

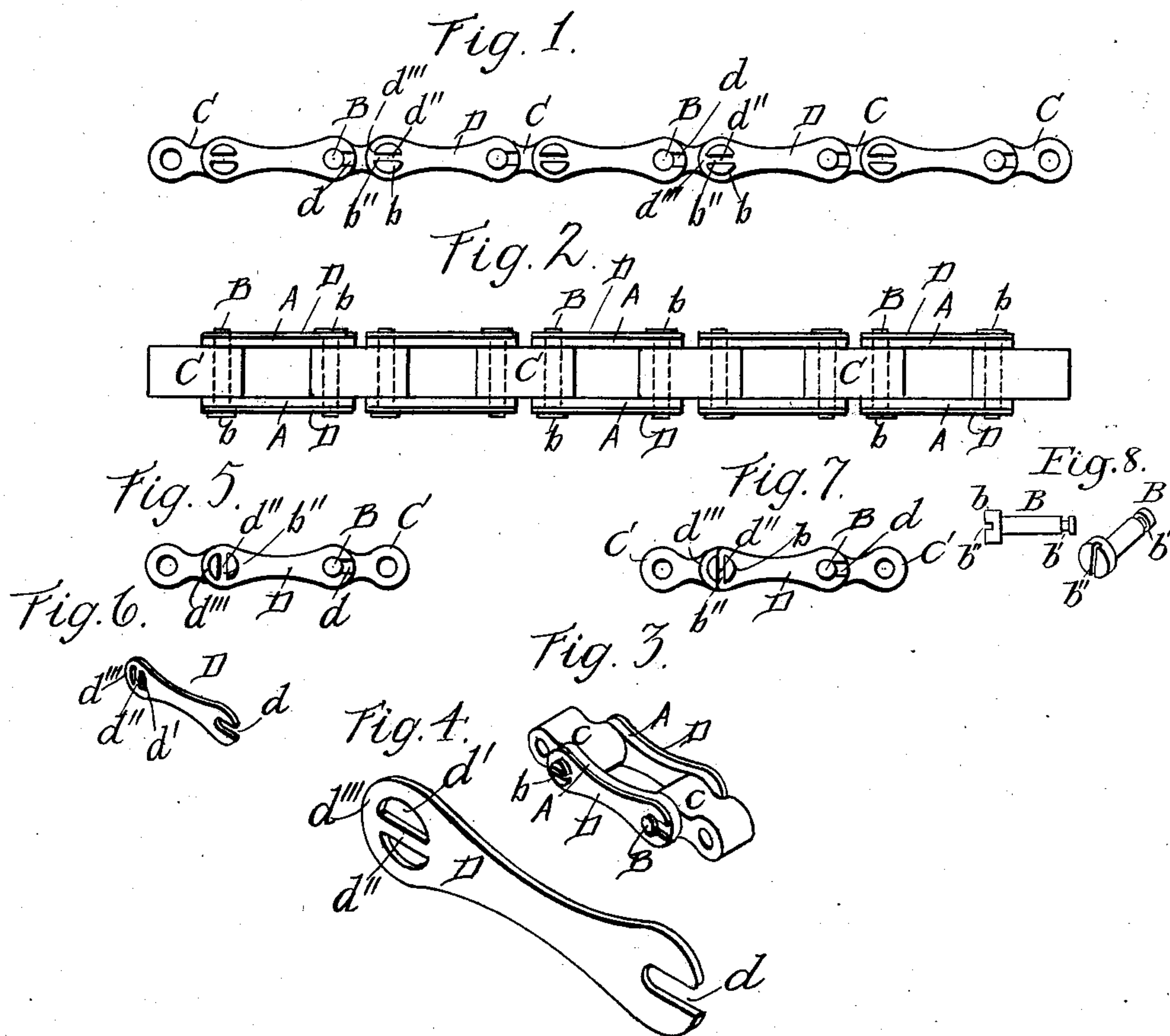
No. 608,530.

Patented Aug. 2, 1898.

H. E. STAHL.
SPROCKET CHAIN.

(Application filed Feb. 27, 1897.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

HARRY ERNEST STAHL, OF TRENTON, NEW JERSEY.

SPROCKET-CHAIN.

SPECIFICATION forming part of Letters Patent No. 608,530, dated August 2, 1898.

Application filed February 27, 1897. Serial No. 625,295. (No model.)

To all whom it may concern:

Be it known that I, HARRY ERNEST STAHL, a citizen of the United States, and a resident of Trenton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Sprocket-Chains; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side elevation of a portion of a sprocket-chain embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view of a shorter section of the chain. Fig. 4 is an enlarged detail view in perspective of one of the improved latches. Figs. 5, 6, and 7 are detail views illustrating modified forms of the latch and the manner of their application to the links of the chain. Fig. 8 shows detail views of the connecting-pins adapted to receive the said latches.

This invention is designed to provide certain new and useful improvements in sprocket-chains of the character described and claimed in the patent to H. E. Stahl and F. T. Coryell, dated March 9, 1897, No. 578,661, and it relates more particularly to the latch devices which are employed for the purpose of securing in place the connecting-pins and removable side bars of the links.

The invention consists in a latch device of this character which possesses certain novel features of construction, all as hereinafter described, and pointed out in the appended claims.

Referring to the drawings, the letter A designates the side bars of the links, B the connecting pins or journals, and C the connecting straps or blocks which form intermediate links. These parts are constructed and combined in the manner described in said patent, each of the said pins having a head *b* at one end and a surrounding groove or depression *b'* near its opposite end, adjacent pins being inserted from opposite sides of the chain.

D designates my improved latch, which I have illustrated in three slightly-different

forms. It consists in a small piece of thin metal, preferably spring-steel, and has at one end an open slot *d*, which is designed to engage the grooved end of one of the pins of each link, and at its opposite end a closed slot *d'*, which is designed to engage the head of the other pin of the same link. In the form shown in Fig. 4 this closed slot has a central longitudinal arm or bar *d''*, which is designed to engage a diametric groove *b''* in the end or head of the pin. Fig. 6 shows a similar form of latch with the exception that the arm or bar *d''* extends transversely of the slot instead of longitudinally. Fig. 8 shows a third form, which is the same as that last described except that the portion of the latch in front of the arm or bar *d''* is cut off. In all these forms this arm or bar is reinforced by the marginal or strap portion *d'''*, which extends entirely or partially around the head of the pin, and thereby greatly strengthens this part of the latch. Two of these latches are applied to each link, one to the outside of each of the latch-bars and in reverse positions. That is to say, the open slot of one latch and the closed slot of the opposite latch engage opposite end portions of the same pin. In this manner both pins are locked against endwise movement, and both are likewise secured against rotary movement in the side bars A in accordance with their natural tendency, this being an important feature.

The latches are preferably so made that they have a natural tendency or tension such as to cause them to hug or clasp the link-bars tightly. They may, however, be readily removed without the use of special tools, and any link or any part thereof can be easily taken out or replaced.

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

1. The herein-described latch or key for use on sprocket-chains for the purpose described, and comprising an elongated thin metallic plate of spring character and formed with a reduced central portion and with end enlargements, one of said enlargements having therein an open slot, and the other of said enlargements having therein a closed slot with an arm or bar extending diametrically across it, said slot and bar being adapted to

engage the projecting end portion of a chain pin or rivet of complementary form, substantially as specified.

5 2. A locking device for use on sprocket-chains, consisting of a plate of thin metal having an opening whereby it may be connected with a stud and an opening adapted to receive the head of another stud, with a

bar extending across the opening, substantially as specified. 10

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

HARRY ERNEST STAHL.

Witnesses:

MARY E. SMITH,
HOPE V. WHITE.