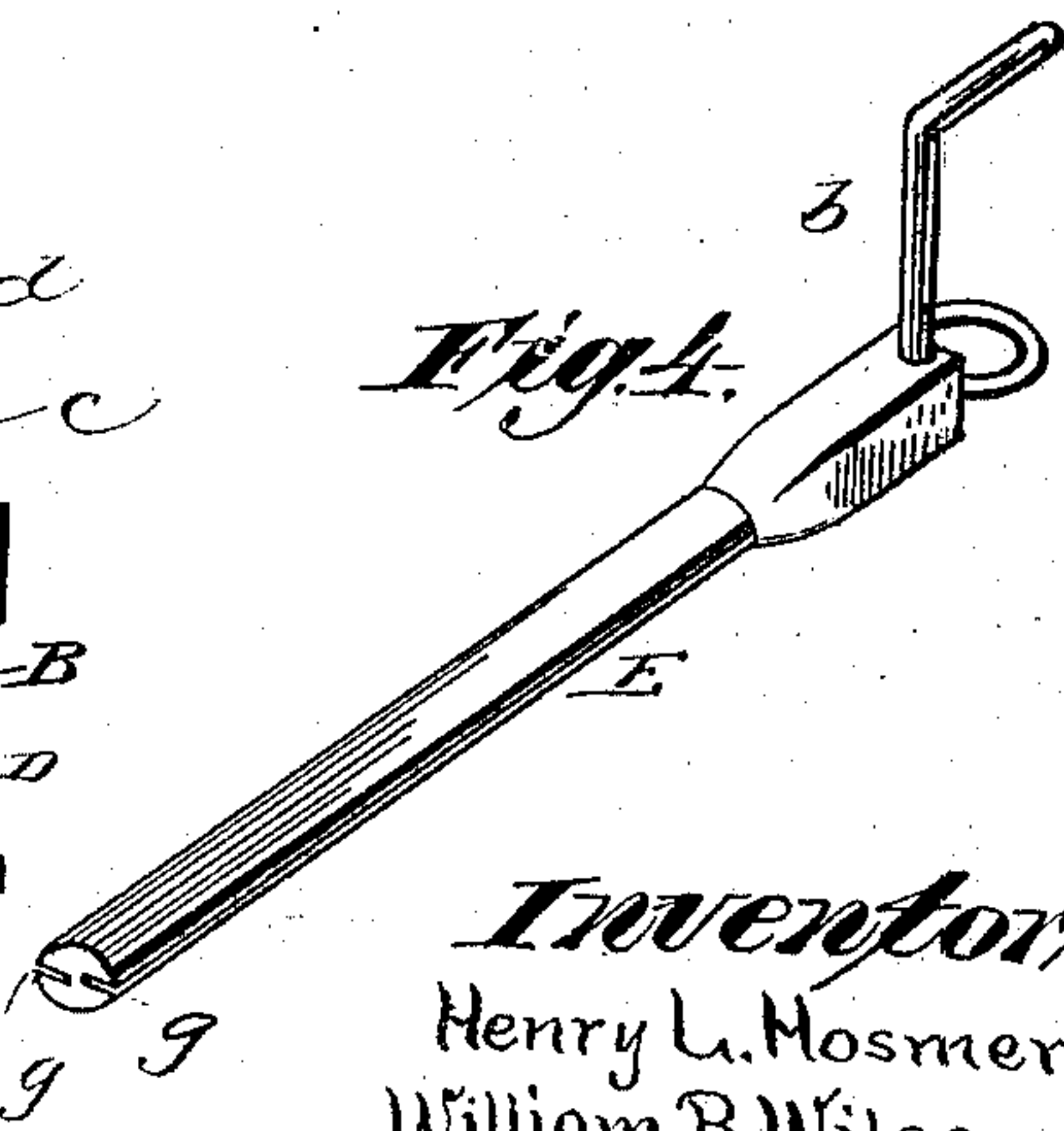
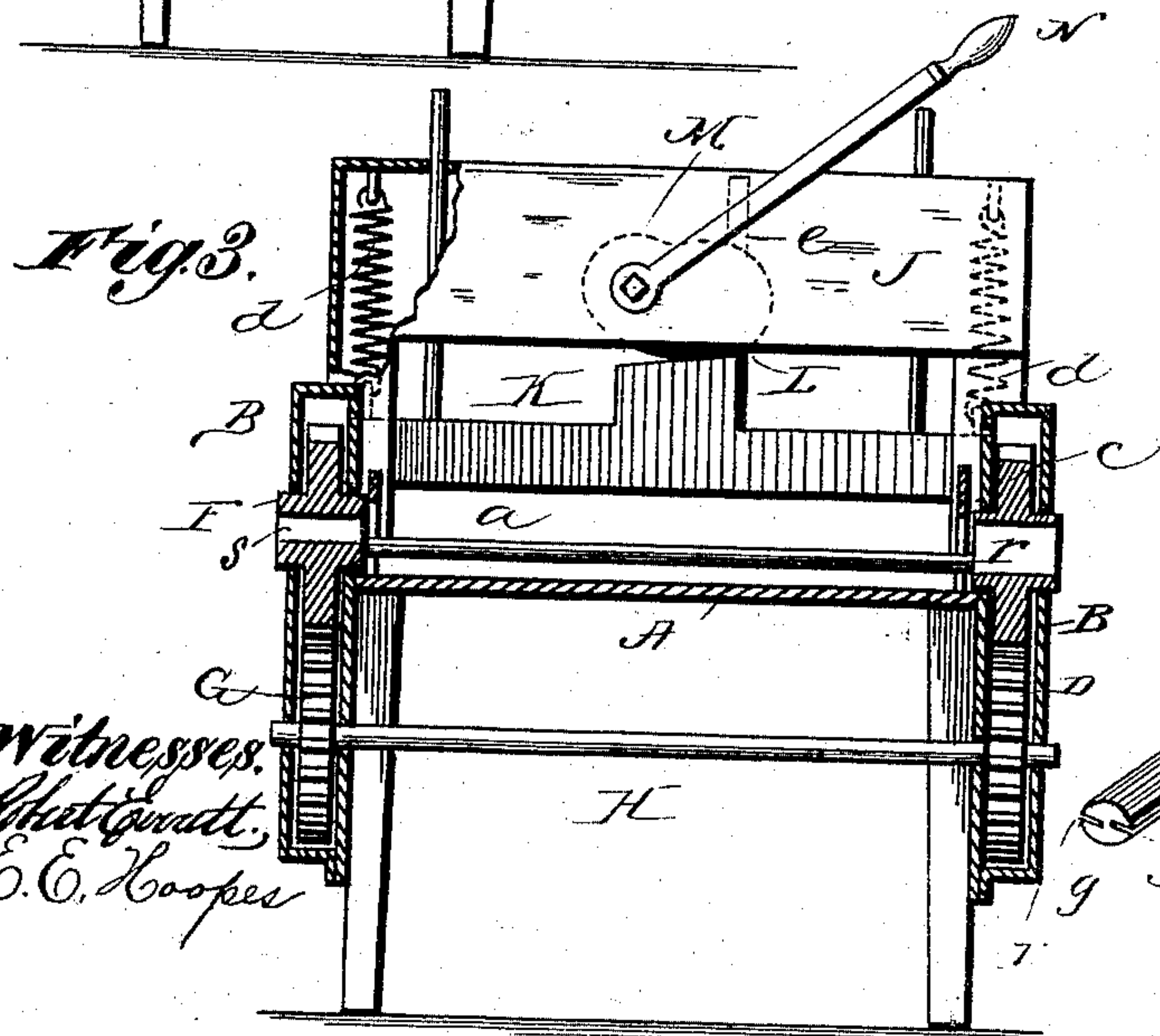
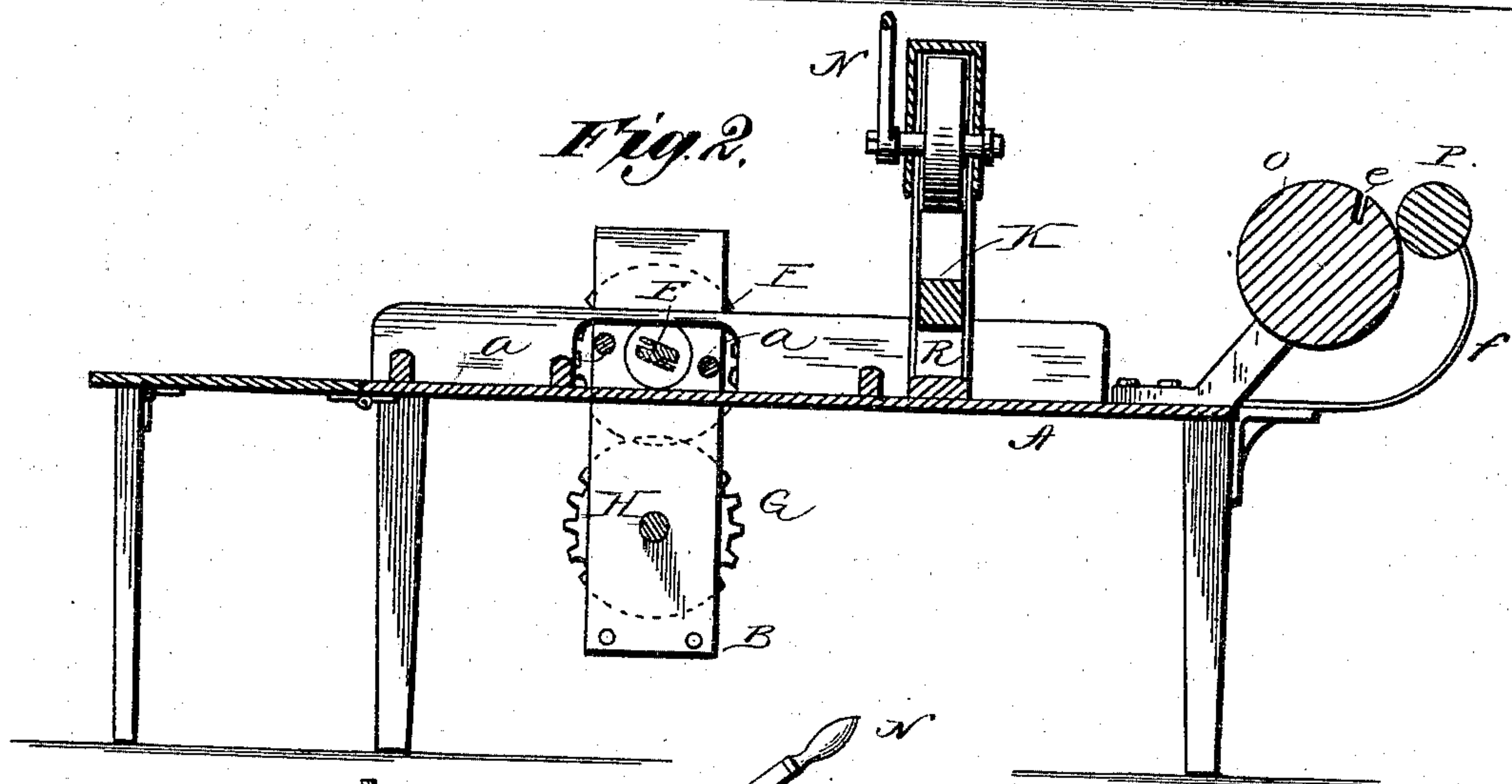
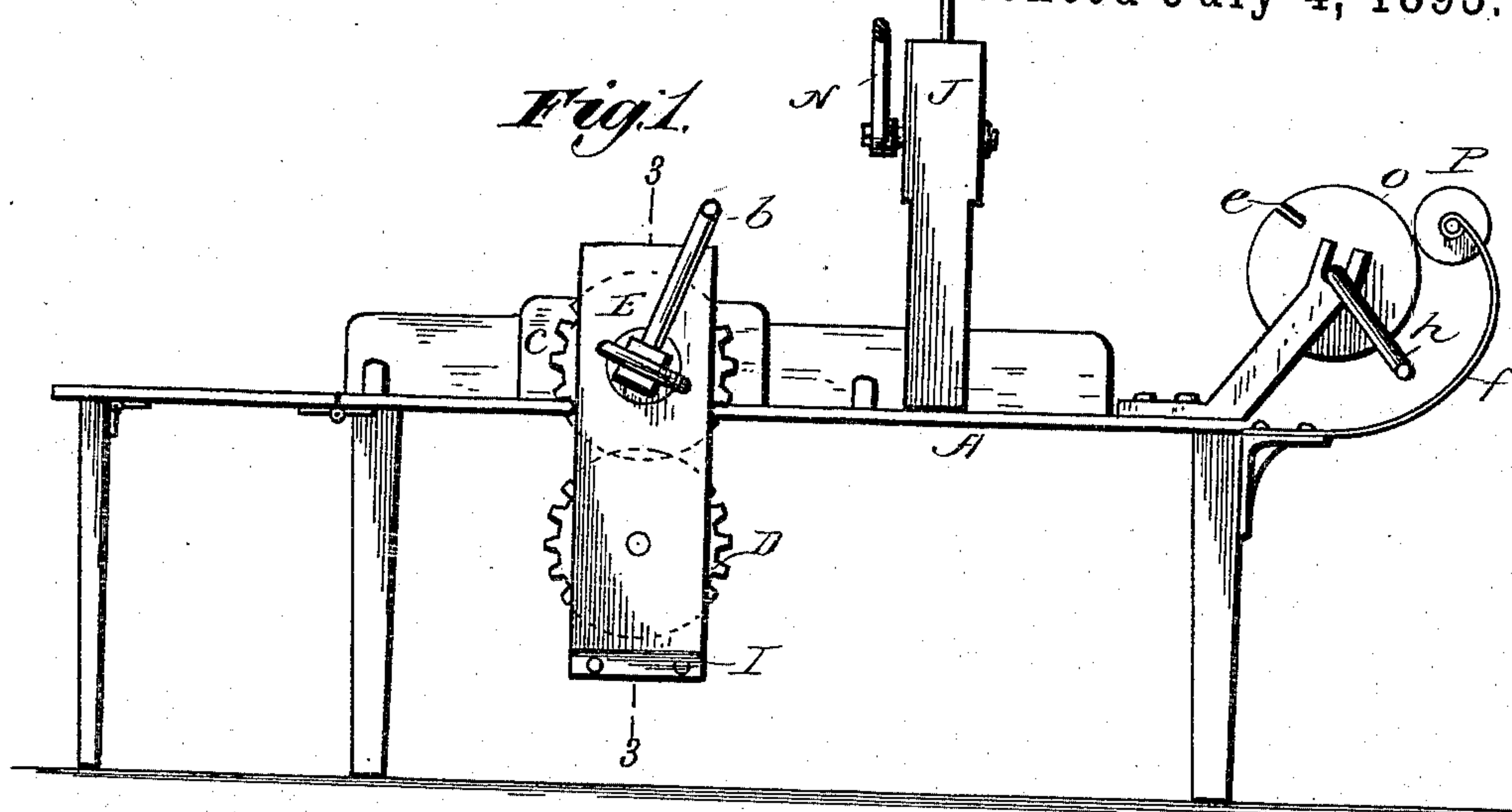


(No Model.)

H. L. HOSMER & W. R. WILSON.
MACHINE FOR SEAMING SHEET METAL.

No. 500,900.

Patented July 4, 1893.



Witnesses.
Alfred G. Smith,
E. E. Hoopes

Inventors.
Henry L. Hosmer.
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By H. W. Stackpole Atty

UNITED STATES PATENT OFFICE.

HENRY L. HOSMER AND WILLIAM R. WILSON, OF CLAY CENTRE, KANSAS.

MACHINE FOR SEAMING SHEET METAL.

SPECIFICATION forming part of Letters Patent No. 500,900, dated July 4, 1893.

Application filed September 1, 1892. Serial No. 444,759. (No model.)

To all whom it may concern:

Be it known that we, HENRY L. HOSMER and WILLIAM R. WILSON, citizens of the United States, residing at Clay Centre, in the county of Clay and State of Kansas, have invented certain new and useful Improvements in Machines for Seaming Sheet Metal; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in machines for seaming tin or other sheet-metal and the objects are to provide a new and improved single machine that the tin may be folded, joined and pressed therewith in a simple, easy and effective manner, thus saving much time and labor. We attain these objects by means of the mechanism hereinafter described and illustrated in the accompanying drawings in which—

Figure 1 is a side elevation of our machine; Fig. 2, a longitudinal section of same, and Fig. 3, a cross section thereof taken on the line 3—3 Fig. 1, the grooved bar being omitted. Fig. 4 is a perspective view of the grooved bar.

Similar letters refer to similar parts throughout the several views.

A is the table; B, the boxes at opposite sides of the table in which the gearing is journaled; C, D, G, F, the driving-gear, D and G being connected by shaft H; grooved-bar E passing through an orifice or slot *r* in gear-wheel C, extends into an orifice or slot *s* in gear-wheel F.

Rods *a a* connected with the boxes B serve to hold the sheets of metal flat while their edges are being turned. Said grooved bar E being inserted as aforesaid an edge of one sheet of tin or other metal is then inserted in groove *g* on one side of the bar and an edge of another sheet in the groove *g* on the opposite side thereof. The turning of the crank *b* one and a half revolutions folds and joins said edges of sheet-metal together. By withdrawing bar E, the folded and joined sheets may be removed.

The gears C and F are disconnected and independently journaled in the boxes B at

opposite sides of the table A, and since the orifice *s* in the gear F is substantially oval shaped to receive the oval shaped portion of the bar E, and the orifice *r*, in the gear C is square or angular for the reception of the angular part of the bar E, it is desirable that the two gears should rotate in unison so that their orifices will always stand in proper alignment, or register, for the convenient insertion of the grooved bar, for otherwise either gear might be accidentally turned while the bar E is removed or out of the machine and the orifices in the gears would thus be placed out of proper relative position. It is also desirable that the power applied to the rotatable grooved bar E should be equalized at both ends thereof. To accomplish this the gears C and F mesh into gears D and G which are connected by the shaft H, whereby the gears C and F must turn in unison and their orifices are thus maintained in correct relative position for the insertion of the grooved bar E, while the power applied to the latter is equalized at both ends thereof.

Of course, with our machine as thus described, the edges of single sheets may be folded separately and not joined if so desired; or, by making said rods *a a* also removable, the opposite edges of single sheets may be folded and seamed together, thus forming a cylinder. Presser-bar K is suspended by springs *d d*, their upper ends being secured to the upper portion of the box or frame-work J. Cam M, journaled in said box, when operated by lever N serves to depress bar K. At the point of contact of said cam, the top surface of said bar K to prevent lateral movement thereof, is somewhat declining laterally from the direction in which the power is applied thereto. The seam made as hereinbefore described being placed on base R, bar K is forced down heavily thereon and presses the same firmly together. The forward end of said folded sheets being then inserted in groove *e* of drum O the tin or other metal may, by turning crank *h*, be rolled together as fast as it is seamed and pressed. Roller P being firmly held against said tin by spring *f* prevents the same from being unrolled when said crank is released. Lug *l* is secured to the upper surface of cam M and bears against the inner surface of the top of box or frame

J when said cam is idle, thus preventing handle N being thrown over beyond convenient reach of the operator.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a metal seaming machine, the combination with a table A, of a rotatable folding bar E having grooves in its opposite sides to receive the edges of sheet metal to be joined so that by rotating the bar the edges of the sheet metal are folded together, substantially as described.

2. In a metal seaming machine, the combination with a table A, of a pair of rods *a* for holding the sheets of metal in a flat condition, and a rotatable folding bar E having grooves in its opposite sides to receive the edges of

sheet metal to be joined, substantially as described.

3. The combination with a table, and suitable boxes at the opposite sides thereof, of gear wheels independently journaled in said boxes and provided with orifices, connected gear wheels meshing with said independently journaled gear wheels, and a grooved folding bar adapted to engage the orifices in the independently journaled gear wheels, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY L. HOSMER.

WILLIAM R. WILSON.

Witnesses:

W. H. FULWEILER,

E. E. HOOPES.