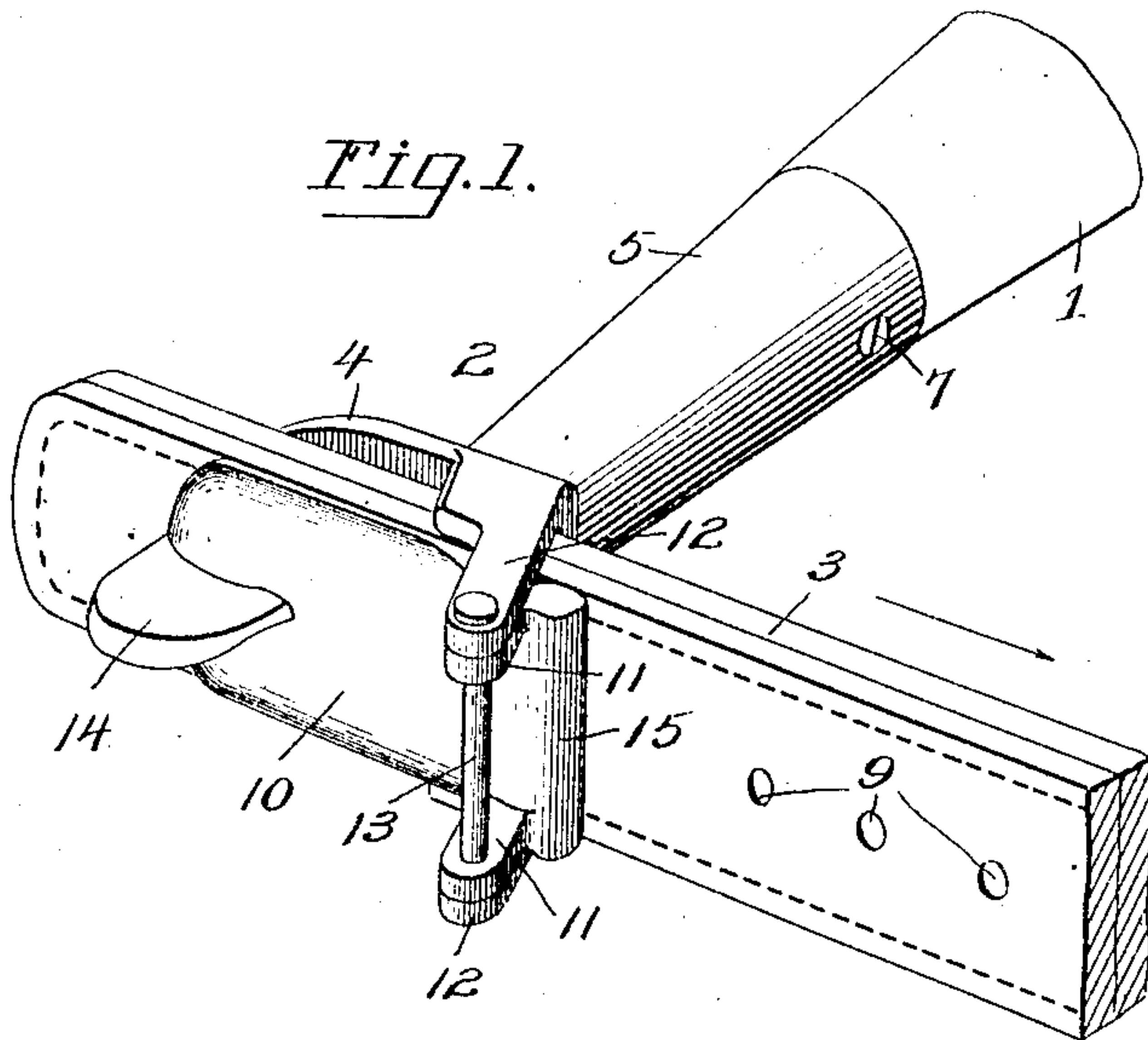


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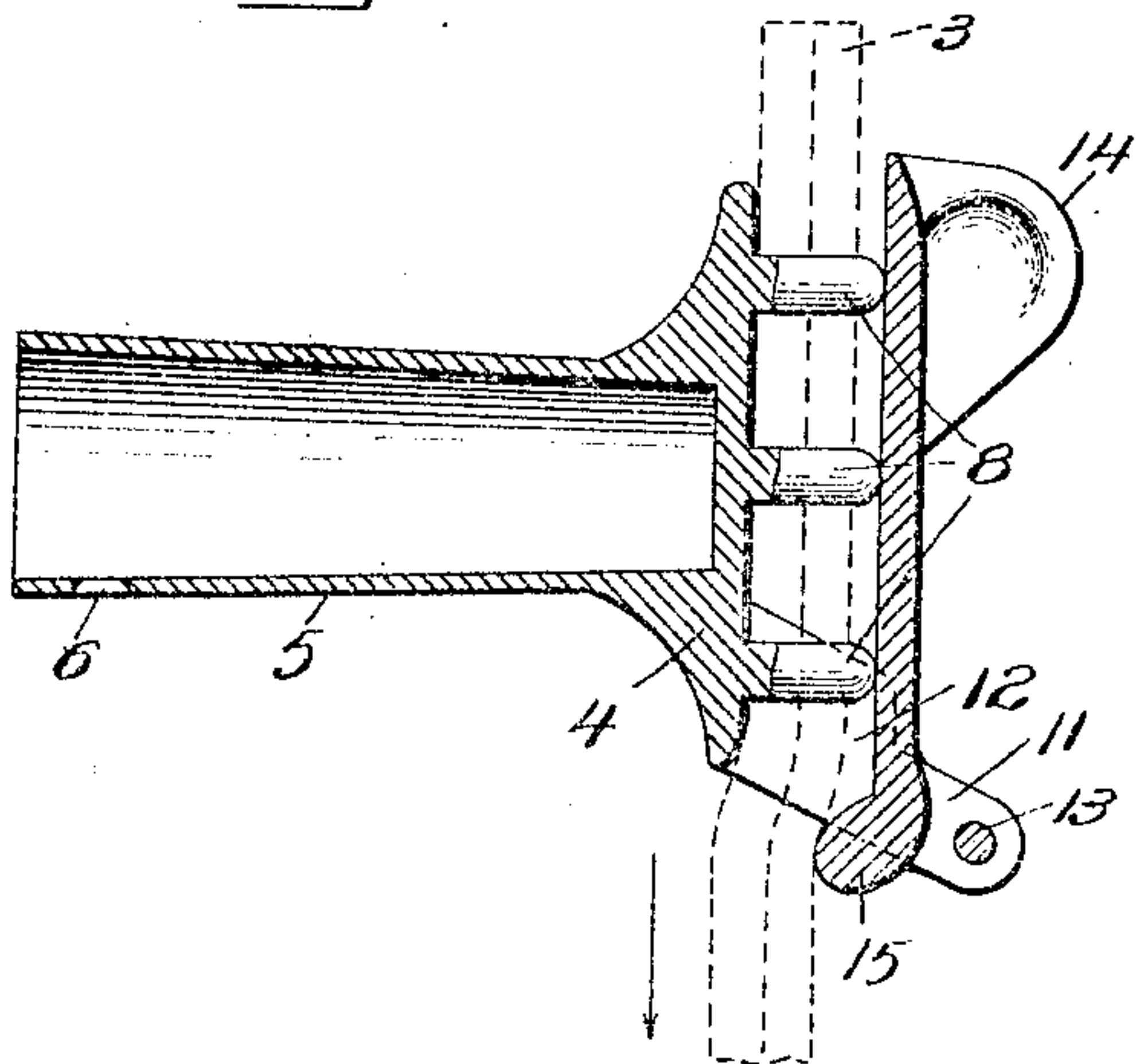
PATENTED MAY 19, 1908.

S. D. RIEGEL.  
SWINGLETREE ATTACHMENT.  
APPLICATION FILED APR. 10, 1907.

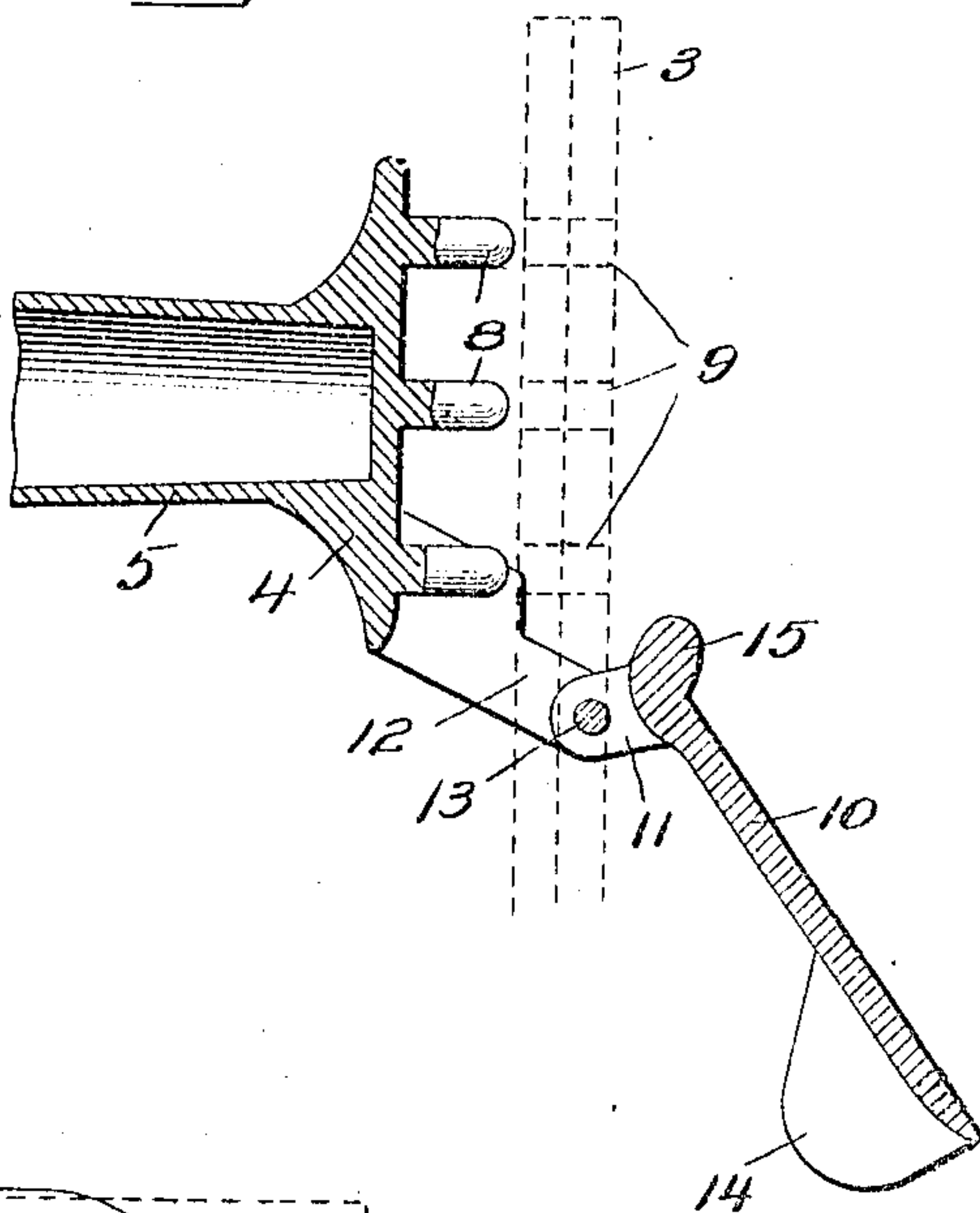
*Fig. 1.*



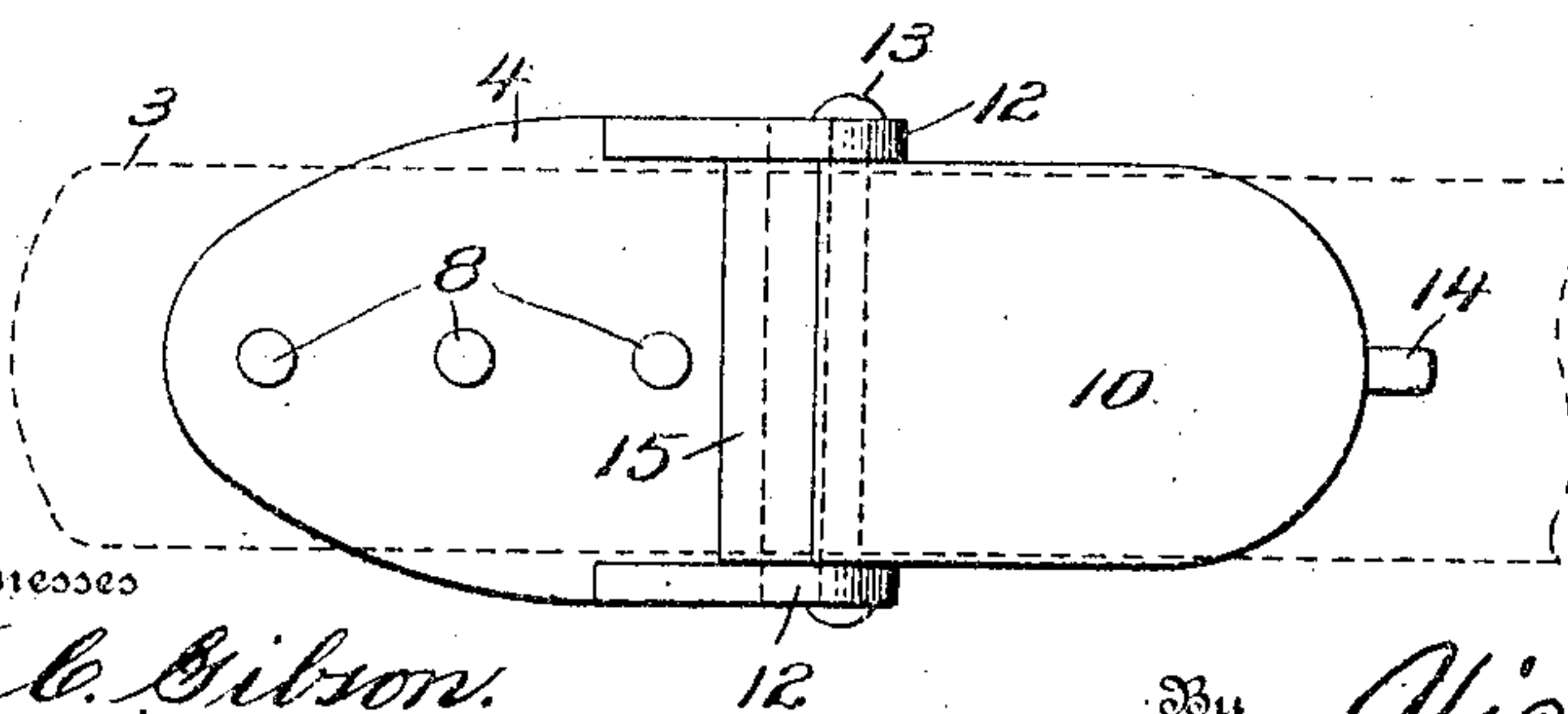
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses

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# UNITED STATES PATENT OFFICE.

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## SWINGLETREE ATTACHMENT.

No. 888,194.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed April 10, 1907. Serial No. 367,382.

*To all whom it may concern:*

Be it known that I, SAMUEL D. RIEGEL, a citizen of the United States, residing at Experiment, in the county of Spalding and State of Georgia, have invented new and useful Improvements in Swingletree Attachments, of which the following is a specification.

This invention relates to a swingletree attachment whereby the traces of a harness can be readily attached to or detached from the swingletree and firmly held in position.

The invention has for one of its objects to improve and simplify the construction and operation of devices of this character, so as to be comparatively easy and inexpensive to manufacture, thoroughly reliable and efficient in use and having its parts so arranged as to permit a trace to be conveniently and quickly attached or detached.

A further object of the invention is to provide a trace holding device for swingletrees in which the parts are so arranged that the holding effect becomes greater as the draft on the trace increases.

A still further object of the invention is the provision of a trace holding device, so designed that there will be no movement on the trace at its rear end, accompanying the up and down movement of the horse as in trotting, so that there will be no perceptible wear on the parts of the device, thereby overcoming one of the great objections to other ordinary swingletrees in which the traces are free to oscillate with the movement of the horse to gradually wear the parts away so that breakage occurs.

With these objects and others in view, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts, which will be more fully described hereinafter and set forth with particularity in the appended claims.

In the accompanying drawing, which illustrates one of the embodiments of the invention:—Figure 1 is a perspective view of one end of a swingletree with the attachment applied and showing the rear portion of a trace. Fig. 2 is a central horizontal section of the trace holder or attachment. Fig. 3 is a similar view showing the hinged member or keeper of the device in open position for permitting a trace to be attached or detached. Fig. 4 is a side view of the device with a keeper in open position.

Similar reference characters are employed to designate similar parts throughout the several views.

Referring to the drawing, 1 designates a portion of the swingletree of ordinary construction, on the end of which is applied a trace holder or attachment designated generally by 2 whereby the trace 3 is connected with the swingletree.

The device 2 comprises a head 4 formed integral with a sleeve 5 whereby a ferrule-like body is presented, the sleeve portion having an aperture 6 for the reception of a screw 7, as shown clearly in Fig. 1, whereby the device is rigidly secured to the swingletree. Extending outwardly from the flat surface of the head 4, are spaced lugs 8 formed integral therewith and having their outer ends rounded so as to freely receive the trace. In the present instance, three such lugs are shown and the trace has groups of horizontally extending transverse apertures 9, for permitting the trace to be adjustably secured to the device 2; in other words, the trace can be lengthened or shortened by inserting the lugs 8 into any one of the groups of openings 9.

In order to hold the trace on the lugs 8 and prevent lateral displacement, a keeper 10 is employed, which is a hinged member provided with ears 11 at one end, that engage between arms 12, extending outwardly from the head 4 and these arms and ears are apertured to receive a pintle 13 whereby the keeper is free to swing outwardly and forwardly away from the head 4. The arms 12 are so arranged and proportioned as to permit the trace to be moved longitudinally between the arms at the top and bottom and the hinged end of the keeper and lugs 8 at the sides. At the free end of the keeper is a finger hold 14 to be gripped between the thumb and first finger, whereby the keeper can be open or closed. On the hinged end of the keeper is an inwardly extending cam 15 that is adapted to engage on the outer surface of the trace. The object of this cam is to cause the draft on the trace to hold the keeper tightly in position and thus constitutes a locking device whereby the keeper is prevented from opening as long as the draft is maintained on the trace.

In practice the trace is fastened by first throwing the keeper 10 to the position shown in Fig. 3, whereupon the trace can be moved



from the front between the keeper and the lugs 8, as shown by dotted lines in Fig. 2. While the openings are in register with the lugs 8, the trace is pushed laterally so as to engage it over on the lugs. The keeper 10 is then swung closed to the position shown in Fig. 2, whereby the cam causes the trace to be offset at that point as indicated by dotted lines in Fig. 2. Hence, as draft is applied to the trace, the latter acts on the cam so as to move the latter forwardly and thus hold the keeper in contact with the extremities of the lugs 8. When it is desired to detach the trace, it is merely necessary to ease up on the latter and swing the keeper outwardly, whereupon the trace can be disengaged from the lugs and pulled forwardly out of the trace holder. The arrangement of the parts is such that the trace is prevented from having an oscillatory movement about the point of attachment of the swingletree, so that wear of the parts is reduced to a minimum.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of construction and method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the claims.

What is claimed, is:—

1. A trace holder for swingletrees comprising a socketed body having a disk-shaped head at one end, a plurality of members arranged in a row and extending in a direction parallel of the axis of the socket; a keeper adapted to bear against the extremities of the members for holding a trace thereon, means for hingedly mounting the keeper on the head,

and a cam on the keeper adapted to extend transversely of the trace to be engaged thereby for holding the keeper in position.

2. A trace holder for swingletrees comprising a socketed member having a disk-shaped head, a plurality of parallel members arranged in a row and extending outwardly from the head in a direction parallel to the length of the swingletree, a pair of spaced arms on the head, a swinging keeper disposed parallel with the head when bearing against the extremities of the members, a pivot for mounting the keeper on the arms, and a cam on the hinged end of the keeper adapted to offset a trace and cause the draft on the latter to maintain the keeper in locking position.

3. A trace holder for swingletrees comprising a suitably shaped body fixed on the swingletree, an outwardly-extending member adapted to project through an aperture in a trace and arranged to prevent vertical movement of the trace, a keeper hinged at its front end to the body and adapted to bear directly on the said member to prevent lateral disengagement of the trace from the member, and means on the keeper adjacent the hinged end thereof to be acted on by the trace for holding the keeper in position.

4. A trace holder for swingletrees comprising a suitably shaped body, an outwardly extending member thereon for engaging an aperture in the trace, arms on the body, a keeper hingedly mounted on the arms and arranged to permit the trace to be inserted between the keeper and body, and a device on the keeper arranged to permit the draft on the trace to hold the keeper in closed position.

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

SAMUEL D. RIEGEL.

Witnesses:

W. A. BAKER,  
E. W. DOE.