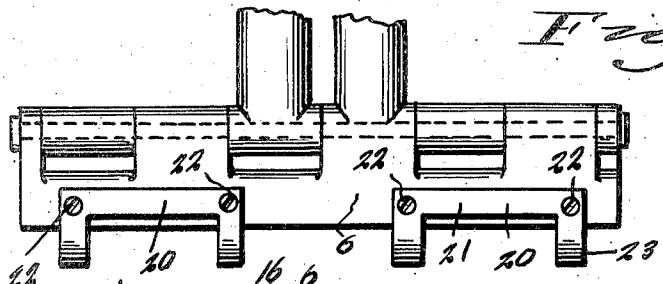
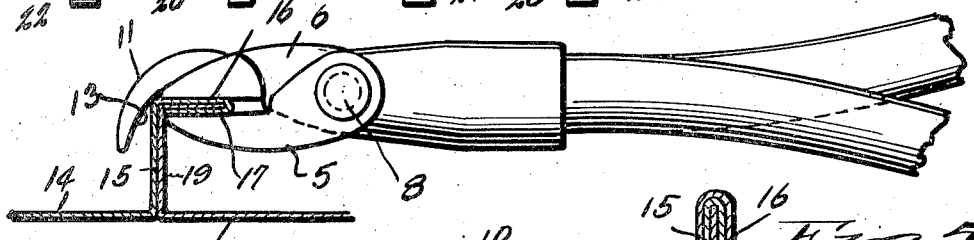


Fig. 4.



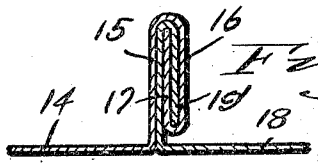


Fig. 5.

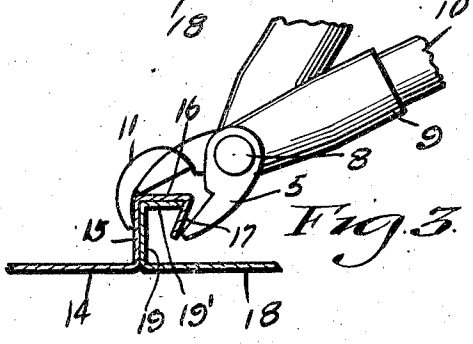


Fig. 3.

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ROOF SEAMING TOOL

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Application March 23, 1938, Serial No. 197,750

3 Claims. (Cl. 113—56)

The present invention relates to roof seaming tools of a type embodying a pair of pivoted jaw members adapted for engaging opposite sides of the upstanding roof seam to bend the same angularly into interlocking engagement.

The primary object of the present invention is to provide a roof seaming tool embodying an extension on one of the jaw members adapted to extend downwardly along one side of the upstanding roofing seam for engaging the latter to prevent slipping of the tool from the seam during the bending operation.

A further object is to provide a tool of this character of simple and practical construction, which is strong and durable, relatively inexpensive to manufacture and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation of the tool is more fully hereinafter described and claimed, reference being had to the accompanying drawing forming part hereof, wherein like numerals refer to like parts throughout and in which—

Figure 1 is a side elevational view of the tool with parts broken away and shown in section.

Figure 2 is an end elevational view.

Figure 3 is a similar view showing the initial roofing seam engaging operation of the tool.

Figure 4 is a similar view showing the completion of the initial bending action of the roofing seam. Figure 5 is a transverse sectional view through a roofing seam showing the same in completed form, and

Figure 6 is a side elevational view of a modified form of the tool embodying a detachable jaw extension.

Referring now to the drawing in detail, wherein for the purpose of illustration I have disclosed the preferred embodiment of the invention, the numerals 5 and 6 designate a pair of cooperating jaw members of elongated formation, the inner ends of each of which are provided with aligned eyes 7 through which a pivot pin or bolt 8 is inserted to provide for the pivotal action of the jaw.

From an intermediate section of each of the jaws, sockets 9 extend for receiving a manipulating handle 10. The foregoing describes a conventional type of roof seaming tool, the present invention comprising an extension 11 for one of the jaws, said extension being of elongated form and secured along one of its longitudinal edges 12 to the outer surface of the jaw, the other edge of the extension 11 projecting beyond the edge of the jaw in a manner as will be apparent from an inspection of the Figures 1 and 2 of the drawing.

The inner surface of the extension 11 is concaved transversely as shown at 13 with the free edge of the extension projecting in a direction toward the opposite jaw and substantially in alignment with the opening between said jaws, as clearly shown in Figure 2.

The tool is designed for use in bending the upstanding seams of a sectional sheet metal roof into interlocking engagement, the sheets being preformed and provided with upstanding seam joints along their longitudinal edges in the manner shown in Figures 3 and 4, one section of the roof being indicated at 14.

The section 14 is formed with an upstanding seam section 15, bent horizontally at 16 and downwardly at 17 to form a depending flange, the seam thus being of inverted channel form, as shown in Figure 3. The section 18 is also provided with an upstanding seam section 19, terminating in an upper horizontal section 19' fitted in the channel of the seam 15.

In order to lock the upstanding seam thus formed, the roof seaming tool is placed on the upstanding seam in the position shown in Figure 3 of the drawing, with the extension 11 contacting the vertical side of the seam 15 and the opposed jaw contacting the depending flange 17 whereby it will be apparent that the closing action of the handle will cause the flange 17 to be bent upwardly and inwardly under the end 19' of the adjacent roofing section, the extension 11 serving to prevent slipping of the tool from the seam. Upon the completion of this initial bending action the seam will be closed in the manner as shown in Figure 4.

Following this initial bending action the tool is turned into a reverse position with the extension 11 engaging the upper surface of the horizontal portion 16, as shown in Figure 4, whereby the latter is bent downwardly against the upstanding portion of the seam into a position as shown in Figure 5 to thus form a double lock seam.

In the form of invention illustrated in Figure 6 of the drawing, in place of a permanently attached extension 11 affixed into one of the jaws, a plurality of attachments 20 are provided, said attachments being of substantially U-shaped form with the bight portion 21 secured in a longitudinal position against the outer surface of the jaws 6 by means of screws or the like 22 and the fingers 23 projecting outwardly beyond the longitudinal

edge of the jaw and curved inwardly substantially in the form as shown in Figure 2.

It is believed the details of construction and manner of use of the tool will be readily understood from the foregoing, without further detailed explanation.

Having thus described the invention, what I claim is:

1. A roof seaming tool comprising a pair of elongated jaws pivotally connected to each other along one of their longitudinal edges, one of said jaws having an extension along its free edge with the free edge of the extension projecting beyond and terminating parallel to the free edge of the other of the jaws and curved transversely in a direction toward said other jaw for contacting the work at a point beyond the jaws and adapted to cooperate with the other of said jaws during initial closing movement, said jaws cooperating with each other independently of the extension during subsequent closing movement.

2. A roof seaming tool comprising a pair of elongated jaws pivotally connected to each other along one of their longitudinal edges and a plurality of fingers secured to the outer surface of one of the jaws and projecting beyond the free longitudinal edge of both jaws and curved in a direction toward the other of said jaws, for contacting the work at a point beyond the jaws and adapted to cooperate with the other of said jaws during initial closing movement, said jaws cooperating with each other independently of the extension during subsequent closing movement.

3. A roof seaming tool for channeled roofing seams in which one edge of the channel is free and depends downwardly, said tool comprising a pair of horizontally elongated pivotally attached jaws, one of said jaws embodying a main jaw structure and an extension, said extension projecting beyond the free edge of both jaws and curved in a direction toward the other jaw, and cooperating therewith to engage the vertical sides of the seam for bending the free edge of the seam inwardly during initial closing movement of the jaws and said main jaw structure engaging the top of the seam and cooperating with said second jaw to bend said free edge upwardly against the top of the seam during continued closing movement of said jaws.

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