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Patented Oct. 4, 1898.

W. C. SOULE.

LOCKING DEVICE FOR CONNECTING BOLTS OF DRIVE CHAINS.

(Application filed Feb. 8, 1897.)

(No Model.)

Fig. 1.

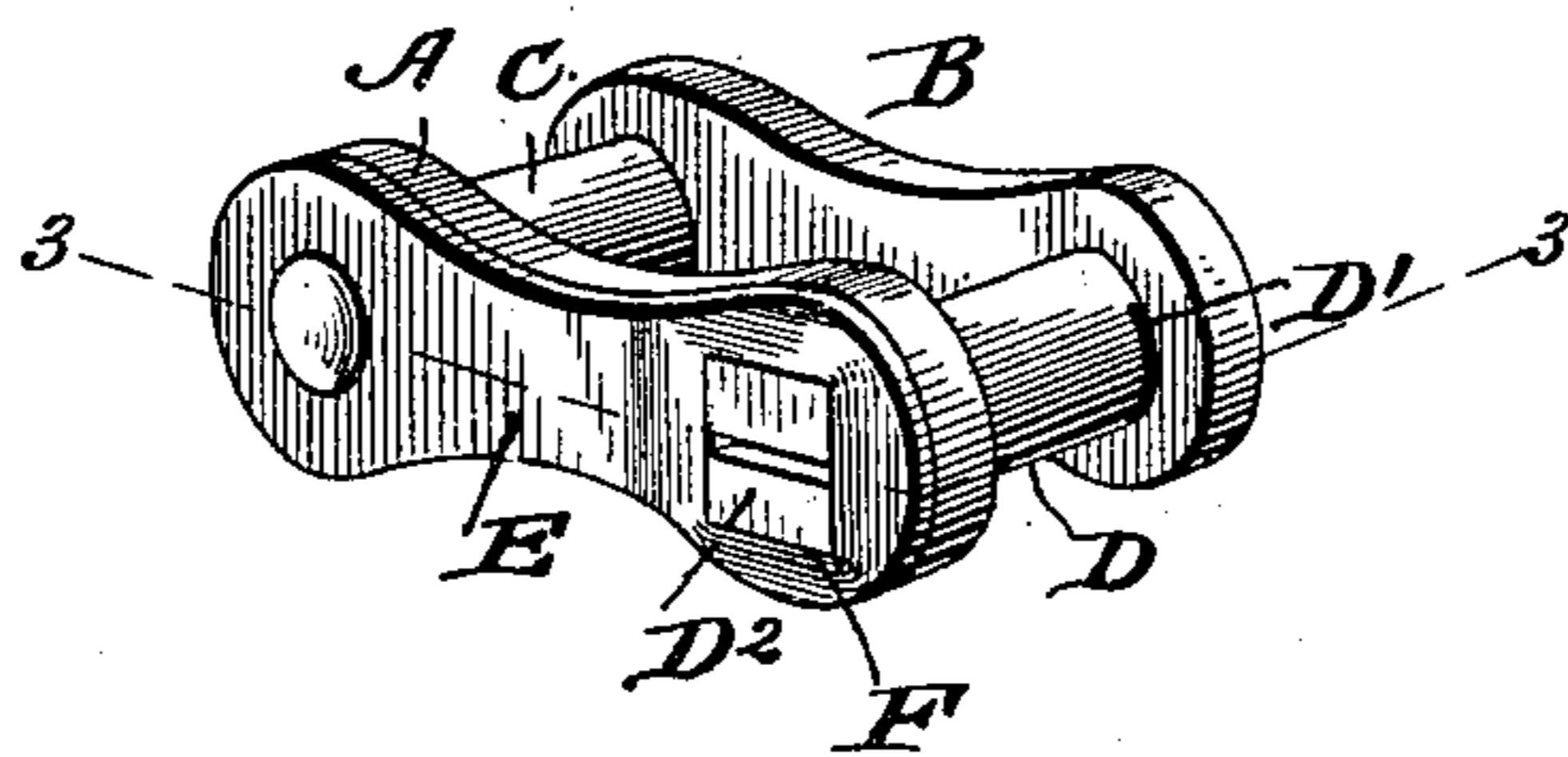


Fig. 2.

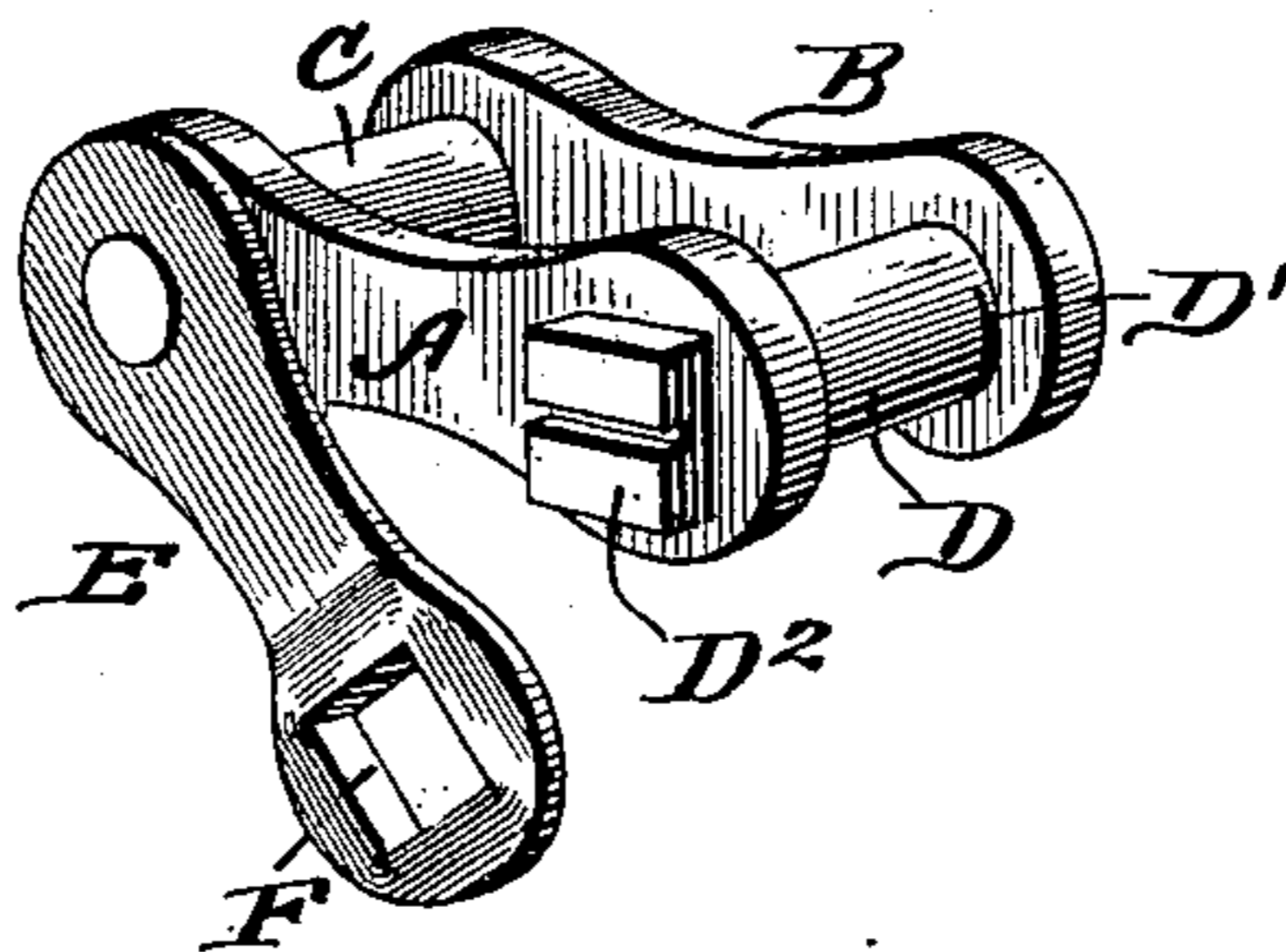
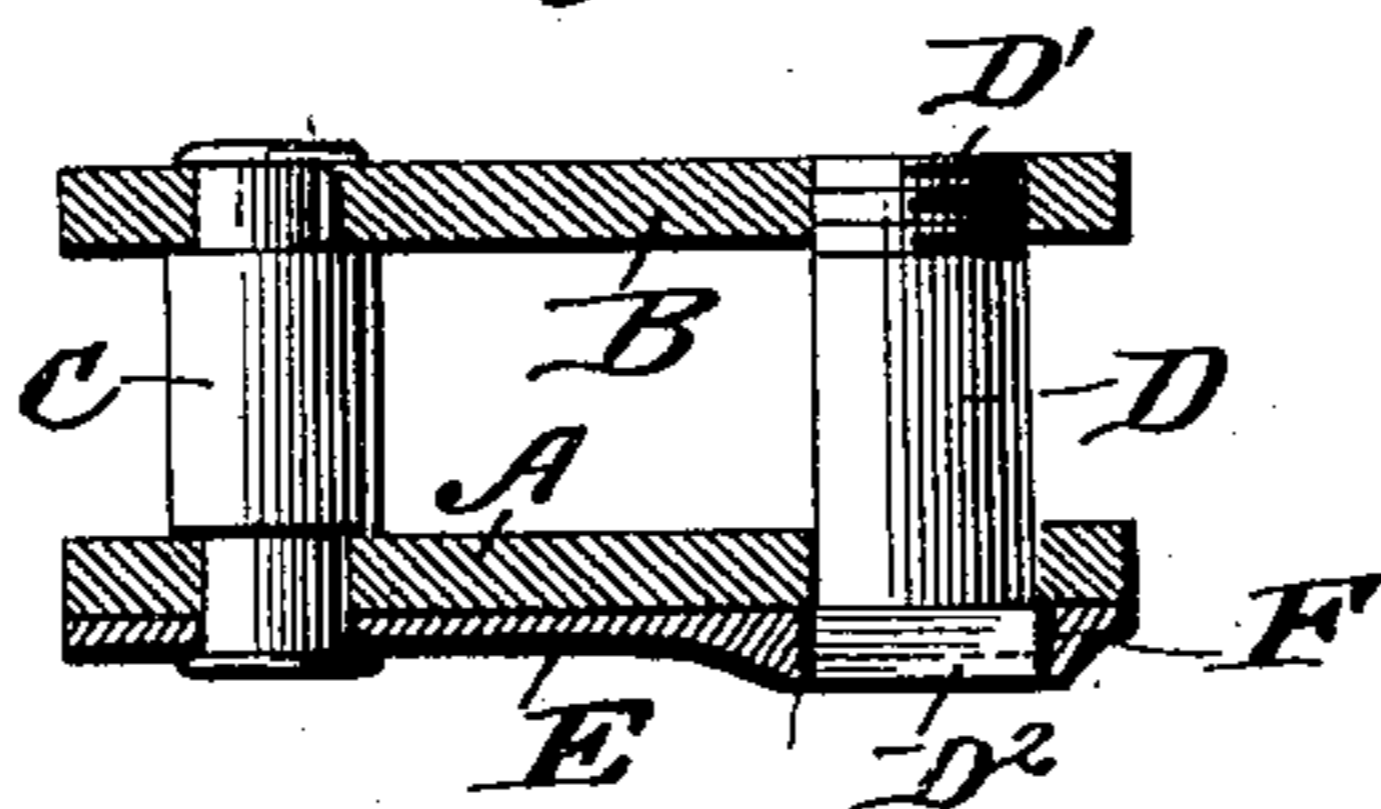


Fig. 3.



WITNESSES:

M. D. Blouelle
P. B. Surpin.

INVENTOR

Welling C. Soule.

BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WELLING C. SOULE, OF SAVANNAH, NEW YORK.

LOCKING DEVICE FOR CONNECTING-BOLTS OF DRIVE-CHAINS.

SPECIFICATION forming part of Letters Patent No. 611,950, dated October 4, 1898.

Application filed February 8, 1897. Serial No. 622,493. (No model.)

To all whom it may concern:

Be it known that I, WELLING C. SOULE, a citizen of the United States, residing at Savannah, in the county of Wayne and State of New York, have invented a new and useful Locking Device for the Connecting-Bolts of Drive-Chains, of which the following is a specification.

My invention is an improvement in drive-chains, and particularly in the constructions whereby to lock the screw-pintle of such chain; and the invention has for an object to so construct and support the device for locking the screw-pintle that it may be made of sufficient length to give it the resilience necessary to permit its adjustment into and out of locked position without reducing the thickness of the locking-plate and whereby such plate may be secured to the chain by the usual rivet-pin which connects the adjacent links, thus avoiding the necessity of employing a separate fastening for the said locking-plate.

The invention consists in the special construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my invention with the plate in locked position. Fig. 2 is a similar view with the spring-plate unlocked, and Fig. 3 is a longitudinal section on about line 3 3 of Fig. 1.

For purposes of illustration I have shown the chain-link on a somewhat larger scale than the ordinary bicycle-chain.

The link is shown as composed of the side sections A and B, which are connected at one end by the rivet-pin C and at the other end by the screw-pintle D, which is threaded at one end D' in the plate B and turns freely in the plate A and has at its end which turns in the plate A a non-circular head D², which may be nicked, if desired, to receive a screw-driver.

The plate E is made of spring metal and conforms in its contour to that of the section A, against which it fits, and forms when in locked position practically a lateral extension of the section A, supplementing the strength of such section, and by coinciding at its edge therewith avoids the provision of any ledges or offsets to receive dust or dirt, and also avoids the necessity of furnishing any means for cleaning the spring locking-plate

other than those employed for cleaning the ordinary chain-sections. This spring-plate E is pivoted at one end on the rivet-pin and may be swung on such pivot into and out of engagement with the non-circular head of the screw-pintle, being provided at its swinging end with an aperture F adapted to the head of the screw-pintle, whereby it may be adjusted over the same, as shown in Fig. 1, to lock the screw-pintle from turning, or may be adjusted, as shown in Fig. 2, clear of the head of the screw-pintle, so the latter may be readily threaded or unthreaded into or out of position, as may be desired.

In the described construction I have made the plate E of a greater thickness surrounding its aperture F, as best shown in Fig. 3.

By my improvement it will be noticed the spring locking-plate is carried by the rivet-pin, so that I avoid the necessity of separate fastenings for the said spring-plate. At the same time this construction not only avoids the necessity of separate fastenings, but by it I am able to use a spring-plate of a length exceeding the distance between the rivet-pin and the screw-pintle, so I can employ a plate of the thickness necessary to give the desired strength and of a length necessary to give the resilience in a plate of such thickness.

In operation the locking-plate may be swung into and out of locked position, being lifted slightly over the head of the screw-pintle, as will be understood from the drawings.

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

1. In a chain substantially as described the combination of the link, the rivet-pin for connecting it with the adjacent link, the screw-pintle having an integral non-circular head, and a spring-plate pivotally secured on the rivet-pin and provided at its free end with an aperture adapted to the head of the screw-pintle whereby to secure the said pintle from turning, whereby the spring-plate may be supported apart from separate fastenings and may be made of a length exceeding the distance between the rivet-pin and screw-pintle, enabling the use of a plate of suitable strength and of a length necessary to give the desired resilience, substantially as set forth.

2. An improvement in chains consisting of

the link, the rivet-pin for connecting it with
the adjacent link, the screw-pintle having a
non-circular end, and a spring-plate pivot-
ally secured on the rivet-pin and provided at
5 its free end with an opening adapted to the
non-circular end of the pintle whereby to se-
cure such pintle from turning whereby the
spring-plate may be supported apart from
separate fastenings and may be made of a

length exceeding the distance between the 10
rivet-pin and screw-pintle enabling the use
of a plate of suitable strength and of a length
necessary to give the desired resilience sub-
stantially as set forth.

WELLING C. SOULE.

Witnesses:

RAYMOND W. SMITH,
WM. FARRAND.