(No Model.) 2 Sheets—Sheet 1.

L. D. CORTRIGHT.

MACHINE FOR MAKING ROOFING PLATES FOR BUILDINGS.

No. 343,701. Patented June 15, 1886.

Fig. 1.

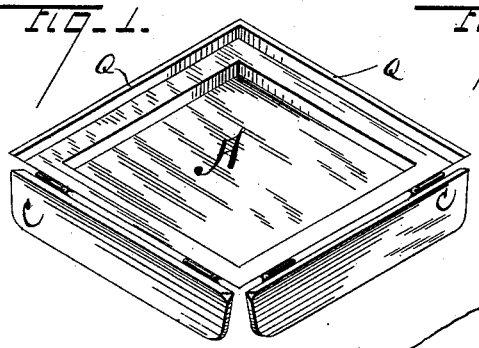


Fig. 2.

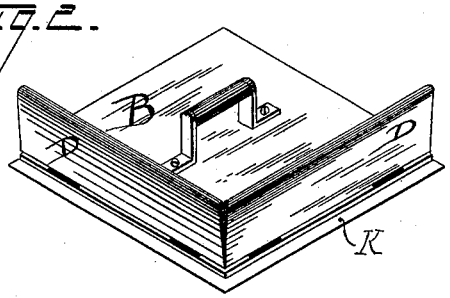


Fig. 3.

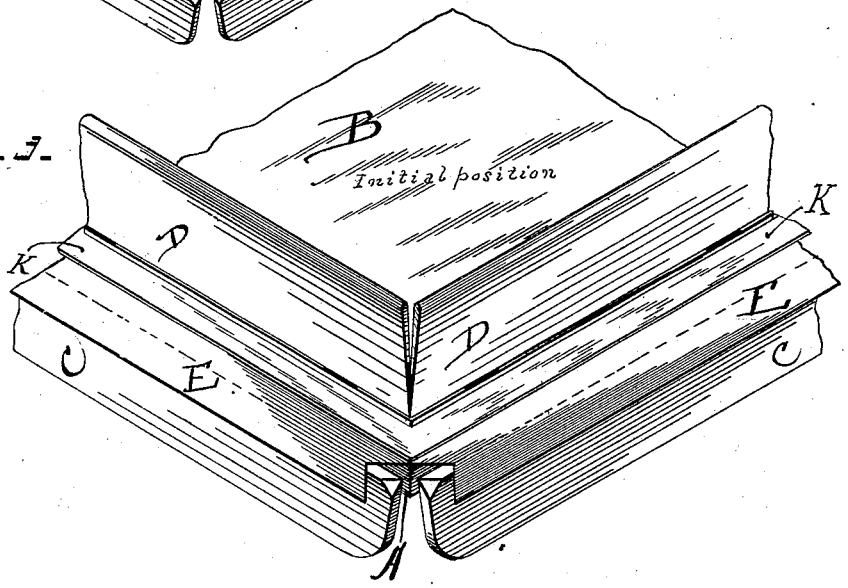
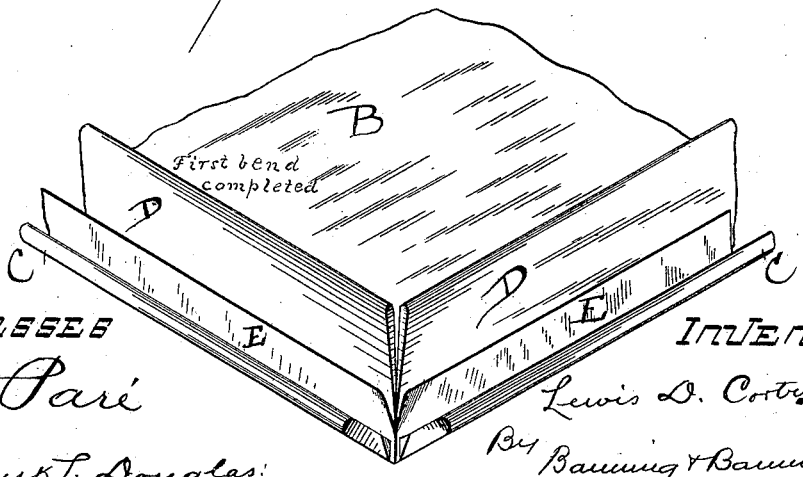


Fig. 4.



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(No Model.) 2 Sheets—Sheet 2.

L. D. CORTRIGHT.

MACHINE FOR MAKING ROOFING PLATES FOR BUILDINGS.

No. 343,701. Patented June 15, 1886.

Fig. 5.

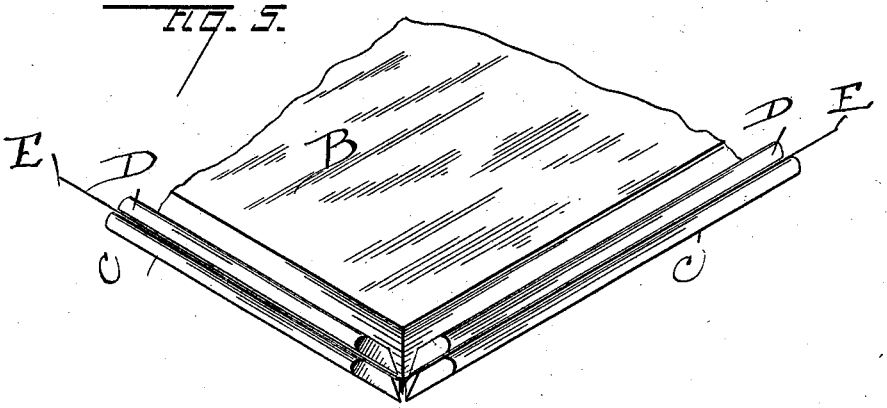


Fig. 6.

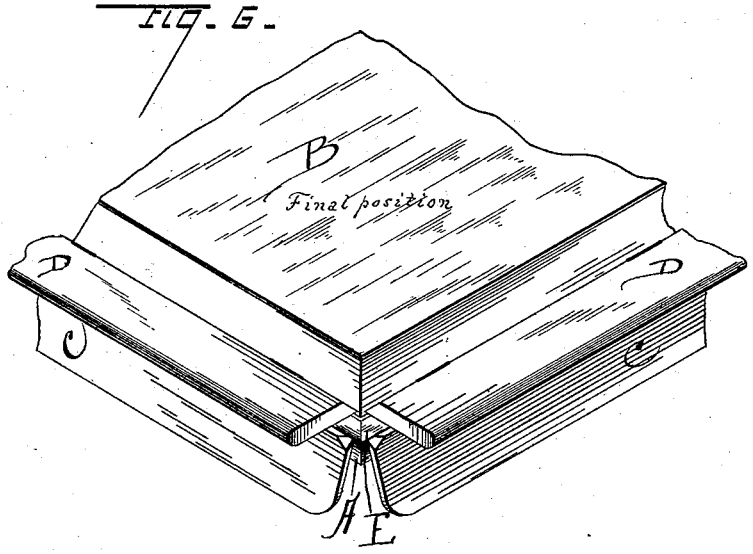
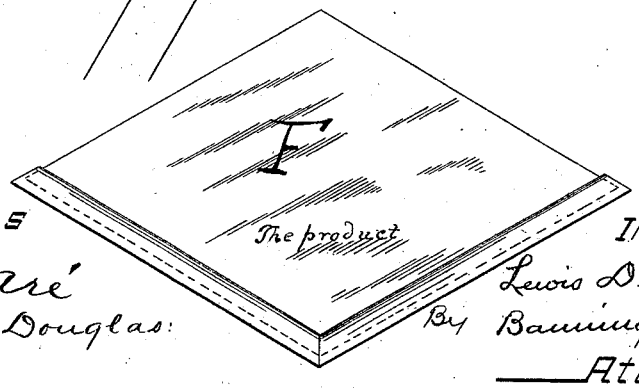


Fig. 7.



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UNITED STATES PATENT OFFICE.

LEWIS D. CORTRIGHT, OF HYDE PARK, ILLINOIS.

MACHINE FOR MAKING ROOFING-PLATES FOR BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 343,701, dated June 15, 1886.

Application filed January 22, 1886. Serial No. 189,423. (No model.)

To all whom it may concern:

Be it known that I, LEWIS D. CORTRIGHT, a citizen of the United States, residing at Hyde Park, Illinois, have invented certain new and useful Improvements in Machines for Making Roofing-Plates for Buildings, of which the following is a specification.

The object of my invention is to construct a machine for making roofing-plates for buildings, like those described in Letters Patent No. 313,853, issued to me March 17, 1885.

In the drawings, Figure 1 is a perspective view of the bottom portion or block of the machine. Fig. 2 is a perspective view of the upper portion or block of the machine. Fig. 3 is a perspective view of the upper and lower portions or blocks of the machine, together with the bending leaves or levers folded up and down, respectively, and a blank of tin placed between them ready to be bent into proper shape. Fig. 4 is a perspective view of the same with the lower levers raised and the tin folded back over the edge of the upper block and against the raised upper levers. Fig. 5 is a perspective view of the same with the upper levers turned down and the tin bent back over the edges of the upturned lower levers. Fig. 6 is a perspective view of the same with the lower levers dropped down to their original position, as shown in Figs. 1 and 3; and Fig. 7 is a perspective view of the completed roofing-plate as it appears when removed from the machine shown in Fig. 6.

In the drawings, A represents the lower portion of the machine; B, the upper portion of the machine; C, the lower levers; D, the upper levers; E, the tin blank operated upon, and F the completed roofing-plate or shingle.

In making a machine for bending roofing-plates into the shape shown and described in my patent above mentioned, I first make a lower block or portion of the size intended for the roofing-plates. Along two sides of this block I preferably make a flange or projection, Q, extending upward to assist in gaging the position of the tin, so as always to insure its being in the right position. At the sides of the lower blocks of the machine, opposite to the sides which are provided with this flange, are hinged two levers or leaves, which are placed at right angles to each other, so that one end of each leaf or lever approaches the same corner of the machine. I have termed these approaching corners the "inner corners" for convenience. I also prefer to make a depression or cavity in the upper surface of the lower block, as in that way any ornaments that may be stamped on the tin blank will not be subjected to the pressure of the machine or injured in any way. I then make an upper block or portion of the machine, which is intended to fit directly upon the lower block, and which is provided with two leaves or levers at right angles to each other, with the inner end of each leaf or lever approaching the same corner. These leaves or levers are placed on the same relative parts of the upper block as the leaves or levers on the lower block are placed, and far enough back from the edge to leave a projection or flange, K, over which the edges of the tin may be bent, as shown in the drawings. A handle may be provided on the upper block to lift it up when a tin blank is being inserted or removed. Of course this portion of the machine may also be raised or lowered by power in any of the well-known ways. I then take a blank for a shingle or roofing-plate with a pentangular piece cut out of its corner, as shown in my patent above referred to, and insert the same between the upper and lower blocks of the machine, with its corner from which the piece has been cut placed so as to correspond with the corner of the machine to which the inner ends of the leaves or levers approach. I have shown the tin blank in position ready to be operated upon in Fig. 3. After the upper block has been adjusted in position I raise the levers C on the lower block and bend the tin backward over the projecting edge or flange K of the upper block, as shown in Fig. 4, where the tin is represented as lying upright against the levers D of the upper block. I then turn the levers D, of the upper block down so as to bend the tin back again over the bending edges of the under levers, as shown in Fig. 5. This bend operates to sufficiently turn the tin to make it retain its form, while the lower levers are dropped down into their first position, (shown in Figs. 1 and 3,) when the upper levers are still further brought down and the folds of the tin brought close together, as shown in Fig. 6. I then turn the levers D up into their original position, (shown in Figs. 2

and 3,) and raise the upper block of the machine and withdraw the roofing-plate, which is completed, as shown in Fig. 7, and ready to be applied to the roof of the building.

It will be seen that the completed shingle is precisely like the completed shingle shown in my patent above referred to, the pentangular cut in the corner enabling the folds of the tin to come closely together without overlapping or interfering in any way with the folds or bends.

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

1. A machine for bending the edges of tin or other thin plates along two of their sides, extending from the same corner of the blank, inward and then outward, which consists in an upper and a lower portion, each provided with leaves or levers having their inner ends approaching the same corner of the machine, substantially as described.

2. In a machine for bending or folding the edges of tin or other thin plates along two of their sides, the combination of a lower block having hinged leaves or levers on two of its sides approaching the same corner of the machine, and an upper block having hinged leaves or levers on two of its sides approaching the same corner of the machine and corresponding to the sides of the lower block having the leaves or levers, substantially as described.

LEWIS D. CORTRIGHT.

Witnesses:

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GEORGE C. COOK.