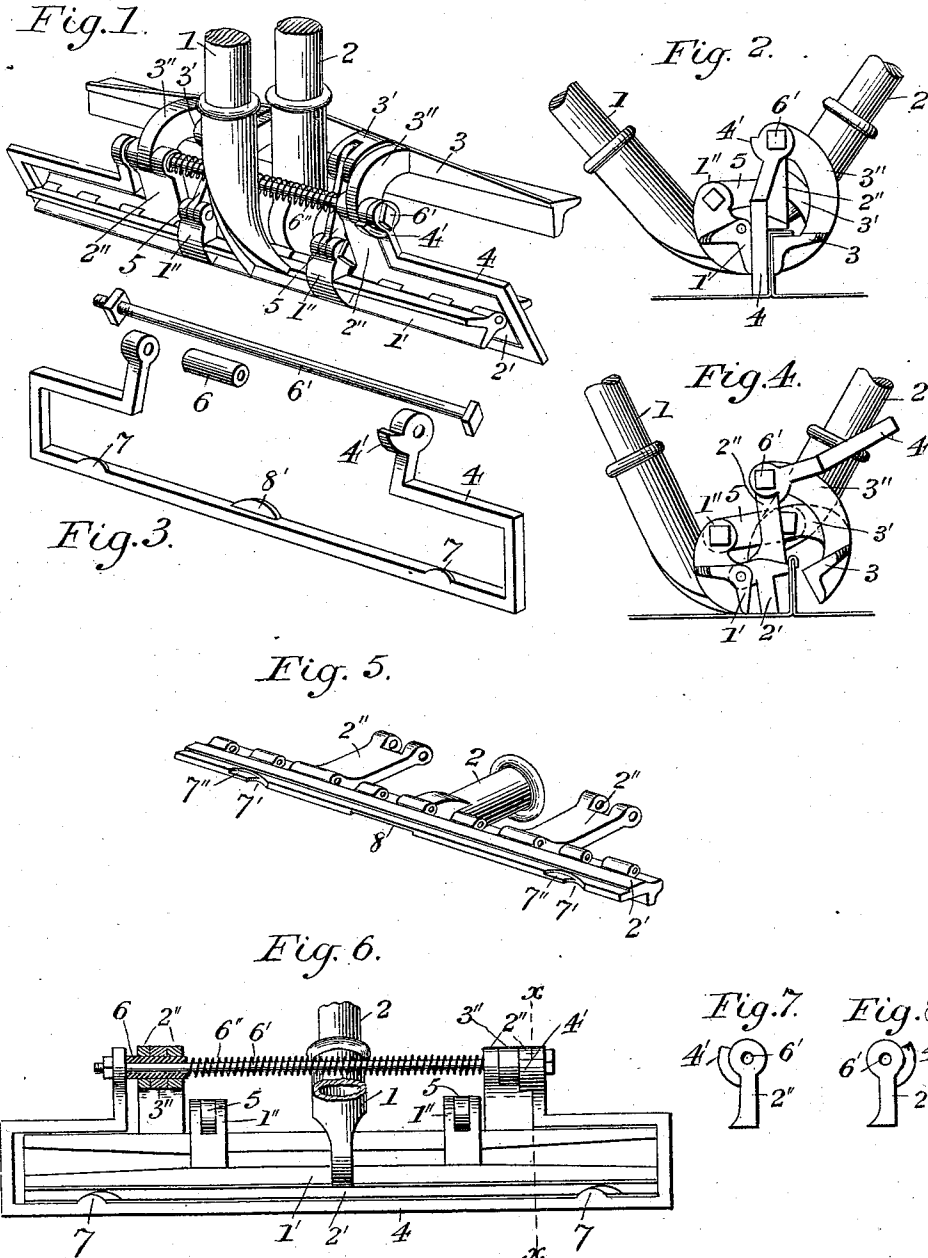


(No Model.)

W. L. HEBERLING.
ROOFER'S SEAMING TOOL.

No. 552,061.

Patented Dec. 24, 1895.



Witnesses:

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ROOFER'S SEAMING-TOOL.

SPECIFICATION forming part of Letters Patent No. 552,061, dated December 24, 1895.

Application filed April 24, 1894. Serial No. 508,867. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. HEBERLING, a citizen of the United States, residing at Havana, in the county of Mason and State of Illinois, have invented a new and useful Improvement in Roofers' Seaming-Tools, of which the following is a specification.

My invention relates to tools for forming double-lock standing seams in metal roofing, and has for its object to provide a tool that will perform all the operations of double seaming by the simple outward movement of two common handles, dispensing with foot-power and the use of a second tool to complete the work. The mechanism by which I attain this object is illustrated in the accompanying drawings, throughout which like parts are designated by similar numerals.

Figure 1 is a perspective view of my improved tool with jaws open. Fig. 2 is an end view of the same with jaws closed. Fig. 3 is a perspective view of my raising-frame and accompaniments. Fig. 4 is an end view of the tool with jaws slightly open and the raising-frame locked up in idle position. Fig. 5 is a perspective of the central jaw of the tool lying on its side. Fig. 6 is a side elevation of the tool with a segment cut away to show how the coil-spring acts on the raising-frame through the hinge. Fig. 7 shows the upper part of a cross-section taken at the line X X, Fig. 6, while the raising-frame is down in working position. Fig. 8 is a view of the same parts shown in Fig. 7 as they appear when the raising-frame is up, as in Fig. 4.

This seamer consists of three jaws and a raising-frame. Two adjacent jaws 1' and 2' are hinged together and provided with handles 1 and 2, Figs. 1 and 4. The third jaw 3 is pivotally connected with both the others and automatically operated by them. The central jaw 2' is provided with hinge-lugs which project sidewise into corresponding depressions formed for them in the jaw 1', and the interlapping parts thus brought together are hinged by a light rod which passes through them from one end of the jaws to the other, Figs. 1, 2, 4 and 5. The angular jaw 3 is provided with lugs 3'' 3'', which are hinged to lugs 2'' 2'' of the central jaw 2', Figs. 1, 2, 4 and 6. The two outside jaws are connected together by links 5 5, which unite the lugs

1' 1' of the jaw 1' with the lugs 3' 3' of the jaw 3, Figs. 1, 2, 4 and 6.

The raising-frame 4, Fig. 3, is hinged to the lugs 2'' 2'' of the central jaw 2' by the bolt 6, Figs. 1, 2, 3, 4 and 6. The bolt 6, which supports the raising-frame 4, also serves in conjunction with the thimble 6', Figs. 3 and 6, as a hinge-rod for the lugs 2'' and 3'' referred to, Figs. 1 and 6. The thimble 6' is inserted on the rod 6 at the end of a compressed spiral spring which surrounds the rod with one end against the lug 2'' and the other against the thimble, Fig. 6, thus causing the thimble to communicate the pressure from the spring endwise against the raising-frame so as to force it endwise and engage its locking mechanism. The right-hand end of the raising-frame, as shown in Figs. 1, 3 and 6, is enlarged and has a projection 4', which may engage either side of the adjacent lug 2'', and thus limit the swing of the raising-frame. The lugs of the raising-frame are far enough apart to give it a quarter of an inch play endwise with the rod 6 outside of the lugs 2'', Figs. 1 and 6, so that while the compressed spring naturally holds the frame endwise with the projection 4' in engagement at the side of the lug 2'' the operator may force the frame and thimble back against the spring far enough to release the projection 4' and bring it out on the edge face of the lug 2'', and when thus released the position of the frame may be changed either from that shown in Figs. 1, 2 and 6 to that shown in Fig. 4, or vice versa. In these different positions the projection 4' engages opposite sides of the lug 2'', as shown in Figs. 7 and 8. Fig. 7 shows the position of 4' to 2'' while the raising-frame is in working position, as in Figs. 1, 2 and 6. Fig. 8 shows the position of 4' to 2'' while the frame is up with its base against the handle 2, as in Fig. 4. When the frame is swung down the stop 8' comes in contact with the lower part of the jaw 2' at the notch 8, Fig. 3, which limits its downward swing just as it has reached its proper working position. Additional means for locking the raising-frame in this position and supporting it at its base are provided by the catches 7 7, Fig. 3, and notches 7' 7', with their extensions 7'' 7'', Fig. 5, which are entered by said catches when the projection 4'

escapes from the edge of the lug 2", which permits the frame to move endwise, thus securing the rigid position of the frame until it is again released, as before described.

- 5 The operation of this tool is very simple. It is apparent that the outward movement of the handles operates all the jaws simultaneously, and that the jaw 3 is used with the central jaw for starting the folds, and that
10 the jaw 1' is used with it for clamping them down.

In turning and clamping down the first fold of a double seam the tool is used with the raising-frame under it, as in Figs. 1, 2 and 6,
15 and in turning and clamping down the second fold it is used with the raising-frame locked up in idle position, as in Fig. 4.

What I claim as new, and desire to secure by Letters Patent, is—

- 20 1. In a roofer's seaming tool, three jaws each two of which are hinged or linked together on a pivotal line separate from that on which either of them is connected with the remaining jaw; all arranged to be brought
25 together simultaneously by operating mechanism.

2. In a roofer's seaming tool, three jaws each two of which are hinged or linked together on a pivotal line separate from that on
30 which either of them is connected with the remaining jaw; all arranged to be brought together simultaneously by the operation of two handles.

3. In a roofer's seaming tool, two jaws
35 hinged together as a seam clamp, in combination with a third jaw which is pivotally connected with each of them above the pivotal line of their connection with each other.

4. In a roofer's seaming tool, two jaws
40 hinged together as a seam clamp, in combination with a third jaw which is hinged or pivoted to the clamp jaw nearest it above the pivotal line of the clamp hinge, and between the pivotal lines of the said two hinges is connected by links with the farther clamp jaw.
45

5. In a roofer's seaming tool, a central jaw which is adapted to rest with its base on the roof while at work and is provided with two
50 outside jaws which are adapted to close against it, in combination with a hinged raising frame which is adapted to work under said central jaw, or to be swung out therefrom.

6. In a roofer's seaming tool, a central jaw which is adapted to rest with its base on the roof while at work and is provided with two
55 outside jaws which are adapted to close against it, in combination with a hinged raising frame which is adapted to work underneath said central jaw, or to be swung out therefrom, and is provided with an automatic
60 locking device.

7. In a roofer's seaming tool, two opposing jaws which are hinged together above their working faces, one of which jaws is adapted
65 to rest on the roof while at work and is provided on one side with a rigid longitudinal lip which is adapted to bend the seam flanges at right angles over the edge of the opposing jaw, in combination with a raising frame
70 which is hinged to said lipped jaw and is adapted to work underneath it or to be swung out therefrom.

8. In a roofer's seaming tool, two opposing jaws which are hinged together above their
75 working faces, one of which jaws is adapted to rest on the roof while at work and is provided on one side with a rigid longitudinal lip which is adapted to bend the seam flanges at right angles over the opposing jaw, in combination with a raising frame which is hinged
80 to said lipped jaw and is adapted to work underneath it or to be swung out therefrom, and to be locked in position by an endwise movement.

9. In a roofer's seaming tool, two opposing
85 jaws provided with operating mechanism, in combination with a raising frame or bar which is provided at its ends with hinge lugs which both stand outside of corresponding lugs on one of the said opposing jaws, and are hinged
90 therewith by a pin or bolt on which a coil spring is carried between the said lugs of the said jaw, one end of said spring engaging the inner side of one of the said jaw lugs and the other end arranged with means to communicate pressure through the hinge-bolt hole of
95 the opposite said jaw lug to the adjacent lug of the raising frame, said frame being adapted to be thus forced endwise and locked.

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Witnesses:

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