

ALVAH WORSTER, IMPROVED TRACE BUCKLE.

Patented Oct. 31, 1871.

No. 120,561.

Fig. 1.

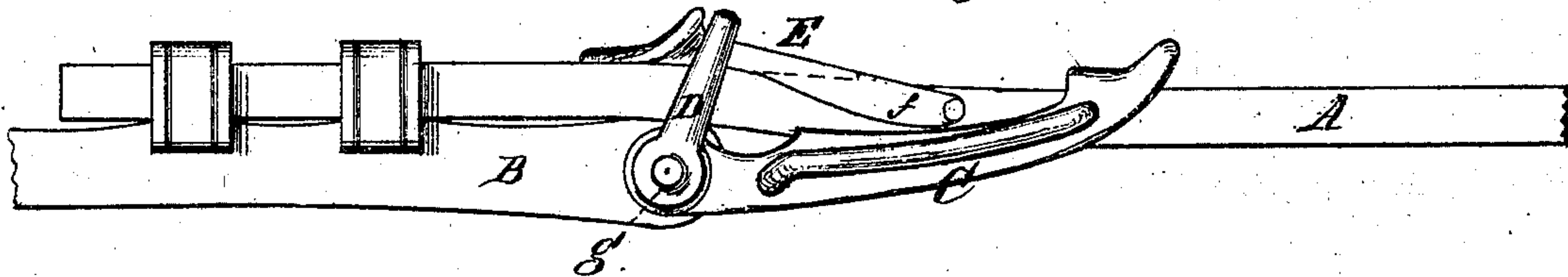


Fig. 2.

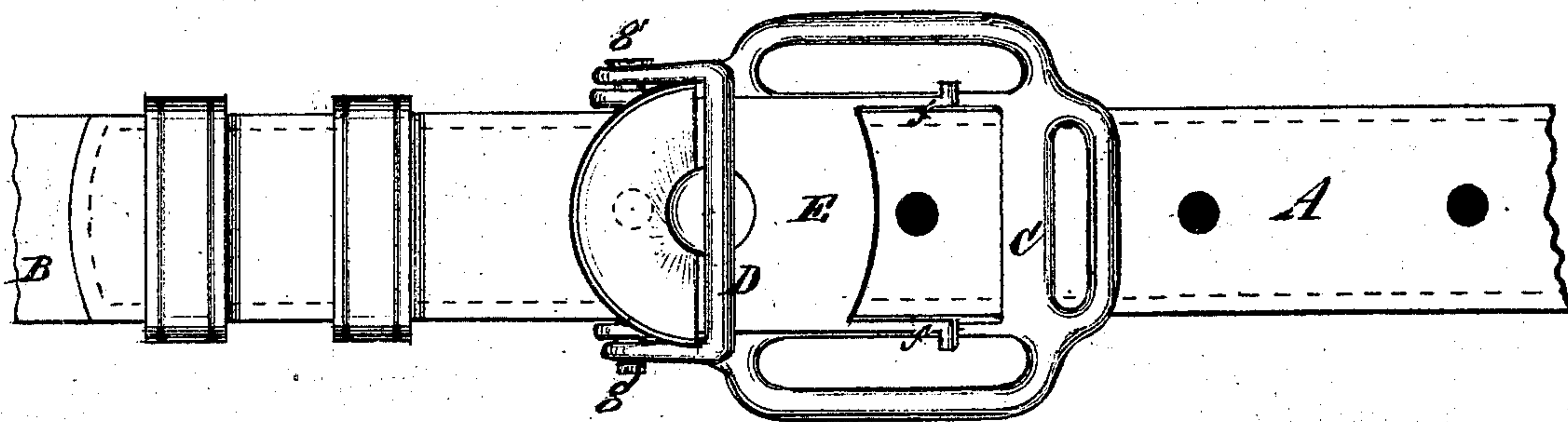


Fig. 3.

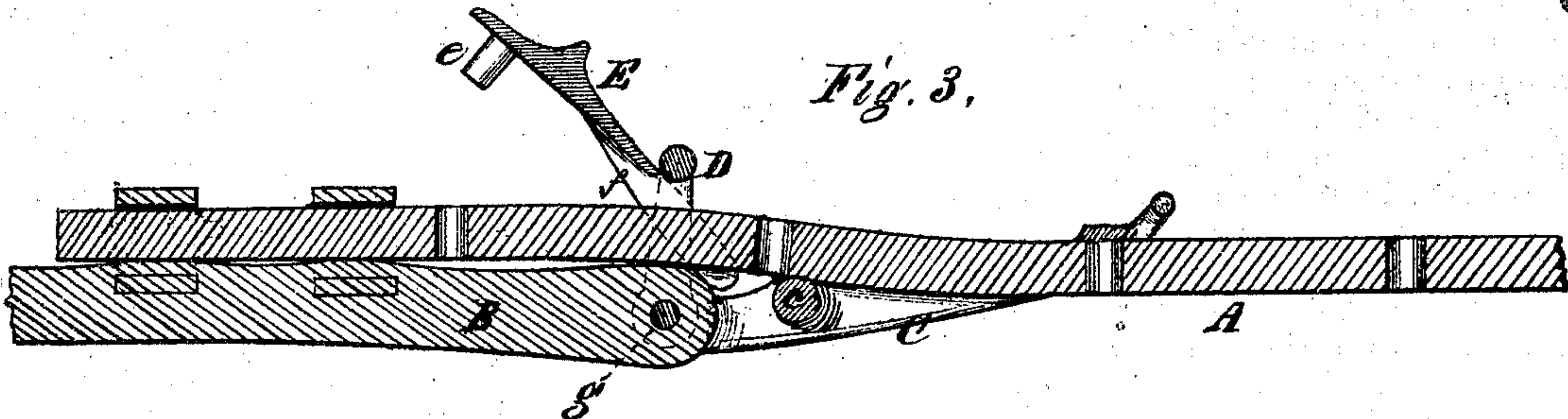
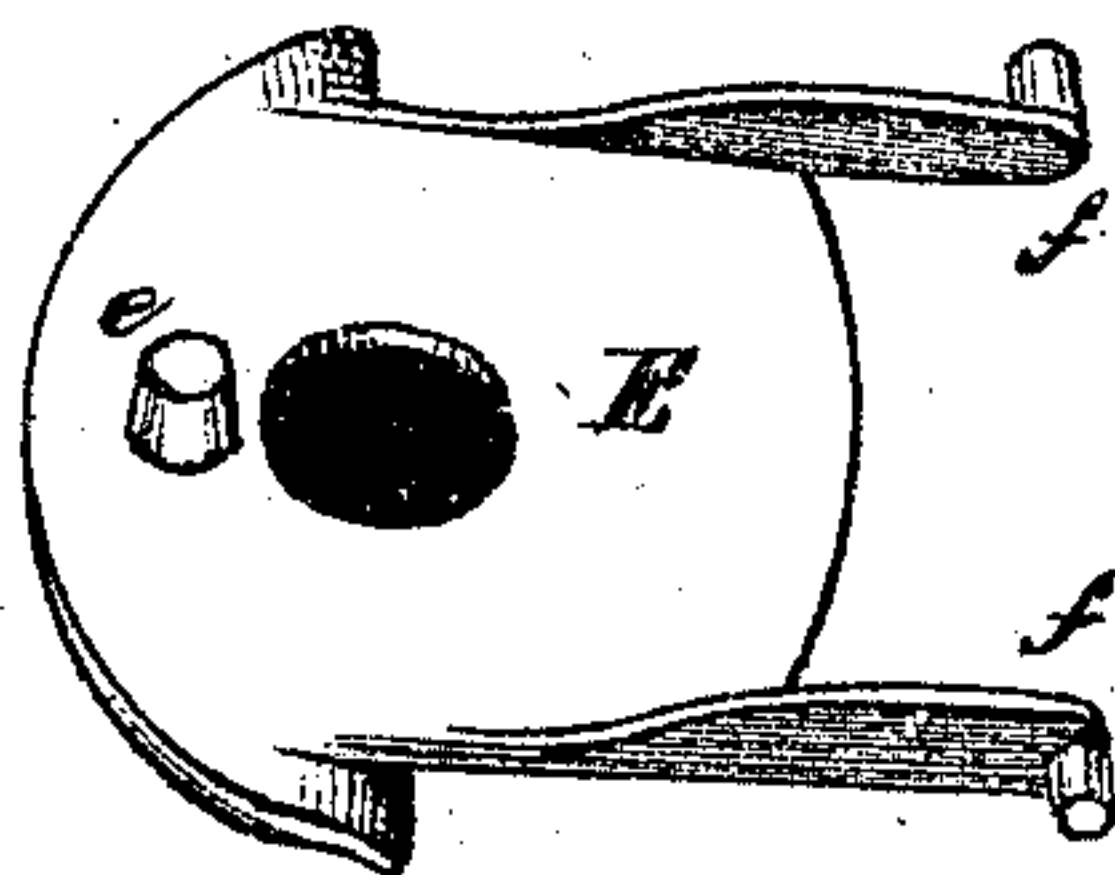


Fig. 4.



WITNESSES.

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IMPROVEMENT IN TRACE-BUCKLES.

Specification forming part of Letters Patent No. 120,561, dated October 31, 1871; antedated October 27, 1871.

To all whom it may concern:

Be it known that I, ALVAH WORSTER, of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Trace-Buckles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side view of my invention. Fig. 2 is a front or face view, and Fig. 3 is a central longitudinal section. Fig. 4 is a detail view.

Similar letters of reference indicate like parts in the several figures.

In the accompanying drawing, A is the tug. B is the hames-tug. C is the buckle-frame. D is the swinging-loop, and E is the tongue-plate. In the swinging-loop buckle as at present constructed there is not sufficient room under the bar of the loop, when it is thrown up for changing the length of the tug, to allow as free a movement of the parts as is desirable; and this objection I obviate by cutting away the rear end of the tongue-plate E and extending from its rear two arms, *ff*, as seen in Fig. 4, these arms being at a proper distance from each other to allow the tug A to pass between them, as shown in Figs. 1 and 2. By this means the plate is entirely out of the way, and is withdrawn altogether from under the bar of the loop D when the buckle is open, as shown in Fig. 3, thus making the buckle much more roomy for regulating the length of the tug, and also materially improving its capacity

or adaptability for holding tugs of various thicknesses. By this construction the tongue is less liable to become disengaged or be shaken out of the tug when it is pushed forward. I attach the buckle-frame C to the hames-tug B by a screw-bolt, *g*, and use the same screw or bolt for securing the swinging-loop D to the buckle-frame C, as shown in Fig. 2. I place the bar *c*, Fig. 3, of the buckle-frame at such a height as to bear against the rear side of the tug B, to make the bend in the tug more gradual, instead of the bend coming all in one place where it rests upon the swell at the rear end of the hames-tug; and this tends to make the tug wear better, as it is strained less at said bend on the rear end of the hames-tug.

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

1. In connection with the swinging-loop D and buckle-frame C, the tongue-plate E having extensions or arms *ff*, projecting between which the strap passes from its rear end, substantially as and for the purpose herein specified and shown.

2. The swinging-loop D and buckle-frame C, united by the screw-bolt *g*, when the said screw-bolt also serves to secure the buckle to the hames-tug, substantially as herein described and shown.

The above specification of my invention signed by me this 6th day of April, 1870.

Witnesses: ALVAH WORSTER.

WM. J. DODGE,
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(23)