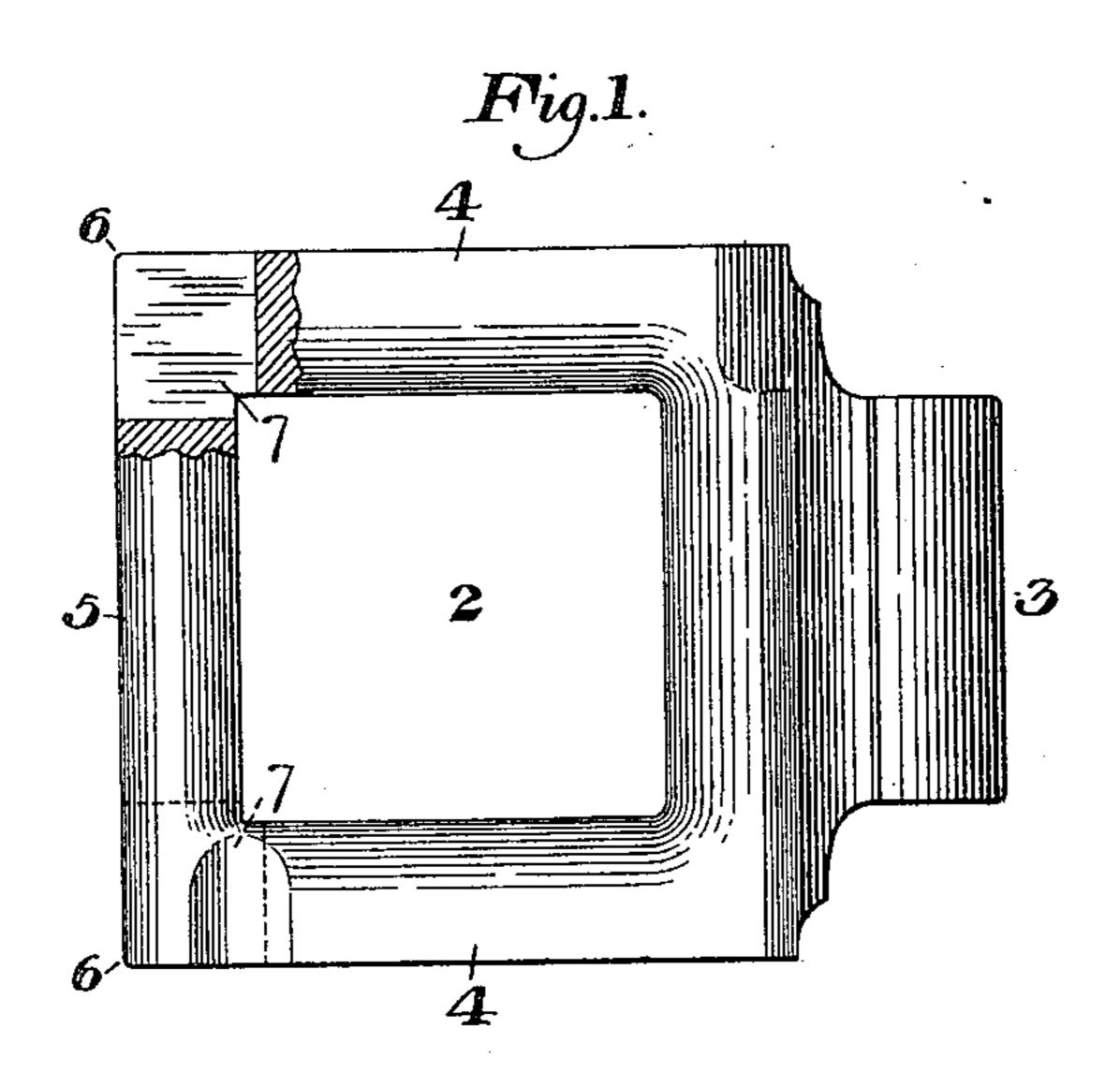
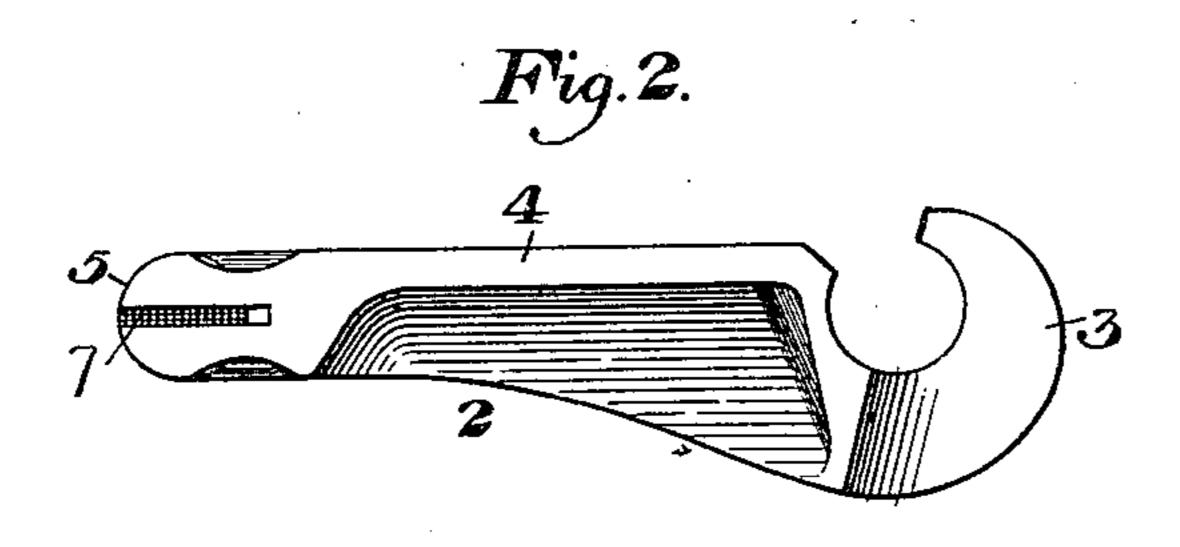
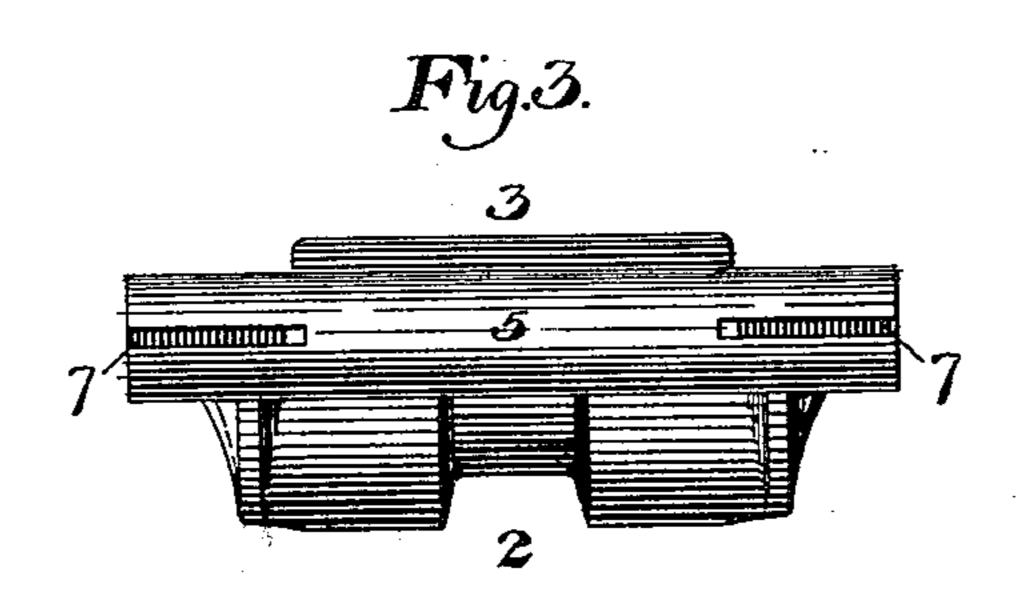
G. G. HOWE. CHAIN LINK.

(Application filed May 22, 1900.)

(No Model.)







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Glenn G. Howe by Baxewell Baxewell his attorneys.

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United States Patent Office.

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

CHAIN-LINK.

SPECIFICATION forming part of Letters Patent No. 667,775, dated February 12, 1901.

Application filed May 22, 1900. Serial No. 17,509. (No model.)

To all whom it may concern:

Be it known that I, GLENN G. HOWE, of Indianapolis, Marion county, Indiana, have invented a new and useful Improvement in 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 plan view of my improved chain10 link, partly broken away. Fig. 2 is a side elevation, and Fig. 3 is an end elevation.

In casting links for drive-chains difficulty has been experienced by reason of the formation of shrinkage-cracks, especially at the corners between the side bars and end bar. It is the purpose of my invention to prevent this by means which do not impair the efficiency of the link, but increase its strength and practical usefulness.

To that end my invention consists in forming in the link, by means of cores inserted at the proper places in the mold, thin slotted openings which cause a separation of the metal at the points where shrinkage is to be prevented.

In the drawings, 2 represents a link having a hook 3, side bars 4, and an end bar 5. In the corners 6 I form slots or small openings 7,

preferably extending through the metal to the inner lines of the link in the plane of the side 30 bars. These slots, which are constituted by placing small cores in the molds in which the links are cast, prevent shrinkage of the metal during casting, and as they expose surfaces upon which the annealing process may readily take effect the slotted portions are made stronger by annealing than they would be if the metal were solid at those points.

My improvement may be applied to links of various forms and constructions, since

What I claim is—

1. A metal link having a small opening in it at a place where shrinkage is apt to occur for the purpose of preventing such shrinkage; substantially as described.

2. A link having small openings in it and extending inwardly from its corners for the purpose of preventing shrinkage; substantially as described.

In testimony whereof I have hereunto set 50 my hand.

GLENN G. HOWE.

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Witnesses:

CLINTON E. PROUSE, H. D. GORDON.