

(No Model.)

L. H. TRUAX.
Die Box for Stamping Machines.

No. 232,912.

Patented Oct. 5, 1880.

Fig. 1.

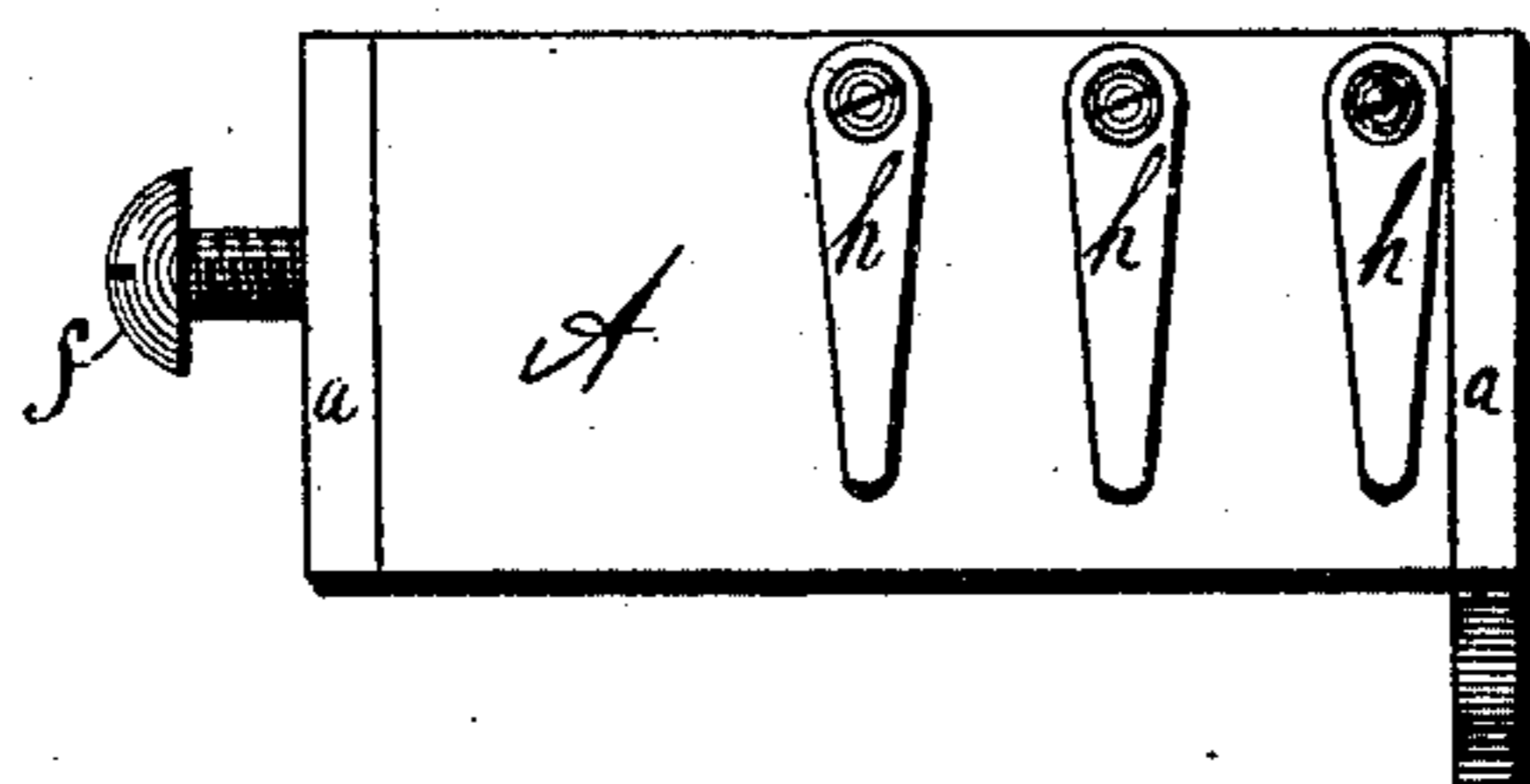


Fig. 2.

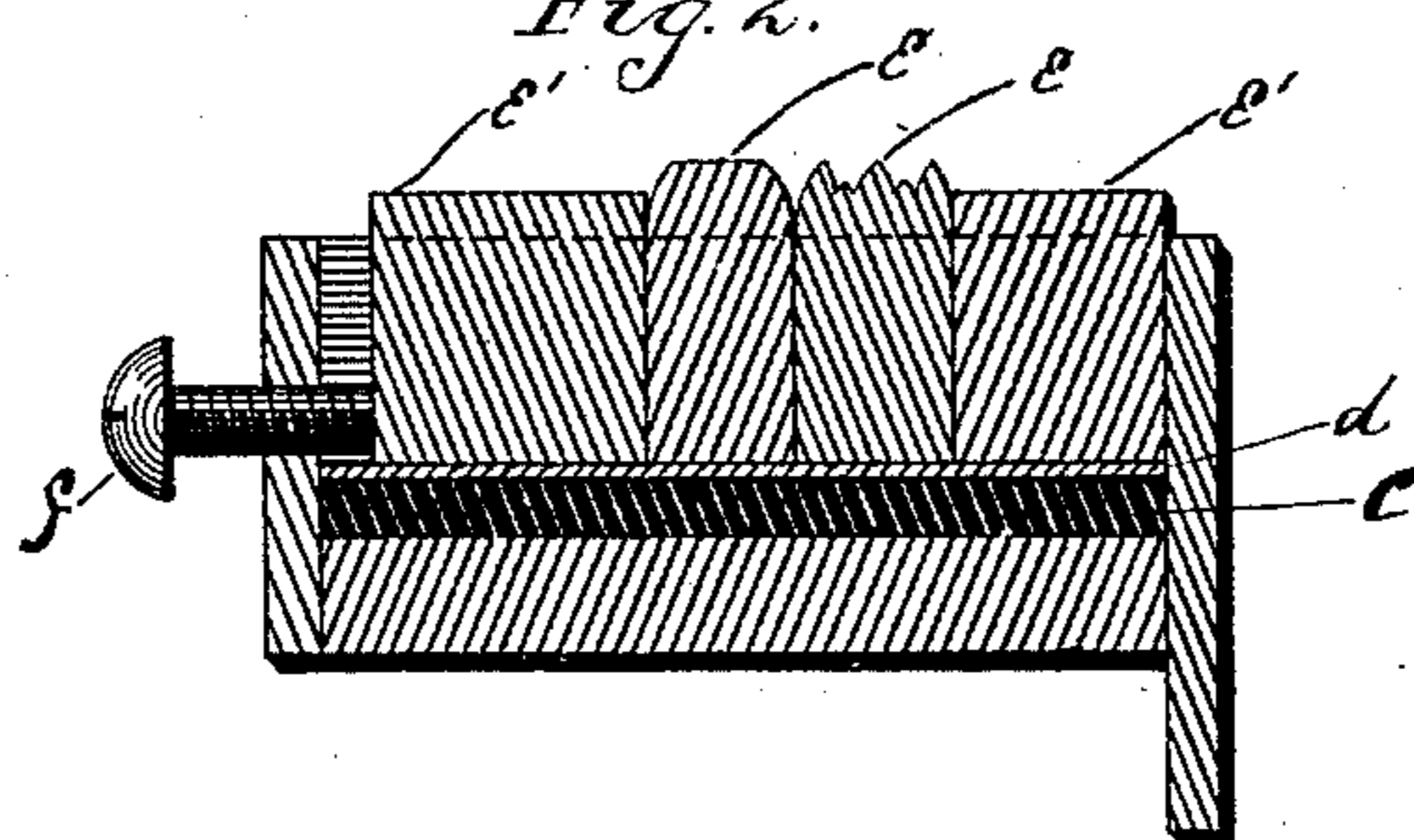
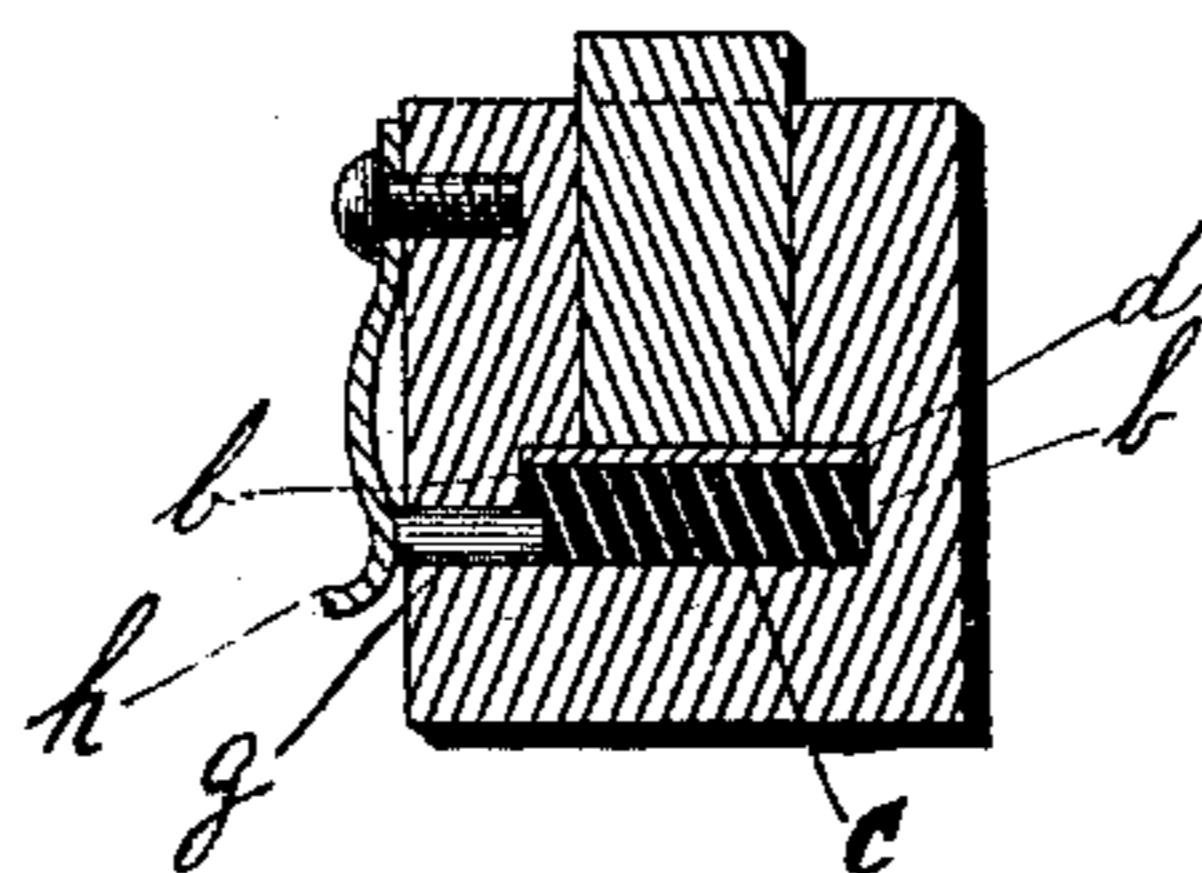


Fig. 3.



Witnesses:

J. W. Garner?
William S. O'Haines.

Fig. 4.



Inventor:

L. H. Truax.
By Charles E. Foster
Atty.

UNITED STATES PATENT OFFICE.

LEONARD H. TRUAX, OF ST. JOHNSBURY, VERMONT.

DIE-BOX FOR STAMPING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 232,912, dated October 5, 1880.

Application filed June 30, 1880. (No model.)

To all whom it may concern:

Be it known that I, LEONARD H. TRUAX, of St. Johnsbury, in the county of Caledonia and State of Vermont, have made certain Improvements in Die-Boxes for Marking Scale-Beams, of which the following is a specification.

My invention relates to improvements in die-boxes for marking scale-beams, metallic squares, and other articles of like character.

The object of my invention is to provide a device which will, by allowing an automatic adjustment of the dies, operate in a uniform manner and overcome the variations in the surface and thickness of the article on which the impression of the dies is made.

My invention consists in the peculiar construction of the die-box and of the means employed for permitting an automatic adjustment of the dies in combination therewith, all of which will be more fully hereinafter explained, and specifically set forth in the claims.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form part of this specification, and in which—

Figure 1 is a side elevation of my die-box. Fig. 2 is a longitudinal section of the same, showing the dies in position. Fig. 3 is a cross-section of the same. Fig. 4 is a plan view of one of the dies.

A represents a metallic box, having movable ends *a* properly secured.

At the base of the slot within which the dies *e* are placed is a chamber of greater width than the said slot, formed by two square-cut grooves, *b b*, Fig. 3. Within this chamber is fitted neatly a strip of rubber, *c*, of suitable quality. Above the rubber, and extending beneath the shoulders formed by said grooves *b b*, near the base of the slot, is driven a piece of flexible steel, *d*, neatly fitted therein, which slightly compresses the rubber strip *c*. By this means the rubber is confined so that it

cannot expand in any manner, save as described hereinafter, thus securing a positive and strong resistance to pressure.

On the steel plate *d* the dies *e* and blanks or guards *e'* rest and are held in position within the box A by the set-screw *f*.

Through the side of the box A, on line with the edge of the rubber strip *c*, are orifices, within which are fitted closely pins or rods *g*, Fig. 3, that serve as valves, for the purpose hereinafter stated. These rods *g* are held in place, firmly pressed upon the edge of the rubber *c*, by strong springs *h*, the upper ends of which are secured to the side of the box A by screws or otherwise, Figs. 1 and 3.

My invention is more especially designed for use in machines for marking scale-beams, &c., when both sides or one side of the beam is to be marked with a single impression, similar to that for which Letters Patent were issued to me February 3, 1880, No. 224,116, and its operation is as follows:

The dies *e* and blanks *e'* being suitably arranged within the box A, their bases resting upon the flexible steel plate *d*, and made sufficiently secure therein by the set-screw *f*, the dies are brought to bear upon the work.

As this work may not always be of uniform surface or thickness, the pressure at those points of variation will be sufficient to compress the rubber beneath the dies and allow them to fall back.

The rubber is permitted to yield through the medium of the vents formed by the openings in the side of the box, pressing out the rods *g*, thus allowing an automatic adjustment of the dies.

The dies are prevented from sinking too far into or impressing the surface of the work too deeply by the blanks *e'*, which, in combination with the automatic adjustment of the dies, cause an equality of depth to be given the impression made upon the surface marked.

After the pressure is removed from the dies the rods are forced back upon the rubber by

the springs *h*, which also exert a strong resistance to the expansion of the rubber through the openings, as stated.

Any requisite number of vents can be arranged in the side of the box that may be required for the purpose described.

Having thus described my invention, what I wish it to be understood that I claim as new, and desire to secure by Letters Patent, is—

10 1. The combination of dies *e*, blanks *e'*, yielding strip *e*, elastic plate *d*, and box A, substantially as shown and described.

2. The combination of a die-box having a yielding seat for the dies, composed of a flexible strip, whereon the dies rest, and an elastic substance beneath, and the means employed for allowing an expansion of the said yielding substance, consisting of the rods or pins *g* and spring-levers *h*, substantially as shown and described, and for the purpose stated. 15 20

LEONARD H. TRUAX.

Witnesses:

OLIVER T. BROWN,

CHARLES M. CARPENTER.