

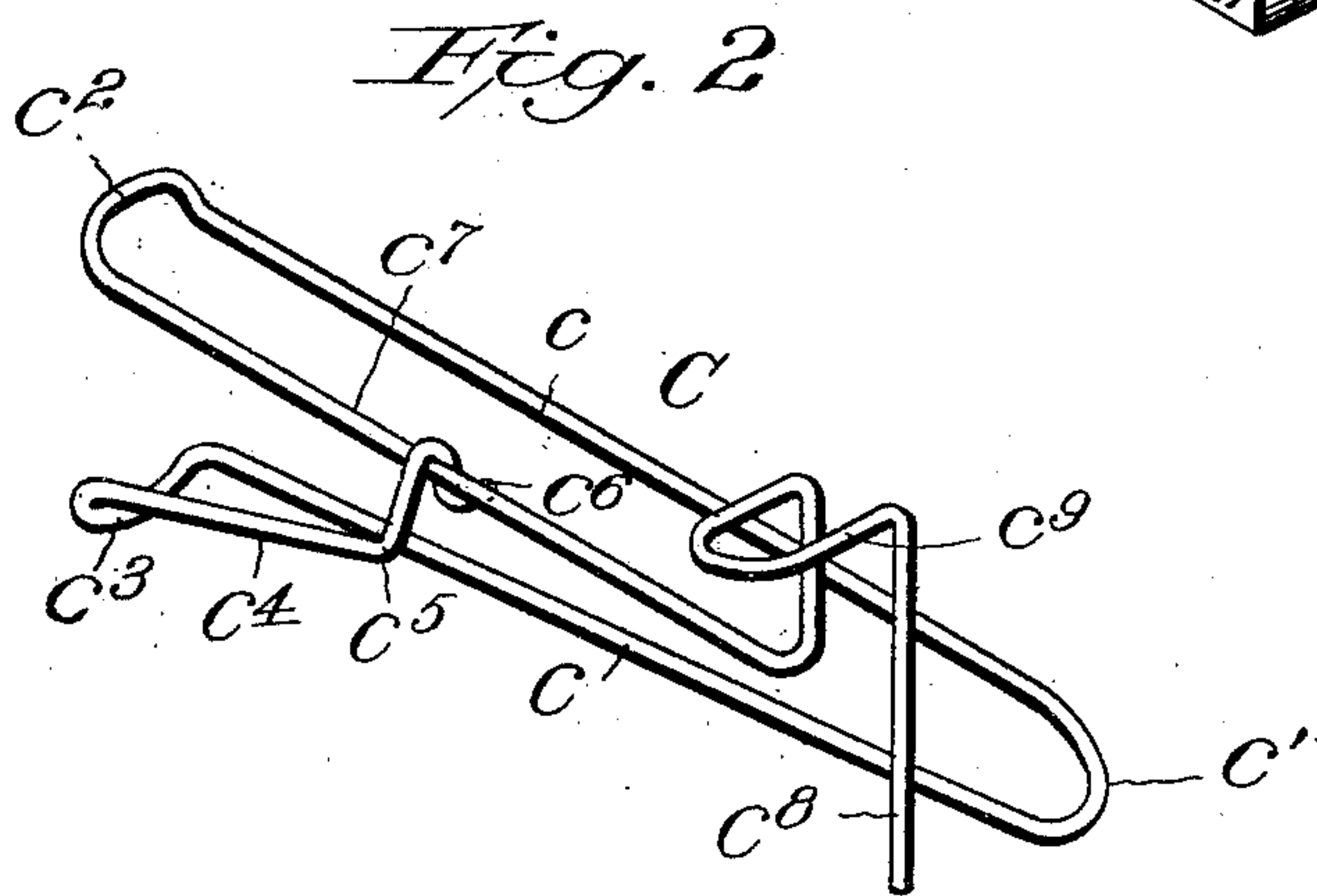
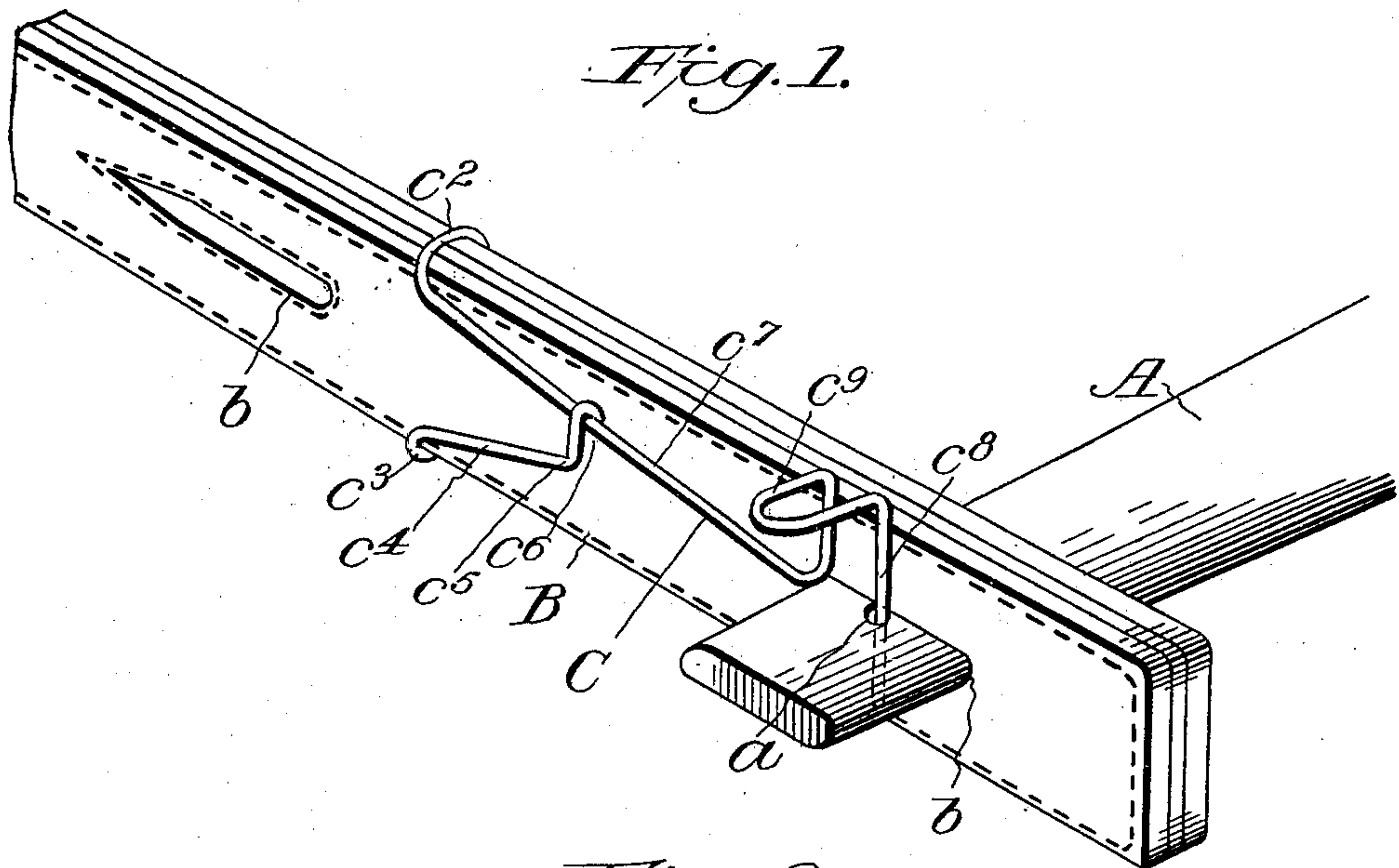
No. 826,946.

PATENTED JULY 24, 1906.

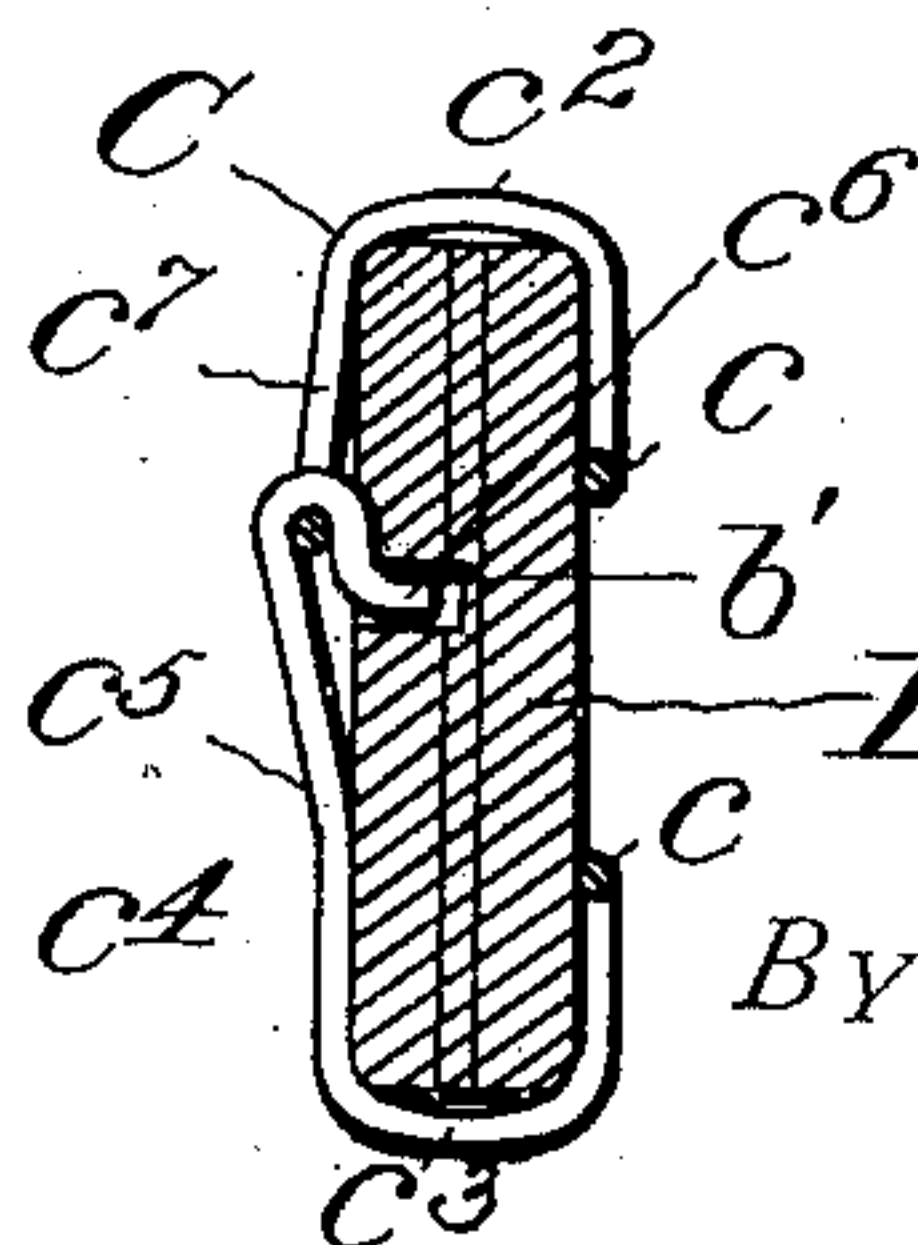
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WHIFFLETREE CONNECTOR FOR TRACES.

APPLICATION FILED JUNE 30, 1905.



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## WHIFFLETREE-CONNECTOR FOR TRACES.

No. 826,946.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed June 30, 1905. Serial No. 267,726.

*To all whom it may concern:*

Be it known that I, ROBERT JAMES LAY, a citizen of the United States, and a resident of Cairo, Ritchie county, West Virginia, have invented new and useful Improvements in Whiffletree-Connectors for Traces, of which the following is a specification.

This invention appertains to attachments for traces of harness, the object of the present improvement being to provide a very simple, cheap, and effective device that is adapted to be carried by the trace and to engage with the whiffletree to prevent the accidental displacement of one part from the other when placed in engagement; and the invention consists of an attachment for traces which is made from a single piece of wire which is shaped to overlie the sides of the trace and engage the edges by inherent spring-pressure, one of the terminals entering an indentation or perforation in the trace, the other terminal being adapted to pass through the eye of the swingle or whiffle tree to hold the trace thereon, as will be herein-after set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view showing the invention applied. Fig. 2 is a perspective view, and Fig. 3 a sectional view.

A designates a whiffletree or a swingletree which has near its end an eye *a*, and the trace has the usual slotted openings *b b* of a size to admit of the passage therethrough of the end of the whiffletree. The outer face of the trace B through one of the thicknesses of the leather has a recess or opening *b'* to receive one of the terminals of the attachment, and with the exception of the recess in the trace both the trace and the whiffletree are of ordinary construction.

In the make-up of the trace-holder or whiffletree-connector C a single piece of wire is bent to provide diverging members *c c*, which are connected by a curved part *c'*. The piece of wire is also bent to overlie the edges of a trace, as shown at *c<sup>2</sup>* and *c<sup>3</sup>*, and one of the terminals is bent to provide a part *c<sup>4</sup>*, an intermediate bend *c<sup>5</sup>* directing the wire partially across the trace, the end of such portion being bent to form a loop *c<sup>6</sup>*, beyond

which the end extends inward to enter a recess in the trace. The member of the wire that forms the upper or front part of the device is bent to provide a part *c<sup>7</sup>*, which extends from the part *c<sup>2</sup>* at an inclination to a point near the opening or eye through the trace, such member then being bent upward and again downward to provide a pin *c<sup>8</sup>*, that is adapted to be passed through the eye *a* of the whiffletree A.

If found desirable, the upper portion of the return-bend that includes a part of the pin *c<sup>8</sup>* and a part of the wire that is parallel therewith may be bent outward to provide a grasping portion *c<sup>9</sup>*.

The device herein set forth may be readily applied to traces, as it is only required to form in the outer side of the trace a recess for the reception of one end of the wire, and in use the transverse parts of the attachment will embrace the edges of the trace and assist in holding the attachment in place. The device when applied locates the converging members *c c* on the inner side of the trace, the bent portion *c'* being beyond the eye *b*, and on the opposite side of the trace is the pin *c<sup>8</sup>* and the other terminal of the wire. This device provides means for connecting the trace to the whiffletree and means for holding the end of the trace straight and stiff, so that the trace can be readily attached to the whiffletree.

I claim—

1. A trace attachment consisting of a piece of wire that is bent to provide converging members to lie over one side of a portion of a trace, continuations of such members which span the edges of the trace, a terminal portion being shaped to engage the eye of a whiffletree when passed through the eye of the trace, the other terminal entering a recess in the trace, substantially as shown.

2. A trace attachment made from a continuous piece of spring-wire that is bent to provide diverging bars, cross portions that embrace the edges of a trace, a spring-depressed member having an upward-extending portion and parallel therewith a pin, a member that extends from the other cross portion such member being bent to form a

loop that limits the upward movement of the  
pin-carrying member, the part beyond the  
loop being substantially at right angles to the  
bar which terminates in the pin that enters  
5 the eye of the whiffletree, substantially as set  
forth.

In testimony whereof I have hereunto set

my hand in the presence of two subscribing  
witnesses.

ROBERT JAMES LAY.

Witnesses:

G. M. CAIN,  
A. T. CATON.