

(No Model.)

M. N. JUDD & A. McMANUS.
BACK BAND BUCKLE.

No. 597,501.

Patented Jan. 18, 1898.

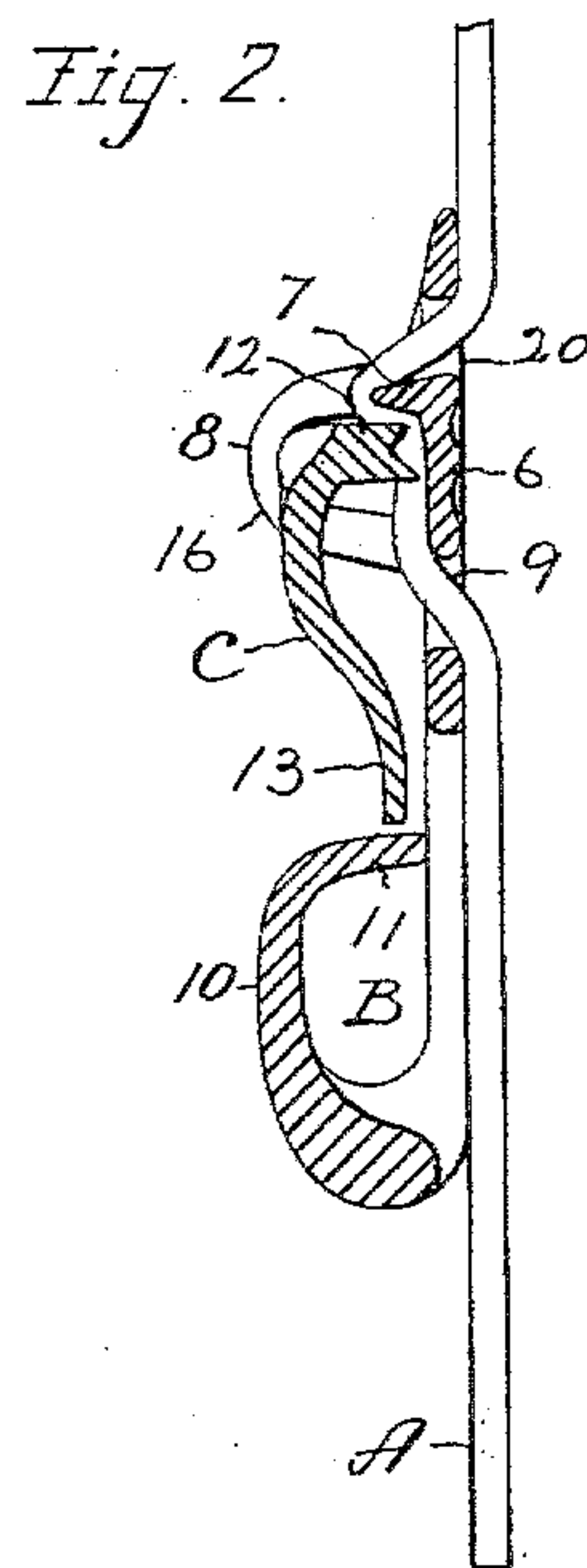
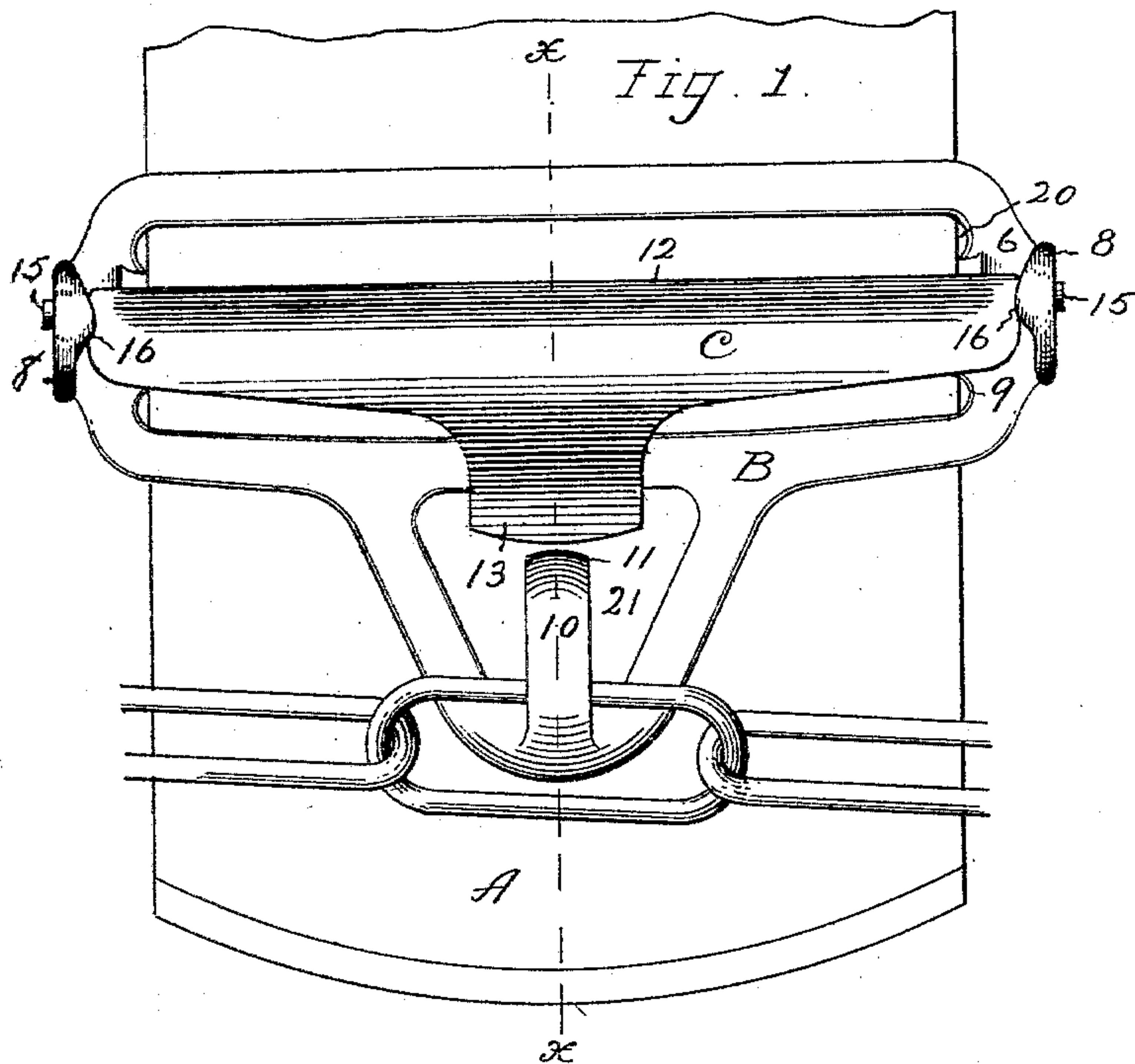


Fig. 4.

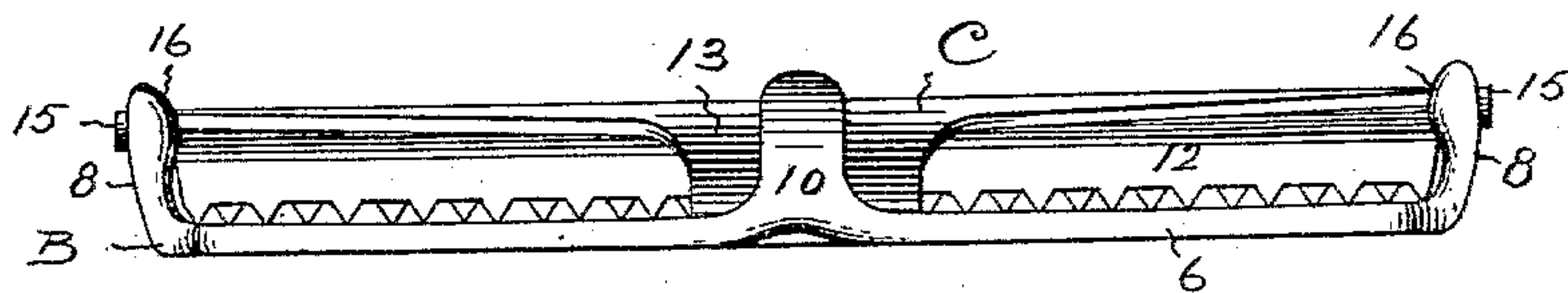
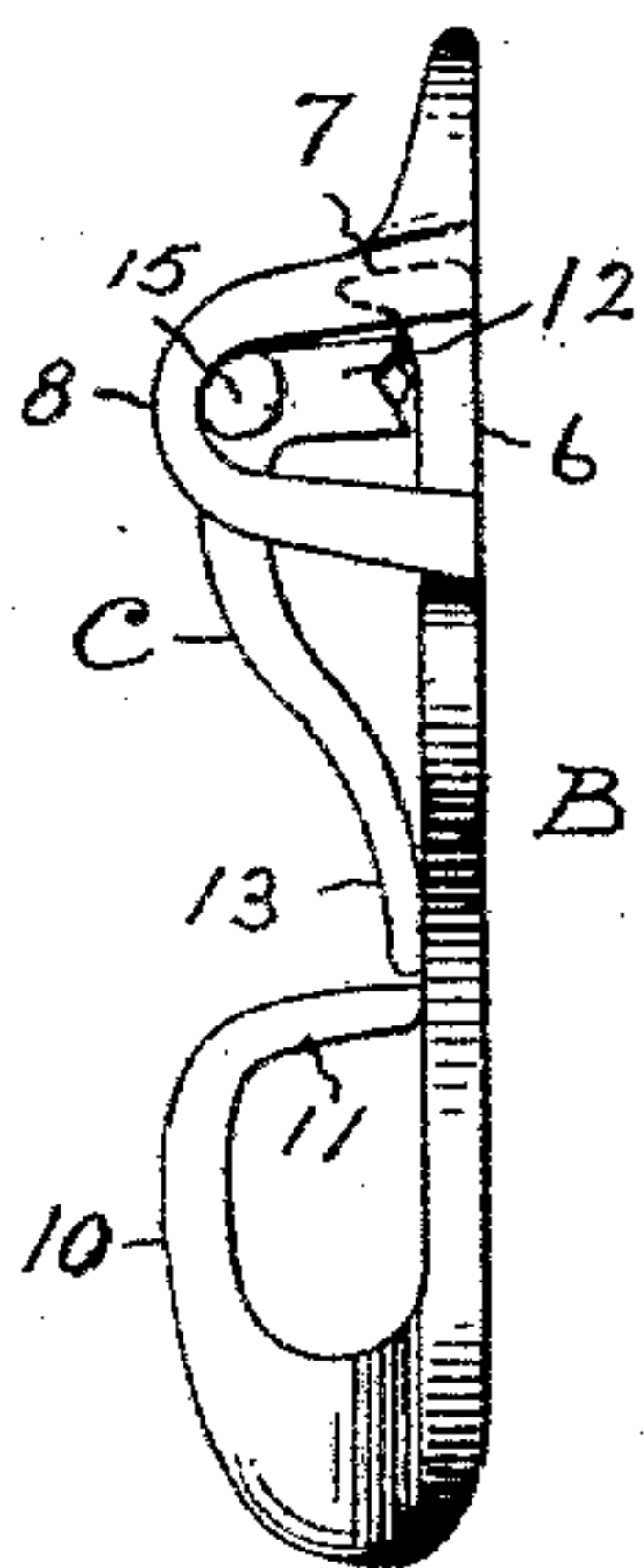
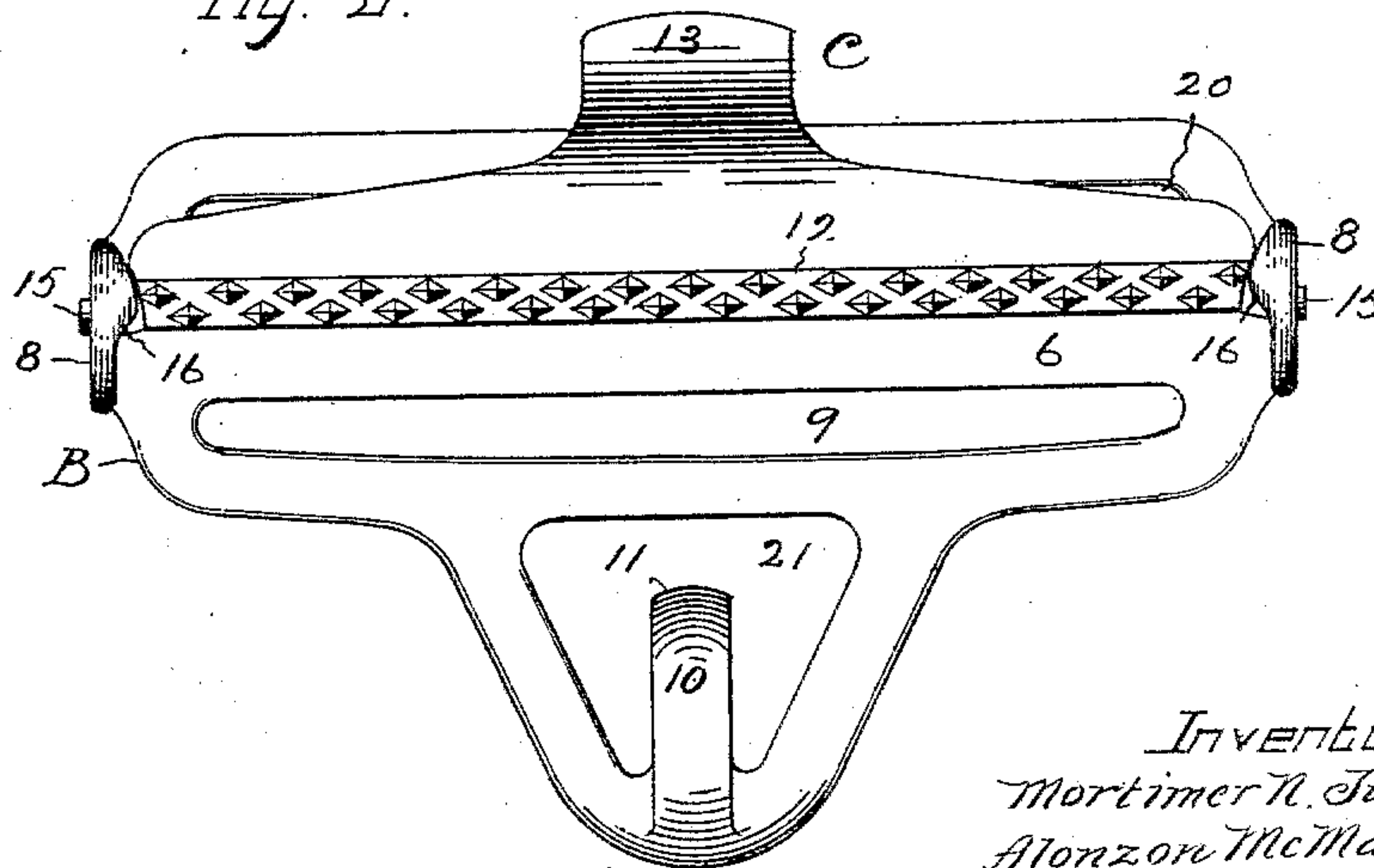


Fig. 5.



WITNESSES
 W. D. Stipe
 Thomas S. Hall

Inventors
Mortimer N. Judd,
Alonzo McManus.
By James Shepard.
Atty.

UNITED STATES PATENT OFFICE.

MORTIMER N. JUDD AND ALONZO McMANUS, OF NEW BRITAIN,
CONNECTICUT.

BACK-BAND BUCKLE.

SPECIFICATION forming part of Letters Patent No. 597,501, dated January 18, 1898.

Application filed November 17, 1896. Serial No. 612,460. (No model.)

To all whom it may concern:

Be it known that we, MORTIMER N. JUDD and ALONZO McMANUS, citizens of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

Our invention relates to improvements in buckles for back-bands for holding up trace-chains; and the objects of our improvements are simplicity and economy in construction and general efficiency in use.

In the accompanying drawings, Figure 1 is a front elevation of our buckle, together with a portion of the web or back-band and trace-chain. Fig. 2 is a sectional view of the same less the chain on the line $x x$ of Fig. 1. Fig. 3 is a side elevation of the buckle detached from the web. Fig. 4 is a reverse plan view of said buckle. Fig. 5 is a front elevation with the buckle-tongue swung back and over, so as to show its grasping edge.

A designates one end of the web or back-band.

B is the buckle-frame, and C the tongue. The frame is provided with a web-holding back bar 6, having a rib 7 near the upper edge of its bearing-face, a loop or slot 20 above said rib, two pivotal lugs or ears 8, cast in the form of loops open at the rear to facilitate molding, the loop or slot 9, chain-hook 10, and inwardly-turned guard, which is a continuation of the chain-hook and extends rearward to the plane of the buckle-frame back. The opening 21 in the buckle-frame back of and above the hook 10 is large enough to let a chain-link pass endwise through it. The tongue is provided with a web-grasping wing 12, having a double row of teeth, which wing, when the tongue is closed, extends closely back to the front surface of the back bar 6 and nearly to the rib 7 thereof. Said tongue is also provided with a chain-holding flap 13 for shutting down over the chain-opening 21, above the guard 11, for confining the chain against accidental unfastening, and with trunnions 15, that enter the pivotal lugs or ears 8.

The buckle thus far described is a complete and operative one; but in order to secure what we call a "double" lock we form a cam pro-

jection 16 on the inside of each ear 8 for being engaged by the ends of the buckle-tongue. These projections are located with reference to the tongue, so that when the tongue is closed, as shown in Figs. 1 to 4, inclusive, the ends of the tongue stand just in front or under said projections and lock the tongue in its closed position. When the tongue is lifted or turned back, the ends are carried to the rear of said projections, as shown in Fig. 5, the ears being sufficiently elastic to spring out as the laterally inelastic tongue is forced by the projections and cause the tongue to snap into place as it passes the highest point of said projection in opening and closing.

In order to assemble the parts cheaply, the ears may be cast as if bent outwardly a little from each other, and then after inserting the tongue they can be forced toward each other to bring them into the position shown to hold the tongue pivotally in place. We prefer to make the upper part of the front face of the holding-bar 6 substantially concentric to the axis of the tongue and to make the upper row of teeth on the grasping edge of the tongue shorter than the lower row, whereby the grip on the web maintains itself to the very last without any partial release or let up, as there would be if the grasping-face of the bar 6 were flat.

To attach the buckle and web, the latter is passed through the slot 20 from the rear, over the rib 7, and between the web-holding back bar 6 and web-grasping wing 12, (the tongue being thrown back to bring the flap 13 to the front,) then through the loop 9, and down to the back of the frame. Turning the tongue down into the position shown in the figures preceding Fig. 5 will firmly secure the buckle on the web. Lifting the tongue in the same way by means of the flap 13, the trace-chain D can be put on or off the hook 10, and then turning the tongue down when the chain is on the hook it will securely hold it therein. Any downward strain or pull on the buckle will draw the tongue firmly upon the web as held by the back bar and rib 7, and thereby said tongue and web serve as one lock for securing the chain on the hook, while the projections or cams 16 also serve to hold the tongue in its closed position. Thus it will be

seen that our buckle is provided with a double lock. The rib 7 on the back bar not only forms a stop, but, in connection with the slot 20 of the frame, gives an offset form to the web at that point to give a firmer hold. It is also very simple and efficient, being formed of only two principal parts and can be made at a small cost.

We claim as our invention—

10 1. A buckle comprising the frame having the web-holding back bar and a tongue pivoted on said frame, the front bearing-face of the said holding back bar being concentric to the axis of the said tongue and the said tongue
15 having the double row of teeth with the upper row shorter than the lower row to make them concentric to said concentric face, substantially as described.

20 2. A buckle comprising the frame having web-holding back bar and laterally elastic ears 8 with a cam projection 16 on the inside of each of said ears, and the laterally inelastic tongue provided with a toothed longitudinal

edge that coacts with the face of said web-holding back bar, said tongue being pivoted 25 in said ears with its ends moving in a path to engage said cam projections and force the said ears outwardly in passing them, substantially as described.

3. The herein-described buckle comprising 30 the frame having the web-holding back bar with a curved bearing-face and a stop-rib at the upper edge of said face, and having also the hook 10 with the guard 11, the end of which guard extends rearwardly to the plane 35 of the buckle-frame back, and a tongue pivoted on said frame and having the web-grasping wing with a double row of teeth acting in connection with said curved bearing-face and stop-rib, substantially as described.

MORTIMER N. JUDD.
ALONZO McMANUS.

Witnesses:

H. C. NOBLE,
N. E. JUDD.