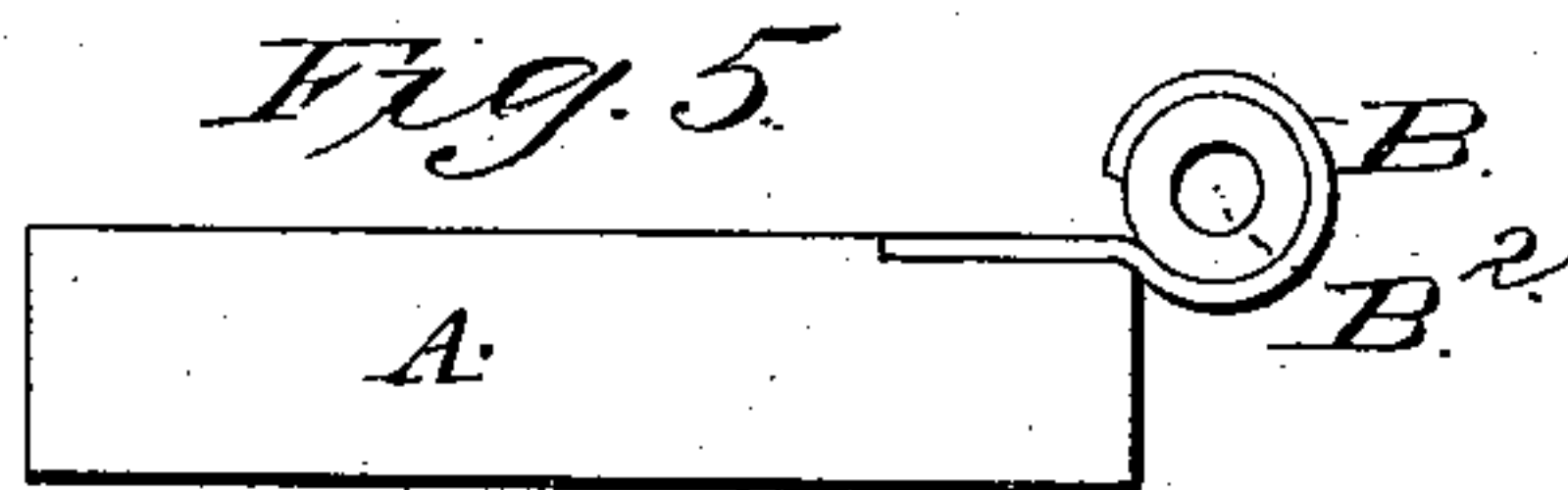
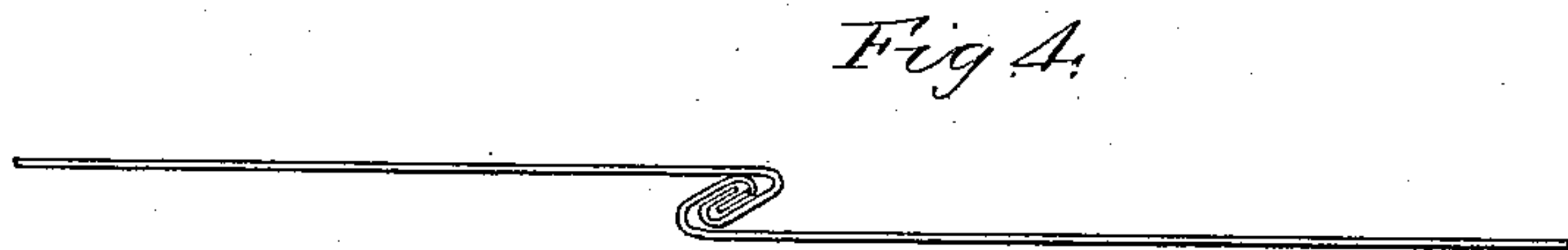
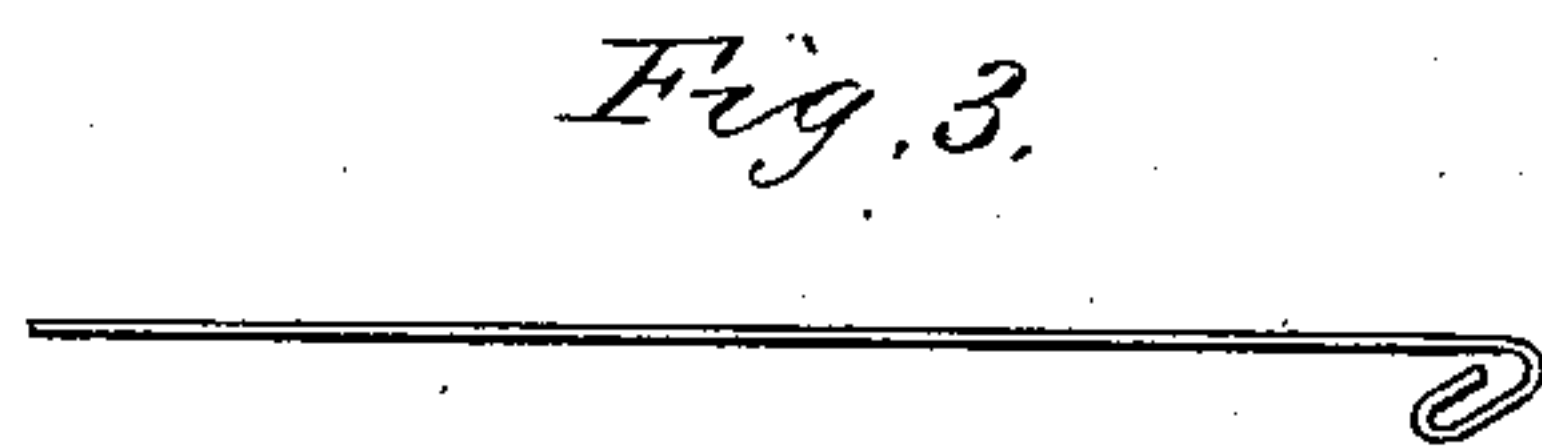
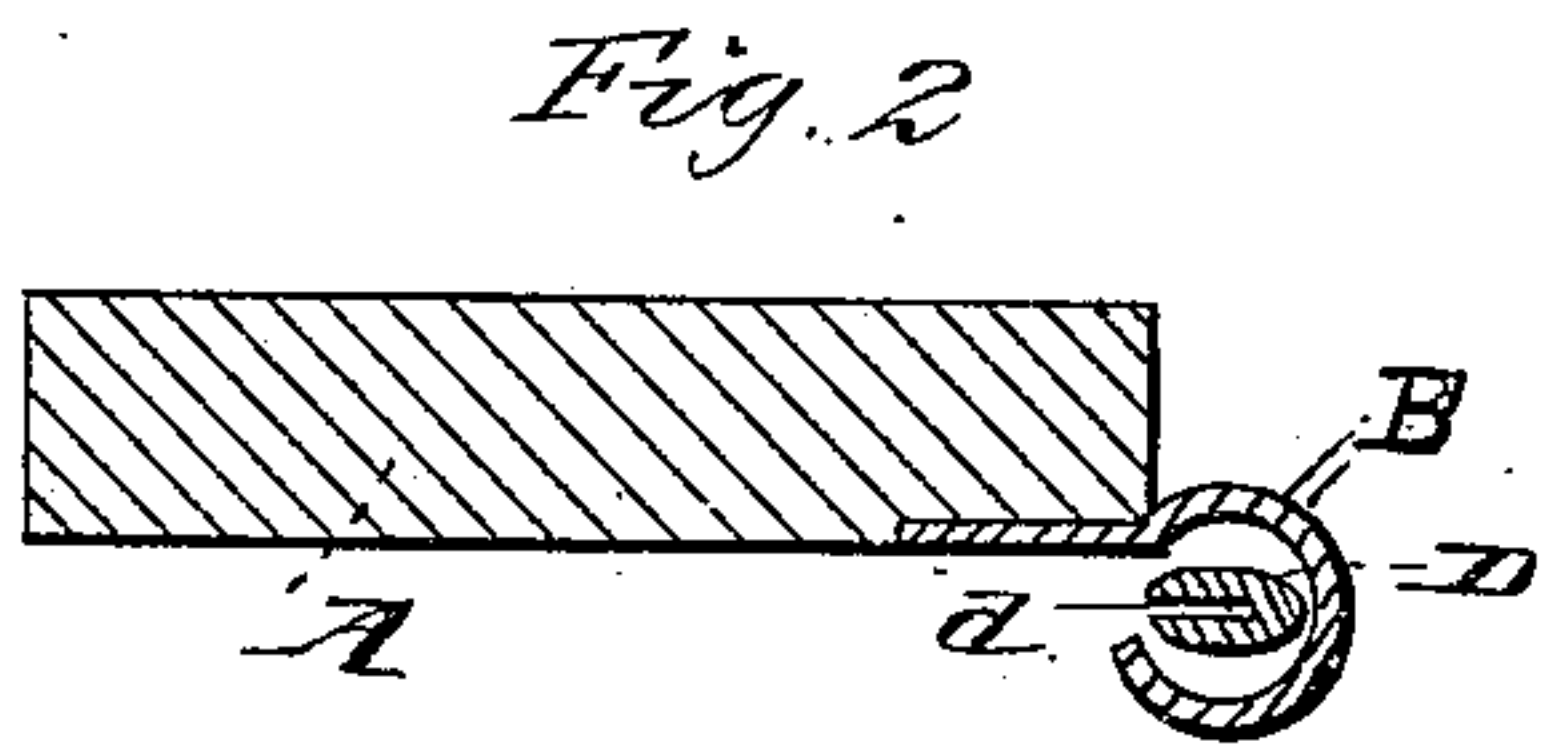
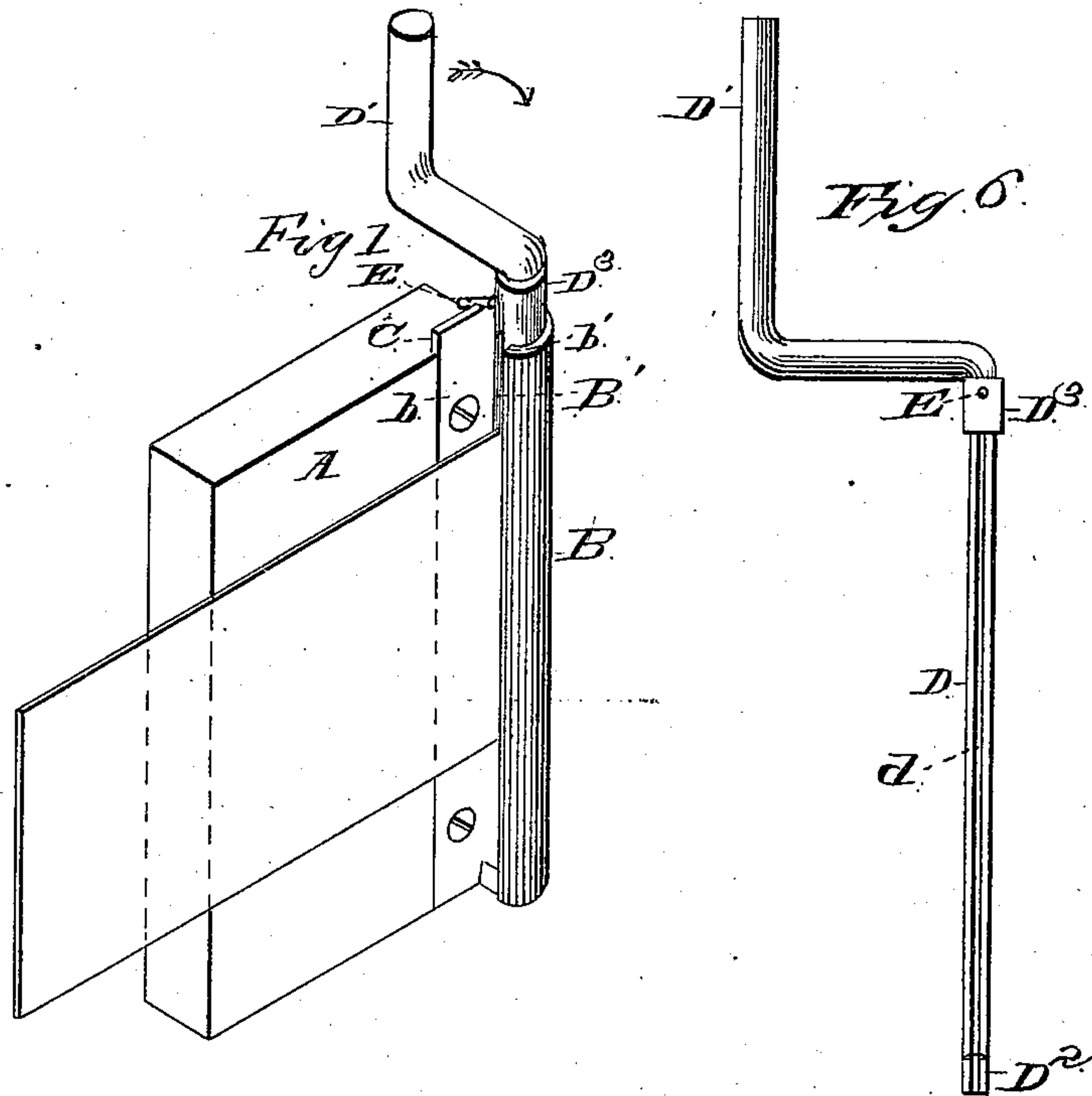


(No Model.)

W. E. SPANGLER.
EDGING SHEET METAL.

No. 316,196.

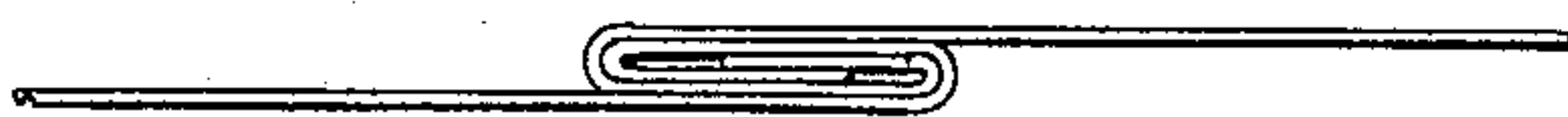
Patented Apr. 21, 1885.



Witnesses.
W. R. McKinnon
J. R. Street

Inventor.

Fig. 7



W. E. Spangler
by H. S. Snow & Co.
attys

UNITED STATES PATENT OFFICE.

WASHINGTON E. SPANGLER, OF WAY CROSS, GEORGIA.

EDGING SHEET METAL.

SPECIFICATION forming part of Letters Patent No. 316,196, dated April 21, 1885.

Application filed September 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, WASHINGTON E. SPANGLER, a citizen of the United States, residing at Way Cross, in the county of Ware and State of Georgia, have invented certain new and useful Improvements in Edging Sheet Metal, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention has for its object to provide a machine whereby to easily and accurately double-edge tin or sheet-iron plates for use in roofing houses and for similar purposes.

15 In the drawings, Figure 1 is a perspective view of my machine. Fig. 2 is a transverse section of same. Fig. 3 shows one of the crimped or edged sheets. Fig. 4 shows two of said sheets joined. Fig. 5 is a rear end view of the machine, and Fig. 6 is a detail view of the shaft. Fig. 7 is an edge view of a finished and flattened seam as made upon my machine.

25 In preparing tin for application to the roof it is usual for the tanners to crimp or edge the sheets, as shown in Fig. 3, and then interlock them, as shown in Fig. 4, by sliding the crimped edges one in the other. This is commonly done by folders of suitable pattern, and requires a great deal of time and labor. My machine is designed to do this work accurately and speedily.

30 In carrying out my invention I prefer to employ a suitable support, A, on one edge of which I secure the cylinder B, which is preferably formed of a bar of stout flat metal secured at one edge, *b*, on the support, and bent into the cross-sectional form shown, with its other edge, *b'*, a sufficient distance from the face of edge *b* to provide the slot B', through which

40 to pass the tin in the operation of the device. This slot is preferably formed, as shown, flush with the upper face of the support, which forms, practically, a table on which to support the tin sheet while being crimped, though such table may be dispensed with where desired. This base B forms the cylinder or casing, and has at its rear end a bearing, B², for the end of the shaft. The edge *b* of plate B is extended longitudinally beyond the forward end

50 of the cylinder to form the stop C. I prefer to so form the stop, though, manifestly, it may

be made separate from the cylinder-plate and secured in position in any suitable manner.

The shaft D is provided at one end with a crank, D', or other suitable means for revolving it, and has its other or rear end formed with a short journal, D², turning in the bearing B². I also form the shaft near the crank D' with an enlarged cylindrical portion or journal, D³, fitted to turn snugly within the cylinder. These parts D² D³ form the journals of my shaft, both being supported in bearings in the cylinder or casing. I also provide the shaft at or near the crank with a radial pin or projection, E, suitably arranged to engage 65 against the upper or lower sides of slots C in the several positions of the shaft.

The body of the shaft between the journals D² D³ is flattened in cross-section, as shown in Fig. 2, and has formed in one of its edges a groove, *d*, which extends longitudinally along the shaft, and may also be cut across the journal D², as shown in Fig. 6.

75 The operation is simple. The shaft is placed in the cylinder and adjusted into the position shown in Fig. 1. The groove *d* is now opposite the slot B', and the edge of a tin or other metal plate is inserted in said groove. The shaft is now revolved into the position shown in full lines, Fig. 1, and carries the tin with it, bending the same into the shape shown in Figs. 3 and 4. This is known in the trade as "edging" the sheets. The shaft, with the tin bent around it, is now removed from the cylinder, and the sheet of tin is slipped off the rear end 85 of shaft, and the latter is reinserted in the cylinder ready for another sheet, and so the operation continues.

90 It will be seen that the stop C, together with pin E, indicates accurately the proper point at which the shaft should be set to receive the tin, and also stops same when it has been turned to the extent necessary to give the proper bending to the tin, thereby preventing damage to the tin. I therefore prefer to employ the stop, though obviously it might be dispensed with, in which case greater care would be necessary in using the machine.

I claim—

1. In a machine for edging tin or other metal plates, the combination, with the hollow cylinder B, having the lip *b*, for attachment to the 100

support, and the slot B', of the flat shaft D, having the groove *d* on one edge and adapted to be rotated in the said cylinder, as set forth.

2. The machine for edging tin consisting of
5 the support provided with a stop, C, the cylinder slotted longitudinally and provided with a bearing, B², the shaft provided with journals D² D³ and held and rotatable in the cylinder and formed with a longitudinal
10 groove, *d*, and a pin, E, the stop and pin being

relatively so arranged that the cylinder makes more than three-fourths and less than a whole revolution, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WASHINGTON E. SPANGLER.

Witnesses:

W. A. WRIGHT,
L. A. WILSON.