

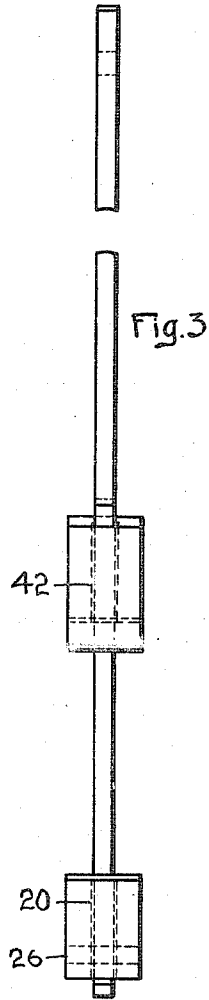
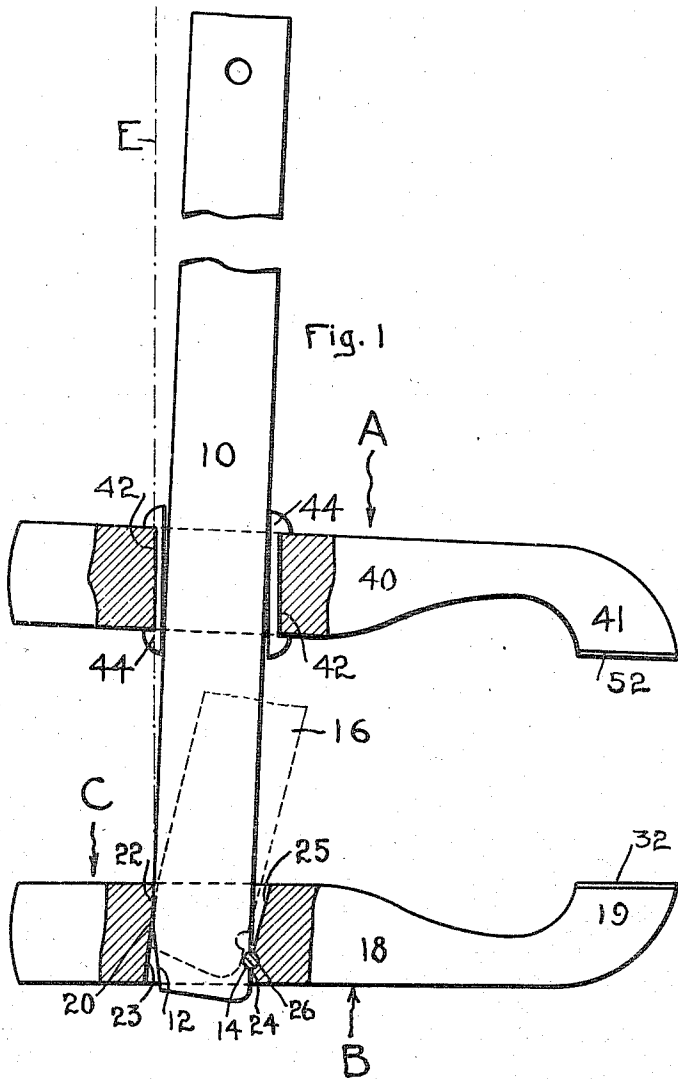
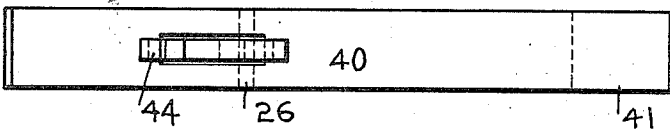
CLAMPING DEVICE.

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1,049,402.

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Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN T. RYDBERG, OF GARWOOD, NEW JERSEY.

CLAMPING DEVICE.

1,049,402.

Specification of Letters Patent.

Patented Jan. 7, 1913.

Application filed April 1, 1909, Serial No. 487,356. Renewed May 28, 1912. Serial No. 700,351.

To all whom it may concern:

Be it known that I, JOHN T. RYDBERG, a citizen of the United States, and a resident of Garwood, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Clamping Devices, of which the following is a specification.

This invention relates to clamping devices, in which the jaws thereof are caused to directly engage with the objects they are to bind, without the use of binding screws and the like.

The invention is particularly applicable where a quick acting clamping device is desirable for light pressures. The parts thereof can be easily disconnected, so as to allow them to be packed for shipment in parcels of small dimensions.

In the accompanying drawings Figure 1 is a front elevation of an exemplification of the invention showing a portion thereof in section. Fig. 2 is a top plan view of Fig. 1, and Fig. 3 is a side view of Fig. 1.

The numeral 10 represents a sustaining bar which is beveled off at its lower left hand side as shown at 12, and has formed in the lower portion of its right hand side a notch 14.

A lower gripping jaw 18 with the gripping lip 19 has an opening 20, one side wall of which comprises the upper vertical portion 22 and the lower flaring portion 23. The opposite side wall of said opening comprises the lower vertical portion 24 and the upper flaring portion 25. A pivot pin 26 is secured in the jaw 18 at the junction of the portions 24 and 25 and partially projects into the opening 20. The gripping lip 19 of the jaw 18 is mounted with a flexible cover 32. The sustaining bar 10 and lower jaw 18 are maintained in engagement by locking the pivot pin 26 of the said jaw with the notch 14 of the bar 10. To insert the said bar in the jaw 18, the former is located in the position indicated in dotted lines at 16 in Fig. 1, so that the right hand side of the bar clears the pivot pin 26 as it enters the opening 20 in the said jaw 18.

An adjustable gripping jaw 40 with gripping lip 41 is mounted on the sustaining bar 10 to co-act with the gripping jaw 18. The jaw 40 is formed with an opening 42, in which are located the gibs 44. The dis-

tances between the gibs secure clearance between them and the bar 10 when the jaw 40 is at right angles to the longitudinal faces of the bar 10, and when not at right angles thereto the upper outside corner of one of the gibs and the lower outside corner of the opposite gib are each in gripping engagement with the diagonally opposite edges of the side walls of the opening 42. The inner accompanying faces of the gibs are parallel to the longitudinal faces of the bar 10. The gripping lip 41 is covered with a flexible cover 52.

To use the invention the pivot pin 26 of the lower gripping jaw 18 is engaged with the notch 14 of the sustaining bar 10, as shown in full lines in Fig. 1. Then the lips 19 and 41 are brought to bear against the opposite sides of an object to be clamped. Next, pressure is brought on the top face of the jaw 40 and on the lower face of the jaw 18 as indicated by the arrows A and B, by virtue of which the jaw 40 is located in an inclined position, and one of the gibs is pinched by the bar 10 at one of its inner corners and the other gib is pinched by said bar at its diagonally opposite corner, and the faces of the gibs hug the bar 10. It will be noted that the bar 10 is inclined to the jaw 18 when the two latter elements are in operative position as indicated by the divergence between the perpendicular dotted line E and the side of the bar 10. To release the jaws 18 and 40 from the object clamped, pressure is applied to them at the points indicated by the arrows A and C.

Having described my invention I claim:

In a clamping device of the class described the combination with a sustaining bar having a beveled portion at one side of its lower extremity and a recess oppositely disposed thereto, a lower clamping jaw having a vertical opening therein through which said bar passes, one wall of said opening being provided with a vertical straight portion at its upper extremity, and a flared portion at its lower, while the remaining wall is provided with a flared portion at its upper extremity and a vertical portion at its lower extremity, a pivot pin being provided at the junction of said flared and vertical portions of said last named wall, said pin adapted to be received

in the recess of said sustaining bar, a movable jaw superposed above said lower jaw provided with a central vertical opening, and gibs adapted to be received in the trans-verse ends of said vertical opening and bite
5 into the surface of the sustaining bar when the jaws are in their operative position.

Signed at Cranford, in the county of Union and State of New Jersey this 29th day of March A. D. 1909.

JOHN T. RYDBERG.

Witnesses:

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