

(Model.)

2 Sheets—Sheet 1.

O. W. BURRITT.

MACHINE FOR CROSS SEAMING SHEET METAL.

No. 307,521.

Patented Nov. 4, 1884.

Fig. 1.

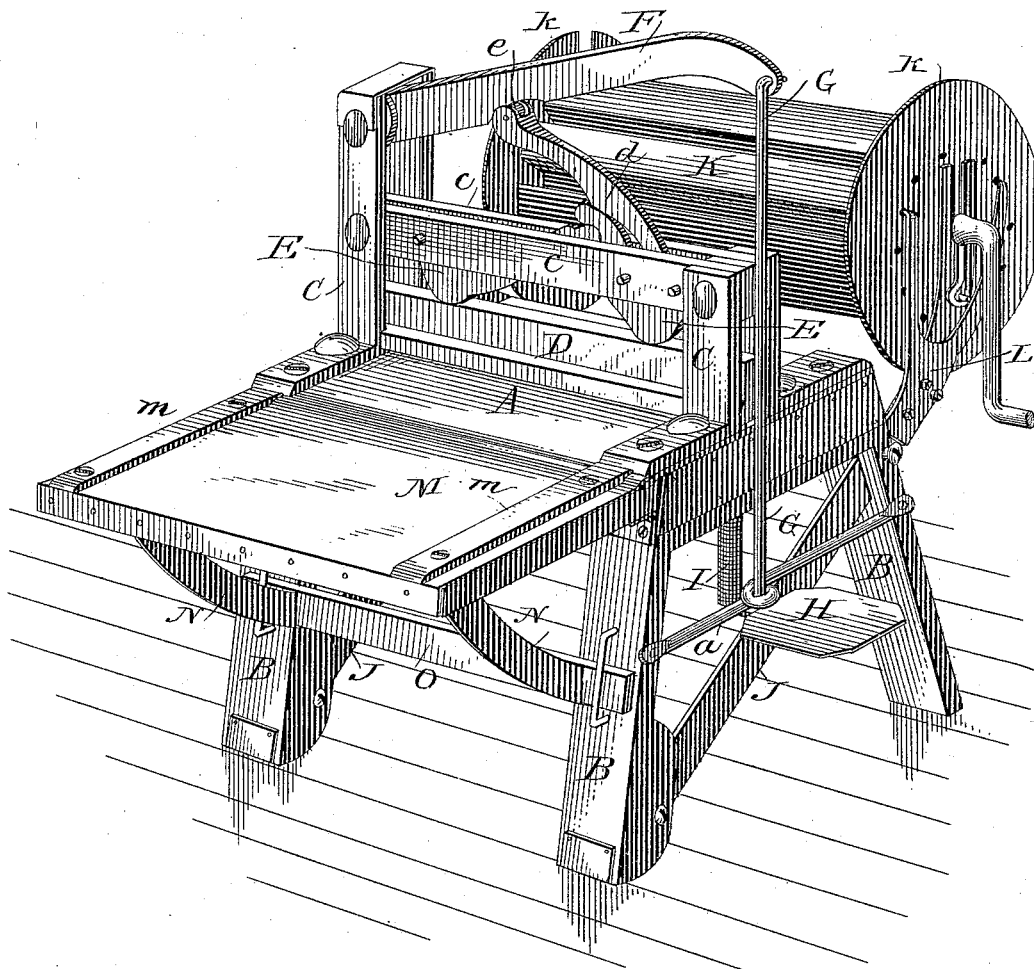
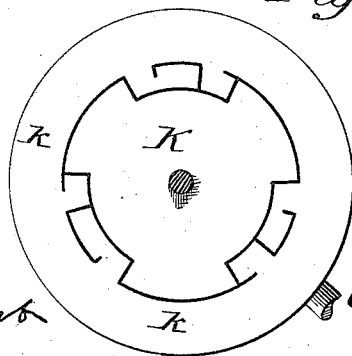


Fig. 3.



Witnesses:
James R. Palmer
William H. Holcomb

Inventor:

Orrin W. Burritt

(Model.)

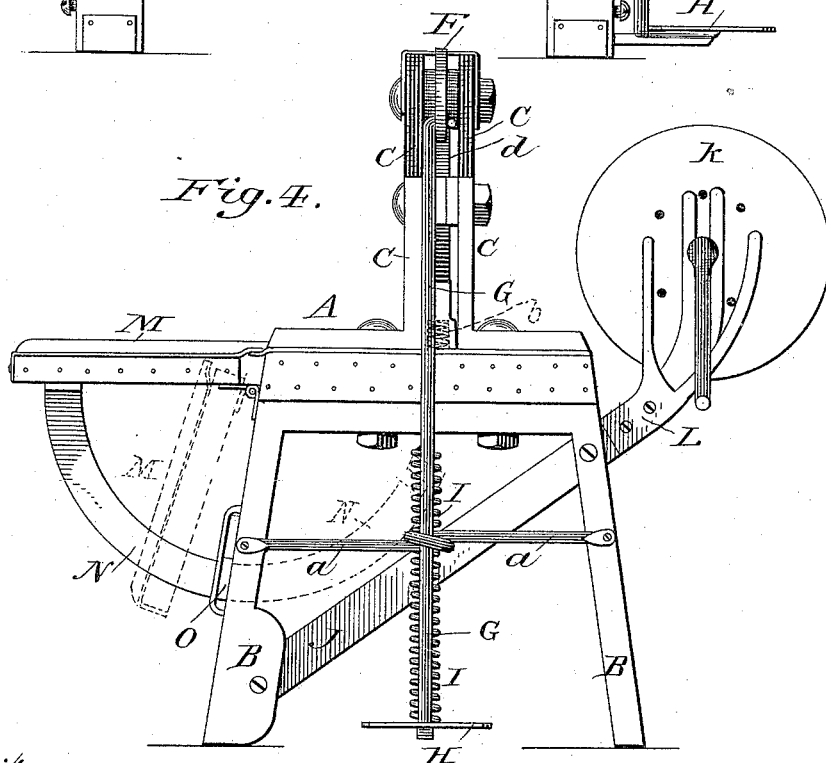
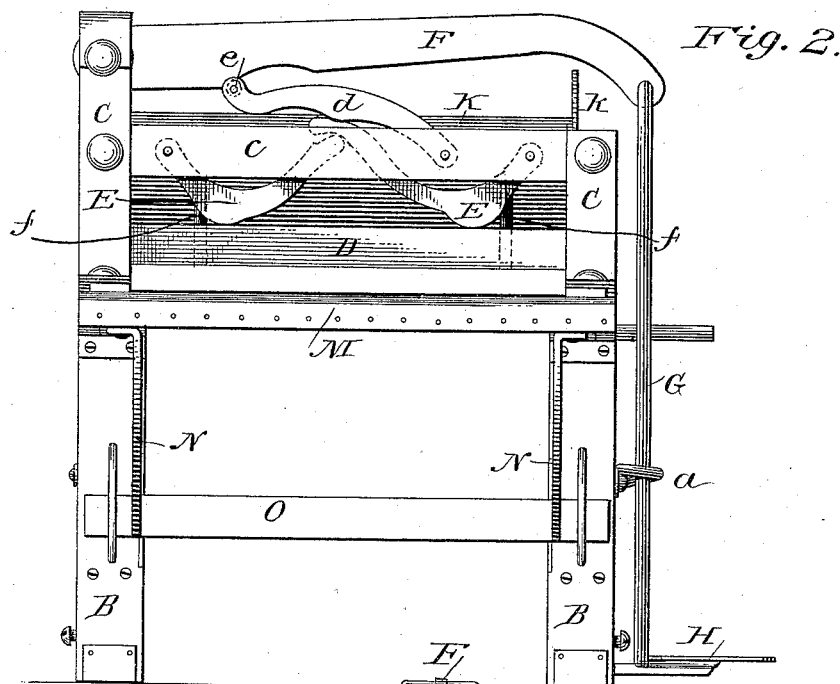
2 Sheets—Sheet 2.

O. W. BURRITT.

MACHINE FOR CROSS SEAMING SHEET METAL.

No. 307,521.

Patented Nov. 4, 1884.



Witnesses:
James R. Peters
William W. Holcomb

Inventor:
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UNITED STATES PATENT OFFICE.

ORRIN W. BURRITT, OF WEEDSPORT, NEW YORK.

MACHINE FOR CROSS-SEAMING SHEET METAL.

SPECIFICATION forming part of Letters Patent No. 307,521, dated November 4, 1884.

Application filed August 18, 1884. (Model.)

To all whom it may concern:

Be it known that I, ORRIN W. BURRITT, a citizen of the United States, residing at Weedsport, in the county of Cayuga and State of New York, have invented a new and useful Improvement in a Machine for Closing the Seams of Sheet Metal, of which the following is a specification.

My invention relates to improvements in a machine for uniting the cross-seams of sheet metal, producing a continuous strip for roofing or valley purposes.

The objects of my improvements are, first, to provide a bed-plate on legs or supports with standards and cross-bars suitable to guide a follower to and from the bed-plate by spring-adjustment, and for the attachment of lever-power to drive the follower; second, the construction of a cylinder-former supplied with gage-heads and shaft, so attached as to be adjusted by an angular movement, with spring-ratchet adapted to a reverse revolution, the hooks or catches of the cylinder arranged for coiling over or under; third, a device for a movable-table attachment with independent support that can be folded down or easily removed, reducing the machine to a smaller compass. I attain these objects by the mechanism illustrated in the drawings.

Figure 1 is a perspective view of the complete device. Fig. 2 shows the follower provided with gage-pins, and position of the eccentric levers with the foot plate or treadle down. Fig. 3 represents the cylinder-former with its recesses lengthwise under the hooking-catches and the cylinder-head *k*. Fig. 4 is a view of the movable table and bracket-supports with latch drop and catches.

Similar letters refer to similar parts throughout the several views.

On legs *B B*, supplied with brace-rods *a a*, is placed bed-plate *A*, on which are standards *C C*, with cross-bars *c c*, which constitute the frame-work of the machine. Between standards *C C* is placed follower *D*, over spiral springs *b b*, inserted in bed-plate *A*, driving the follower *D* against the lever-dogs *E E*, pinned to cross-bars *c c*, and working under connecting-lever *d*, with anti-friction roller *e* rolling under lever *F*, attached to standard *C* and governed by draft-rod *G*, passing through

brace *a*, having treadle *H* attached, and spring *I*, connected with bed-plate *A*. Follower *D* is provided with automatic gage-pins *f f*, held by set-screws, for the purpose of securing the gage-pins *f f* to place in follower *D*, the under surface of which is provided with a slight set-off to form a groove on the metal sheets between set-off and gage pins *f f*, all of which are acted upon simultaneously with the movement of treadle *H*.

Cylinder-former *K*, provided with shaft resting upon arms *J J*, passing through legs *B B* diagonally, and secured by set-screws, is constructed with heads *k k*, one of which is attached to arm *J*, the opposite head attached to cylinder and perforated for the reception of spring-ratchet *L*, secured to opposite arm *J*, which is provided with set-screws to carry the points of ratchet *L* to and from the perforated head *k*. Lengthwise the cylinder *K* are hook-catches, to hold the strip while forming, corresponding grooves, to allow the coil to shake loose when removing, and the adverse catches for the purpose of coiling the opposite way.

Movable table *M* is provided with adjustable hinges attached to bed-plate *A*, supported by circular brackets *n n*, and secured by latch *O*, dropping in catches cut in brackets *n n*, and resting against legs *B B*. Raised gages *m m* on table *M* correspond with line-gages of bed-plate *A*, and heads to cylinder-former *K*.

To enable others to use my improvement in a machine for cross-seaming sheet metal, I will describe it more in detail, referring to the drawings, and to the letters marked thereon.

The improvement consists in a device for pressing the locks of sheet metal together for roofing or valley purposes, and at the same time coiling the strip.

The bed-plate *A* upon legs *B B*, provided with braces *a a*, supports standard *C C* with cross-bars *c c*, all of which constitute the frame-work of the machine. The follower *D*, placed between standards *C C*, is raised by springs (not shown) inserted in bed-plate *A* to the lever-dogs *E E*, pinned to cross-bars *c c*. Over the lever-dogs is placed a connecting-lever, *d*, provided with an anti-friction roller, *e*, working under lever *F*, that is attached to standard *C*, the opposite end of the

lever being provided with suspended draft-rod G, passing through an orifice in brace *a*, having the treadle H attached for the use of the foot. Spring I, hooked to treadle H, connects with the under side of bed-plate A, to lift the weight of the levers. It will be observed that there are small gage-pins *ff* inserted through follower D, fastened by set-screws, and automatically working against cross-bar *c* and bed-plate A. The arms J J, passing through the legs B B, and fastened by set-screws, are placed on an angle, acting as braces to the frame-work, and for the purpose of raising and extending the cylinder-former K, that rests by the shaft on the arms J J, this being provided with heads *k k*, one upon the arm J, the opposite upon the cylinder, and perforated for the admission of the spring-ratchet L, which is attached to arm J, the spring-ratchet being made to work either side by the use of set-screws. The former K can be used either to coil over or under, as the case demands. To provide for this, hook-catches are so constructed with corresponding recesses or grooves lengthwise the cylinder to allow the lock to catch the edge for either process in coiling the strip. At the opposite side of bed-plate A is attached the movable table M, so constructed as to easily rise or fall to reduce the compass of the machine, and is independent in its support by means of circular brackets *n n*, passing from under bed-plate A, and fastened securely by latch O against legs B B. Thus by placing the metal sheets prepared for a continuous strip against the line-gages provided upon table M, they are passed on to bed-plate A until the lock

strikes against gage-pins *ff* under follower D, which is formed to produce a slight set-off upon the metal for the protection of the lock. The foot pressed upon treadle H closes the lock. The strip is then caught onto former K and drawn until the next lock strikes the gage-pins *ff*. The coil completed, lift the former from its bearings, and the coil will slip from the cylinder.

What I claim as new and as my invention, and desire to secure by Letters Patent, is—

1. A cross-locking seamer having a bed-plate, A, upon legs B B, supporting-standards C C, with cross-bars *c c*, in combination with follower D, springs *b b*, gage-pins *ff*, lever-dogs E E, connecting-lever *d*, anti-friction roller *e*, lever F, draft-rod G, treadle H, and spring I, connected to bed-plate A, substantially as set forth.

2. The combination of the cylinder K, having hook-catches and corresponding grooves or recesses and adverse catches for opposite coiling, and provided with head-plates *k* and center crank-shaft, with the arms J J and spring-ratchet L, supported by legs B B, and means for operating, substantially as described.

3. A movable table, M, having line-guides *m m*, and hinged to bed-plate A, supported by brackets *n n*, with catch-stops provided for latch O, in combination with and resting against legs B B, substantially as herein shown and described, for the purposes set forth.

ORRIN W. BURRITT.

Witnesses:

JAMES R. PALMER,

WILLIAM W. HALCOMB.