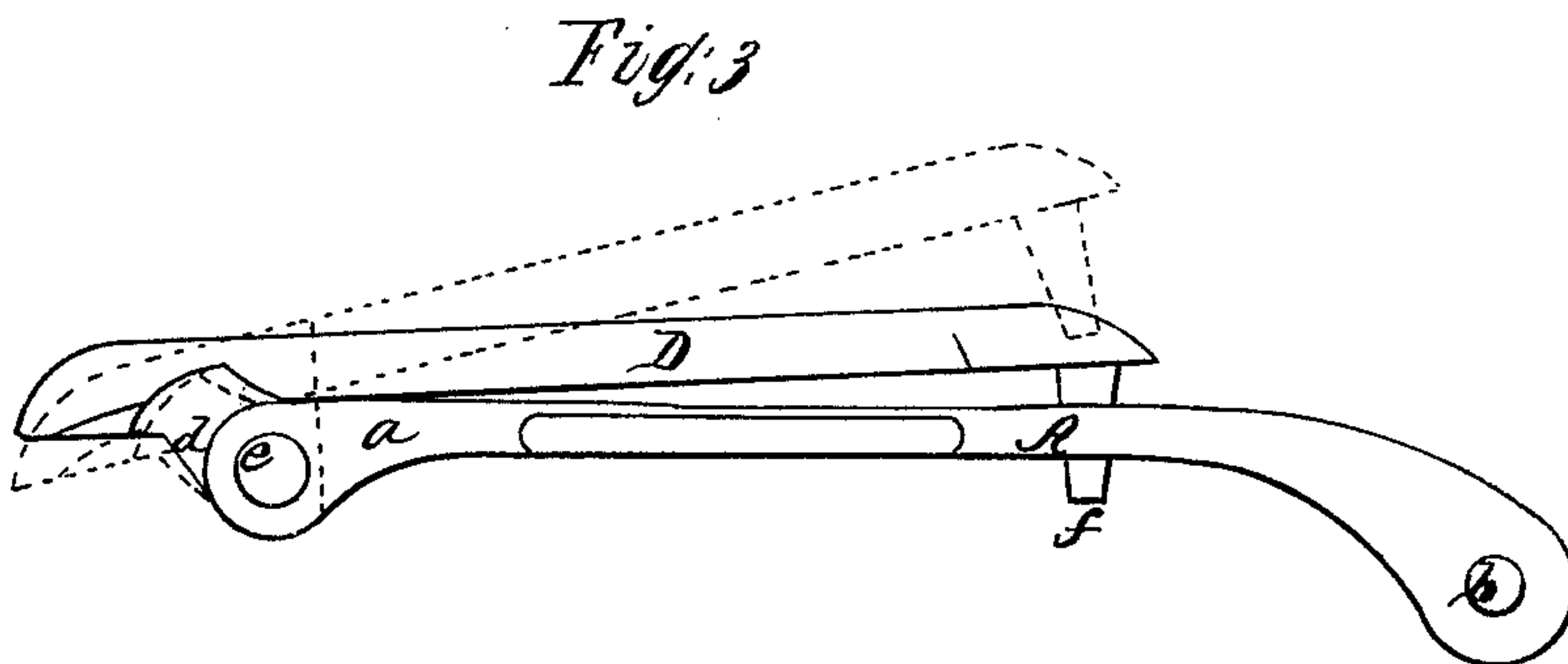
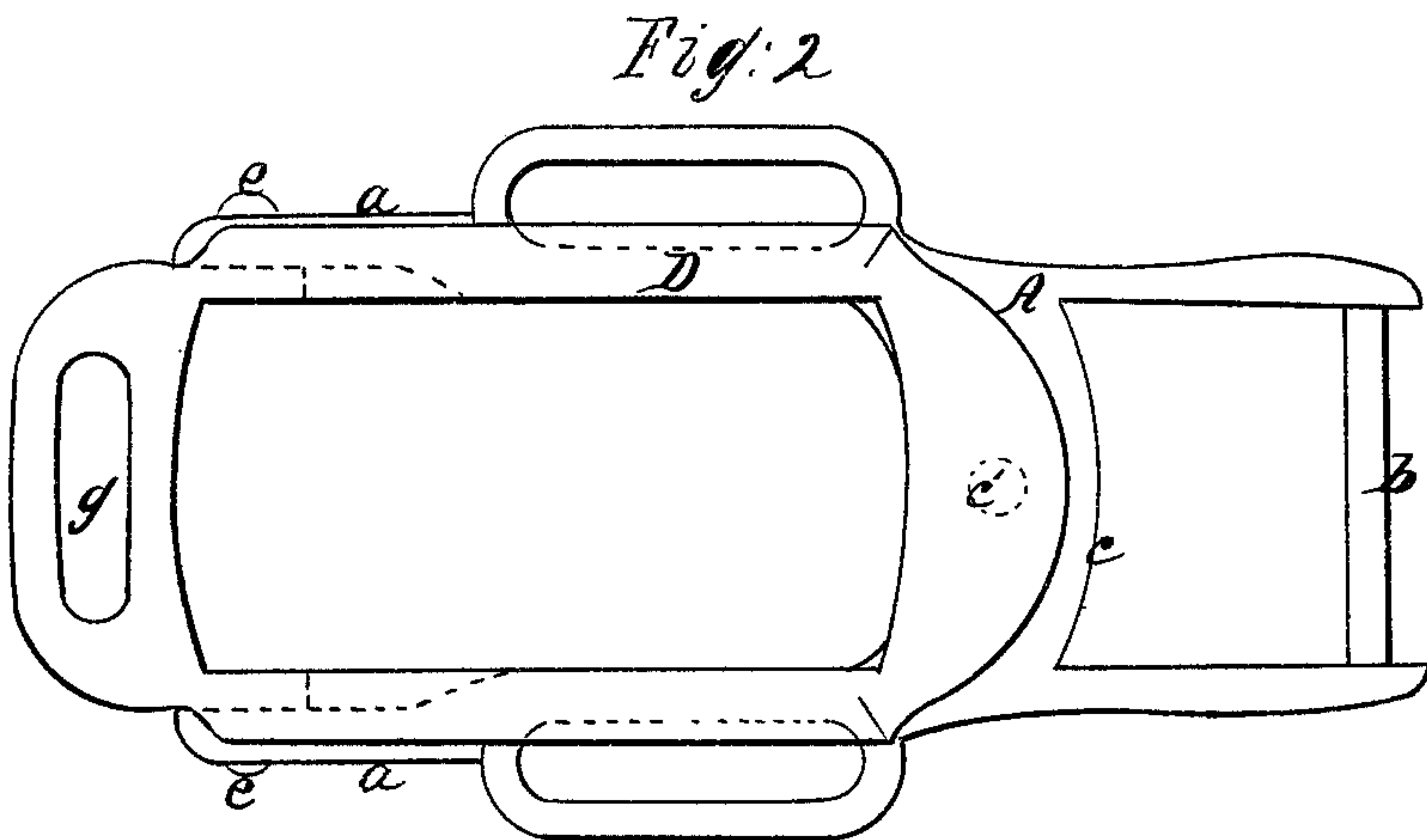
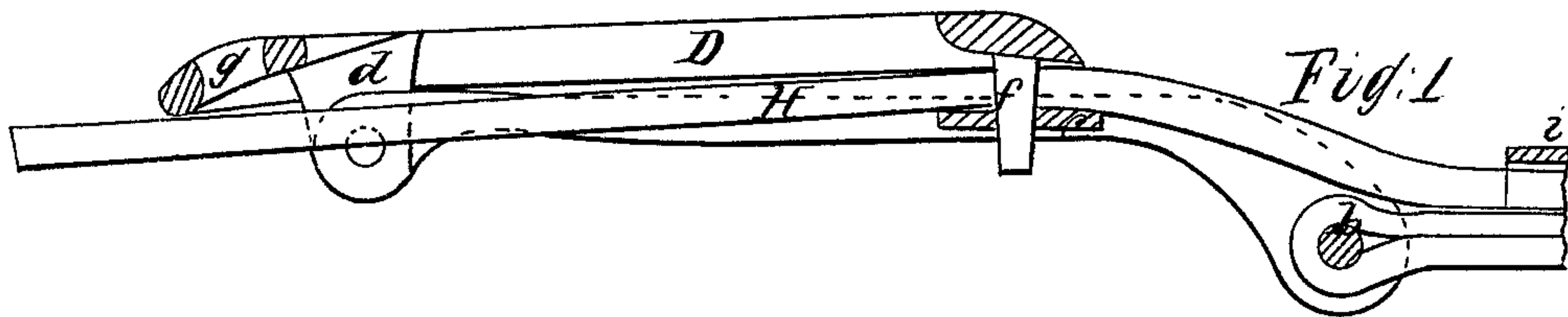


*J. Welker.*

*Trace Buckle.*

*Nº 91,390.*

*Patented Jan. 15, 1869.*



*Witnesses*

*Edward Wilhelm  
Victor B. Becker.*

*Inventor*

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# United States Patent Office.

JACOB WELKER, OF ATTICA, NEW YORK.

*Letters Patent No. 91,390, dated June 15, 1869.*

## IMPROVED TRACE-BUCKLE.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, JACOB WELKER, of Attica, in the county of Wyoming, and State of New York, have invented a new and improved Trace-Buckle; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure I is a longitudinal section;

Figure II, a plan; and

Figure III, a side or edge view in elevation.

Like letters of reference designate like parts in each of the figures.

As illustrated by the drawings—

A is the frame of the buckle, composed of two side bars *a a* with a cross-bar, *b*, at one end for the attachment of the hames-portion of the trace, and a cross-plate, *c*, provided with a tongue-hole, *c'*, the opposite ends of the bars *a a* or frame being disconnected for a purpose presently to be explained.

D is the tongue-frame, formed with ears *d* at one end, by which it is hinged to the ends of the frame-bars *a a* by pivots *e*.

From the opposite end of this frame extends the tongue *f*, designed to fit in the hole *c'* of the cross-plate.

The loop *g* of the tongue-frame extends a short distance beyond the pivots *e*.

The side portions *a a* of the frame are curved, as shown, so as to bring the cross-plate *c* outside of a line connecting the two ends of the frame.

The end of the trace *h* being inserted in the buckle, as shown, and passed through the tucks *i*, the trace will be bent over the cross-plate, so that the tension on the former will draw it snugly against the latter, the loop-extension *g* operating as the short arm of the tongue-frame to keep it pressed against the tug, and

consequently the tongue in proper place through the tug and in the hole *c'*.

Instead of the cross-bar *b*, cast with the frame, a detachable pin or screw may be used, which will enable the buckle to be attached to old harness without ripping and resewing the tug, as would otherwise be required.

The great advantage of my improved buckle is the facility with which it can be operated in adjusting the trace.

Buckles are ordinarily so constructed as to confine the trace to a certain extent at both ends of the frame, which frequently renders it extremely difficult, especially when the tug is thick, to detach the tongue therefrom.

By not connecting the end of the side bars *a* inside of the trace, the latter is left free to yield inward to the pressure of the extension *g* in releasing the tongue, as there is no inside cross-bar nearer the point of pressure than the one, *c*, which permits the necessary yielding without any sudden bending of the tug.

My improved buckle also permits tugs of any and varying thickness to be used, as there is no rigid and limited passage-way through which it is required to be inserted, as in the case with most kinds of buckles which require a tug of a certain thickness.

What I claim as my invention, is—

A trace-buckle, consisting essentially of the bent frame A with cross-plate *c* and disconnected side bars *a a*, and of a tongue-frame, D, hinged to the ends of said side bars, and provided with an extension, *g*, the whole constructed, arranged, and operating as set forth.

JACOB WELKER.

Witnesses:

EDW'D C. HAWKS,  
JNO. J. BONNER.