

No. 703,046.

Patented June 24, 1902.

N. G. DEATON.
COLLAR FASTENER.

(Application filed Dec. 10, 1900.)

(No Model.)

Fig. 1.

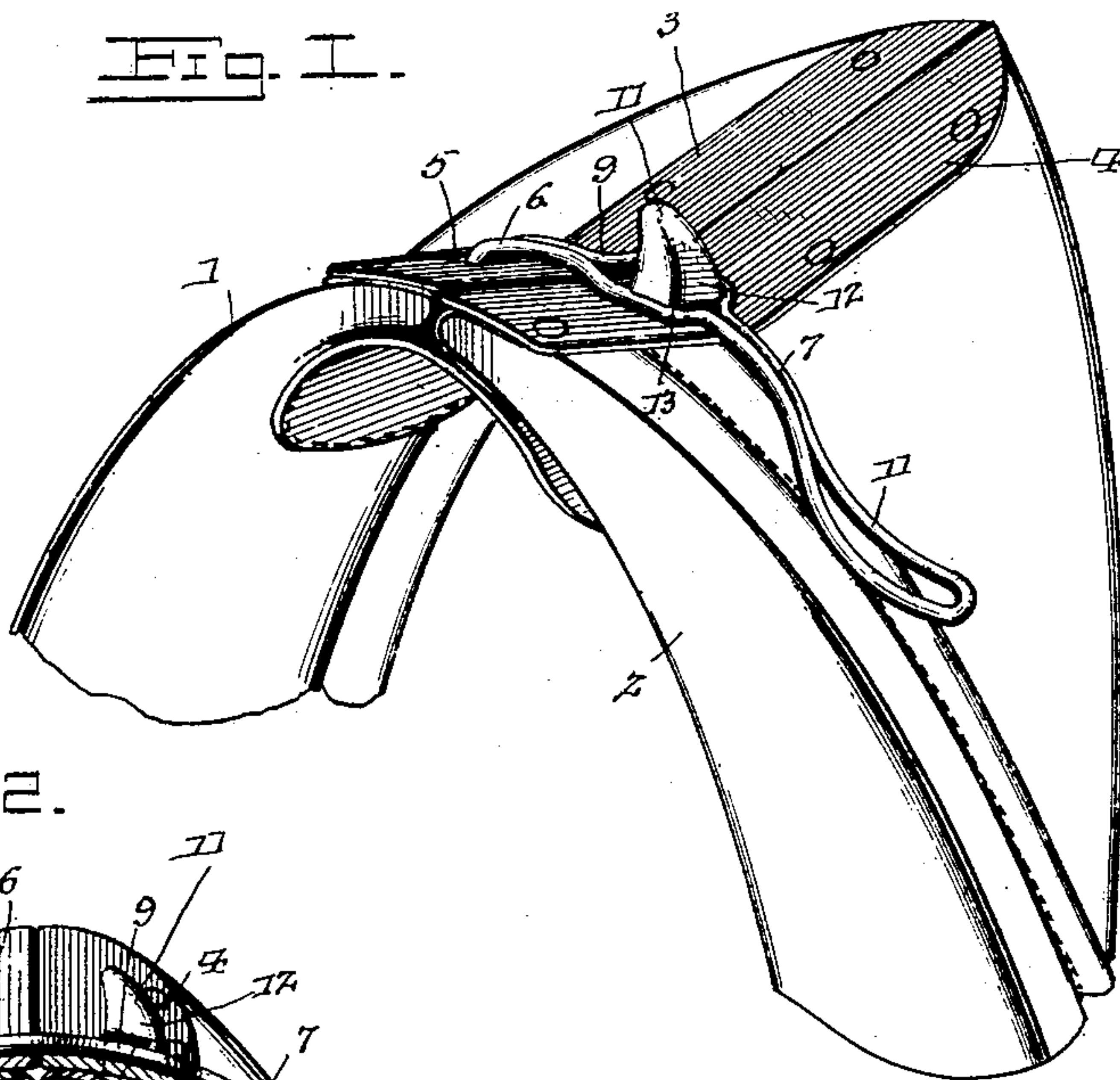


Fig. 2.

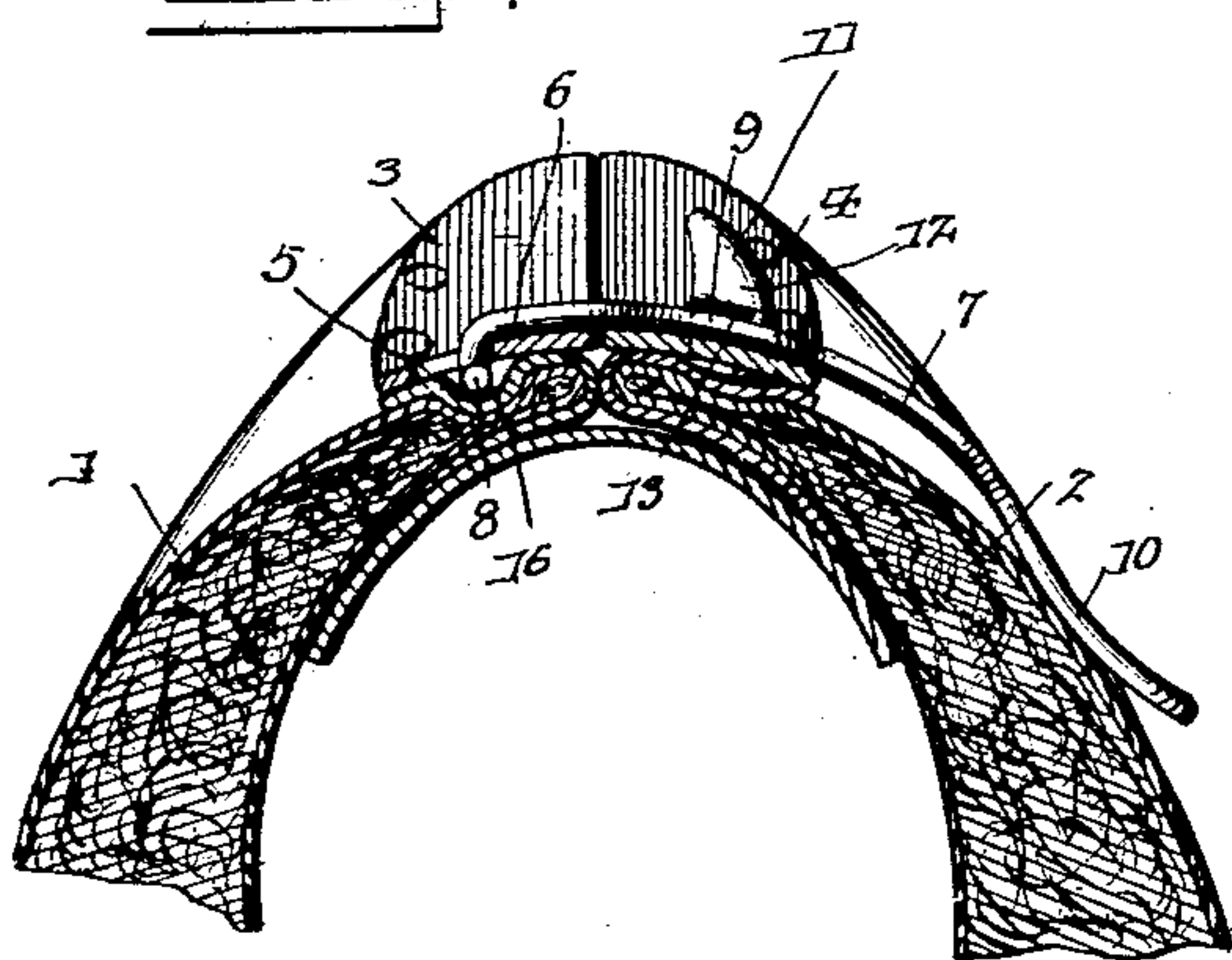


Fig. 3.

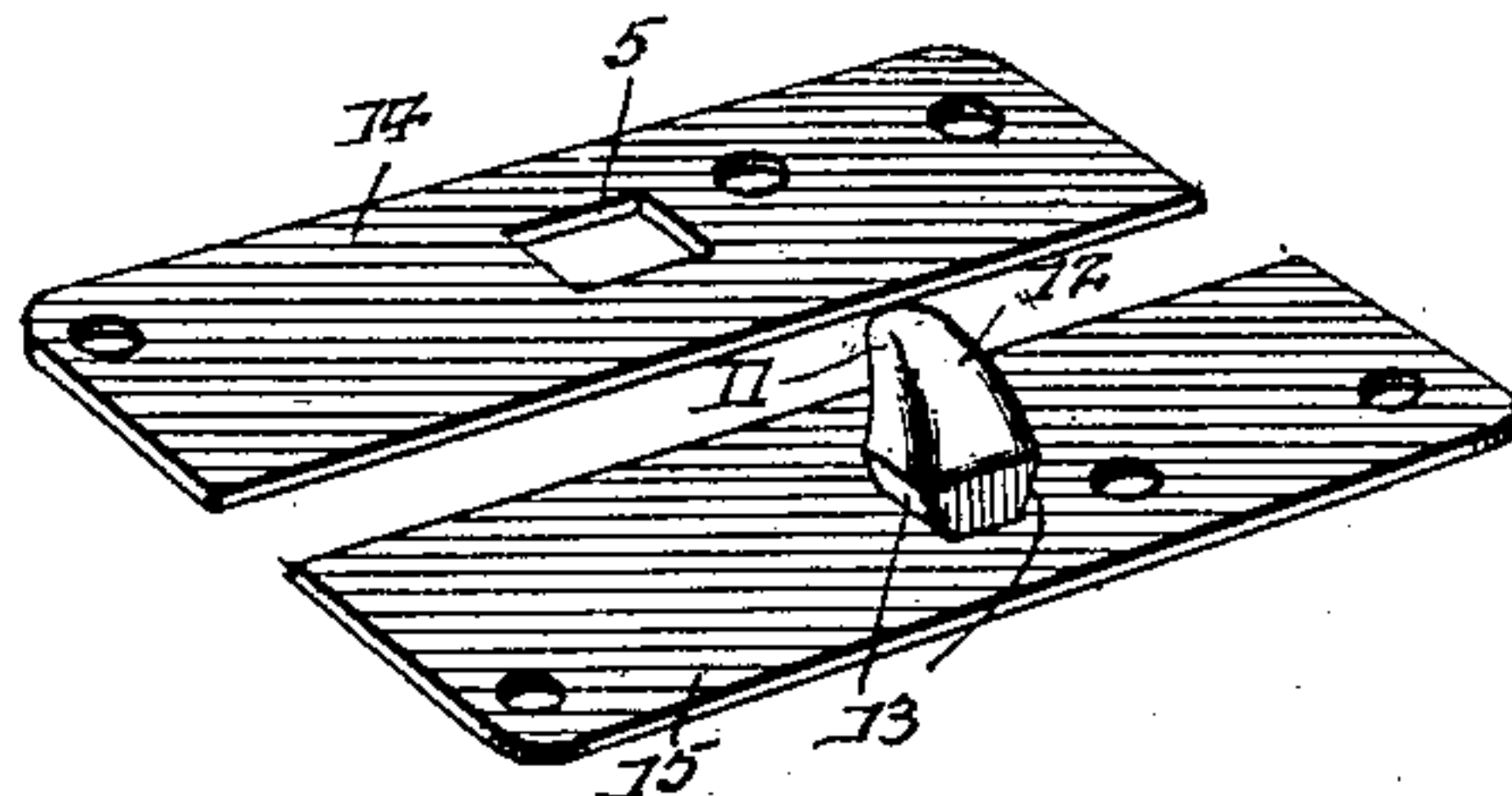
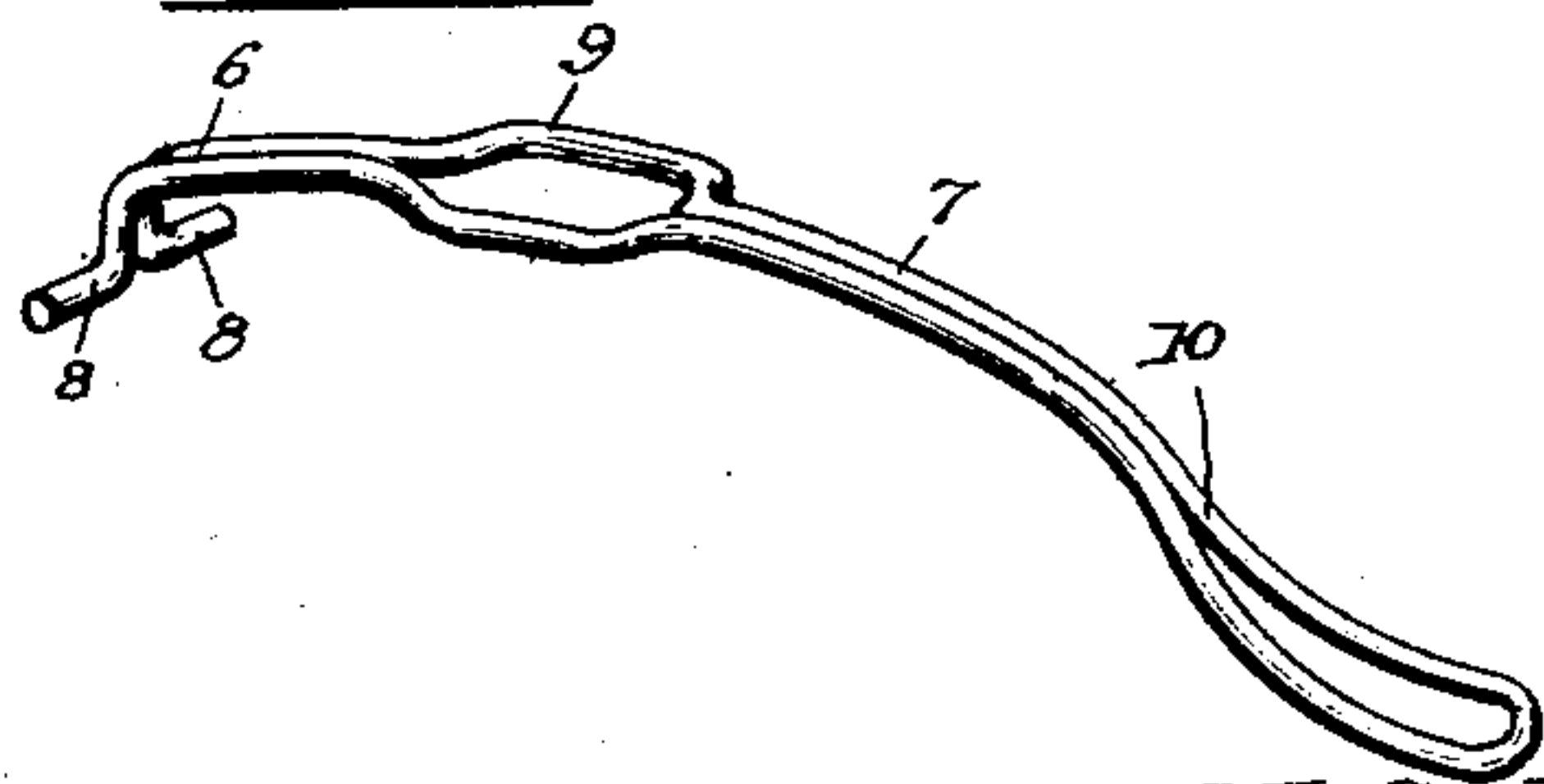


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

NOAH G. DEATON, OF BUFORD, GEORGIA.

COLLAR-FASTENER.

SPECIFICATION forming part of Letters Patent No. 703,046, dated June 24, 1902.

Application filed December 10, 1900. Serial No. 39,418. (No model.)

To all whom it may concern:

Be it known that I, NOAH G. DEATON, a citizen of the United States, residing at Buford, in the county of Gwinnett and State of Georgia, have invented a new and useful Horse-Collar Fastener, of which the following is a specification.

This invention relates to horse-collar fasteners; and the object of the same is to provide a simple and effective device of the character set forth for connecting the upper portions of horse-collars and comprising a small number of strong and durable parts that are so applied that they will not wear the portions of the collar adjacent thereto, adapted to be easily opened and closed, and to firmly resist accidental detachment or disconnection when in locked condition.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of the upper portion of a horse-collar, showing the improved form of fastener applied thereto. Fig. 2 is a longitudinal vertical section of the upper portion of a horse-collar, particularly showing the manner of securing the one end of one of the members of the fastener. Fig. 3 is a detail perspective view of the coupling member of the fastener. Fig. 4 is a detail perspective view showing modified constructions of the improved device.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numerals 1 and 2 designate the opposite upper portions of a horse-collar having intermediately-depressed metallic plates 3 and 4, respectively, connected thereto and located on the upper sides close to the meeting ends. Through the front portion of the plate 3 a slot 5 is formed for the movable insertion therethrough of an angular portion 6 of a coupling member 7, the said terminal being bent downwardly at an angle and having portions thereof formed with laterally-projecting arms 8 to provide a T-head having a greater extent than the length of the slot 5 to prevent accidental disconnection of the attached end of the member. The said

member is formed of spring-wire of suitable gage and has a longitudinal convexity for a greater portion of its length to conform to the contour of the portions of the collar over which it extends in order to lie closely to the latter when in locked position. The wire of which the coupling member is formed is doubled in close parallel relation for a greater part of the same, and near the fulcrumed terminal thereof a rectangular loop 9 is formed, the terminal of the member opposite the T-head terminal being curved outwardly, as at 10, for easy grasping purposes in opening the fastener. Projecting upwardly from the plate 4 in transverse alinement with the slot 5 of the plate 3 is a coupling-head 11, which is rigidly fixed and has a substantially rectangular body formed with a taper toward the upper free end and an outer curved side 12. From a point a short distance above the plane of the plate 4 the said coupling-head is cut or otherwise formed to produce inwardly and downwardly inclined plain faces 13 at the sides and outer portion to provide a locking-seat or surrounding shoulder for engagement with the loop 9 of the coupling member 7.

In Fig. 4 flat plates 14 and 15 are shown for application to a collar having a flat top portion, and in this form of application of the device the coupling member will be correspondingly shaped. Aside from the fastening means set forth the collar will be provided with the usual attachments at the upper portion, as shown, and the end portion of the collar carrying the plate 3 has a recess 16 formed therein under the slot 5 to receive and permit the T-head terminal of the coupling member to have movement.

The operation of the improved fastener is as follows: In connecting the coupling member 7 with the head 11 the loop 9 is gradually drawn downwardly over the said head, and in view of the resilient nature of the said loop it spreads, by reason of the loop being primarily or normally smaller than the maximum enlargement of the head, until the plain faces 13 are reached and which are about a portion of the head approximating in dimension the portion of the said loop engaged thereby. The outer curved side 12 of the head 7 institutes a drawing action on the coupling member, and the upper end por-

tions of the collar and the inner edges of the plates 3 and 4 or of the plates shown by Fig. 4 are thereby brought together, as shown in Fig. 1. By a simple upward pull on the free end of the coupling member the loop 9 can be sprung from its locking engagement with the head and the parts of the fastener thereby disconnected to permit the upper portion of the collar to be opened.

10 The improved fastener is simple in its construction, strong, and durable and can be applied without mutilating or disorganizing the upper portion of a collar.

15 The improved devices can be easily applied to collars now in use as well as to collars during the original manufacture of the same, and the inconvenience and disadvantages of connecting-straps and analogous devices as heretofore used are entirely overcome.

20 Having thus described the invention, what is claimed as new is—

In a horse-collar fastener of the character set forth, the combination with a collar divided at one end by a separating-opening therethrough, of rigid metallic plates secured to the collar on opposite sides of the opening and extending from edge to edge of the collar, one of said plates having an opening extending vertically therethrough, a yielding

coupling member formed from a single piece 30 of spring-wire bent at its center to form an elongated handle, the two similarly-shaped members of which are free to spread under strain, the ends of the said members being bent outwardly in opposite directions to form 35 a T-shaped head adapted to pass through the opening in the plate and to fit loosely in a recess provided in the body of the collar, said coupling member being provided with an angular loop 9, one-half of which is formed 40 by each of the portions of the handle, and a stud-head rigidly secured to the opposite plate, said stud having a rounded or cam-shaped rear face for engagement by one of the transverse walls of the loop and being of 45 a width greater than the normal width of the loop, the opposite sides of the stud being undercut near the base thereof to form seating-recesses for the side portions of the loop, substantially as specified. 50

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

NOAH G. DEATON.

Witnesses:

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