C. H. Raymond,

Edging Sheet Metal.

No. 54,599. Patented May 8, 1866.

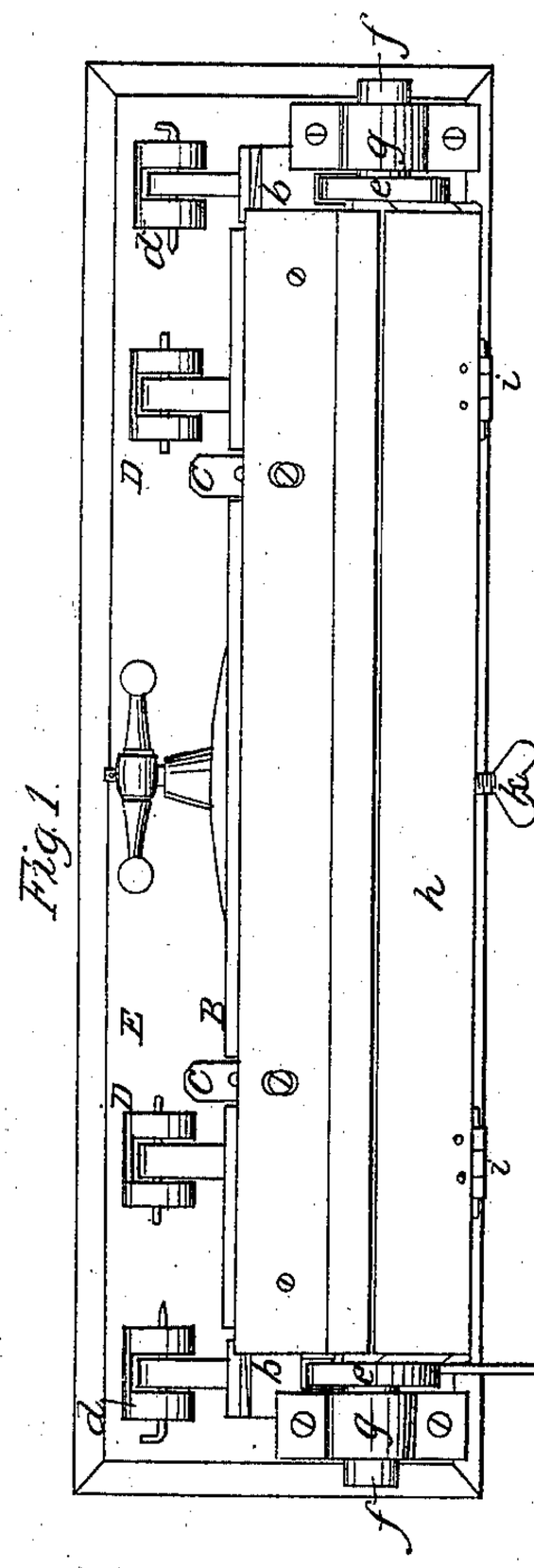

Fig. 1.

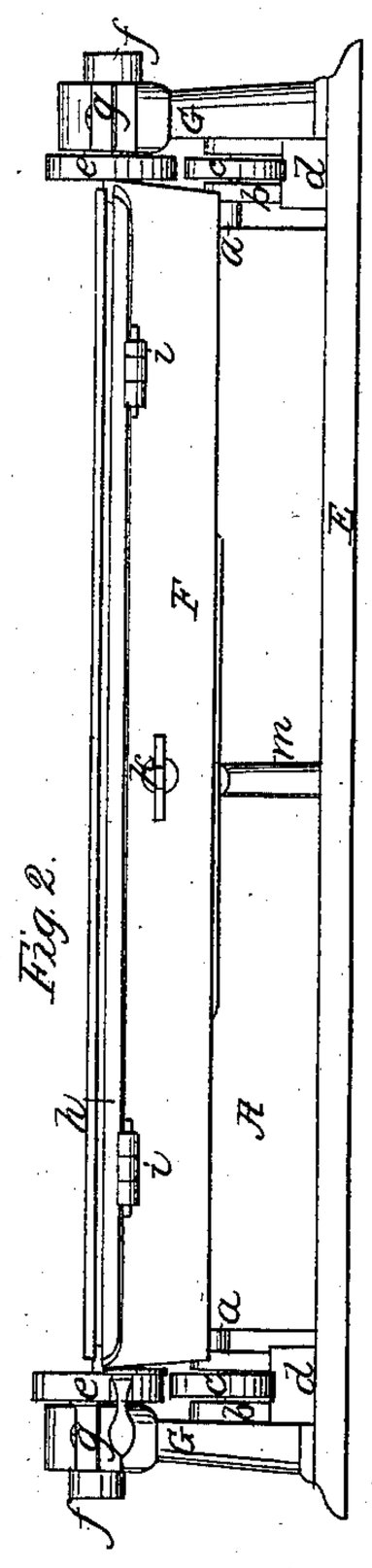

Fig. 2.

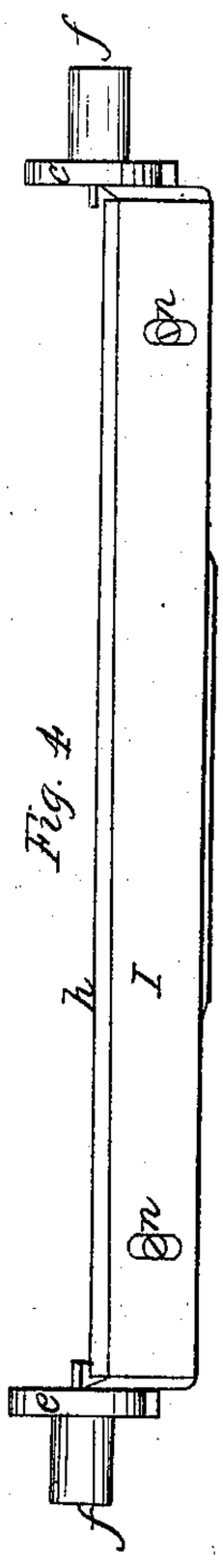

Fig. 4

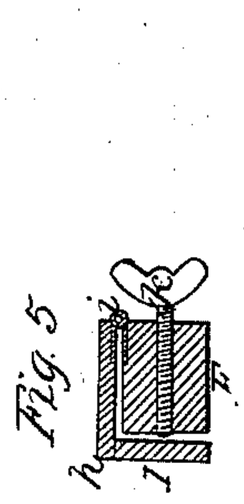

Fig. 5

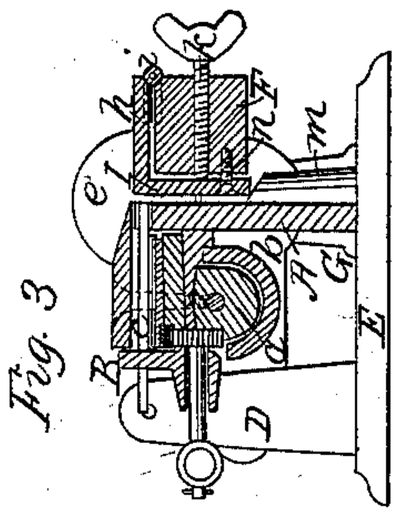

Fig. 3

Witnesses:
B. D. Hall Jr
O. W. Wood.

Inventor
Charles H. Raymond.
By his Attorney.
R. H. Eddy

UNITED STATES PATENT OFFICE.

CHARLES H. RAYMOND, OF WOODSTOCK, VERMONT.

IMPROVEMENT IN MACHINERY FOR FOLDING TIN.

Specification forming part of Letters Patent No. **54,599,** dated May 8, 1866.

To all whom it may concern:

Be it known that I, CHARLES H. RAYMOND, of Woodstock, in the county of Windsor and State of Vermont, have invented an Improved Machine for Folding Tin or Metallic Plate; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a transverse section, of the said machine.

In carrying out my invention I combine with the adjustable cap of the folding-bar of the machine a means or mechanism for elevating such cap up to a level or so as to be even with the lower of the holding-jaws, preparatory to a plate of tin being inserted between the said jaws and against the adjustable gage, however such cap may be adjusted with reference to the upper jaw.

The machine to which my invention is applied is substantially like what is in common use and well known.

In the drawings, A is the stationary jaw, and B the movable jaw. This latter jaw is provided with an adjustable gage, C, and is hinged to two posts or standards, D D, erected on a plate, E. The movable jaw is also hinged or connected to a bar, *a*, which is supported at its extremities by two levers, *b b*, which carry friction-rollers *c c* and have their fulcra in posts *d d*, the whole being arranged as represented in the drawings.

Eccentrics or cams *e e*, affixed to the journals *f f* of the folding-bar F, are placed directly over and so as to operate against the circumferences of the friction-rollers. The journals of the folding-bar are supported in boxes *g g*, arranged at the tops of posts G G, and the said folding-bar is disposed with respect to such journals in manner as represented in the drawings. The adjustable cap of the folding-bar is exhibited at *h*, it being a plate of metal placed on the top of and connected to the folding-bar by hinges *i i*. An adjusting-screw is usually fixed in or so applied to the folding-bar as to work against the cap *h*, in order to adjust it with reference to the upper jaw as may be desirable to insure the required position or distance of the lip or bent-over portion of a plate with reference to the rest of such plate after the said plate may have been subjected to the operation of the machine. This adjusting-screw (which is shown at *k*) I arrange so as to screw through the middle of the folding-bar and against a projection or deep flange, *l*, extending down from the cap *h* and along the inner side of the folding-bar F. The screw, by being screwed against the flange, may be made to force the cap *h* upward more or less and effect its proper adjustment with reference to the upper jaw.

Two or any other suitable number of set-screws, *n n*, go through the flange, screw into the bar F, and serve to fix the cap *h* in position after it may have been duly adjusted by the screw *k*. The positions of these screws, as well as the form of the flange, are exhibited in Figs. 4 and 5, the first of which figures is an inner-side view and the second a transverse section of the folding-bar F and the flange and cap. The flange at its middle projects somewhat below the folding-bar, in order that the part *l'* so projecting while the folding-bar is in the act of being turned down may be moved into contact with and up an inclined plane or cam, *m*, arranged as shown in Figs. 2 and 3. This cam serves to elevate the cap up to a level, or so as to be even with the top surface of the stationary jaw, in order that a plate of metal, while being inserted between the jaws, may meet with no obstruction from the lower or stationary jaw.

I do not claim the combination of the folding-bar F and its adjustable cap *h*, the stationary and movable jaws A B, or the same and the adjustable gage *c;* but

I claim—

The combination of the same and the cam *m* and flange *l*, or equivalent mechanism, for effecting the elevation of the cap up to the level of the top of the upper jaw, under circumstances and for the purpose substantially as specified.

CHARLES H. RAYMOND.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.