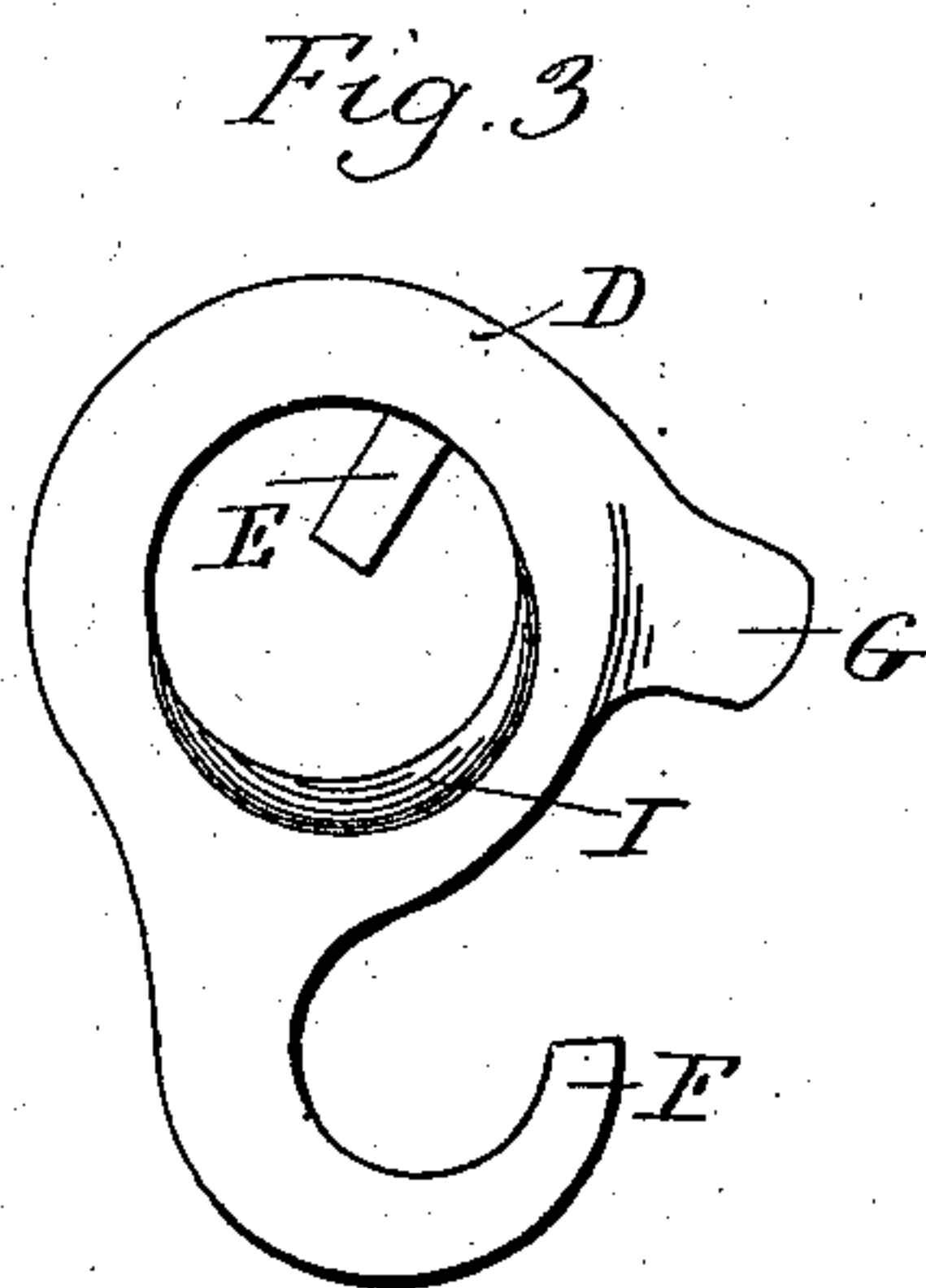
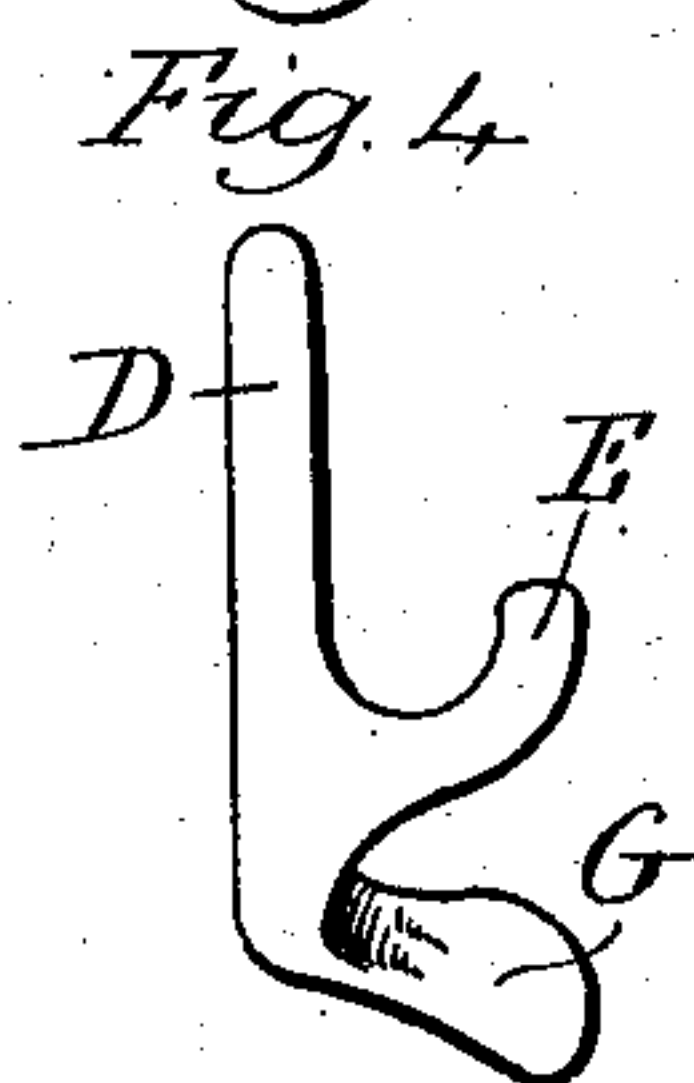
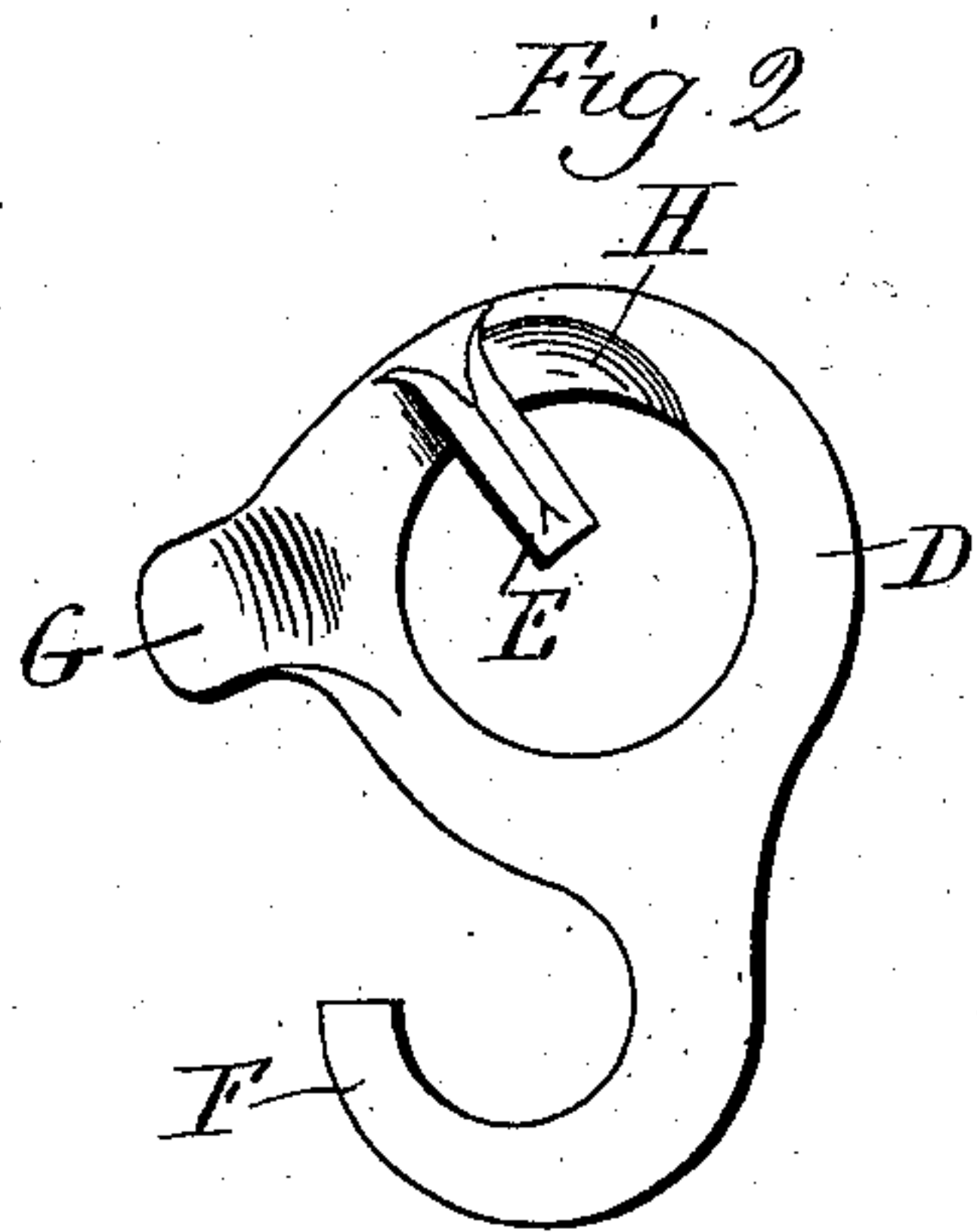
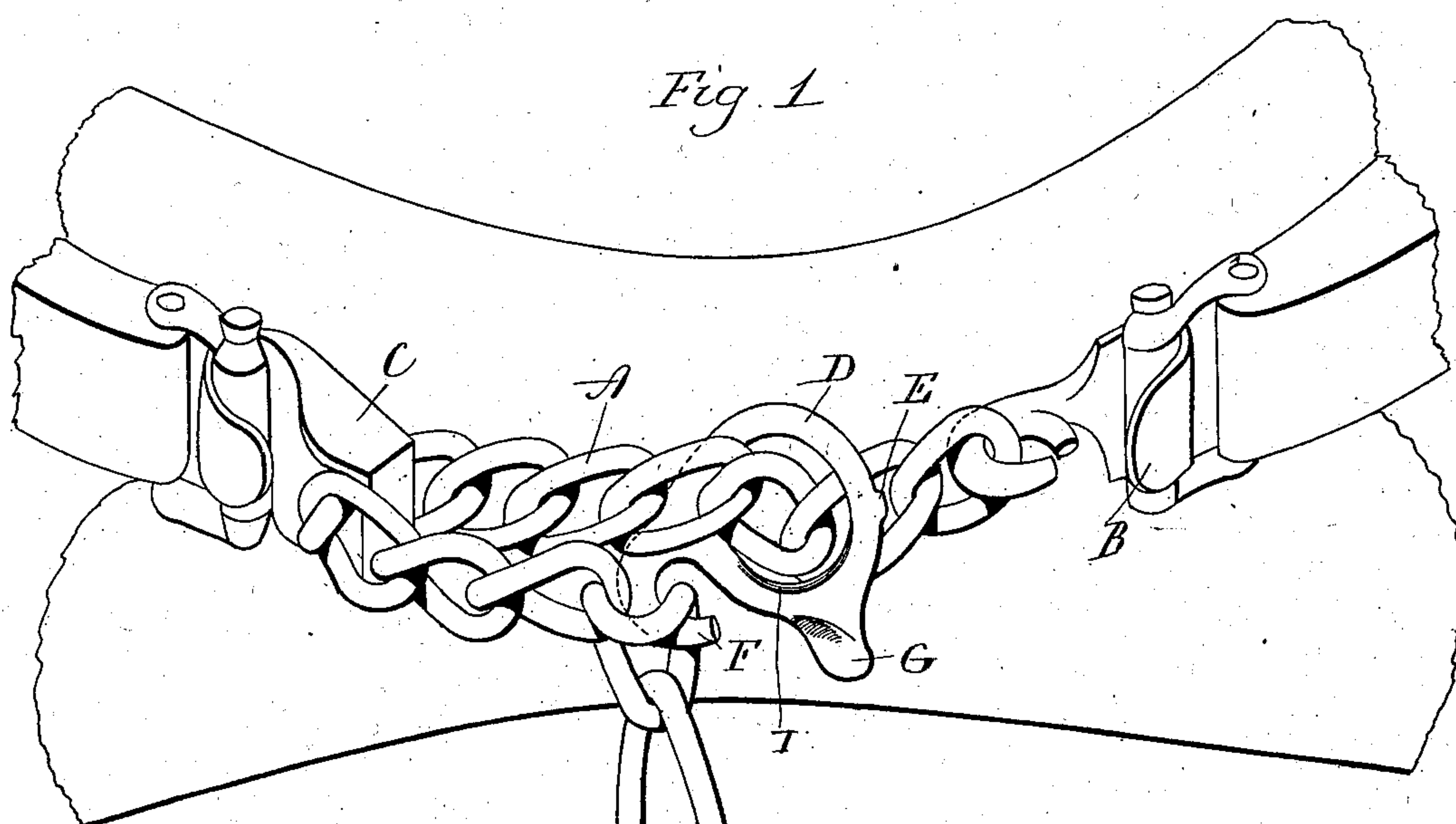


No. 721,397.

PATENTED FEB. 24, 1903.

C. H. SMITH.  
COUPLING DEVICE FOR CHAINS.  
APPLICATION FILED SEPT. 2, 1902.

NO MODEL.



Witnesses  
J. H. Shumway  
Clara L. Reed.

Charles H. Smith.  
Inventor  
By Atty. Seymour & Carey



# UNITED STATES PATENT OFFICE.

CHARLES H. SMITH, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO O. B. NORTH & CO., OF NEW HAVEN, CONNECTICUT, A CORPORATION.

## COUPLING DEVICE FOR CHAINS.

SPECIFICATION forming part of Letters Patent No. 721,397, dated February 24, 1903.

Application filed September 2, 1902. Serial No. 121,843. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. SMITH, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and  
5 useful Improvement in Coupling Devices for Chains; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and  
10 exact description of the same, and which said drawings constitute a part of this specification, and represent, in—

Figure 1, a front view of a hames-chain connected with my improved coupling device;  
15 Fig. 2, an under side plan view of the coupling device; Fig. 3, a top or plan view of the same; Fig. 4, a view in end elevation.

This invention relates to an improvement in coupling devices for chains and is applicable for various purposes where it is desired  
20 to connect two portions of a chain, the object of the invention being a simple and convenient device which may be readily applied and easily disengaged when the chain is under more or less tension; and the invention  
25 consists in the construction as will be hereinafter described, and particularly recited in the claims.

To illustrate my invention, I have shown  
30 it in Fig. 1 of the drawings in connection with a hames-chain A, one end of which is secured to the usual clip B on one hame and passes through an eye C or other device connected with the other hame. The device  
35 consists of a ring D, having a bowed finger E depending from its under side and a hook F projecting outward from one edge and in the plane of the ring. Preferably, and as herein shown, the ring is also provided with a thumb-  
40 piece G, depending from one side of the ring and adjacent to the finger E. Preferably the under side of the ring adjacent to the finger E will be cut away or beveled, as at H, while the upper surface of the opposite side of the  
45 ring will also be cut away or beveled, as at I, for the purpose as will hereinafter appear. The ring is free to slide on the chain, and when it is to be used is moved until the finger E is engaged with the desired link. The  
50 free end of the chain, which passes around or through the object to be connected, is

drawn taut and one of the links of the free end engaged with the hook F, and, owing to the beveled surfaces of the ring, the device will lie substantially flat with relation to the chain, 55 and if the finger E is eccentric to the line of draft from the hook F the tendency of the draft will be to throw the device into its locking position, or, in other words, to turn the ring outward, so as to force the hook into en- 60 gagement with the free end of the chain. The device may also be used advantageously to take up slack in or to shorten a chain. The device will thus hold the respective links of the chain coupled together until the hook 65 is disengaged, and when under tension this may be conveniently done by pressure upon the under side of the thumb-piece G, which will tend to rotate the ring with the finger E as a center, thus throwing the nose of the 70 hook out of the link with which it has been engaged, this thumb-piece being a convenient attachment, although not necessary to the practical operation of my coupling device. The finger and hook virtually form a double 75 hook, and by connecting the ends of the chain with devices, such as the end hooks of a hames-chain, which are larger than the diameter of the ring, my device is non-detach- 80 able. By making the ring adjustable by sliding or moving upon the chain it may be engaged at any desired point, hence avoiding the necessity of an extra length of chain which might be required in some cases were the ring and its hooks immovably secured to 85 the chain.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A coupling device for chains, consisting 90 of a ring, a finger projecting inwardly from one side, and a hook projecting outward from the other side.

2. A coupling device for chains, consisting of a ring, with an inwardly-bowed finger pro- 95 jecting from one side of the ring, and an outwardly-projecting hook.

3. A coupling device for chains, consisting of a ring, an inwardly-bowed finger project- 100 ing from one side of the ring, an outwardly-extending hook from one edge of the ring in the plane thereof, the said finger being at an

angle to a central line through the hook and ring.

4. A coupling device for chains, consisting of a ring having a finger on one side, an outwardly-projecting hook on the other side, and a thumb-piece.

5. A coupling device for chains, consisting of a ring, an inwardly-projecting finger on one side, and an outwardly-projecting hook on the opposite side, the ring adjacent to the finger and hook having beveled surfaces.

6. The combination with a chain, of a coupling device comprising a ring through which the chain passes, an inwardly-projecting finger and an outwardly-projecting hook, both adapted to engage with the links of the chain.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES H. SMITH.

Witnesses:

FREDERIC C. EARLE,

CLARA L. WEED.