No. 765,180. PATENTED JULY 19, 1904.

W. B. JONES.

CLEAT FORMING MACHINE.

APPLICATION FILED DEC. 5, 1902. RENEWED APR. 27, 1904.

NO MODEL.

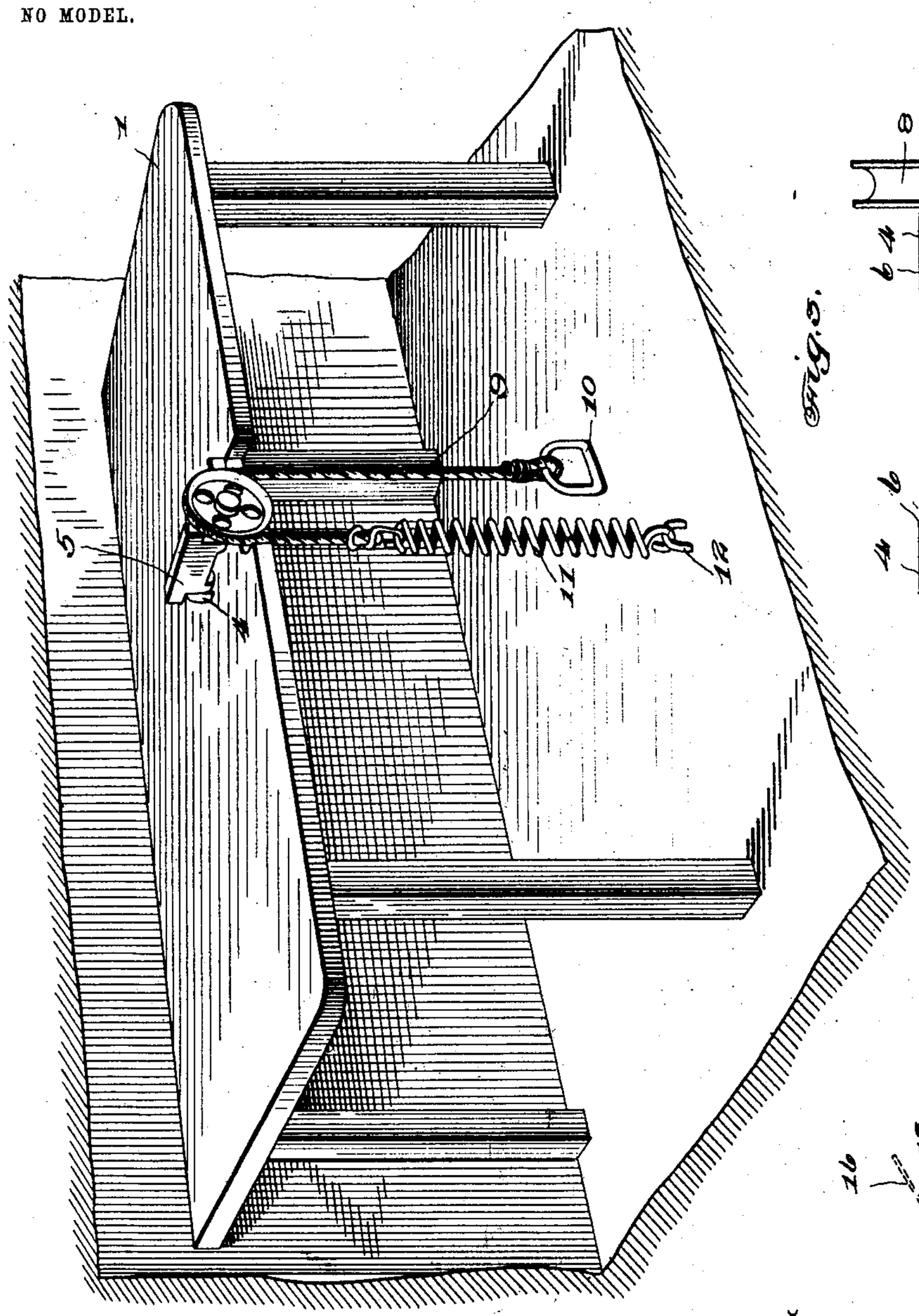

Fig. 1.

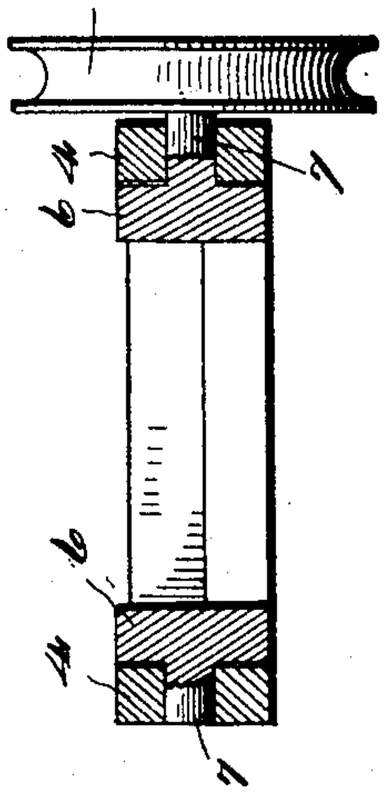

Fig. 3.

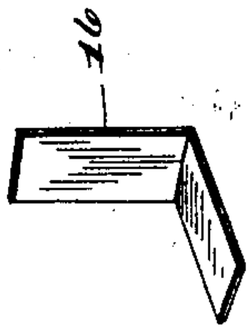

Fig. 4.

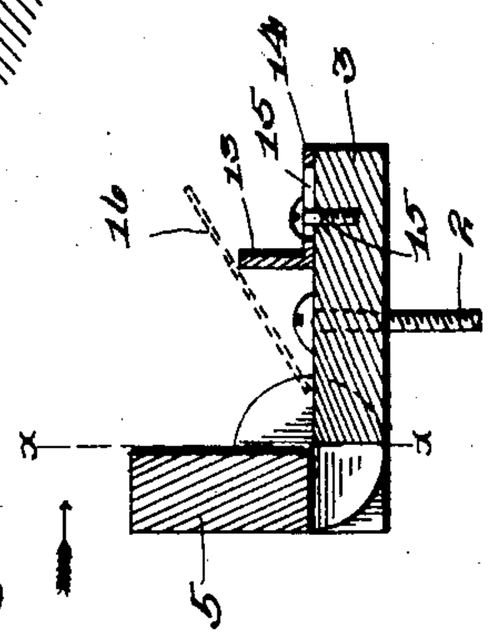

Fig. 2.

Witnesses

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No. 765,180. Patented July 19, 1904.

UNITED STATES PATENT OFFICE.

WALLACE B. JONES, OF BURROAK, KANSAS.

CLEAT-FORMING MACHINE.

SPECIFICATION forming part of Letters Patent No. 765,180, dated July 19, 1904.

Application filed December 5, 1902. Renewed April 27, 1904. Serial No. 205,247. (No model.)

To all whom it may concern:

Be it known that I, WALLACE B. JONES, a citizen of the United States, residing at Burroak, in the county of Jewell and State of Kansas, have invented certain new and useful Improvements in Cleat-Forming Machines; and I 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.

My invention has relation to forming-machines, and more particularly to a machine adapted to prepare various-sized cleats or anchoring-pieces formed of tin or the like for holding a sheet-metal roof in place.

The object of my invention, among others, is to provide a machine which will be found reliably efficient in the performance of its office of so bending or preparing the small pieces of tin or other sheet metal commonly employed for anchoring a roof in place that the cleats of the required size and bent into the necessary shape or form may be rapidly produced in great quantities ready for instant use.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, made a part of this application, and in which—

Figure 1 shows a perspective view of my invention complete ready for use. Fig. 2 is a central transverse section of my machine. Fig. 3 is a vertical section of my cleat-forming machine, taken on line *x x*. Fig. 4 is a perspective detail view showing one of the cleats formed or bent by my forming-machine.

It will be hereinafter fully set forth and explained that my machine is rendered easily adjustable, so that it will bend or form different-sized cleats of the style required for anchoring a tin roof having either a standing or a flat seam, as will be readily understood.

The various details of my invention and cooperating elements deemed necessary to illustrate a practical application of my idea to actual use will for convenience be designated by numerals, the same numeral referring to a similar part throughout the several views.

Referring to the numerals on the drawings, 1 indicates a work-bench of the usual or any preferred construction or a table upon which my machine may be readily mounted, as by means of a pair of bolts 2, extending through suitable apertures provided in the body portion or anchoring-section 3 of my forming-machine.

The body portion is provided at one end with a pair of parallel ears 4, between which I pivotally mount the movable member or jaw 5, which is so disposed as to be adapted to be moved downward directly upon the body portion, the outer edge of the member 5 describing the arc of a circle in its downward or upward course, as will be readily obvious.

The jaw 5 is provided with a pair of ears 6, adapted to fit between the ears 4, and each ear 6 is so formed as to be provided with the integral lug or trunnion 7, designed to be loosely received by an aperture in the ear 4, one of the trunnions 7 being of sufficient length to rigidly connect with the controlling-wheel 8, which, as will be seen by Fig. 3, is a grooved pulley adapted to coöperate with the controlling cable or rope 9, one end of which is provided with a stirrup 10, while the other end is connected with the spring-controlled member 11, the lower end of which is anchored to the floor in any preferred way, as by the staple 12.

By reference to the drawings it will be clearly apparent that when the foot of the operator is entered in the stirrup and the stirrup drawn downward the wheel 8 will be turned, and since said wheel is rigidly connected with the jaw 5 by means of the trunnion 7 said jaw will be drawn downward in contact with the body portion 3 and will be again elevated by the spring 11 when the pressure on the stirrup is removed.

In order, therefore, to utilize the downward movement of the jaw 5, I provide the adjustable lip 13, which comprises the integral extension of the plate 14, having the transversely-disposed apertures 15, by which said plate is adjusted relative to the base member or body portion 3, and held in an adjusted position by means of a pair of set-screws, one for each end of the plate. The object in having the lip 13 adjustable is that by disposing said lip in close proximity to the jaw 5

the clips will be bent at right angles, and by adjusting the lip at different degrees from the jaw the clips will be bent at different degrees of obtuse angles.

In Fig. 2 I have illustrated the position of a strip of tin, as indicated by the dotted lines 16, ready for the downward stroke of the jaw 5, whereby the edge of said jaw will engage the piece of tin and force it downward in the angle between the jaw 5 and the upper surface of the body 3 and bend said piece of material in the proper shape to form the anchoring-cleat. (Shown in Fig. 4.)

It will be understood that there may be a continuous strip of tin from which the cleats may be readily formed, or short pieces of tin of proper length may be inserted in the position shown in Fig. 2 and instantly shaped by a downward pressure of the foot upon the strip 10.

It will be clear that by properly adjusting the lip carried by the body portion 3 the cleat may be readily formed as desired. It will also be seen that the various parts of my invention are of a strong and durable character and of simple construction and may therefore be very readily and expeditiously manufactured and quickly assembled each in its respective operative position.

While I have described the preferred combination and construction of parts deemed necessary in materializing my invention, I wish to comprehend all substantial equivalents and substitutes that may fairly fall within the scope of my invention.

Believing that the advantages and manner of using my improved cleat-forming machine have thus been made fully apparent, further description is deemed unnecessary.

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

The herein-described cleat-forming machine comprising a support, a body portion secured thereto and having ears, a jaw pivotally mounted at its lower edge in said ears and having ears adjacent those of the body portion, the trunnions of said jaw being formed integral therewith, a pulley rigidly connected to an extension of one of said trunnions, a rope passed over said pulley, a plate on the body portion having a vertical integral extension adjustable to and from said jaw in a plane parallel with the body portion, a vertically-disposed spring having its lower end permanently anchored and the upper end connected with one end of said rope, and a stirrup attached to the opposite end of said rope, the depending portion of the rope being in parallel alinement with the spring, all substantially as and for the purpose specified.

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

WALLACE B. JONES.

Witnesses:

P. B. TEGLER,

E. L. ROSS.