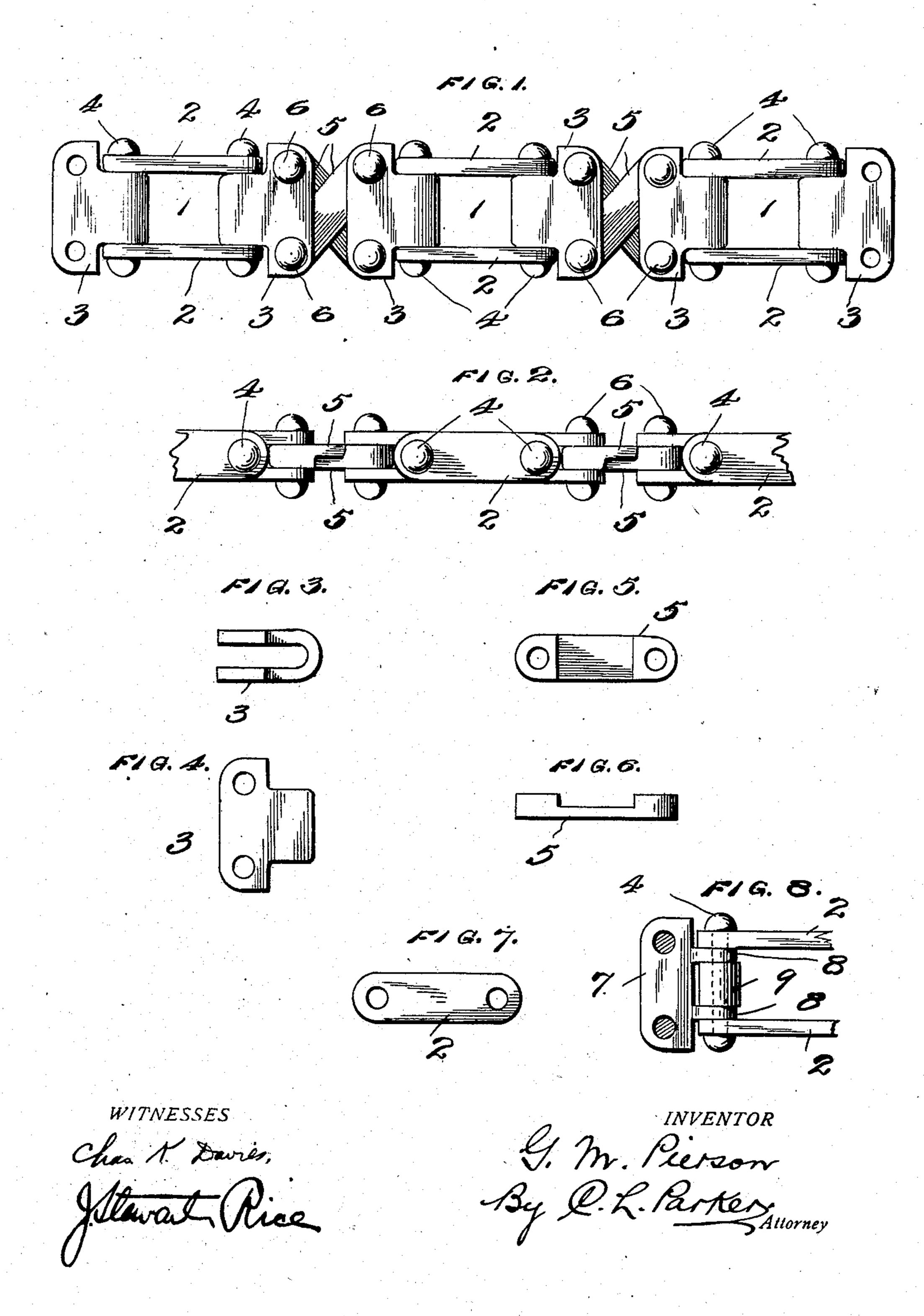
G. M. PIERSON. SPROCKET CHAIN. APPLICATION FILED MAY 25, 1908.

911,266.

Patented Feb. 2, 1909.



HE HORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GILMAN M. PIERSON, OF GRAFTON, NEBRASKA.

SPROCKET-CHAIN.

No. 911,266.

Specification of Letters Patent.

Patented Feb. 2, 1909.

Application filed May 25, 1908. Serial No. 434,801.

To all whom it may concern:

Be it known that I, GILMAN M. PIERSON, a citizen of the United States, residing at Grafton, in the county of Fillmore and State 5 of Nebraska, have invented certain new and useful Improvements in Sprocket-Chains, of which the following is a specification.

This invention relates to improvements in sprocket chains, and has for its object to pro-10 vide a chain, which while adapted to bend in the manner of the ordinary sprocket chain, can be flexed or bent laterally so that when it is necessary to cause the chain to follow an irregular course, the canting of the 15 sprocket wheel and the consequent tilting or turning of the chain will be avoided.

Other objects and advantages of my invention will appear in the course of the fol-

lowing specification.

In the accompanying drawing: Figure 1 is a top plan view of a portion of my improved sprocket chain; Fig. 2 is a side view of the same; Fig. 3 is a side view of one of the knuckles or couplers; Fig. 4 is a top plan 25 view of the same; Fig. 5 is a plan view of one of the flat cross links; Fig. 6 is a side view of the same; Fig. 7 is a side view of one of the flat bars; and Fig. 8 is a top plan view of a modified form of link, with a portion 30 thereof broken away.

Referring to Figs. 1 to 7, inclusive, of the drawing, which illustrate the preferred form of my invention, and particularly to Figs. 1 and 2, which show a portion of my sprocket 35 chain composed of several links designated by the numeral 1, connected together in a manner to be explained hereinafter, these links consist of flat side bars 2 perforated at each end (see Fig. 7) and which are de-40 signed to be pivoted at each end to U-shaped knuckles or couplers 3 by means of rivets 4 adapted to pass through said perforations and be confined within the closed end of the knuckle, which ends are reduced, as shown.

All of the links 1 of my sprocket chain are constructed in the manner just described, and are designed to be connected together by means of flat bars 5, perforated at each end and provided with cut-out portions, as illus-50 trated in Figs. 5 and 6. These flat bars 5 are adapted to be crossed, one over the other, with their cut-out portions interfitting, and

their ends pivotally held by rivets 6 between the open ends of the opposite U-shaped knuckles or couplers 3. As will be apparent, 55 the object of arranging these bars 5 in the manner just described is to provide for their sliding freely upon one another, when the

chain is turned laterally.

Referring now to Fig. 8, which illustrates 60 a modified form of U-shaped knuckle or coupler 7, and which has its closed end reduced and cut away to form closed loops 8, 8. The flat bars 2, previously described, are adapted to be pivotally connected to the 65 knuckles 7 by means of the rivets 4 passing through the perforations in the flat bars 2 and through the openings in the closed loops 8, 8, in which the rivets are confined. Antifriction rollers 9, provided with longitudinal 70 passages therethrough are adapted to be held between the loops 8, 8 by one of the rivets 4 passing through said passages. The links in this modification are designed to be connected together by means of the bars 5 75 in the same manner as previously described, and will form a roller or anti-friction sprocket chain.

Having described my invention, what I claim is,

1. A sprocket chain, comprising a number of links, and bars crossed and pivoted between said links to permit of a lateral movement of said chain, substantially as described.

2. A sprocket chain, comprising a number of links, and bars, provided with cut-out portions, pivotally connecting said links, said bars being crossed to permit of a lateral movement of said chain, substantially as de- 90 scribed.

3. A sprocket chain comprising links embodying knuckle portions, and side bars pivotally connecting said knuckle portions, and diagonal members connecting said links to 95 permit of lateral movement thereof, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GILMAN M. PIERSON.

Witnesses:

URIAH F. STANARD, W. C. Pierson.