

(No Model.)

H. M. HERRING.  
WATCH CHAIN ATTACHMENT.

No. 294,733.

Patented Mar. 4, 1884.

Fig. 1.

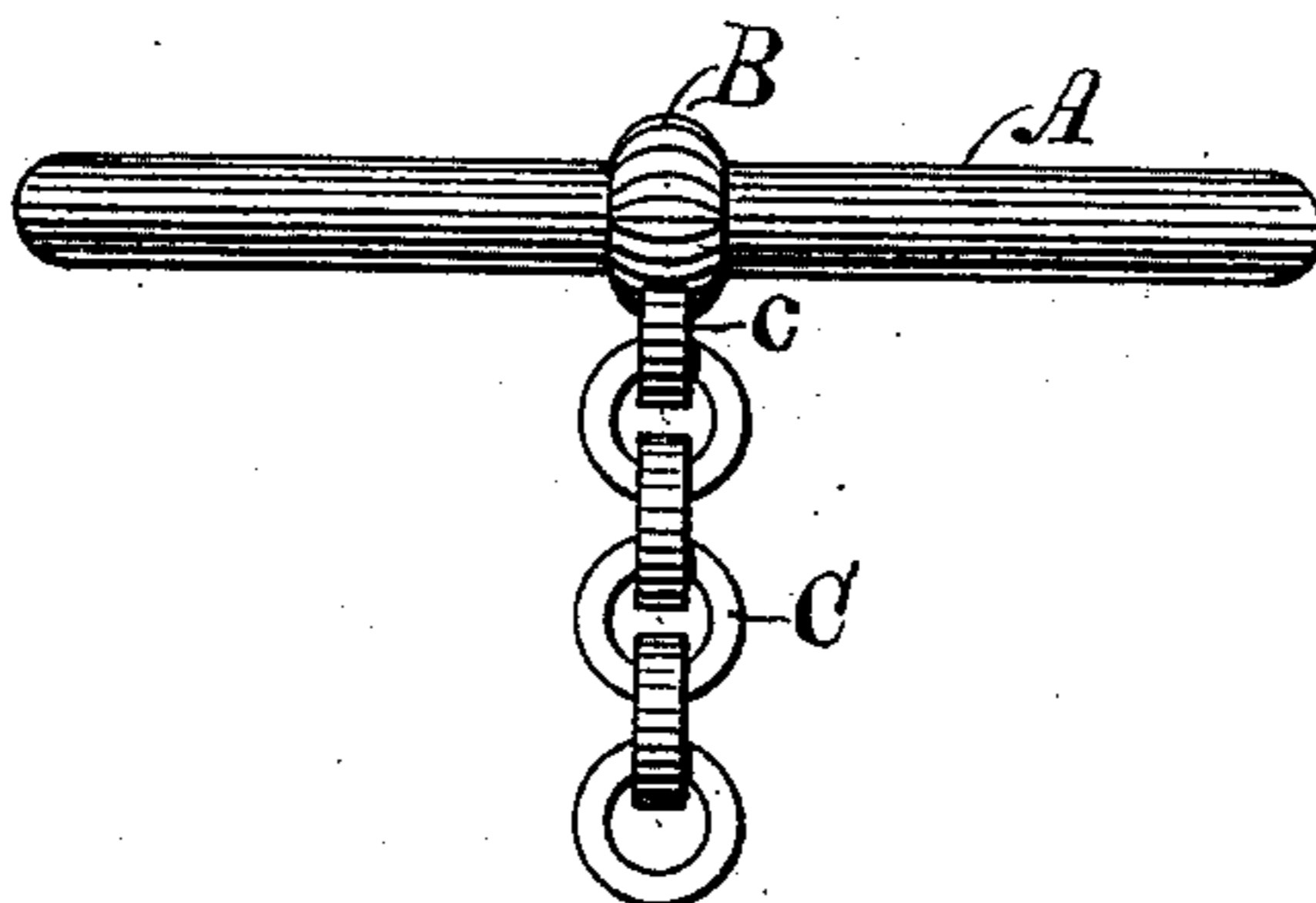


Fig. 2.

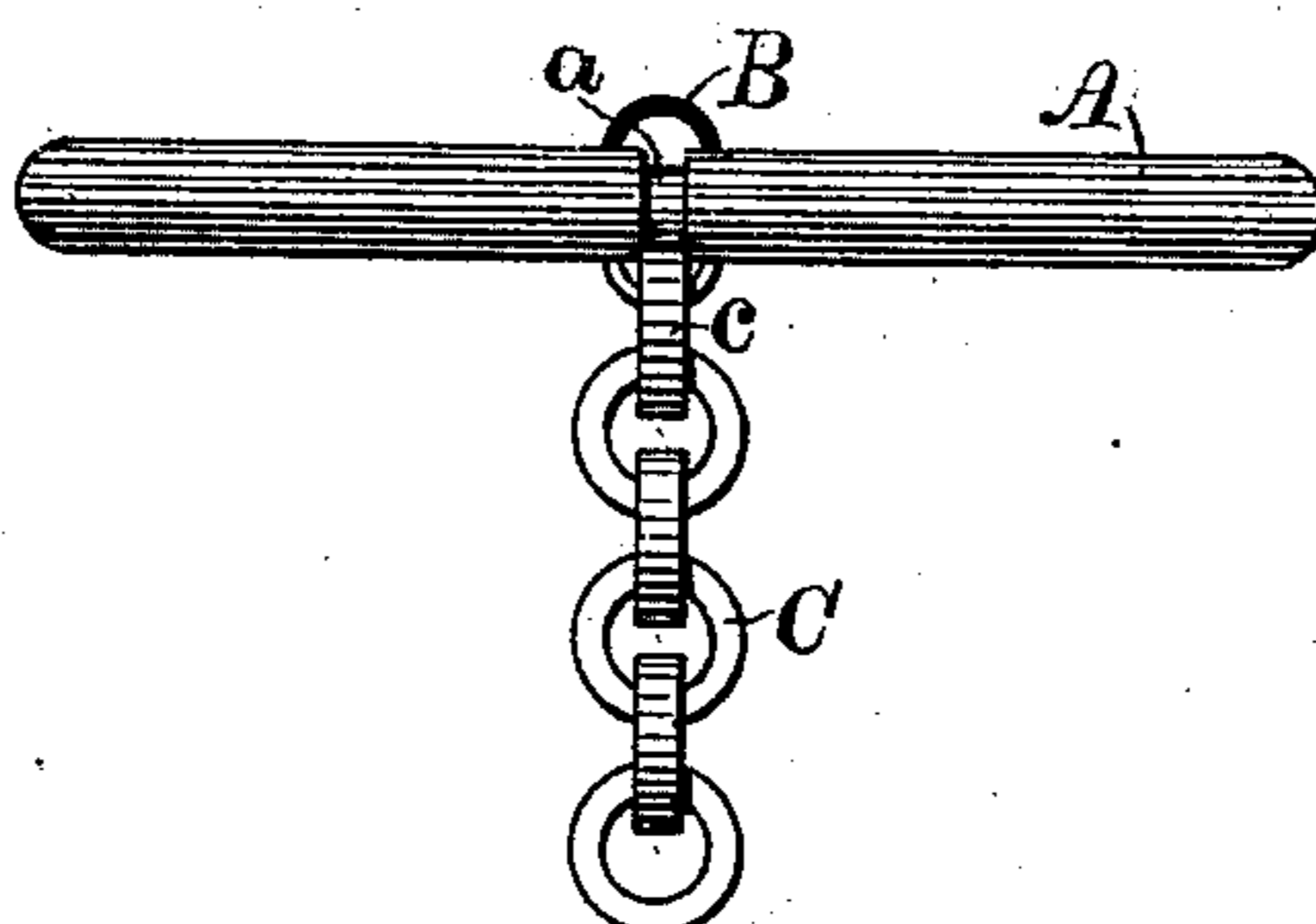


Fig. 3.

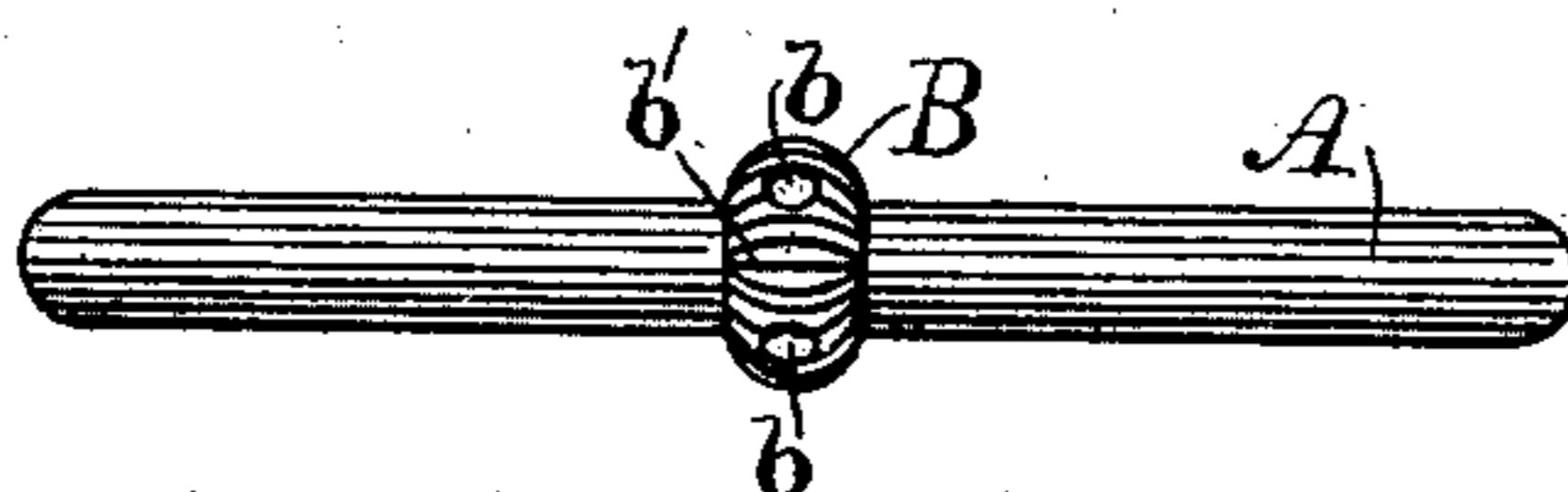
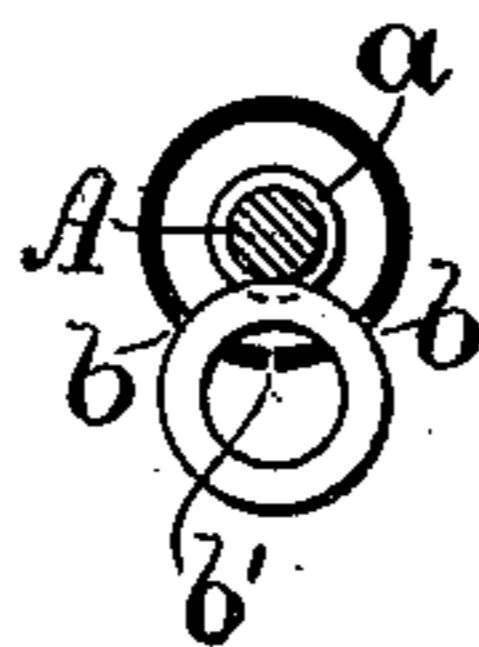


Fig. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HENRY M. HERRING, OF NORTH ATTLEBOROUGH, MASSACHUSETTS, ASSIGNOR  
TO OSCAR M. DRAPER, OF SAME PLACE.

## WATCH-CHAIN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 294,733, dated March 4, 1884.

Application filed December 17, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY M. HERRING, of North Attleborough, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Watch-Chain Bars, of which the following is a specification.

My invention relates to the bars of watch-chains; and its object is to produce a connection between the end of the chain and the cross-bar of such character as to dispense with the use of solder, and also to allow the bar to turn in the connection.

My invention consists in a watch-chain bar provided with a groove, a sleeve for surrounding said groove, and a ring arranged to pass through two holes formed in the sleeve and resting in the groove.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved chain. Fig. 2 is a similar view of the same, the sleeve being shown in cross-section. Fig. 3 is a side elevation of the bar and its sleeve, showing the apertures in the latter. Fig. 4 is a transverse vertical section of the bar and sleeve, showing the construction of the latter, and the relative position of the chain-ring.

In the said drawings, A designates the chain-bar, which is formed at its center with a circumferential groove, *a*. (Shown in Figs. 2 and 4.)

B designates the sleeve, which is formed of a concavo-convex strip of metal, which is bent into circular shape, so as to bring the ends of strip close together, as shown at *b'* in Figs. 3 and 4. Near each end of the strip is formed

an aperture, *b*, and when the strip which forms the sleeve B is bent into circular shape the apertures *b* assume the relative positions shown in Figs. 3 and 4.

C designates the chain, the upper link or ring, *c*, of which is passed through the apertures *b*, and the periphery of which rests in the groove *a*.

It will be seen from the above description that the connection between the end of the chain and the bar is made without any soldering. The sleeve B may be of any preferred outline, and may be ornamented in any desired manner without departing from the spirit of my invention.

The manner of uniting the parts above described is evident from the description, and it will be seen that the link *c* prevents, by engaging the groove *a*, any lateral displacement of the sleeve B, and allows the bar to freely turn in the connection.

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

1. The combination, with a cross-bar having a circumferential groove, of a sleeve, and a link or ring secured to said sleeve and engaging with said groove, for the purposes set forth.

2. The combination, with the bar A, having the groove *a*, of the sleeve B, having the apertures *b b*, and the link or ring *c*, passing through said apertures and entering at its periphery the said groove, substantially as and for the purposes described.

HENRY M. HERRING.

Witnesses:

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