

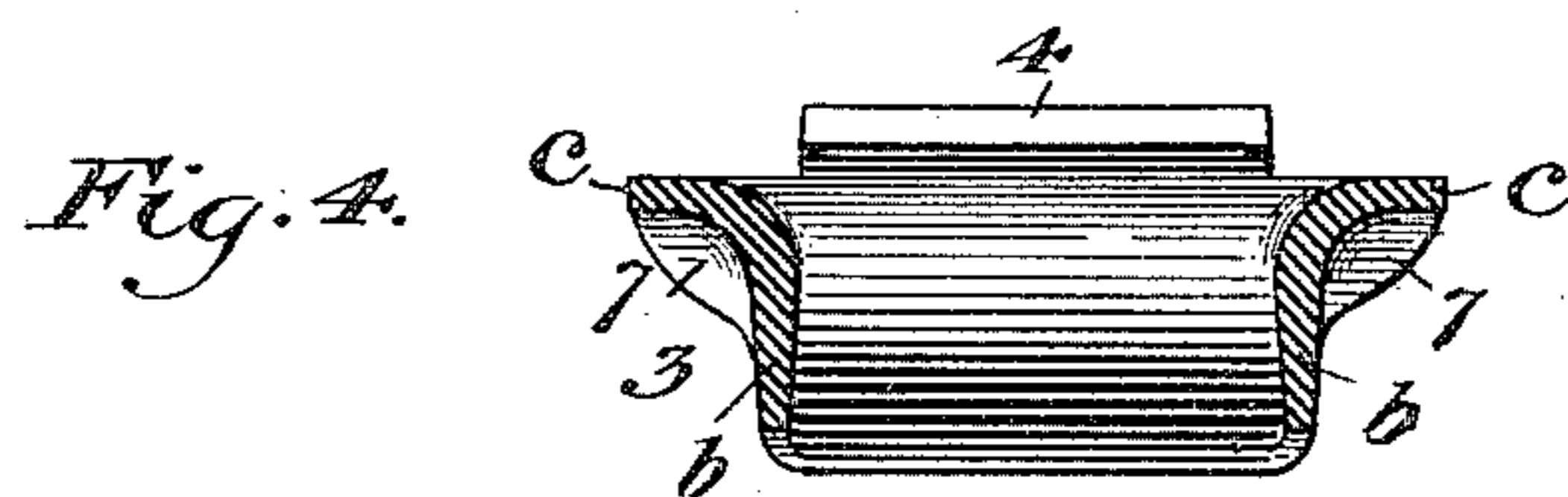
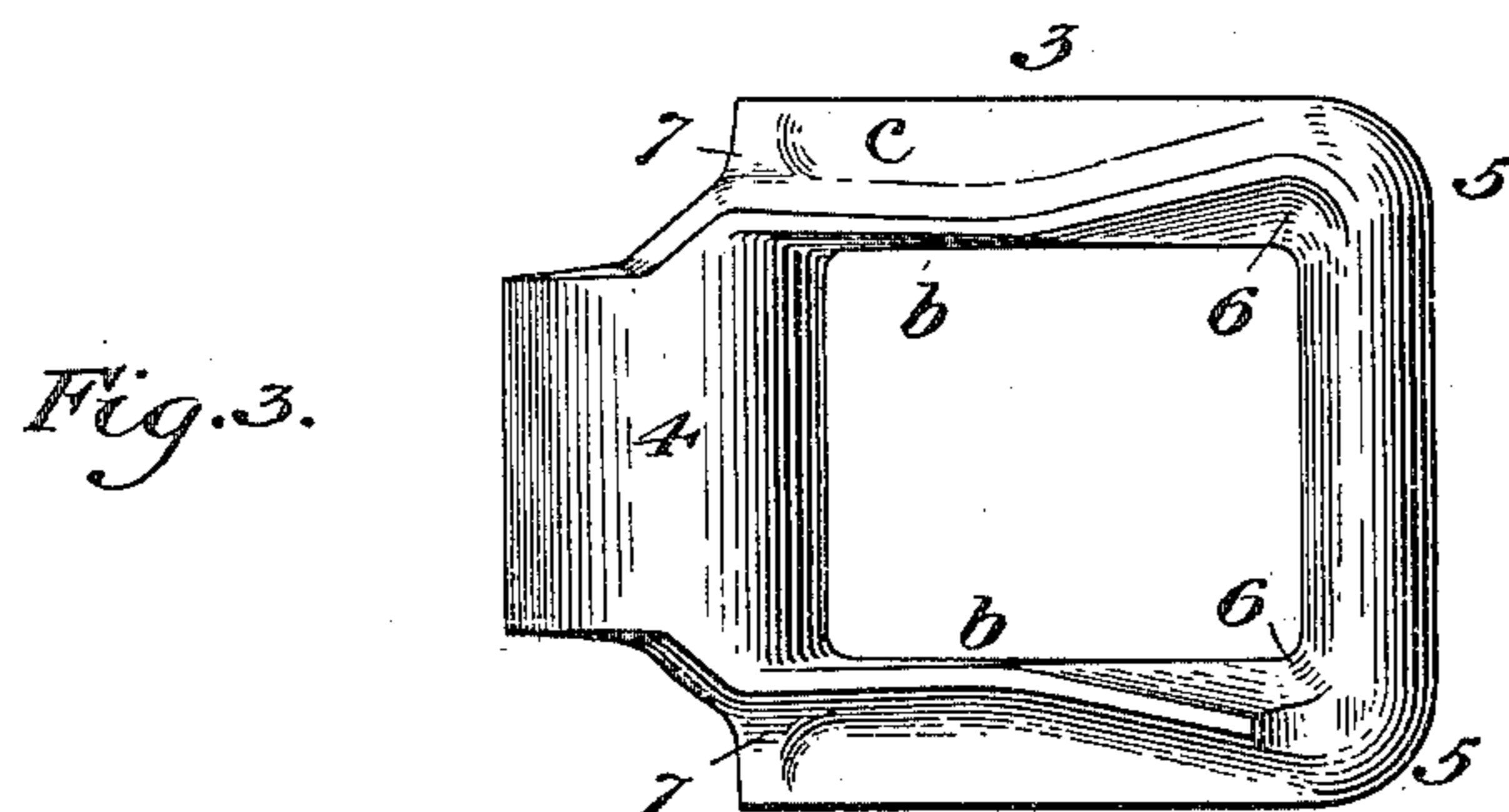
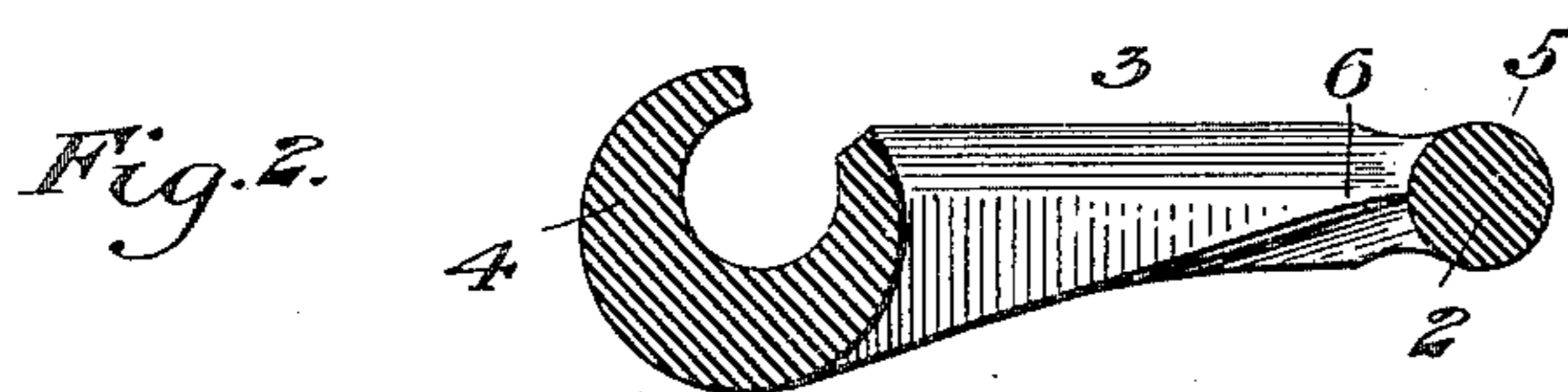
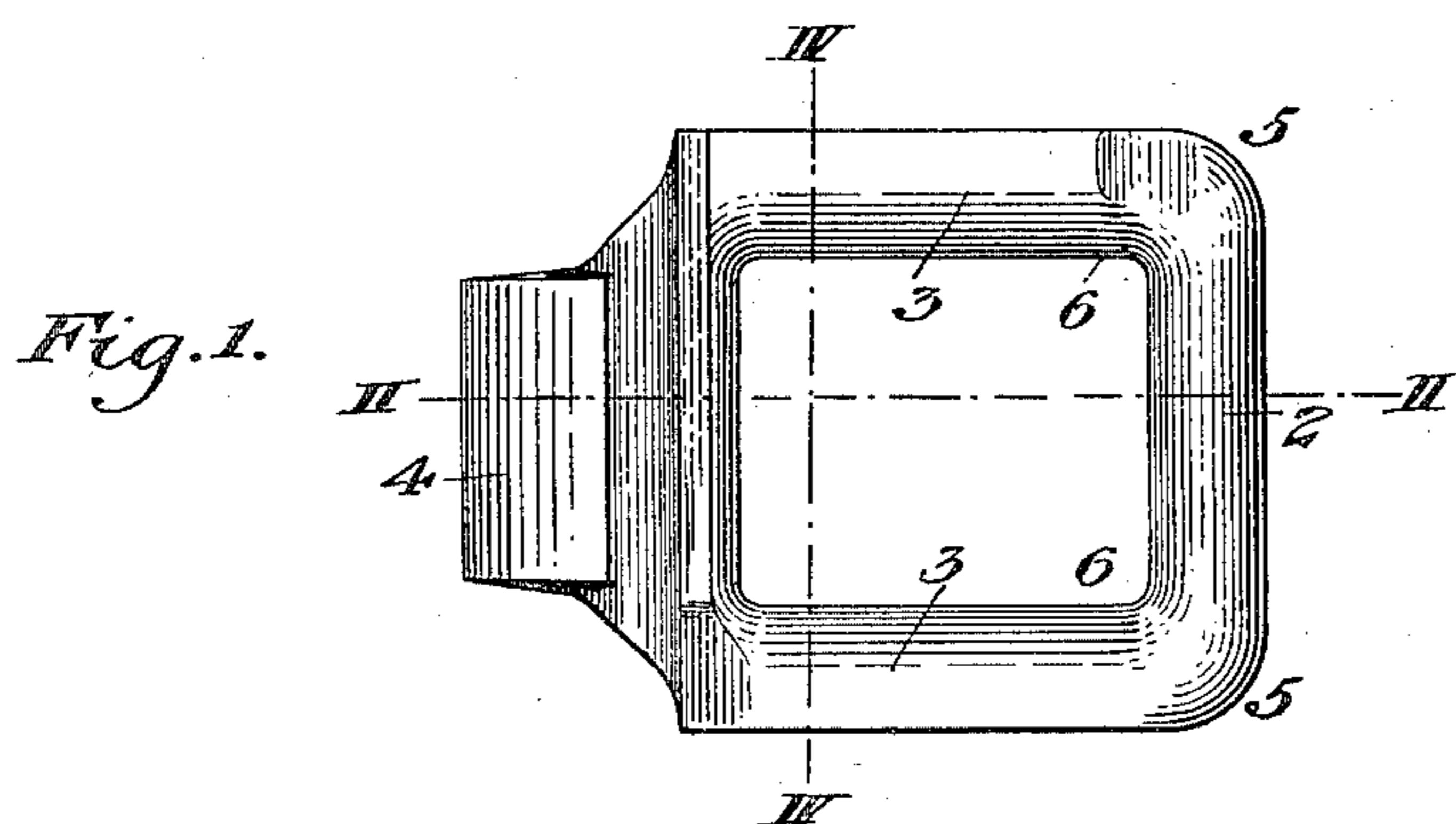
No. 673,750.

Patented May 7, 1901.

G. G. HOWE.
DRIVE CHAIN LINK.

(Application filed May 22, 1900.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

GLENN G. HOWE, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE EWART MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS.

DRIVE-CHAIN LINK.

SPECIFICATION forming part of Letters Patent No. 673,750, dated May 7, 1901.

Application filed May 22, 1900. Serial No. 17,510. (No model.)

To all whom it may concern:

Be it known that I, GLENN G. HOWE, of Indianapolis, Marion county, Indiana, have invented new and useful Improvements in Drive-Chain Links, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front plan view of my improved link. Fig. 2 is a vertical longitudinal sectional view on line II II of Fig. 1. Fig. 3 is a back plan view, and Fig. 4 is a vertical cross-sectional view on the line IV IV of Fig. 1.

In the manufacture of links for drive-chains it is of great importance to secure with the least possible weight of metal the greatest possible strength and resistance to the strains to which the links are put when in use, and in order to obtain these results I form my improved link, as shown in the drawings, in which 2 is the end bar of a drive-chain link, 3 3 are the side bars, and 4 is the hook. The side bars 3 3 for the whole or greater portion of their length have a substantially L-shaped cross-sectional form (shown in Fig. 4)—that is to say, they have a body portion *b* and a flange *c*, which projects outwardly from the top of the body portion *b*, and preferably extends from end to end of the side bar, the latter being of approximately the same thickness of metal throughout its cross-section at any one point and being curved on its exterior surface. At the ends of the side bars next to the hub are outwardly-projecting shoulders 7, which extend cross-wise of the side bars, as distinguished from extending in a direction parallel therewith. The side bars, having the cross-sectional form above described, and the shoulders 7 constitute a strong and rigid construction and result in the best distribution of the metal, so that when the link is subjected to the usual annealing process it will be converted uniformly throughout.

Another feature of my invention consists in rounding the exterior of the lower corners 5 5, as shown in Figs. 1 and 3. This con-

struction I have found tends to prevent the shrinkage of the metal which otherwise occurs at the corners during casting. Heretofore it has been common practice to cast drive-chain links with feeders or balls of metal connecting the corners and intended by affording a mass of metal at those places to feed and prevent the shrinkage; but my invention enables me to dispense with such feeders, thus saving metal and doing away with the necessity for grinding off the sprues which are left at the points where the feeders are broken off.

A further feature of my invention consists in reducing the metal of the side bars at the inner corners 6, imparting to the side bars a pinched appearance at those points. I find that by giving the link this form any shrinkage which may occur at the corners is forced into the interior of the side bars, where the section of the metal is larger and where it does but little harm, since the surface of the link remains without cracks or imperfections.

Within the scope of my invention as defined in the claims parts of my improvements may be used without the others. Thus I may make a link having reduced portions 6 or with angular side bars, but with square outer corners.

Other changes may be made without departure from my invention, since

What I claim is—

1. An integral four-sided link for drive-chains, having lateral bars of L shape, rounded on the surface and in cross-section of approximately uniform thickness of metal, said bars having flanges extending along the top of their body portions and projecting outwardly therefrom; substantially as described.

2. An integral four-sided link for drive-chains, having lateral bars of L shape, rounded on the surface, said bars having flanges extending along the top of their body portions, and projecting outwardly therefrom; substantially as described.

3. An integral four-sided link for drive-chains, having lateral bars of angular form,

and having at the ends thereof shoulders 7
extending crosswise of the said bars; substan-
tially as described.

4. A link for drive-chains having at inner
5 corners reduced portions 6, and having round-
ed outer corners opposite to said reduced por-
tions; substantially as described.

5. A link for drive-chains having at inner

corners reduced portions 6; substantially as
described.

In testimony whereof I have hereunto set
my hand.

GLENN G. HOWE.

Witnesses:

CLINTON E. PROUSE,
H. D. GORDON.