

Jonah R. Cole.
 Timman's Crimping Machine.

PATENTED JUL 11 1871

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Fig. 1.

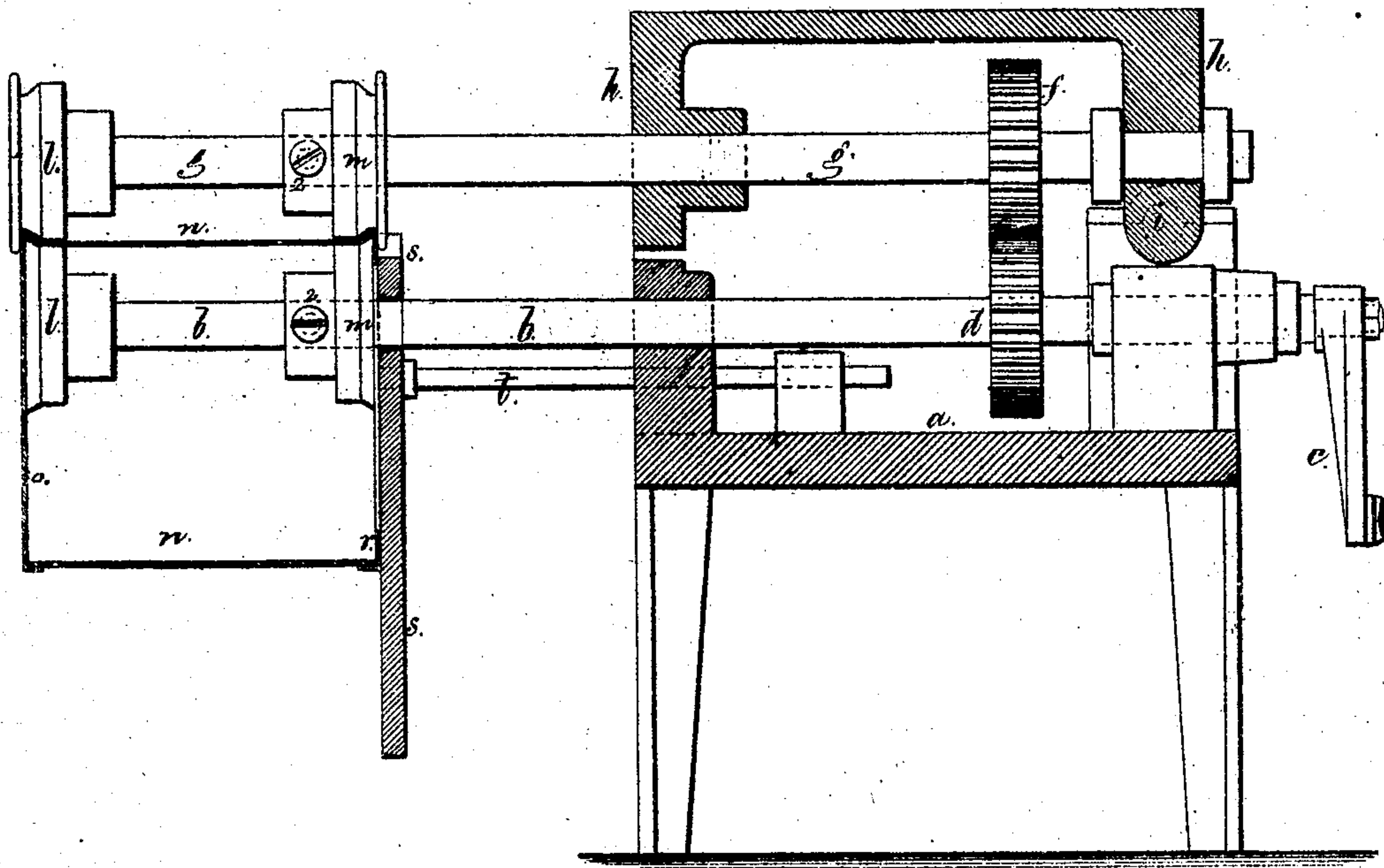
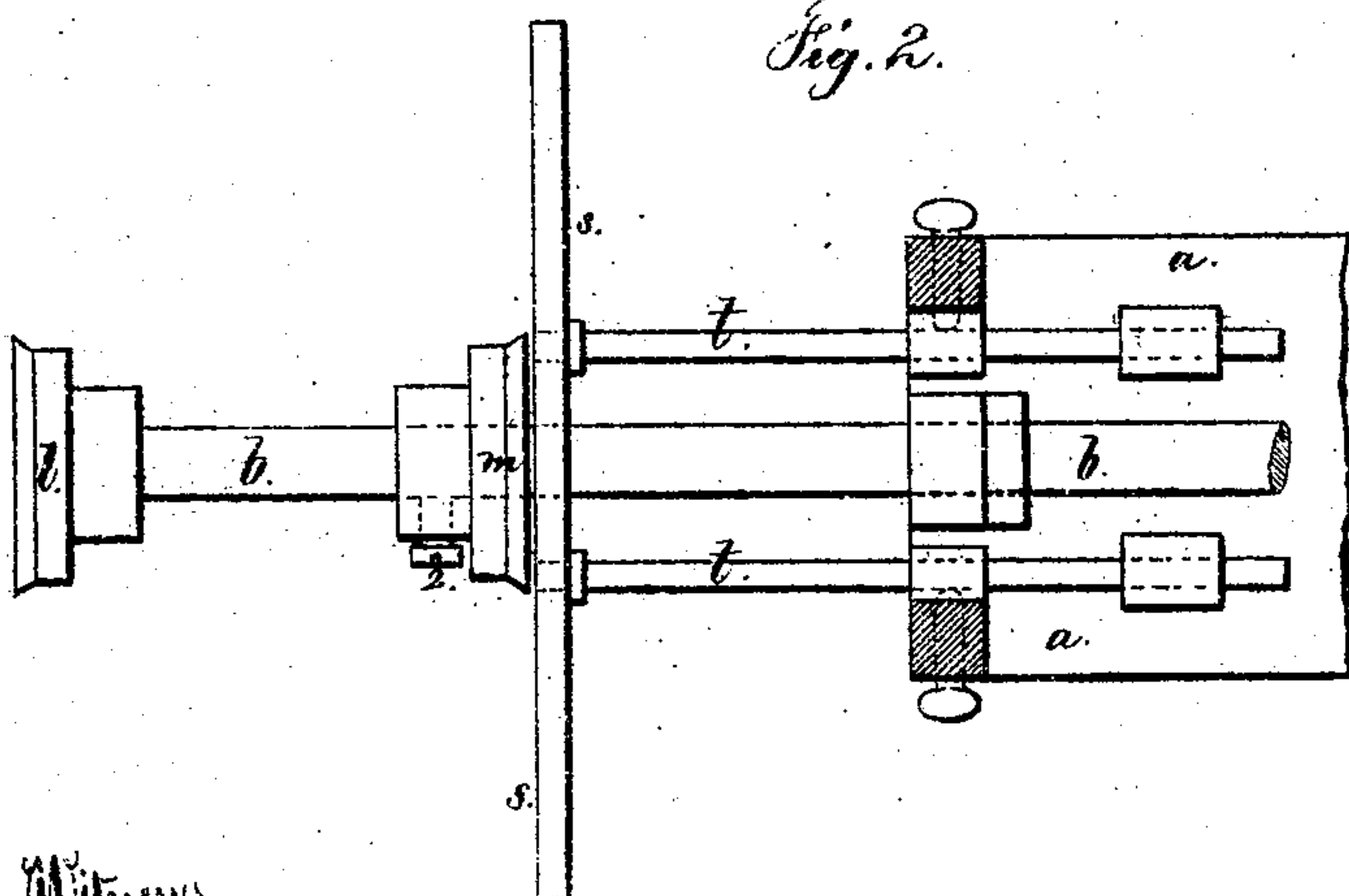


Fig. 2.



Witness

Chas. A. Smith
 Geo. W. Walker

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UNITED STATES PATENT OFFICE.

JONAH R. COLE, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, THOMAS G. BROWNE, AND CHARLES HERRING.

IMPROVEMENT IN MACHINES FOR SEAMING CYLINDRICAL TIN BOXES.

Specification forming part of Letters Patent No. 116,931, dated July 11, 1871.

To all whom it may concern:

Be it known that I, JONAH R. COLE, of the city and State of New York, have invented an Improvement in Tinman's Crimping-Machines; and the following is declared to be a full, clear, and exact description thereof.

Tinman's machines have heretofore been made with two shafts that are geared together and project from the frame a sufficient distance for carrying the grooving-rollers that are employed in rolling the cylindrical barrel and the flange of the head together, so as to lock the parts into each other.

My invention is made with especial reference to rolling together the cylindrical barrel and a closed head or bottom at one end and an open flat ring at the other end of such cylinder, and these two operations are performed simultaneously in order to effect two objects—the first is to save time and expense, and the second is to perform the work in a better and more reliable manner.

Heretofore, in rolling on the open flat ring, it was very liable to slip off, because the workman cannot keep both the ring and cylinder in their proper relative positions without considerable dexterity, and the open ring had first to be applied to the cylinder and afterward the closed end.

In my machine two pairs of grooving-wheels or rolls are employed, one pair being at the ends of the horizontal shafts, and the other pair upon such shafts, at the distance required by the length of the sheet-metal cylinder, and adjustable thereon, and a gauge is employed for the open flat ring to set against. By this construction both heads or ends are crimped upon the sheet-metal cylinder simultaneously by the two pairs of rollers bending up the sheet metal and interlocking the same, and the operator does not have any difficulty in keeping the parts in contact while the grooving-rollers are interlocking the parts.

In the drawing, Figure 1 is a vertical section of the said machine; and Fig. 2 is a partial sectional

plan, showing the lower rollers and the fence or gauge.

The bed *a*, lower shaft *b*, crank *c*, gear-wheel *d* to the wheel *f* upon the shaft *g* in the upper frame *h*, hinged at *i*, so as to be lifted, are substantially the same as in any ordinary tinman's machine, and I remark that the shaft *g* and frame *h* may be lifted to separate the grooving-rollers to allow for inserting or withdrawing the articles in any usual manner. It is preferable to employ a treadle to draw the parts together, and a spring to separate them. The rollers *l l* are attached at the ends of the shafts *b* and *g*, as heretofore; but in addition I make use of the second pair of rollers or wheels *m m* upon the shafts *b g*, attached adjustably by set-screws *2 2*, so as to be positioned to accommodate the length of the cylinder *n*. *o* is the flat bottom or end of the can or pail, and *r* is the open ring applied at the other end of the cylinder *n* of the can or pail. These parts are to be prepared with dies in the usual manner, so as to set together. The gauge or fence *s* is sustained by the rod or rods *t* and clamping-screw, so that it is held at the proper distance from the rollers *m m* to admit the open ring-head *r*.

It will now be apparent that, when the heads *o* and *r* are slipped upon the cylinder *n* and the pail or can introduced into the machine in the position represented, pressure upon the end or bottom *o* will keep the parts together while the sheet metal is crimped and interlocked by the action of the rollers *l l* and *m m*, that act simultaneously in connecting both ends of the pail or can in a perfect manner with great rapidity.

I claim as my invention—

The rollers *m m*, adjustable upon the shafts *b* and *g* of the tinman's crimping-machine, in combination with the rollers *l l* at the ends of said shafts, substantially as and for the purposes set forth.

Signed by me this 23d day of May, A. D. 1871.

Witnesses: JONAH R. COLE.

CHAS. H. SMITH,
GEO. T. PINCKNEY.