

No. 849,668.

PATENTED APR. 9, 1907.

W. H. FAILOR.
TRACE.

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Fig. 1.

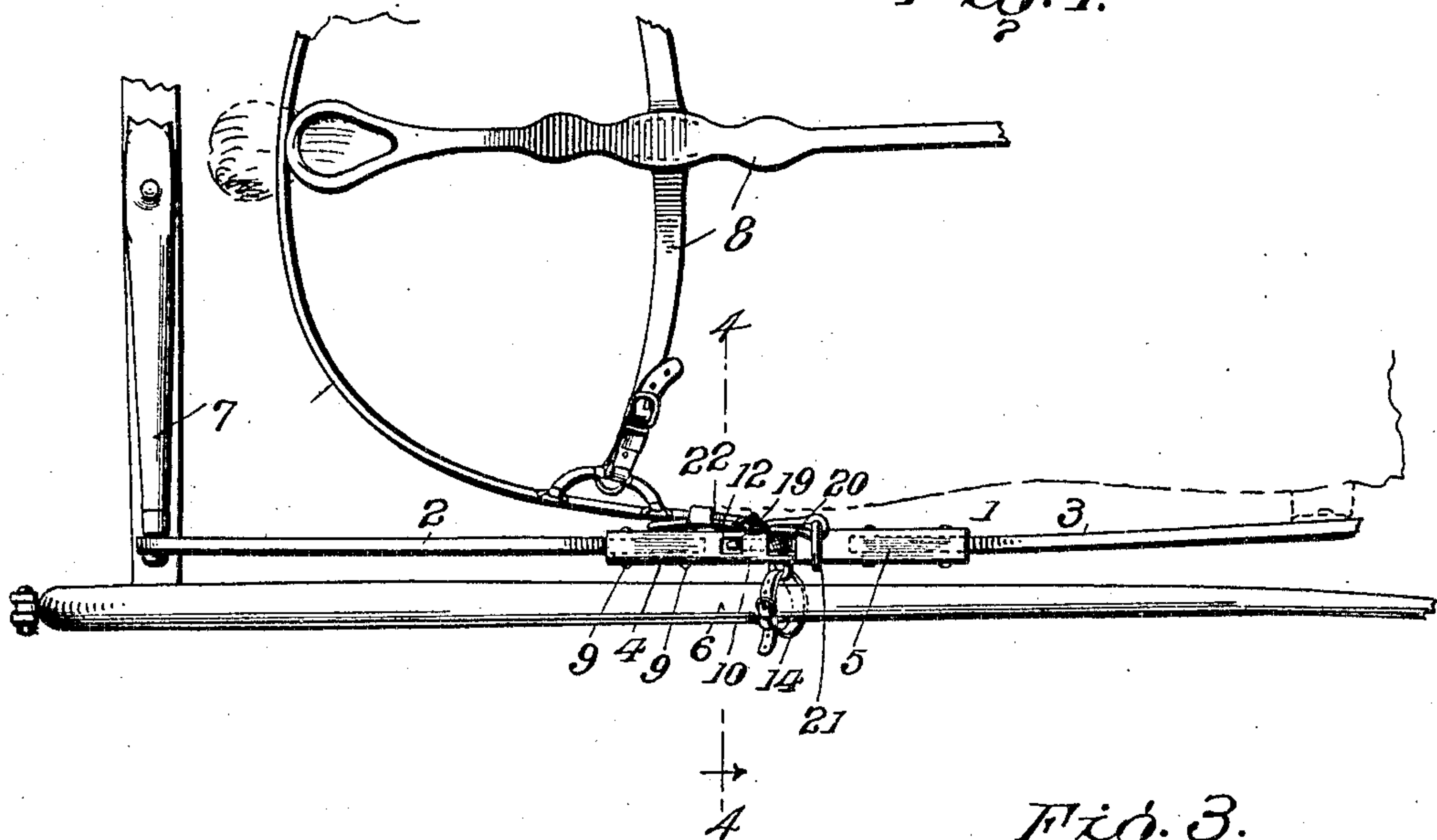
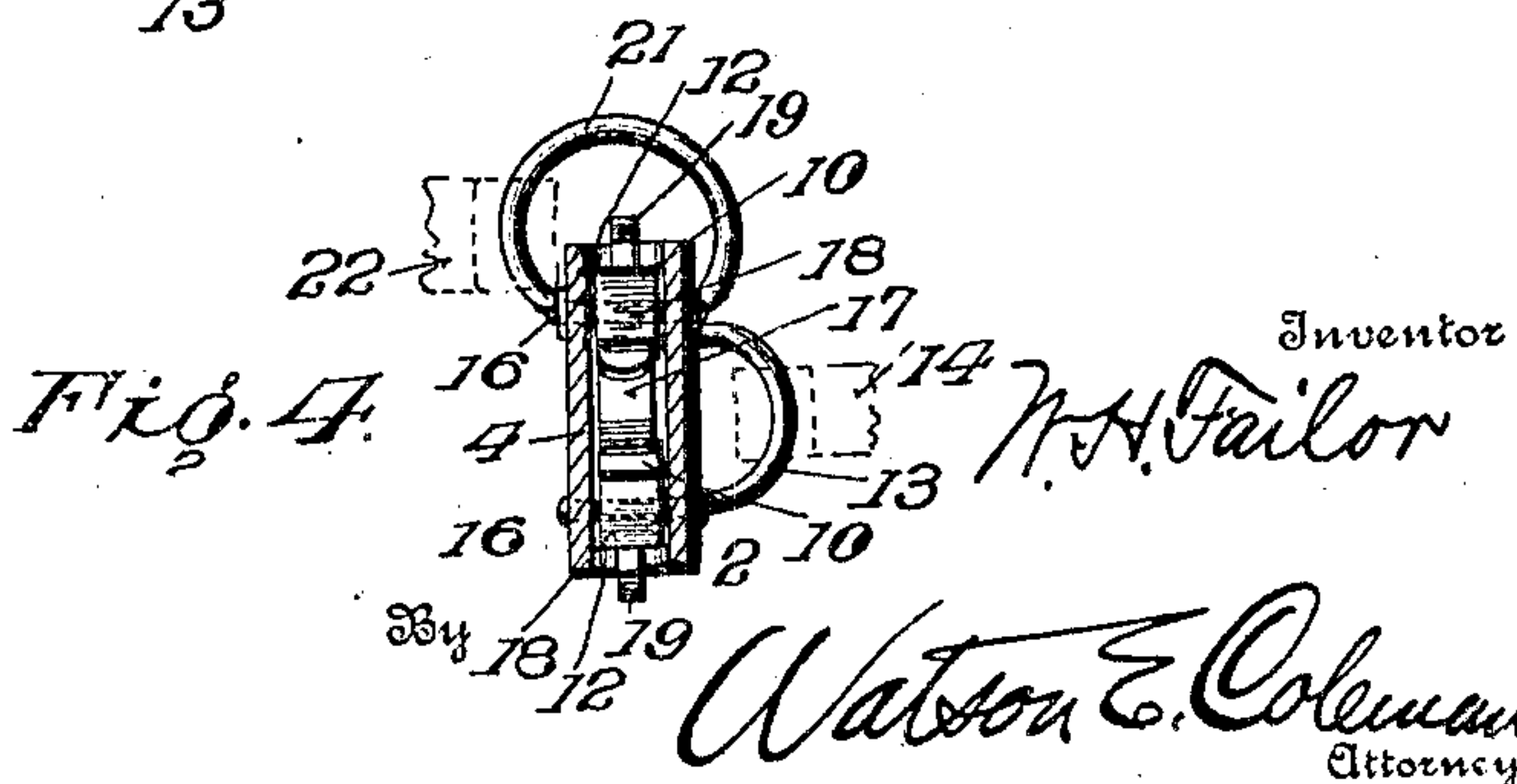
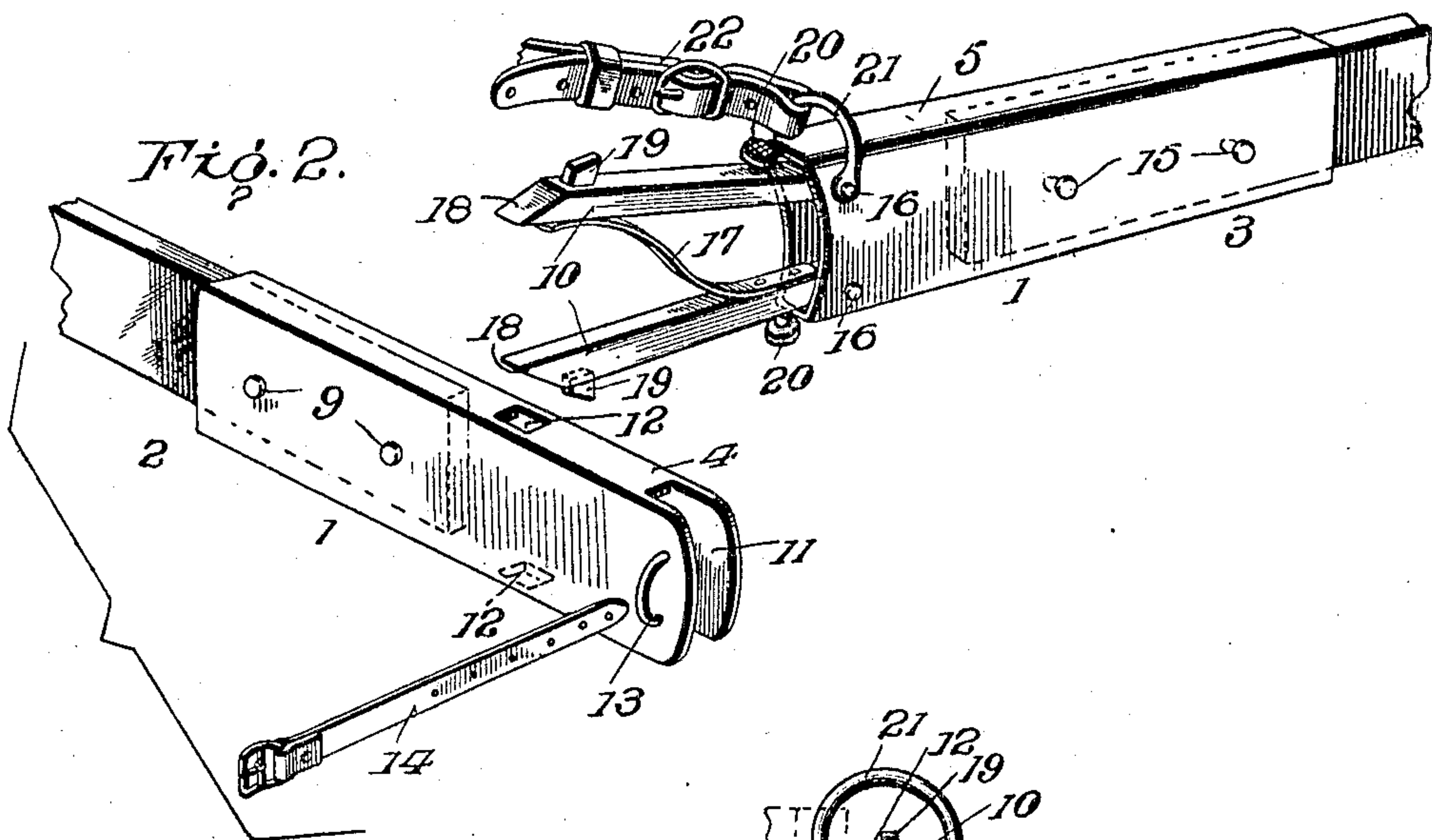


Fig. 3.



Witnesses
Jno. Amie
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UNITED STATES PATENT OFFICE.

WILLIAM H. FAILOR, OF CARLISLE, PENNSYLVANIA.

TRACE.

No. 849,668.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM H. FAILOR, a citizen of the United States, residing at Carlisle, in the county of Cumberland and State of Pennsylvania, have invented certain new and useful Improvements in Traces, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in traces, and more particularly to one made of two detachable sections, one of which is carried by the harness and the other by the vehicle, so that the horse or draft-animal may be quickly and conveniently hitched and unhitched without the necessity of adjusting and fastening the holdback-straps or passing the traces through the usual guides on the shafts and attaching their rear ends to the swingletree.

The object of the invention is to provide a two-part trace of this character having a simple and practical detachable coupling and means for supporting its sections or members from the harness and the shafts or thills of the vehicle.

Other objects and advantages of my invention, as well as the structural features by means of which these objects are attained, will be made clear by an examination of the specification, taken in connection with the accompanying drawings, in which the same reference-numerals indicate corresponding parts throughout, and in which—

Figure 1 is a plan view of a portion of a vehicle shaft or thill and a harness, showing the application of my improved draft-trace. Figs. 2 and 3 are perspective views of the two members of the trace-coupling; and Fig. 4 is a transverse sectional view, on an enlarged scale, taken on the plane indicated by the line 4-4 in Fig. 1 and looking in the direction of the arrow.

Referring to the drawings by numeral, 1 denotes my improved trace, which is formed of two sections 2 and 3, adapted to be quickly and easily connected and disconnected by means of a coupling consisting of two members 4 and 5. The trace-section 2 has the coupling member 4 upon its forward end, and its rear end is secured to the swingletree 7 on the cross-piece of the shafts; but any other suitable connection may be employed. The trace-section 3 has the coup-

ling member 5 upon its rear end, and its front end is connected in the usual manner to the breast-strap or collar of the harness 8.

The coupling member 4 is preferably in the form of a hollow rectangular body or casting in one end of which the trace-section 2 is secured by rivets or similar fastenings 9. The other end of this body or casting is rounded and open to receive the spring jaws or arms 10 upon the other coupling member 5. The top and bottom of said body or casting is recessed or cut away slightly at said open end, as shown at 11, and in said top and bottom are formed recesses or openings 12, which form seats for the spring-arms 10. Upon the inner side of the body or casting adjacent to its open forward end is provided a loop 13 to receive a strap or similar connection 14, which passes loosely around the shaft 6 and supports the forward end of the trace-section 2, so that the latter will always be within convenient reach. As shown, the loop 13 is cast integral with said body; but it may be formed separate and secured thereto. The coupling member 5 is also in the form of a hollow casting having the rear end of the trace-section 3 secured in one of its open ends by rivets or the like 15. The jaws or arms 10 are pivoted in the other open end of this casting by rivets, bolts, or the like 16, passed transversely therethrough, and their projecting outer ends are forced apart by a flat spring 17, disposed between them, as shown. Said outer ends of the arms 10 are beveled, as at 18, to permit them to readily enter the open end of the coupling member 4, and upon their outer faces are formed vertically-projecting lugs 19, which are adapted to enter or seat in the recesses or openings 12 in the top and bottom walls of the member 4 to lock the latter to the member 5. In order to permit the arms 10 to be readily forced together, so that they can be easily inserted in and removed from the member 4, I provide them with finger-pieces or buttons 20, which enter the recesses 11 in said member 4 when the two members are coupled. Upon the top of the body or casting of the member 5 I provide a loop 21, to which the usual holdback-strap 22 is connected, so that the rear end of the trace-section 3 is thus supported and it will not be necessary to adjust and fasten the holdback each time the animal is hitched up to the shafts. As shown,

this loop 21 spans the member 5 and is secured to it by the upper rivet or bolt 16, which passes through its apertured ends.

The construction, use, and advantages of the invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings. It will be noted that when these improved traces are used the animal may be quickly and easily hitched and unhitched by simply connecting and disconnecting the two members of the coupling and without the necessity of adjusting and fastening the holdback-straps or securing the rear ends of the traces to the swingletree. The coupling is of simple and durable construction and, if desired, may be made ornamental.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention as defined by the appended claims.

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

1. The combination with a trace consisting of two sections, one carried by a harness and the other by a vehicle, of a coupling connecting said sections and consisting of detachable members, means for connecting one of said members to a shaft, and means for connecting a holdback to the other of said members.

2. The combination with a trace consisting of two sections, one carried by a harness and the other by a vehicle, of a coupling connecting said sections and consisting of detachable members, a loop upon one of said members, a band upon said loop to loosely engage

a shaft, and a loop upon the other of said members to receive a holdback-strap, substantially as described.

3. The combination with a trace consisting of two sections, one carried by a harness and the other by a vehicle, of a coupling connecting said sections and comprising two hollow members having the ends of the trace-sections secured therein, one of said members being formed with recesses or openings, spring-actuated jaws or arms pivotally mounted in the other of said members and adapted to engage said recesses or openings, means upon one of said members to receive a holdback, and means upon the other of said members for attachment to a shaft, substantially as described.

4. The combination with a trace consisting of two sections, one carried by a harness and the other by a vehicle, of a coupling connecting said sections and comprising two hollow members having the ends of the trace-sections secured therein, one of said members being formed with recesses or openings, arms pivoted in the other of said members, a spring between said arms for forcing them apart, lugs upon the beveled outer ends of said arms to enter said recesses or openings, a loop upon one of said members, a band upon said loop for engagement with a shaft, and a loop upon the other of said members to receive a holdback-strap, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

WILLIAM H. FAILOR.

Witnesses:

E. T. HEFFELFINGER,
C. A. BURKHOLDER.