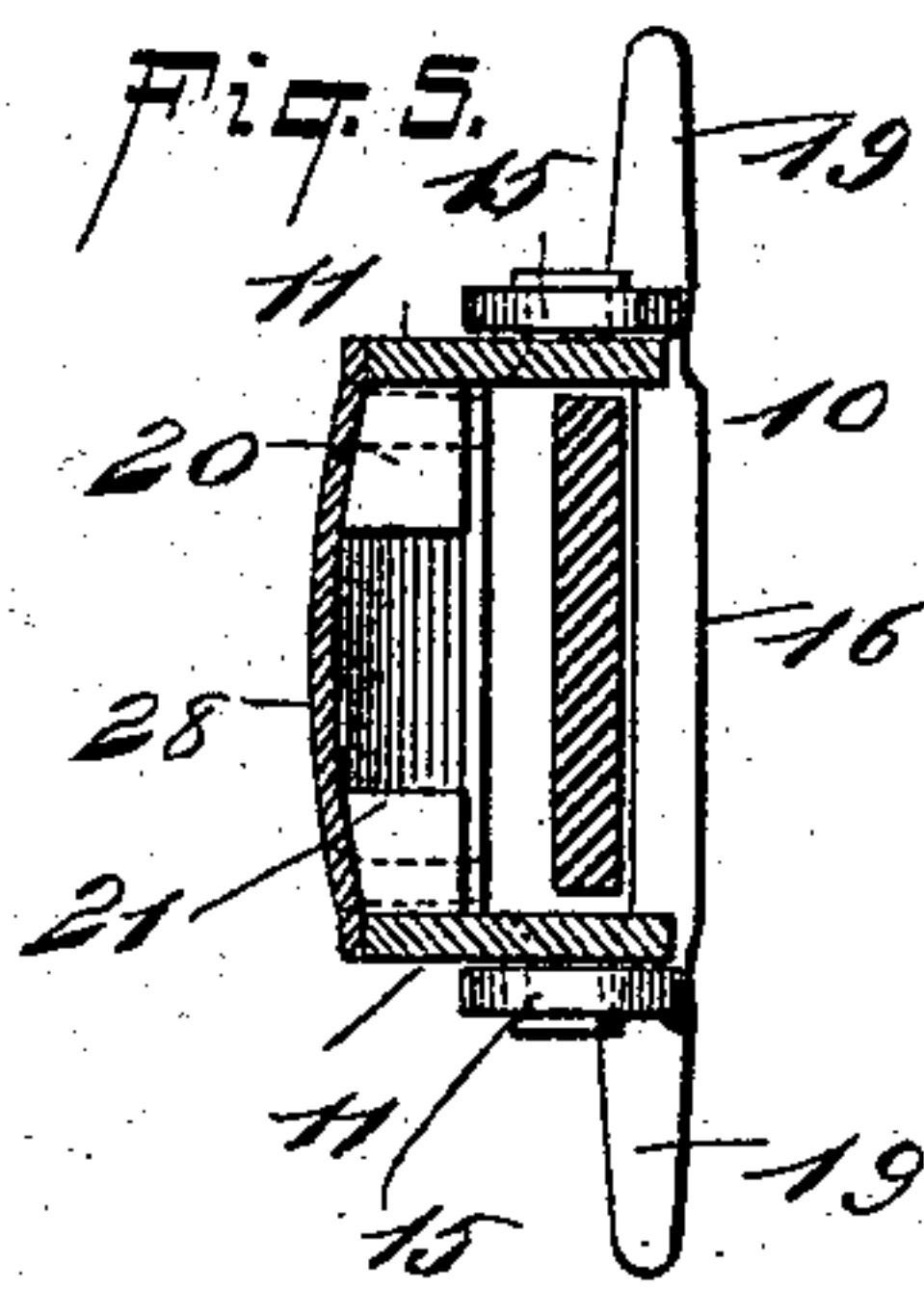
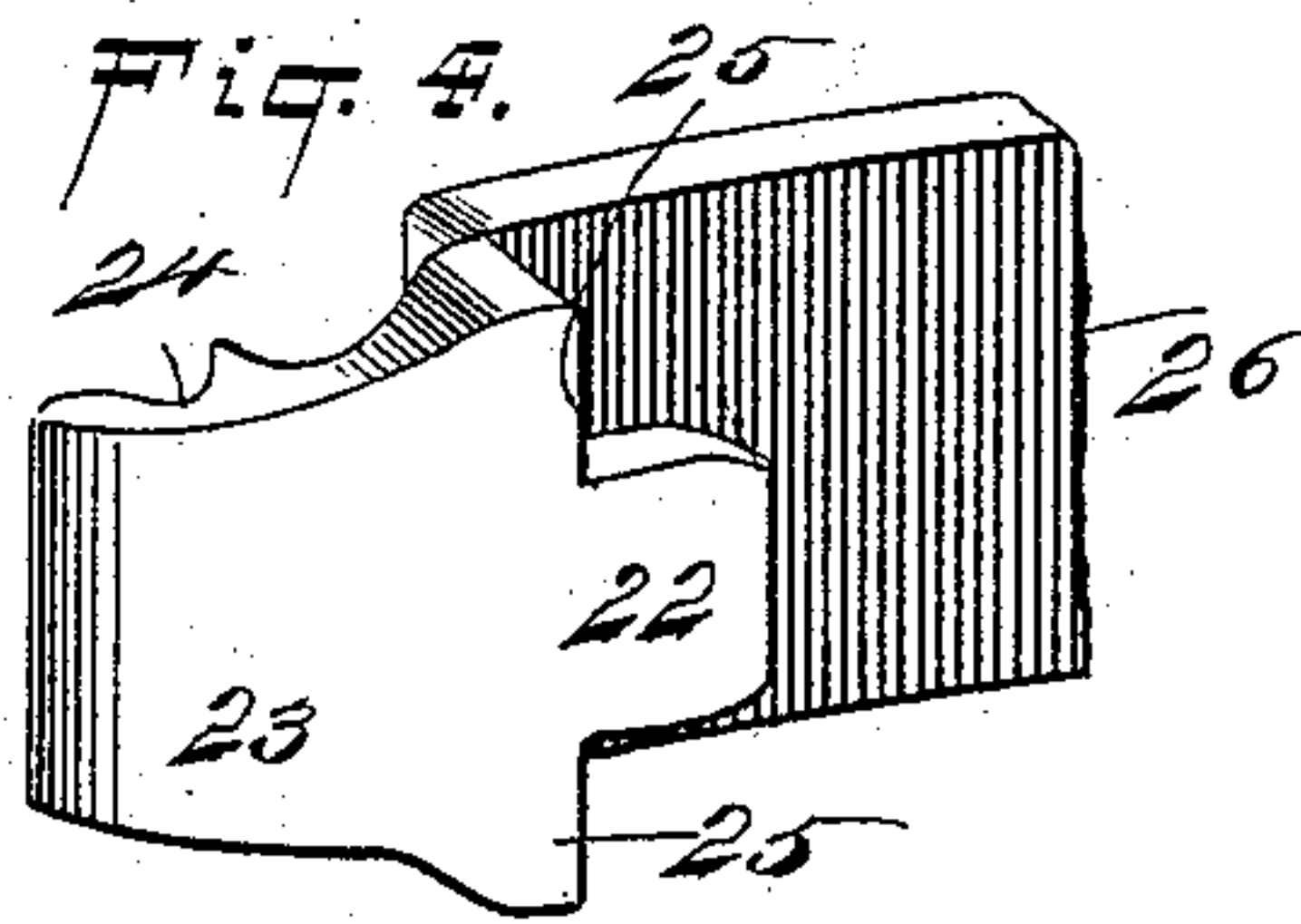
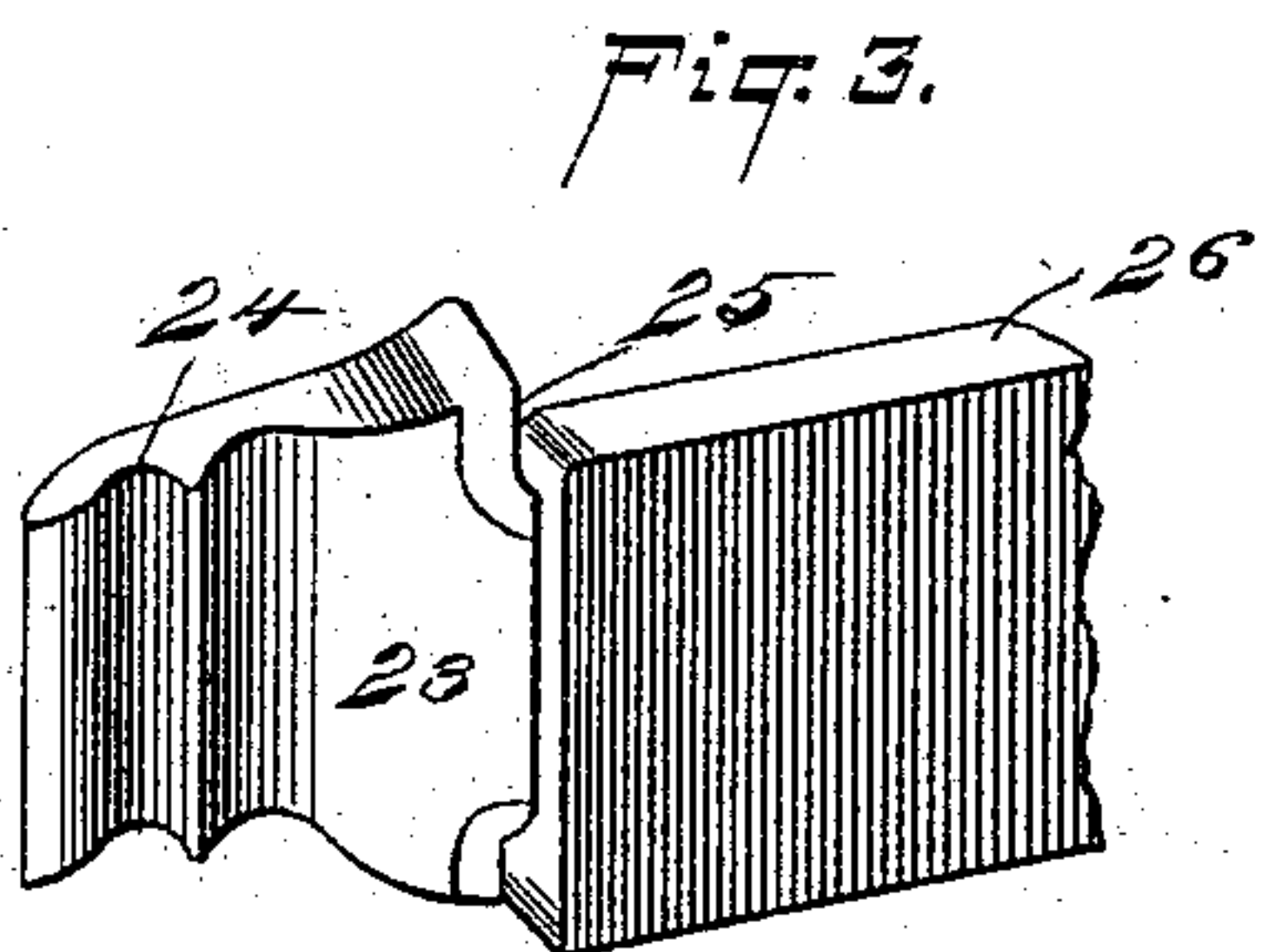
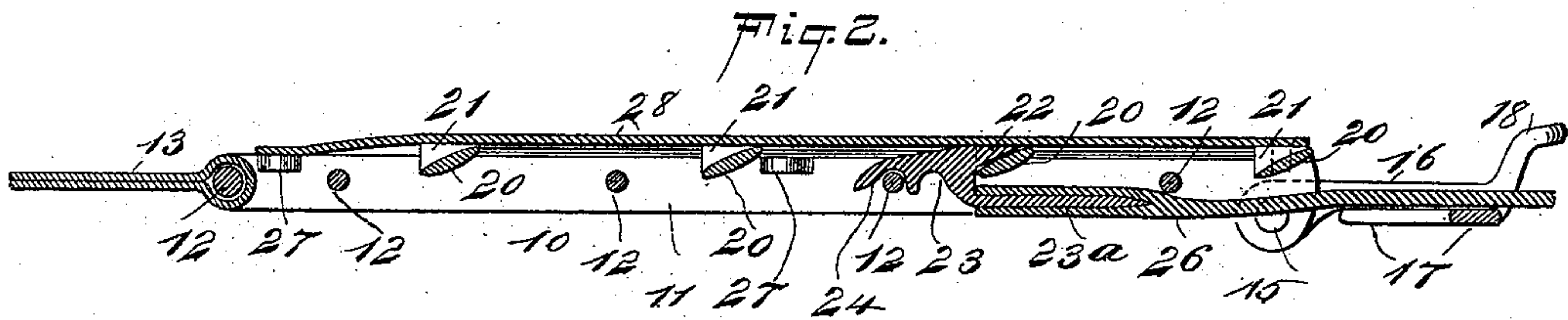
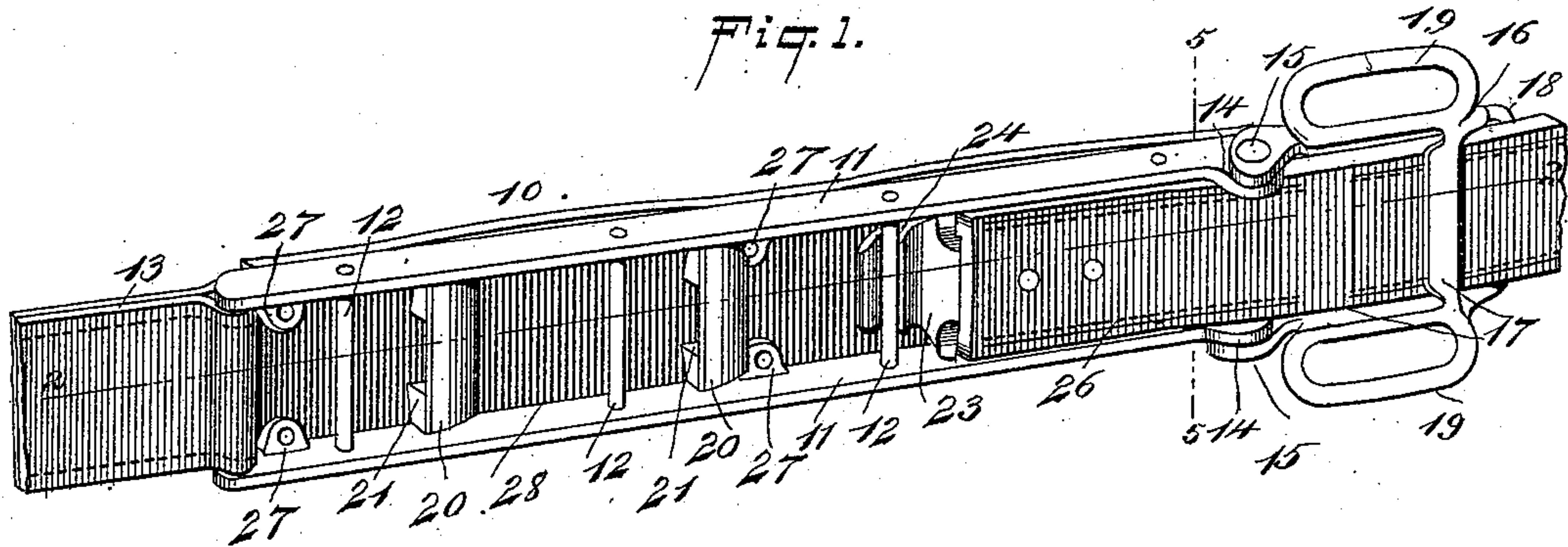


(No Model.)

J. C. CLAUSEN.  
HAME TUG.

No. 528,414.

Patented Oct. 30, 1894.



WITNESSES:

William Goebel.  
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# UNITED STATES PATENT OFFICE

JULIUS CARWIN CLAUSEN, OF HENSALL, CANADA.

## HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 528,414, dated October 30, 1894.

Application filed February 5, 1894. Serial No. 499,079. (No model.)

*To all whom it may concern:*

Be it known that I, JULIUS CARWIN CLAUSEN, of Hensall, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Hame-Tug and Trace Fastening, of which the following is a full, clear, and exact description.

My hame-tug belongs in a class whose characteristic is a series of notches, or slots, adapted to receive a hook attached to a trace. I have devised certain material changes and improvements as hereinafter specified.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the hame tug embodying my invention. Fig. 2 is a longitudinal section on the line 2—2 of Fig. 1. Fig. 3 is a broken perspective view of the fastening hook on the trace, showing the outer side thereof. Fig. 4 is a similar view showing the inner side of the fastening hook, and Fig. 5 is a cross section on the line 5—5 of Fig. 1.

The hame tug 10 is provided with an elongated frame having two parallel side pieces 11 which are connected at intervals by cross rods 12, which stiffen the frame and which also assist in holding the trace hook, as herein- after described, and to one of these cross rods, at the end of the frame, is pivoted the strap 13 which may be connected to the hame in any usual manner.

The side pieces at the rear end of the tug are widened, as shown at 14, to form a good bearing, and at these points the buckle frame 16 is pivoted, as shown at 15 in Figs. 1 and 2, this frame being of substantially the usual kind having the customary cross bar 17 to guide the trace, the rear loop 18 serving as a guide and adapted to receive the breeching strap, and the top and bottom loops 19 to connect with the back pad and belly girth. This pivot or hinge connection between the hame-tug and buckle frame, 16, is important, since it enables the hame-tug to be bent inward when a trace is to be attached, so that the lat-

ter need not be bent as would be otherwise requisite. As is well known, traces are usually so thick as to be quite stiff when dry and hard, so that it becomes difficult to adjust them from one engagement to another with a buckle or other fastening device. By my construction and connection of parts, no difficulty is encountered in such adjustment. The frame is provided also with cross bars 20, these being arranged at regular intervals, and each bar being placed adjacent to and a little behind a cross rod 12, while in the back side of each cross bar is a notch 21, rearwardly and inwardly inclined, as shown clearly in Figs. 2 and 5, this notch being adapted to receive the tongue 22 on the inner side and rear end of the fastening hook 23, which hook is provided with an out-turned point or nose, 23, having a transverse groove, 24, in its outer side to adapt it for engagement with a cross rod, 12. The fastening hook 23 is provided with square shoulders 25 on each side of the tongue 22, these shoulders being adapted to abut with the front flat end portions of the cross bars 20. The hook 23 is also provided with a rearwardly-extending shank 23<sup>a</sup> which is fastened in the end of the trace 26, as shown clearly in Fig. 2, but the hook may be fastened in any convenient way.

The back side of the frame is protected by a strap 28, which is fastened in perforated lugs 27, projecting laterally from the inner sides of the side pieces 11, but the strap may be fastened in any other convenient manner. The strap has sufficient play to permit the point or nose of the hook 23 to be pushed between the strap and one of the cross rods 12, to facilitate the adjustment of the hook.

The trace 26 extends backward through the buckle 16 in the customary manner, and to adjust it it is only necessary to slacken the tension on the trace, after which the hook 23 is pushed forward slightly, then turned outward and pulled from between the cross rod 12 and cross bar 20, with which it has been engaged, and is placed in engagement with the desired cross rod and cross bar, this being done by pushing the point of the hook well forward beneath the cross rod and then pulling it back, so as to cause the tongue 22 to enter the notch 21 in the cross bar 20 with

which it is desired to engage the hook, and when the tongue enters the notch, the groove 24 engages the cross rod 12, and the trace is thus held securely in place and extends rear-  
5 ward so that there is a straight pull on the tug.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of a buckle, a hame-  
10 tug hinged thereto, and having cross-bars provided with notches on their inner sides, and cross rods arranged in front of said bars, and a trace and its fastening hook having a tongue and out-turned point adapted to en-

gage said cross-bars and rods, respectively, 15 as shown and described.

2. The combination with the hame-tug having the notched cross bars and cross rods arranged in front of the latter, of the metal, trace-fastening hook, having a rearwardly 20 projecting hook, and an out-turned point which is adapted to pass beneath and engage said cross bars, as shown and described.

JULIUS CARWIN CLAUSEN.

Witnesses:

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