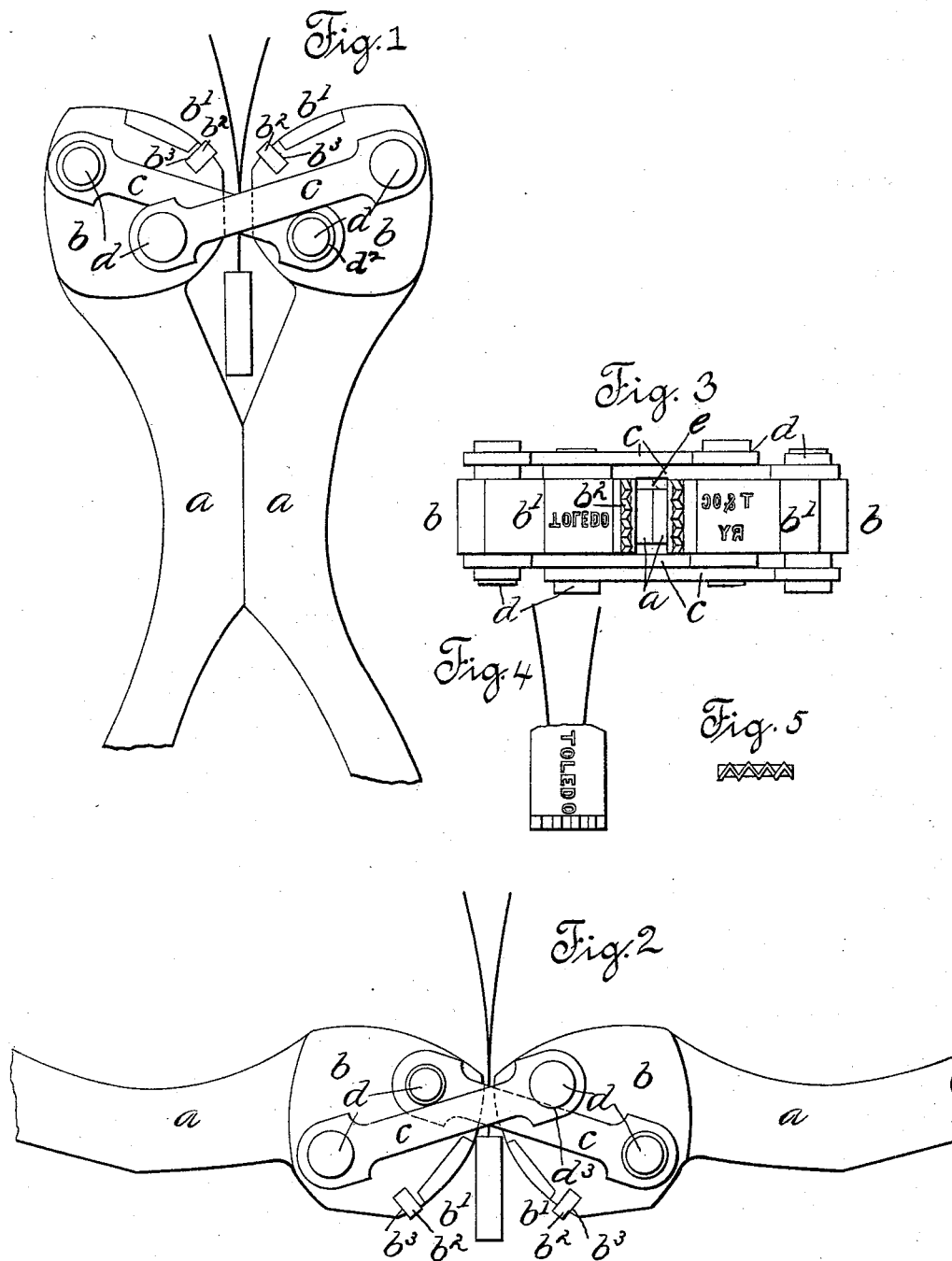


(No Model.)

G. A. CLINE.
ROLLER SEAL PRESS..

No. 494,411.

Patented Mar. 28, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE A. CLINE, OF TOLEDO, OHIO.

ROLLER SEAL-PRESS.

SPECIFICATION forming part of Letters Patent No. 494,411, dated March 28, 1893.

Application filed May 26, 1892. Serial No. 434,510. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. CLINE, of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful
5 Improvements in Roller Seal-Presses, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

My invention relates to the class of devices
10 used for compressing together the soft metal seals and wires that are used for the purpose of sealing the doors of freight cars or the like, and the object of the invention is to provide a device of this class that shall be durable,
15 cheap in construction, and one that can be easily operated with quickness and dispatch in the uses for which it is intended.

To this end my invention consists in a roller seal press having lever handles provided with
20 jaws having rolling contact surfaces, said jaws being pivotally connected by straps or bands located on opposite sides of the jaws and passing diagonally with relation to each other from one jaw to the other; and it further consists in details of the several parts
25 making up the device as a whole, and in their combination, as more particularly hereinafter described and pointed out in the claims.

Referring to the drawings, Figure 1 is a side
30 view of the device with the handles closed, and showing the manner of its use. Fig. 2 is a like view of the device with the handles open, and also showing the manner of use. Fig. 3 is an end view of the device with the
35 handles closed. Fig. 4 is a front view of the seal after compression. Fig. 5 is a front view of the crimped or roughened surface.

In the accompanying drawings the letter *a* denotes the lever handles, made of any suitable material, preferably iron, that are provided on their outer ends with the jaws *b* having rolling contact surfaces *b'*. The jaws *b* are preferably made integral with the lever handles as this affords the cheaper means of
40 construction, and when they are thus made they can be dropped or forged to shape at very little cost, but it is obvious that the lever handles can be made of one piece and the jaws of another rigidly secured together and
50 yet come within the scope of my invention.

The rolling contact surfaces *b'* of the jaws

b are provided with a suitable stamp or figure that it is desired shall be impressed on the seal, and this figure or design may be cut directly in the material of which the jaw is composed, or the jaws may be provided with die
55 sockets within which dies having their faces provided with the suitable seal or stamp may be secured. The lever handles *a* are pivotally connected by means of straps or bands *c* secured, as by means of pins *d* passing through
60 each end, to each of the jaws *b*. Two of these straps or bands are preferably used on each side of the jaws, and they are diagonally disposed running in opposite directions to each other, the preferred form being the one in
65 which one strap passes from the outer edge of the side of one jaw to the inner edge of the side of the other jaw and the strap on the other side of the jaw passes from the inner edge of
70 the side of the first above mentioned jaw to the outer edge of the side of the other jaw, this description having reference to the device when the lever handles are closed together. The bands on the opposite side of
75 the device are disposed in a similar manner. This diagonal arrangement of the straps or bands holds the two lever handles securely and rigidly together and permits no lengthwise play or sliding movement of the jaws
80 with relation to each other.

Instead of providing two of the bands above described on each side of the device one band may be effectually used upon each side in which
85 case the bands would be disposed with relation to each other in the same manner as the two bands above described located upon the same side, that is, one of the bands passing from the outer edge of one side of the jaw to the inner edge of the side of the opposite
90 jaw and the band on the opposite side of the device passing from the inner edge of the side of the first mentioned jaw to the outer edge of the side of the last mentioned jaw.

The pins *d* that are used to pivotally connect the jaws together at their outer edges
95 may be formed with a head *d'* on one end, as may also the other pins, and extend far enough through the jaws on the opposite side to form a stop to limit the outward swinging movement
100 of the lever handles, the connecting straps or bands *c* striking the lug thus formed by the

projecting end of the pin and limiting the outward swinging movement of the lever handles.

The above described construction of the 5 headed pins to form a stop device is preferred, but it is obvious that where two bands are used upon each side of the device a stop will be formed by the pin securing the upper end of the band located farthest away from the side of 10 the jaws, the edge of the band located nearest the side of the jaws striking against this pin as shown at d^3 in Fig. 2 of the drawings. In the drawings the lever handles are shown in Fig. 1 in contact with each other, but it is not 15 essential that the handles shall come together to limit the inward swinging movement of the same as the peculiar construction of the headed pins above described will of themselves form a stop limiting the inward as 20 well as the outward swinging movement, and where two bands are used on each side of the device the band located nearest the side of the jaws coming in contact with the lower pin of the band located farthest away from 25 the side of the jaws will form such a stop.

The crosswise arrangement of the straps or bands taken in connection with the rolling contact surfaces of the jaws forms what may be termed a box e seen in the end view of Fig. 30 2, that effectually holds the wires and seal in the proper position to be encountered by the rolling contact surfaces of the jaws. The contact surfaces b' are also provided with a roughened or crimped surface b^2 , and this may be 35 formed integral with the jaw or the jaw may be provided with a socket b^3 within which a die bearing this roughened or crimping surface may be secured. The preferred form of this crimping surface is one in which the teeth on 40 each of the opposing surfaces shall fit into the spaces formed between the teeth of the opposite opposing face something after the manner of two gears, the teeth being preferably of triangular form. These crimping surfaces 45 are preferably so located that when the lever handles are swung inward they will bite upon the metal seal at its outer edge, thus forming a crimp upon the inner edge thereof.

The jaws are so formed that when the lever 50 handles are swung together there is sufficient space left between the rolling contact surfaces to enable the wires and seal to be easily passed between them, and when the lever handles are swung outward to their full extent the rolling contact surfaces are brought 55 close together; the device is then slid along the wire until the metal seal is brought close up into the angle formed by the rolling contact surfaces. As the lever handles are swung

inward the crimping surfaces coming in con- 60 tact with the outer edge of the seal form a crimp along such edge, and the rolling contact surfaces are so constructed that during this inward swinging movement of the han- 65 dles they shall remain closed together for a distance sufficient to flatten the entire seal, but are so constructed that when the lever handles are swung inward to their fullest extent a sufficient space is left between the roll- 70 ing contact surfaces, as shown at e in the end view in Fig. 2, to allow the press to be withdrawn away from the seal.

The diagonal arrangement of the bands or straps connecting the lever handles as above described, that is, a band on each side pass- 75 ing from the outer edge of one jaw to the inner edge of the other jaw and the bands on the opposite side passing from the inner edge of the first above mentioned jaw to the outer edge of the opposite jaw, is a preferred form 80 of construction, but it is obvious that the device may be constructed with straps or bands passing from the inner edge of one jaw to the inner edge of the other jaw and the bands or 85 straps on the opposite side of the jaws passing from the outer edge of one jaw to the outer edge of the other jaw or vice versa and yet be within the scope of the invention, so long as the diagonal arrangement of the bands or straps is preserved. 90

I claim as my invention—

1. In a seal press, the lever handles having the jaws provided with rolling contact impression surfaces, and diagonally arranged links connecting said jaws, all substantially as de- 95 scribed.
2. As an improved article of manufacture, a roller seal press or like device having lever handles pivotally connected by means of diagonally arranged links extending from one 100 to the other, all substantially as described.
3. In a seal press, in combination, the lever handles, the integral jaws provided with die sockets, the dies fitting said sockets, and diagonally arranged links pivotally connecting 105 the jaws, all substantially as described.
4. In a seal press, in combination, the lever handles, the integral jaws having their rolling contact surfaces provided with a stamp or seal, diagonally arranged links pivotally connect- 110 ing the lever handles, and the pins or lugs forming stops to limit the movement of the lever handles, all substantially as described.

GEORGE A. CLINE.

Witnesses:

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