

No. 679,282.

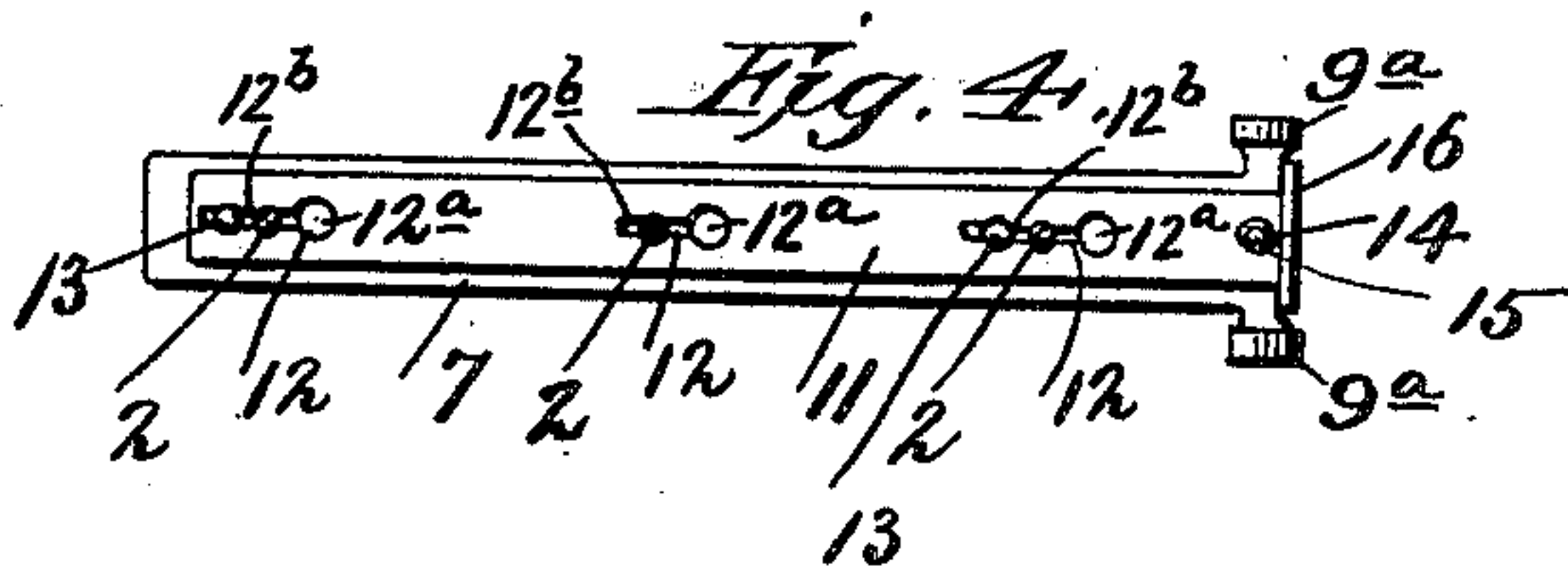
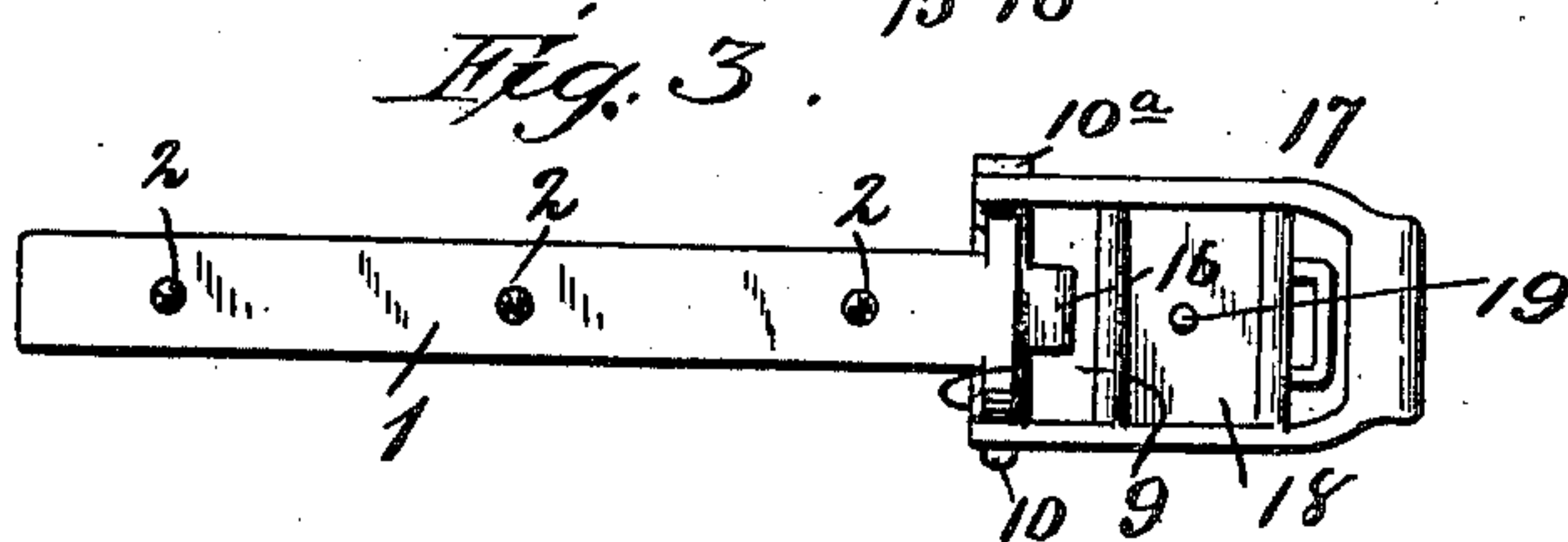
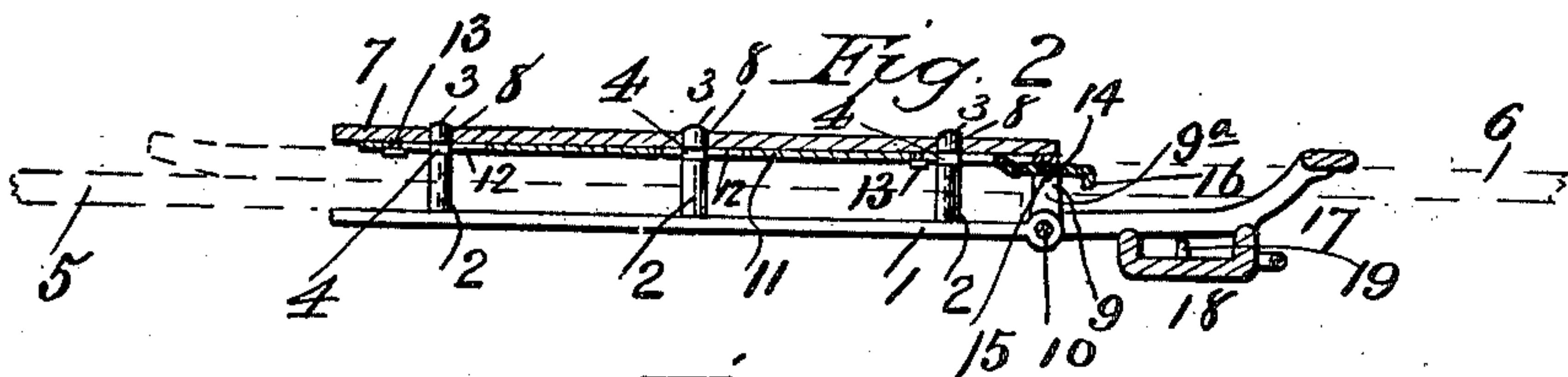
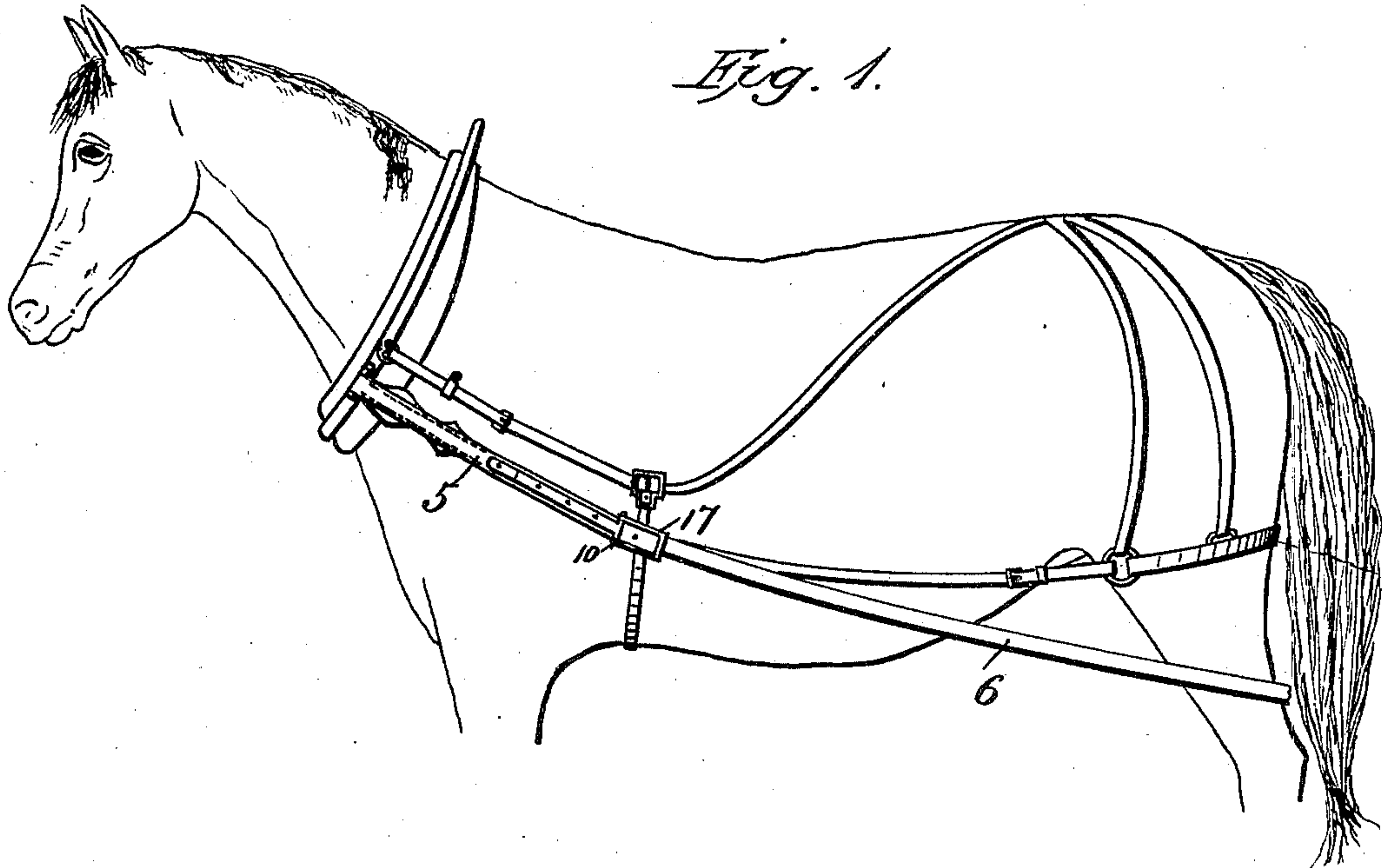
Patented July 23, 1901.

C. N. LING.

COMBINED TRACE BUCKLE AND HAME TUG LOOP.

(Application filed Nov. 9, 1900.)

(No Model.)



Witnesses:
Frank L. Ourand.
H. G. Radelfinger

Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES N. LING, OF ABERDEEN, SOUTH DAKOTA.

COMBINED TRACE-BUCKLE AND HAME-TUG LOOP.

SPECIFICATION forming part of Letters Patent No. 679,282, dated July 23, 1901.

Application filed November 9, 1900. Serial No. 35,961. (No model.)

To all whom it may concern:

Be it known that I, CHARLES N. LING, a citizen of the United States, residing at Aberdeen, in the county of Brown and State of South Dakota, have invented new and useful Improvements in a Combined Trace-Buckle and Hame-Tug Loop, of which the following is a specification.

My invention relates to tug-fasteners for harness; and its object is to provide an improved construction of trace-buckle whereby a trace may be secured thereto without any liability of its being accidentally disengaged, but which may be readily disconnected when desired.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a side view of a horse fitted with a set of harness bearing my improvement. Fig. 2 is a side elevation of my tug-fastener, partially in section. Fig. 3 is a front elevation of the same. Fig. 4 is a rear elevation of the locking-bar and adjacent parts.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates a first bar or strap which has rigidly mounted thereon a series of pins 2, three being shown in the present construction. These pins 2 extend at right angles to the face of the strap 1, are slightly rounded at 3, and grooved on each side at 4. The grooves 4 are parallel and cut transversely. The tug-straps 5 and 6 are secured by the pins 2, and for convenience the intervals between successive pins are made equal. A second bar or strap 7 extends parallel to the strap 1 and is pierced by apertures 8, corresponding to the pins 2. The straps 1 and 7 are connected by means of a hinge formed of a yoke 9, which is rigidly secured to the rear end of the strap 7 and has arms 9^a extending down and embracing the ends of a bolt 10. The bolt 10 extends transversely of the strap 1, fits apertures in the arms 9^a, and is provided with a nut 10^a to hold it in place. Mounted on the under side of the strap 7 is a locking-bar 11, which is cut by a number of keyhole-shaped slots 12. The cir-

cular portions 12^a of these slots are designed to fit the heads of the pins 2, and the straight portions 12^b to fit within the grooves 4 and span the portion intervening between said grooves. The bar 11 is held in place by a pair of studs 13, which have broad heads and extend through the slots 12. By this arrangement the bar 11 is free to slide and forms a lock for securing the pins against withdrawal. An aperture 14 also pierces the bar 11, and this aperture in combination with a lug 15 on the strap 7 enables the bar to be secured against displacement when in its locking position. The rear end of the bar 11 is bent up at 16 to form a toe, which bears against the tug, and thus holds the bar in engagement with the lug 15. A keeper 17 is hinged on the bolt 10 and assists in holding the tug-straps 5 and 6 together. The keeper 17 supports a transversely-extending guide 18, which bears a pin 19, which serves to attach it to the belly-band or sides of the back-strap of the harness.

The operation of my device can now be given. In securing the straps 5 and 6 together they are first passed through the keeper 17 and then placed face to face and secured on the pins 2. The lock-bar 11 is then retracted, the strap 7 folded down, the bar 11 pushed up, and the pins 2 firmly locked in place thereby. The belly-band can now be inserted in the guide 18 and impaled on the pin 19. When the tug-straps are pulled taut, they will press against the toe 16 and hold the bar 11 in engagement with the lug 15 and the belly-band on the pin 19.

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

1. The combination, substantially as described, of a first strap bearing a series of pins grooved transversely near their heads, a yoke the arms of which are hinged to said first strap, a second strap secured to said yoke and having a series of apertures therein constructed to fit the heads of said pins, and a lock-bar slidably mounted on said second strap and having a series of keyhole-slots therein constructed to engage the said grooves in said pins to prevent their withdrawal from the said apertures in said second strap.

2. The combination, substantially as described, of a first strap bearing a series of pins, a yoke hinged by its arms to said strap, a second strap secured to said yoke and having a series of apertures therein constructed to fit said pins, and means for locking said pins in said apertures to prevent withdrawal.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES N. LING.

Witnesses:

CHAS. O. PETERSON,
JOHN SJOLUND.