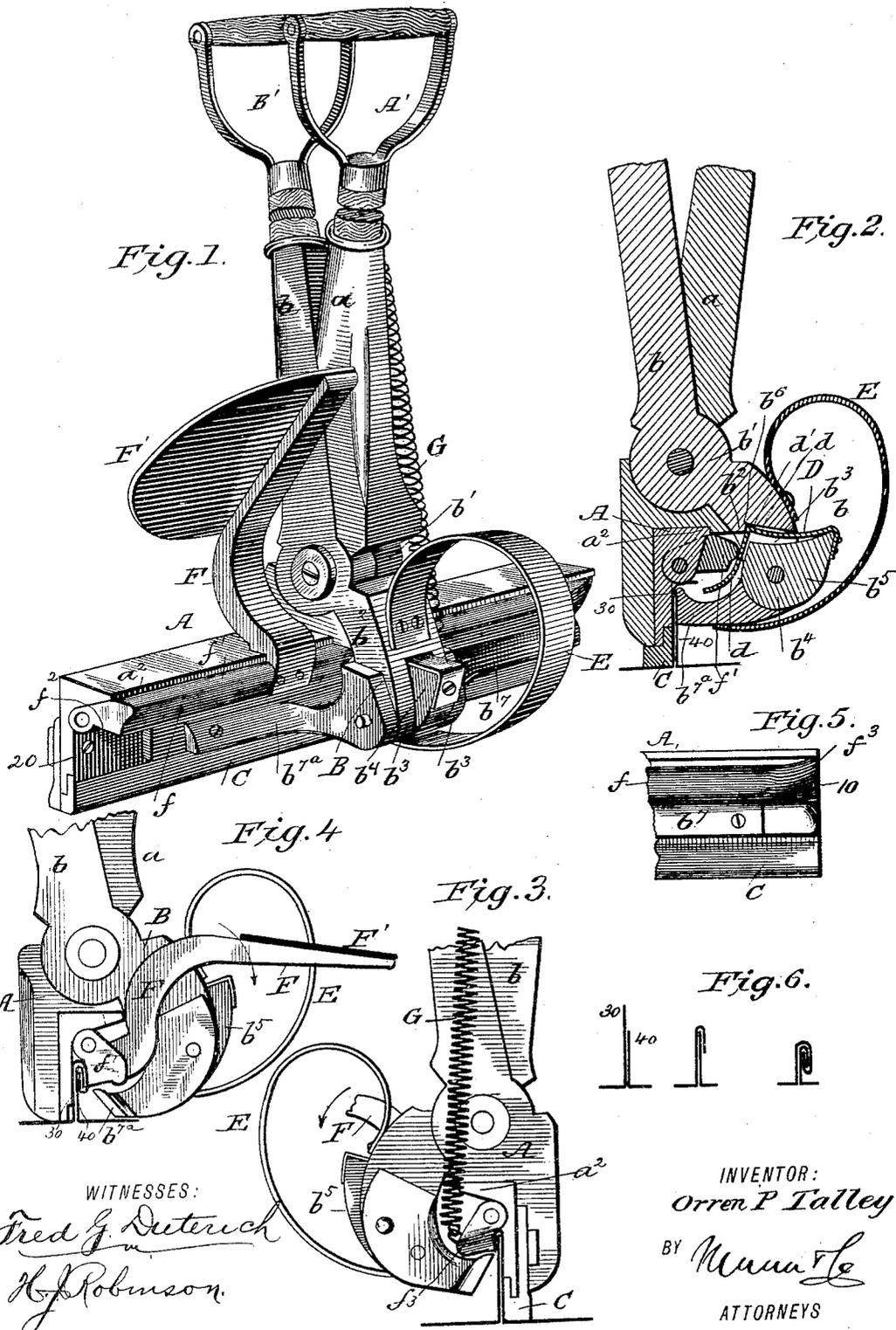


(No Model.)

O. P. TALLEY.
ROOFING SEAMER.

No. 454,303.

Patented June 16, 1891.



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ORREN P. TALLEY, OF RICHMOND, NORTH CAROLINA.

ROOFING-SEAMER.

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To all whom it may concern:

Be it known that I, ORREN P. TALLEY, residing at Richmond, in the county of Chatham and State of North Carolina, have invented certain new and useful Improvements in Roofing-Seamers, of which the following is a specification.

My invention has for its object to provide a device for forming the seam in joining metal employed in roofing, which will serve to quickly and positively join the ends and form a complete crimp at each operation of the machine.

It has also for its object to provide a device whereby the danger of breaking or cracking the ends of the tin as it is crimped is avoided, and which is also adapted for turning a double seam.

Finally, it has for its object to provide a practical and easily-manipulated device which can be manufactured at a small cost and which will not readily get out of order.

To this end my invention consists in the sundry novel features of construction and peculiar combination of parts, all of which will hereinafter be fully described in the annexed specification, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved seaming implement. Fig. 2 is a vertical transverse section of the same. Fig. 3 is an end view showing the position of the folding-bar when depressed to turn the crimp or seam. Fig. 4 shows a detail end view of the implement in the position of turning a double seam. Fig. 5 is a detail view of one end of the same. Fig. 6 illustrates the stages through which the meeting ends of the tin plates pass to form a double seam.

Referring to the accompanying drawings, A indicates the main or abutment jaw, which is pivotally connected with the movable or clamping jaw B, said jaws having upward extensions or tongs a b , provided with hand-holds A' and B' , as shown. The bottom of the jaw A has detachably connected therewith a foot portion or extension C, said extension being of any desired height relatively to the height of the bent portions of the metal

sheets to be seamed. The purpose of such extension will hereinafter be fully explained.

The clamping-jaw B consists of a body portion b' and the curved outward extension b^2 , formed with bifurcated ends b^3 b^3 , as most clearly shown in Fig. 2 of the drawings, by reference to which it will be seen that within said ends b^3 is pivoted the spring-actuated jaw member b^4 , formed with a central portion b^5 , upon the upper face of which is pivoted a leaf-spring D, provided with a locking-extension d , the shoulder d' of which normally engages a shoulder b^6 on the extension b^2 of the jaw B. The clamping portion of said jaw B consists of the laterally-projecting members b^7 b^{7a} , the member b^7 extending out flush with the end 10 of the fixed jaw A, while the member b^{7a} is stopped short of the end 20 of said jaw A for a purpose hereinafter explained.

E indicates a bent leaf-spring secured to the extension b' of the jaw B and projected under the pivotal member, serving to hold the same in the locked position, as before stated.

To one side of the handle portions of the jaws A and B is pivoted the foot or folding lever F, which consists of a longitudinal portion f , pivoted beneath the right-angled projection a^2 of the jaw A, said portion f being formed with an outwardly-curved part f^1 and a straight part f^2 , which part is arranged to press against the vertical wall of the jaw A when said foot-lever is depressed to the position shown in Fig. 3 of the drawings. The upper end of the lever F is formed with a foot-rest F' , and a spring G is provided, which connects the said lever with the lever B, which serves to bring the said foot-lever F back to its normal position. The end f^3 of the member f' is beveled, for a purpose presently explained.

The manner in which my improved device is operated is as follows: The ends of the tin sheets are brought together to the ordinary position (see Fig. 2) and the seamer adjusted with its fixed jaw against the longer one of the up-turned ends of the tin sheets and the jaws A and B brought to a closed position, thereby securely holding said ends together and partially bending the longer end over the shorter end, as

shown. While holding the jaws A and B together the foot-lever F is depressed, causing its member or folding-bar *f'* to bend the longer end over the shorter end of the tin sections, thus completing the seam. It will be observed by reference to Fig. 2 of the drawings that the jaw member *b'*, when the jaws A and B are brought together, fits close up under the folding-bar, so as to more effectually press the ends 30 and 40 together. Now by following the movement of the folding-bar *f* it will be seen that as it is turned down its curved portion *f'* will engage the end *d* of the locking-spring D, depress same, and release it from engagement with the shoulder *b⁶*, and as said bar is further depressed it engages the curved inner face of the jaw member *b⁷* and swings it outward and away from the jaw A, as clearly shown in Fig. 3 of the drawings, and when the foot-lever is released it is forced back to its normal position by the spring G and the jaw *b⁷* to its normal position and against the seam by its spring E. If the machine were always used for folding sheets of no greater width than the length of its jaws, there would be no necessity to bevel the end *f³* of the folding-bar *f*; but in operating on sheets wider than the machine it is necessary that the same shall not be bent too abruptly at the point where the portion that is folded or crimped in the first operation meets the still unfolded or uncrimped portion, and this is avoided by beveling the end of bar *f*. In other words, the sheet is not broken at such point, since it is not bent sharply. The making of the jaw *b^{7a}* shorter than the folding-bar and the jaw A, as stated, allows the said jaw *b⁷* to close without catching the half-fold made by the beveled end of the folding-bar when the tongs are opened and moved along the seam, and again closed on the same to make another fold. After the tin sections have been joined and formed with the first seam the gage or extension C is removed and the operation of folding is repeated, as before, thus forming the second or double seam to the tin, such operation being clearly understood by reference to Fig. 6 of the drawings.

From the foregoing description, taken in connection with the drawings, the advantages of my improvement will readily appear. It will be seen that by allowing the jaws to re-

main closed during the operation of folding they furnish a perfect guide for holding the ends of the tin properly together.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a roofing-seamer, the combination, with the jaw A, formed with a fixed longitudinal member, the folding-bar F, pivotally connected to the upper end of the said member, and a foot-lever connected to said bar F, of the jaw B, pivotally connected with jaw A, said jaw formed with a pivoted spring-actuated clamping member arranged, when the jaws A and B are folded together, to be in the path of the movement of the folding-bar when the foot-lever is depressed, whereby such clamping member will be forced from its closed position, substantially as and for the purpose described.

2. In a roofing-seamer, the combination, with the pivoted jaws A and B, the jaw A formed with the fixed clamping member and the jaw B with a spring-actuated clamping member, and a locking device for holding said clamping member and the jaw B in a fixed relation, of a foot-operated folding-bar pivoted to the fixed member of the jaw A, arranged to operate when the jaws A and B are closed first to release said spring-actuated clamping member and to force it from contact with the fixed clamping member as the seam is turned by the former bar, all arranged substantially as shown and described.

3. The combination, with the jaw formed with a longitudinal and fixed portion A and a spring-actuated folding-bar F, formed with a foot-lever F', said bar pivotally connected to said portion A and arranged to hold the ends of the tin against said fixed portion when depressed, of the jaw B, pivoted to the jaw A and formed with a bifurcated extension *b³*, spring-actuated clamping-jaws *b^{7a}* *b⁷*, pivoted in said bifurcated ends, and a spring-lock D for normally holding said jaw *b³* to an inward position, substantially as and for the purpose described.

ORREN P. TALLEY.

Witnesses:

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