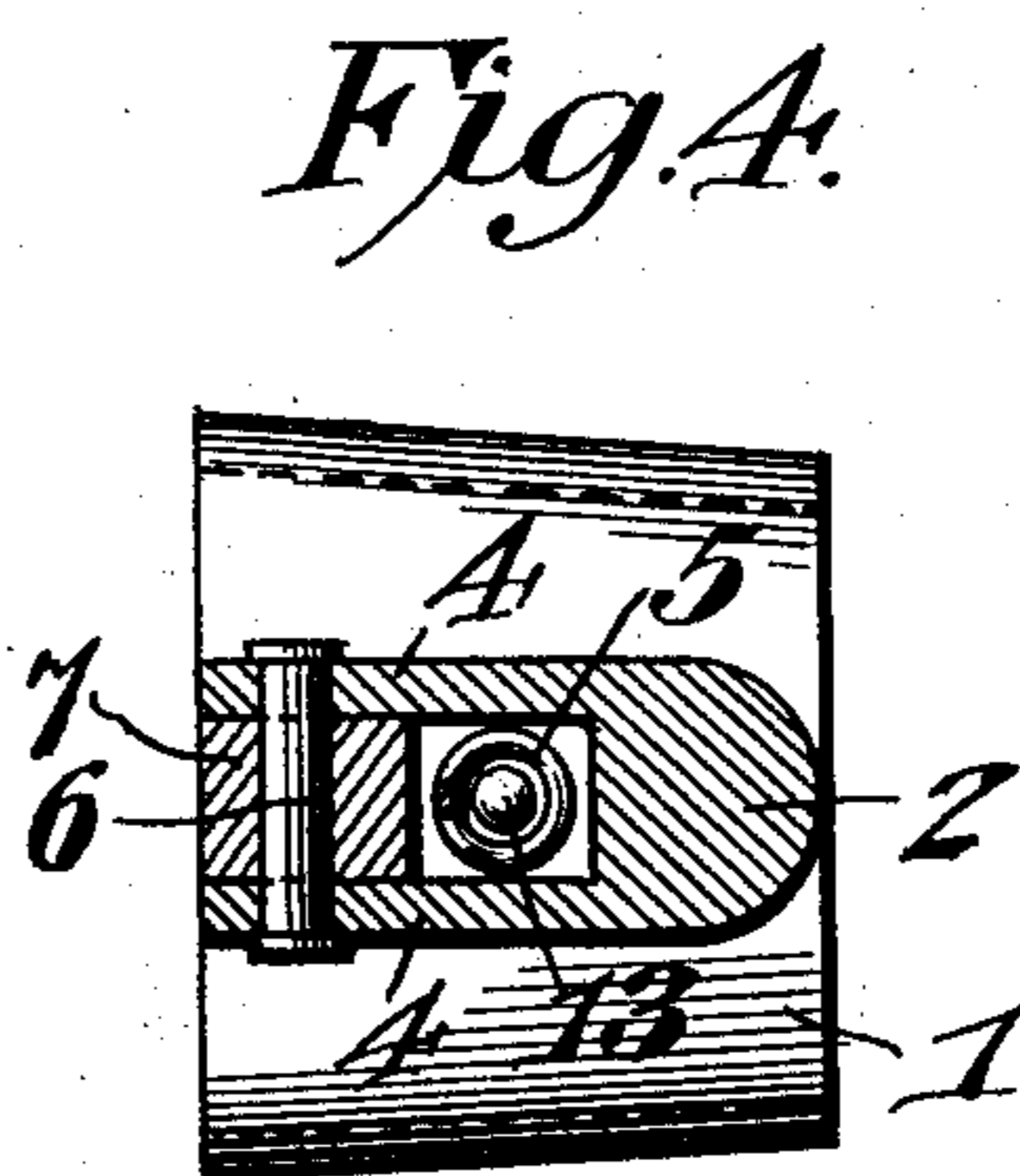
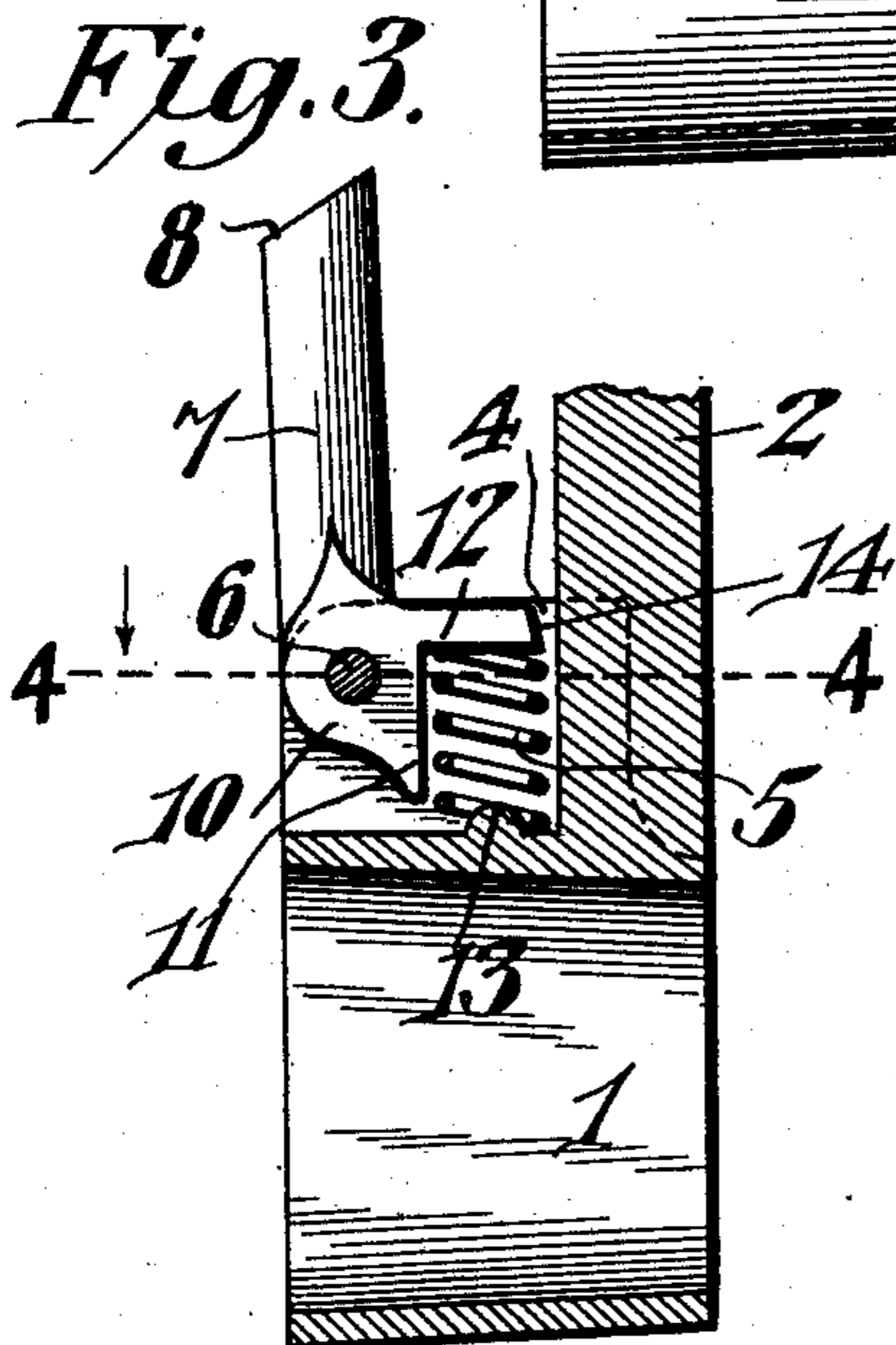
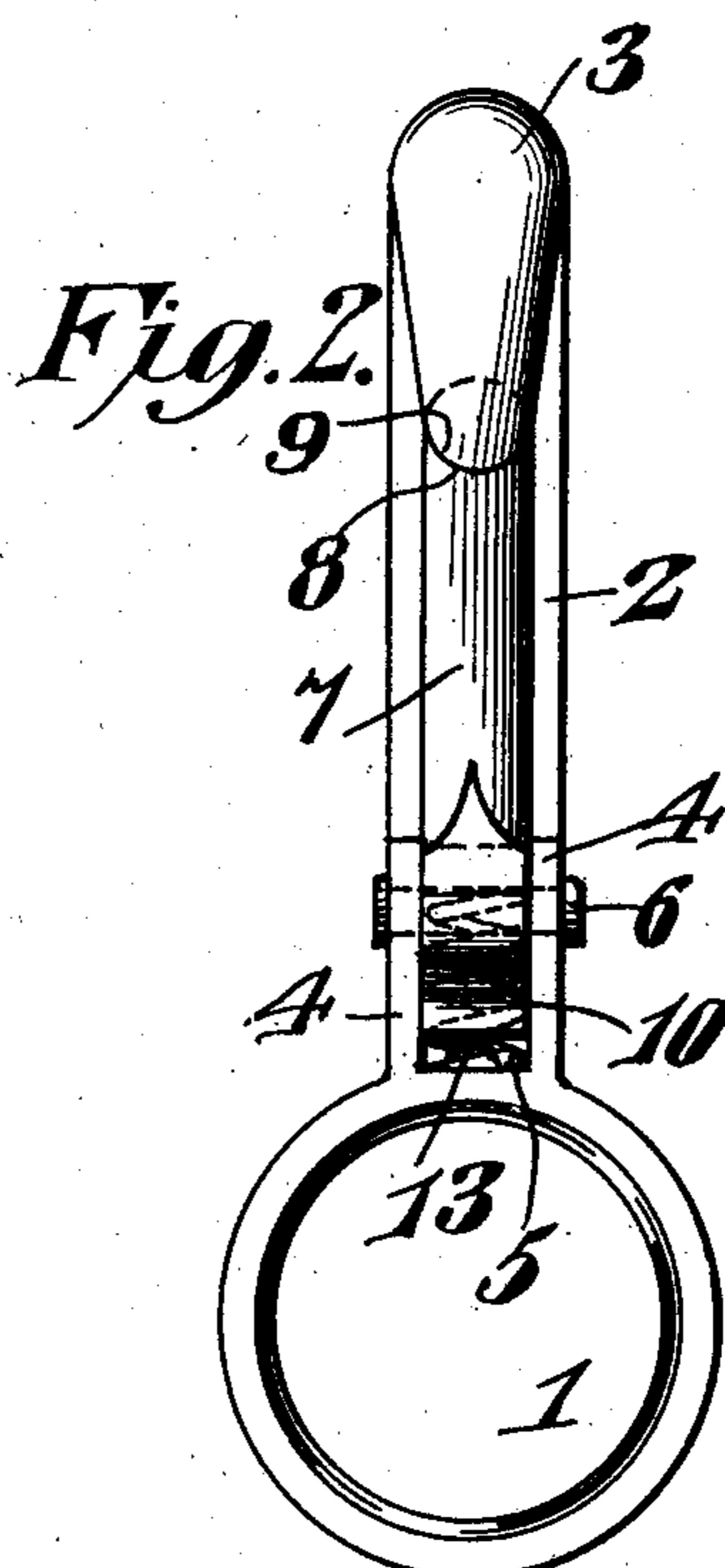
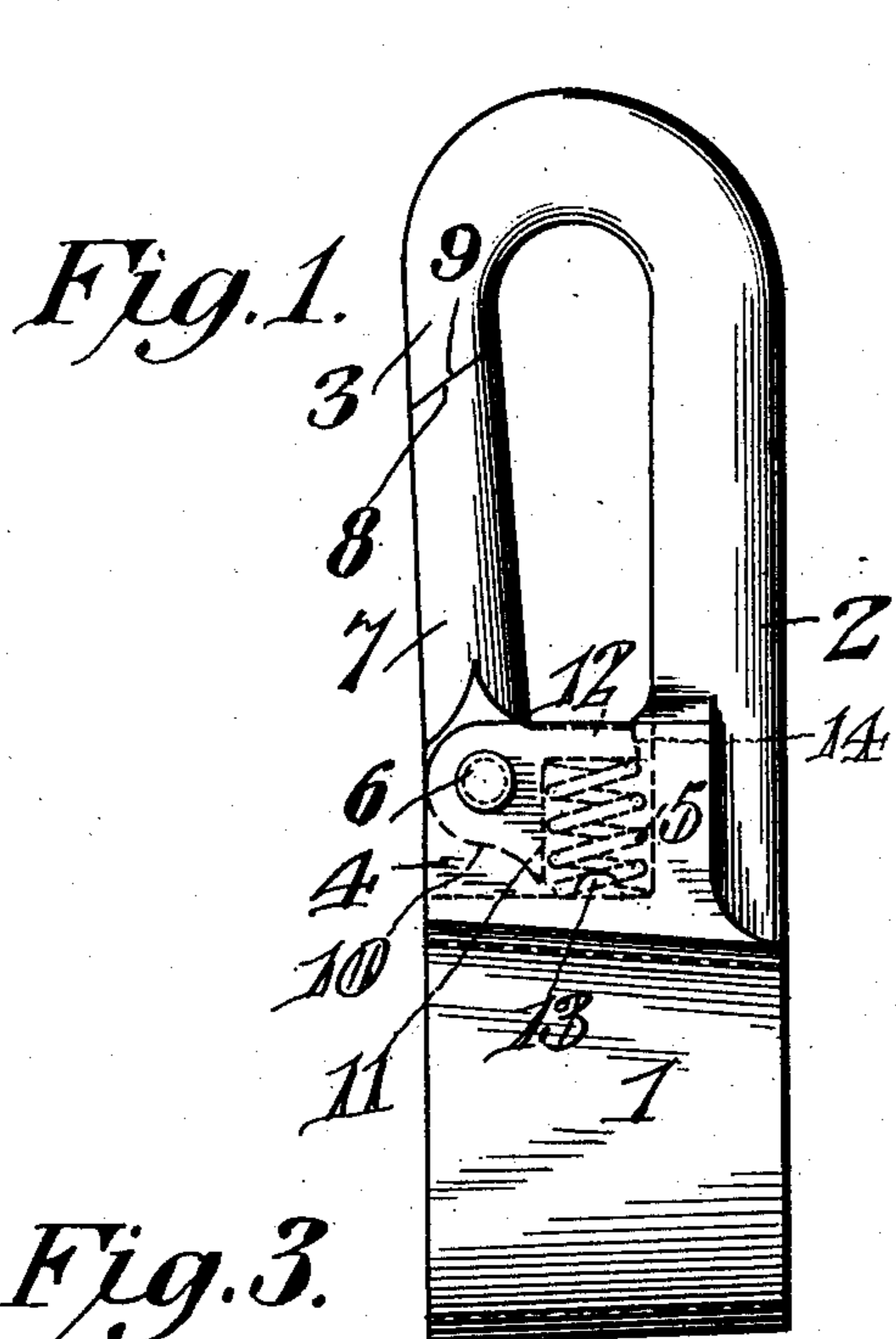


G. S. MacLEOD.
SAFETY WHIFFLETREE CLIP.
APPLICATION FILED MAR. 10, 1910.

992,787.

Patented May 23, 1911.



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GEORGE STEWARD MACLEOD, OF SEATTLE, WASHINGTON.

SAFETY WHIFFLETREE-CLIP.

992,787.

Specification of Letters Patent.

Patented May 23, 1911.

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To all whom it may concern:

Be it known that I, GEORGE S. MACLEOD, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented a new and useful Safety Whiffletree-Clip, of which the following is a specification.

The invention relates to a safety whiffletree clip.

10 The object of the present invention is to improve the construction of whiffletree clips, and to provide a simple, inexpensive and efficient device, designed particularly for use on the heavier class of vehicles, where the whiffletree is located directly in front of the cross bar and between the thills, and adapted to prevent the thills from being notched and weakened at the inner sides through contact with the trace-attaching means.

20 Another object of the invention is to provide a safety whiffletree clip, adapted to enable a trace to be quickly attached to and detached from a whiffletree, and capable of effectually preventing a trace from becoming accidentally unfastened, whereby accidents resulting from such cause will be eliminated.

30 With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claim hereto appended.

35 In the drawing:—Figure 1 is a plan view of a whiffletree clip, constructed in accordance with this invention. Fig. 2 is an end elevation of the same. Fig. 3 is a horizontal sectional view. Fig. 4 is a transverse sectional view on the line 4—4 of Fig. 3.

40 Like numerals of reference designate corresponding parts in all the figures of the drawing.

In the embodiment of the invention illustrated in the accompanying drawing, the whiffletree clip includes a sleeve 1, and a hook 2 formed integral with and extending forwardly from the front side of the sleeve and having the outer side face of its shank in flush relation with the outer end of the sleeve, and provided with a bill 3, the outer side face of which is arranged in the plane of the inner end of the sleeve 1. The sleeve is tapered outwardly to fit on the tapering end of a whiffletree (not shown), and the device is provided at the upper and lower faces of the shank of the hook 2 with spaced

flanges 4, extending from the shank of the hook to the inner end of the sleeve, as clearly shown in Fig. 4 of the drawing. The spaced flanges 4 form a housing for a spring 5 and are pierced by a pivot 6, which connects a tongue 7 with the sleeve. The tongue 7 when in its closed position is arranged in flush relation with the inner end of the sleeve, and its free end 8 is beveled and engages a correspondingly beveled face 9 of the bill 3 of the hook. The beveled face 9 of the bill of the hook limits the outward swing of the tongue 7, which is normally maintained in engagement with the bill by the spring 5.

The tongue 7 is provided at its inner end with a flattened head or portion 10 to fit between the flanges 4, and it is provided with a straight inner edge 11 and has a projecting arm 12, located between the front edges or portions of the flanges 4, when the front end of the tongue is in engagement with the bill of the hook. The arm substantially closes the space between the flanges at the front thereof, and the spring 5, which is of spiral form, is arranged between the shank of the hook and the flattened inner end portion or head of the tongue, and is interposed between the arm 12 and the front side of the sleeve, whereby it is adapted to maintain the tongue 7 in its closed position. The sleeve is provided at the front with a rounded projection or protuberance 13, which fits within the inner end of the spring. The end 14 of the arm 12 is curved and is adapted to clear the shank of the hook 2 in the swinging movements of the tongue.

The device is designed particularly for use on whiffletrees, which are arranged immediately in front of the cross bar of a pair of thills and which lie in the plane of the cross bar and the thills. The rigid connection of the hook with the sleeve prevents the hook from swinging outward and contacting with the inner side faces of the thills, and prevents the same from being weakened in such manner. The tongue is adapted to be readily moved inward to connect the trace to the whiffletree and the spring will maintain the tongue firmly in its closed position. The inner face of the tongue is arranged in flush relation with the inner face of the bill of the hook, and the two parts are of uniform cross sectional area, so that they present a smooth continuous surface to the

eye or other connecting device of a trace, and there is no liability of the latter becoming accidentally disconnected from the device. Accidents resulting from such causes
5 are effectually eliminated.

It will be noted upon reference to Fig. 1 of the drawings that the rigid hook 2 extends forwardly from the sleeve in a substantially straight line, and it is then curved
10 inwardly at its front in a lateral direction, and then rearwardly in spaced relation to the straight side of the hook. The tongue 7 extends from the ears in a straight line in substantially parallel relation to the straight
15 side of the rigid hook. At the rear end the projecting arm 12 of the tongue closes the space between the inner end of the tongue and the inner end of the rigid hook. The space defined between the tongue and the
20 hook is substantially oblong, or the form of an elongated loop, wherein the part 12 of the hook forms a closure for the inner end of the loop, while the curved end of the rigid hook closes the outer end of the loop. In
25 this way, when a chain is coupled to the clip, it is held to a prescribed path and cannot deviate therefrom to any material extent. It can move backwardly and forwardly in accordance with the draft, but it cannot shift
30 sidewise, and it cannot in its back and forth movement injure the spring, for the arm 12 serves as a protection for the spring.

I claim—

35 A whiffletree clip including a sleeve adapted to be arranged on the end of a whiffletree, a hook formed integral with the sleeve and extending forwardly therefrom at the front

side thereof in a substantially straight line, the outer side of the hook being substantially flush with the outer end of the sleeve,
40 said hook having its outer end curved laterally inward and then backward, integral flanges extending along the front side of the sleeve from the shank of the hook to the inner end of the said sleeve, a tongue closing
45 the space between the inner ends of the flanges and pivoted to the same and extending in a straight line toward and engaging the inwardly-turned outer end of the rigid hook, said tongue when in its normally engaged
50 position being arranged substantially parallel with the straight portion of the rigid hook, said tongue being further provided at the outer edges of the flanges with an inwardly extending arm which closes the
55 space between the flanges, and a spring housed within the space between the flanges and held in place by the inner ends of the tongue, the hook and the said inwardly extending arm, said spring engaging said arm
60 to maintain the tongue in its closed position, whereby the rigid hook with its curved outer end and the tongue with its forwardly extending arm form an inclosed elongated loop
65 in which the link or other engaging part is caused to be received and allowed to play.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE STEWARD MacLEOD.

Witnesses:

L. N. LINKLETTER,
WALTER SHAVE.