

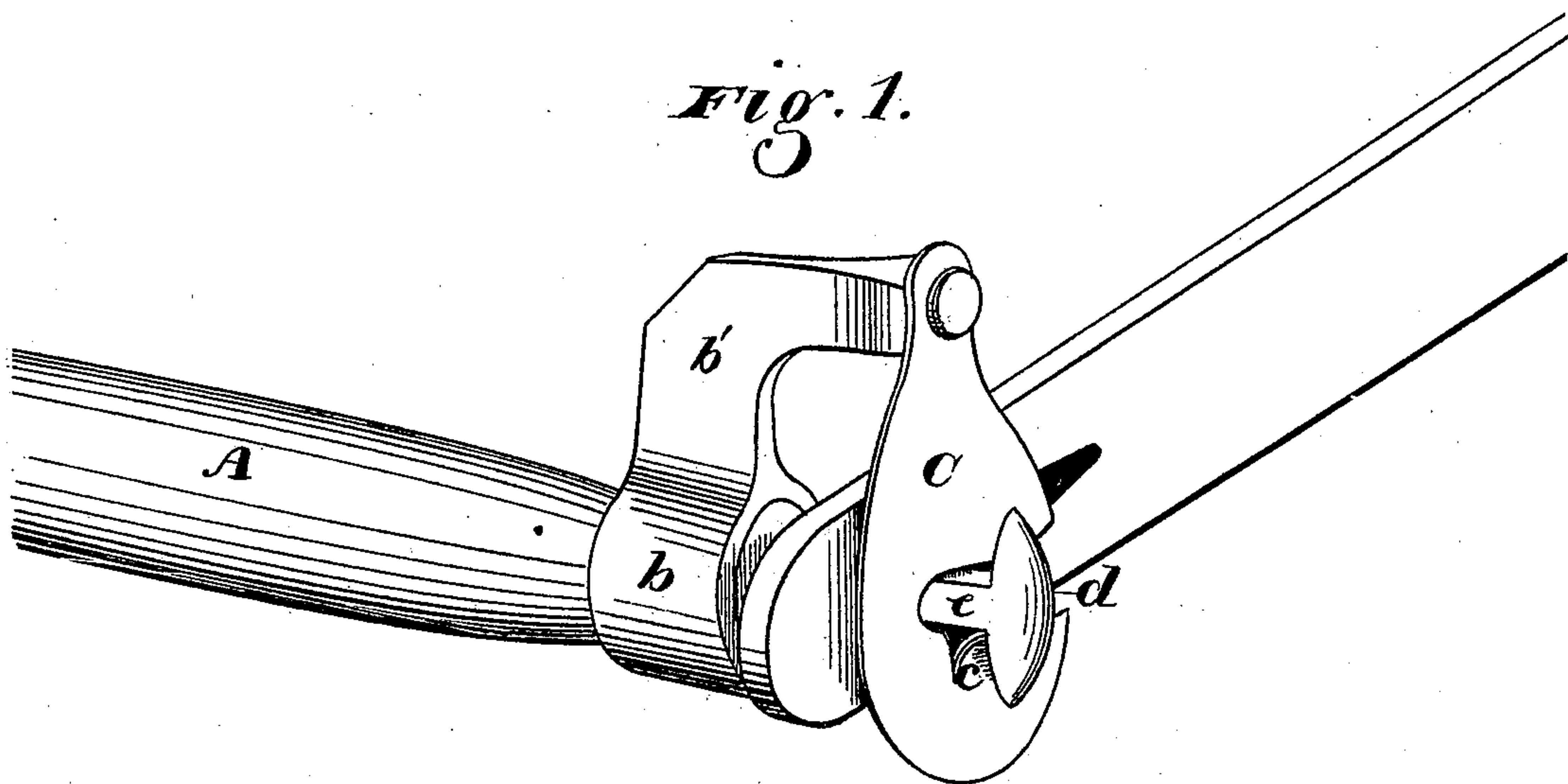
W. QUINLAN & A. PEERS.

TRACE-FASTENER.

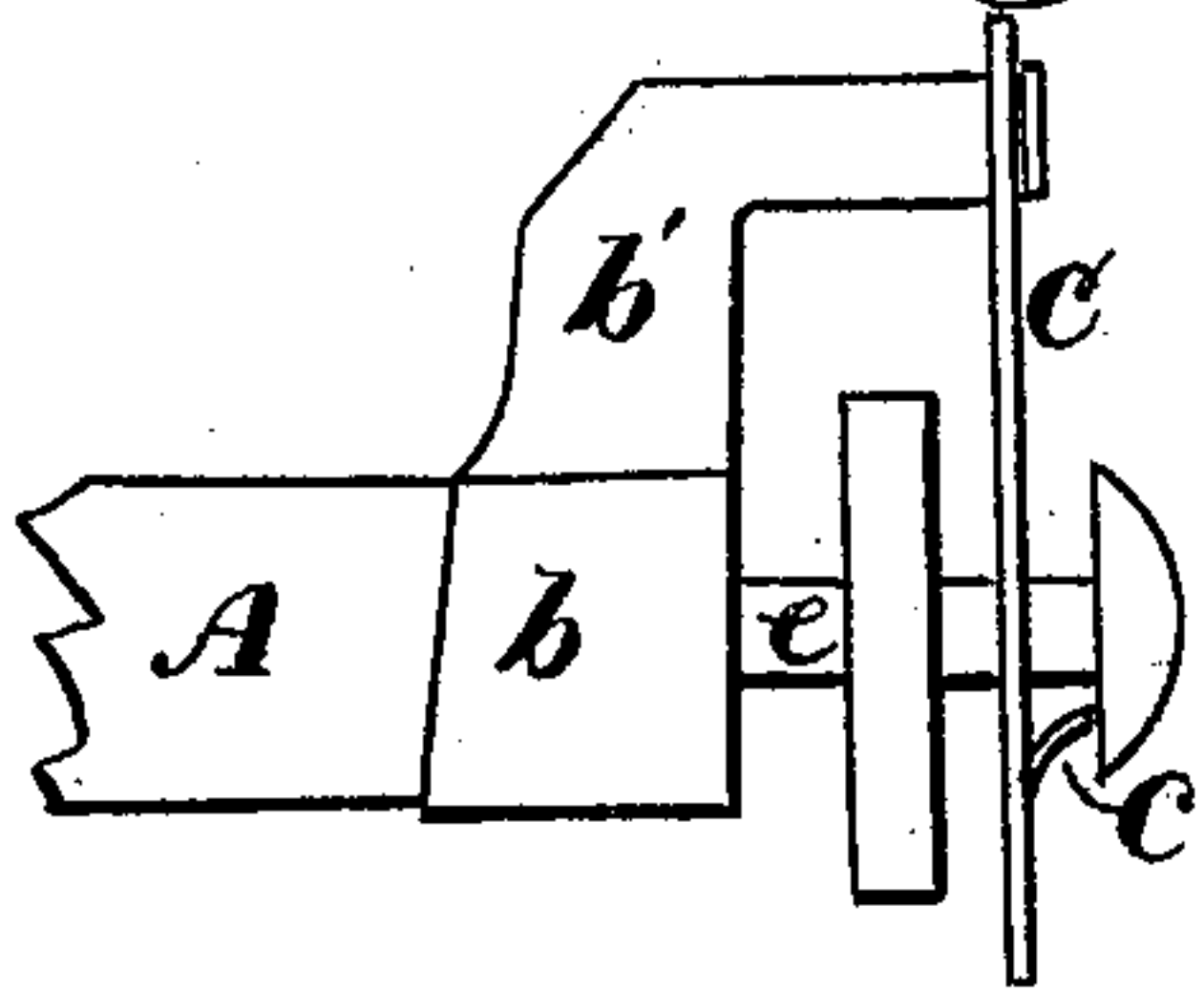
No. 177,423.

Patented May 16, 1876.

*Fig. 1.*



*Fig. 2.*



Witnesses

*Geo. H. Strong.*  
*John L. Bone.*

Inventor

*William Quinlan*  
*Alexander Peers*  
*by Henry V. B.*  
*their Attorneys.*

# UNITED STATES PATENT OFFICE.

WILLIAM QUINLAN AND ALEXANDER PEERS, OF MAYFIELD, CALIFORNIA.

## IMPROVEMENT IN TRACE-FASTENERS.

Specification forming part of Letters Patent No. **177,423**, dated May 16, 1876 ; application filed March 24, 1876.

*To all whom it may concern :*

Be it known that we, WILLIAM QUINLAN and ALEXANDER PEERS, of Mayfield, Santa Clara county, State of California, have invented a Trace-Fastener ; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention without further invention or experiment.

A very common method of preventing traces from slipping over the heads of such pins as are usually secured to the ends of single-trees for vehicles of all descriptions has been to pass a thin strip of leather through an opening formed in the head of such pin. This, however, is open to the objection that the leather is extremely liable to rot and break off, and it is therefore the object of this invention to obviate such objectionable feature, and to provide a simple, durable, and effective means whereby the trace can be easily secured in place, and all liability of accident avoided. To this end our invention consists, substantially, in a spring-catch plate, which is pivoted to a bent arm, connected with the end of a single-tree and arranged to engage with the pin upon which the trace is held.

Referring to the drawing, A represents the single-tree, the ferrule *b* at the end of which has an extension or arm, *b'*, and to the end of this arm the swinging catch-plate *c* is pivoted. This is a very convenient way of forming such arm, although it is evident that other mechanical equivalent might be adapted with good

success. The plate *c* has a slot or opening, *d*, designed to fit over the pin *e* after the trace has been slipped thereon, as illustrated in the figure of the drawing, and it is held in this position by reason of a lip or projection, *c'*, which bears against the head of the pin *e*. The plate *c* is made of plate-steel or other equivalent material, and is sufficiently thin to allow it to spring inward when pressure is applied to its free end. The spring of the plate keeps the lip engaged with the head of the pin, and in order to relieve the catch from the pin for the purpose of removing the trace, the plate *c* is pressed inward or toward the single-tree until the lip thereon is freed from the pin-head. After this the plate may be swung around upon its pivot and the trace slipped from off the pin.

A rigid swing plate could be applied, in which case a separate spring would have to be used to catch upon a projection on the pin-head.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The catch-plate *c*, pivoted to a bent arm, *b*, and constructed to engage with the pin *e*, outside of the trace, in combination with the single-tree A, substantially as and for the purpose specified.

WILLIAM QUINLAN.  
ALEXANDER PEERS.

Witnesses:

GEO. H. STRONG,  
JNO. L. BOONE.