(Model.)

D. J. SHELDRICK.

DRIVE CHAIN

No. 428,862. Patented May 27, 1890.

Fig. 1.

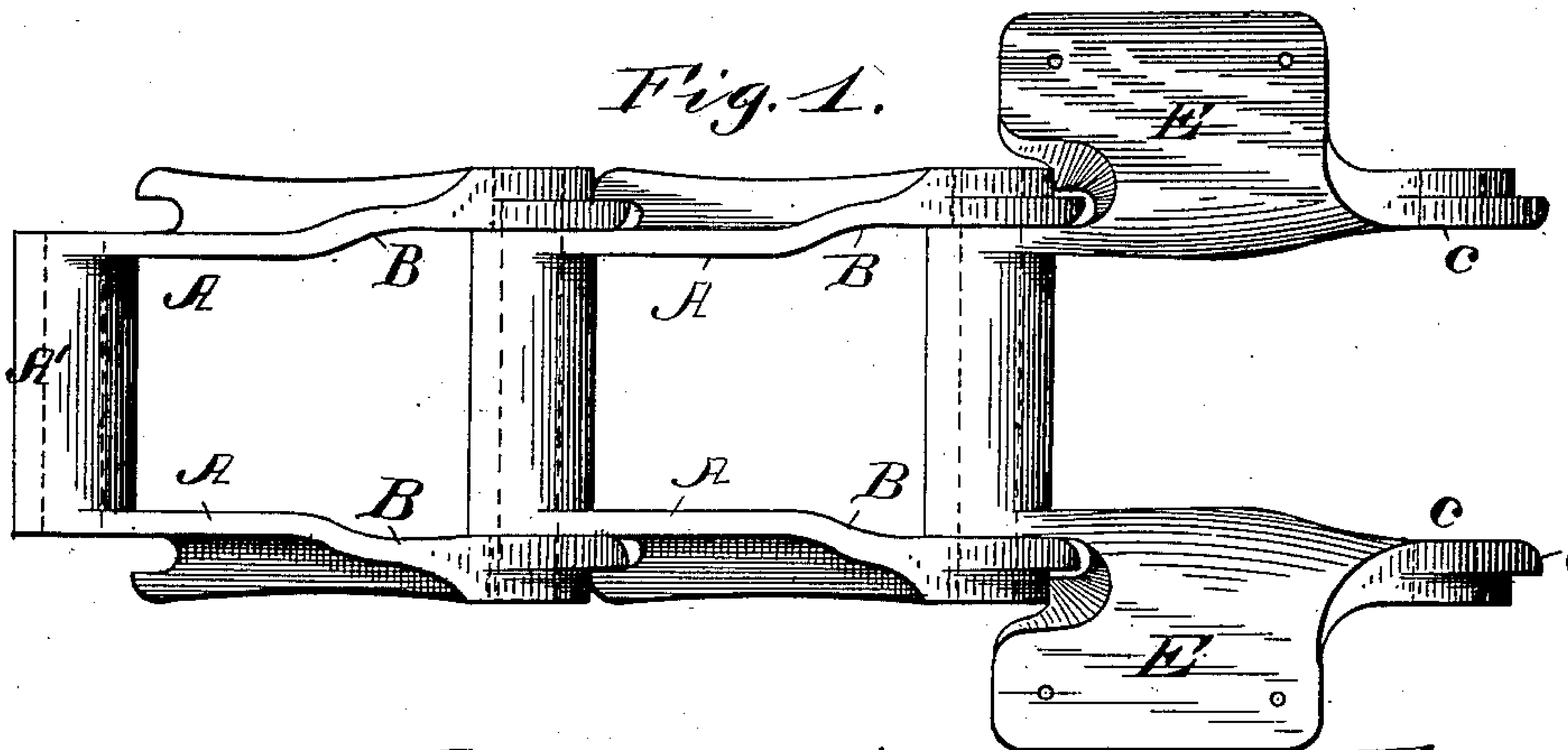


Fig. 2.

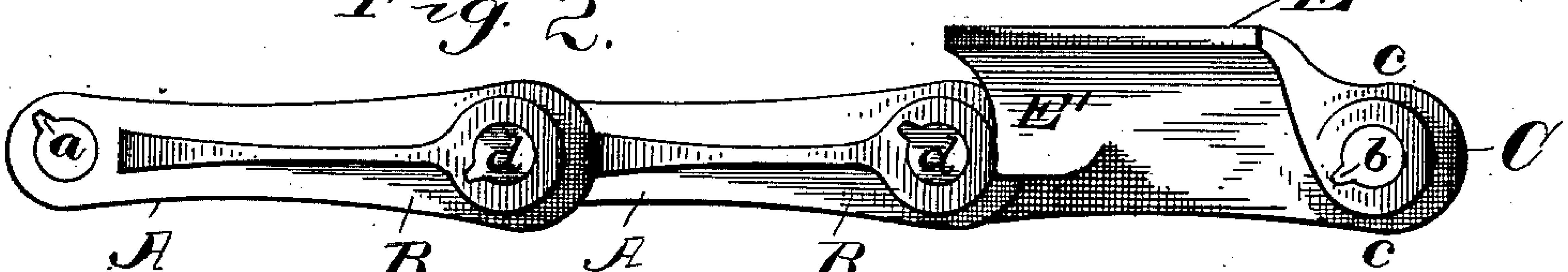


Fig. 4.

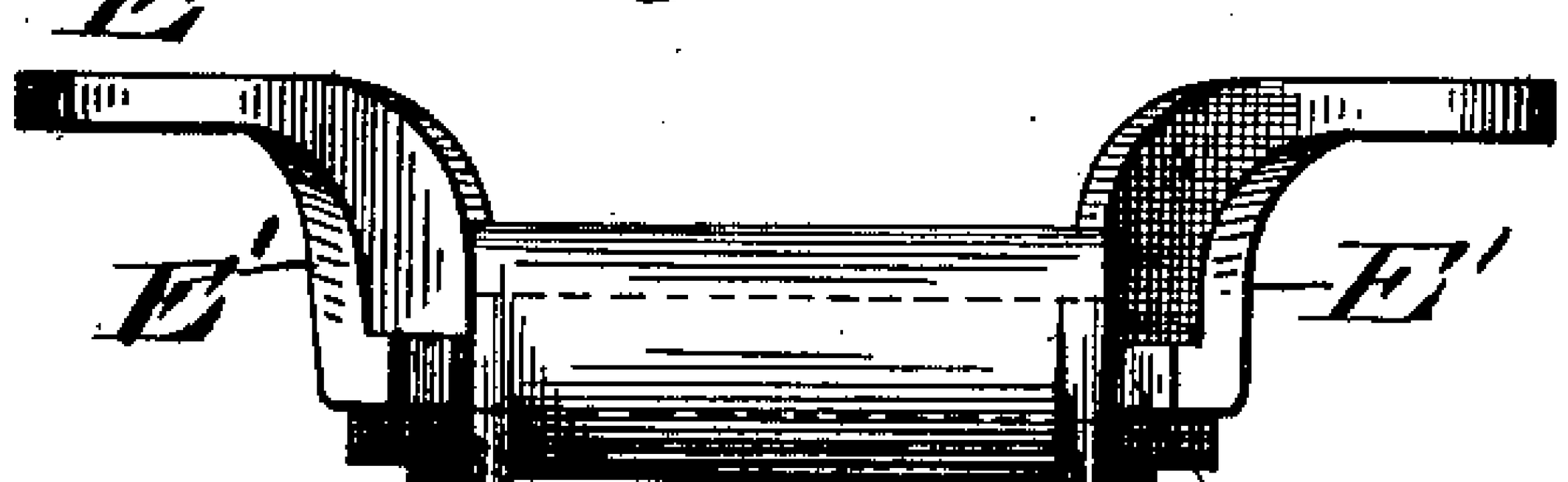


Fig. 6.

Fig. 3.

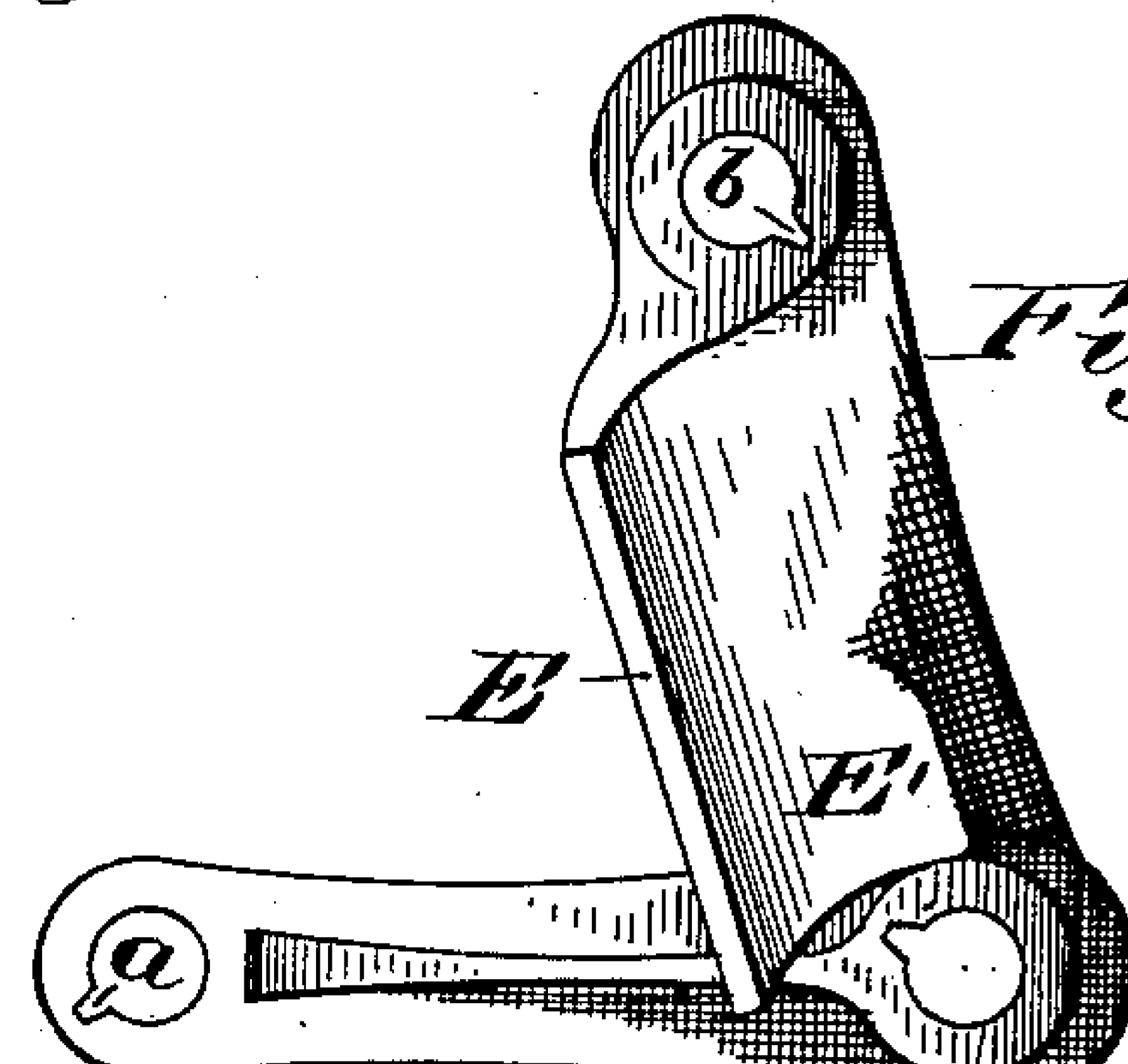
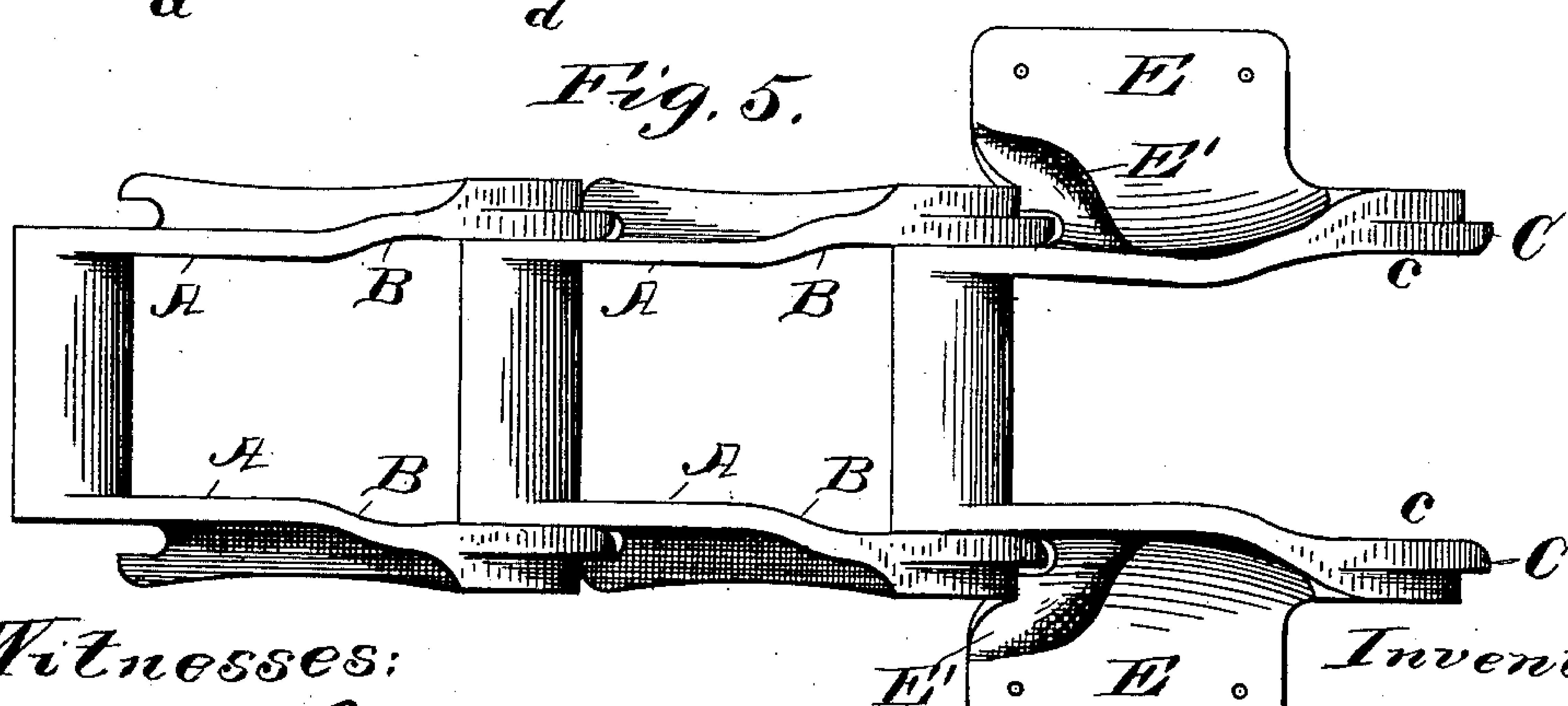


Fig. 5.



Witnesses:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DAVID J. SHELDRICK, OF COLUMBUS, OHIO, ASSIGNOR TO JOSEPH A. JEFFREY, OF SAME PLACE.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 428,862, dated May 27, 1890.

Application filed March 8, 1889. Serial No. 302,493. (Model.)

To all whom it may concern:

Be it known that I, DAVID J. SHELDRICK, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Drive-Chains, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a plan view of my improved chain. Fig. 2 is an edge view with the links straightened out in working position. Fig. 3 is an edge view with two links in position for coupling and uncoupling. Fig. 4 is an end view of one of the links. Fig. 5 is a bottom view with the links straightened out.

A B A B are the side bars, each connected at one end to an inward-projecting tubular end bar, thimble, or sleeve A′, having a pintle-seat, which is circular in cross-section, except at *a*, where it is grooved, and at its opposite end with a pintle-seat, which is circular in cross-section, except at *b*, where it is grooved, the side bar and tubular end bar being integral, substantially as is customary in this class of chains. Each side bar is provided with a projecting flange or shoulder C *c c*, of which its central part C is at its outer edge practically concentric with the center of the pintle-seat, its ends *c c* practically merging with the main portion of the side bar.

D *d d* is a pintle fitting somewhat closely the pintle-seats in the ends of the side bars and the thimble, the arrangements of the grooves *a b* being such that when two links are at an angle to each other, as in Fig. 3, these grooves register with each other, so that the pintle can be inserted; but when the links are straightened out the splines engage with opposite ends of the sleeve or thimble. Upon the upper edges of the side bars there are laterally-projecting flanges E E, preferably provided with bolt-holes to receive some form of conveyer or carrier bar, and in order to furnish as large a supporting-surface as is possible for such conveyer or carrier I extend these ears forward in the direction of the sleeves to points about in line with the centers of the pintle-seats.

E′ E′ are bracing webs or brackets curved in horizontal section and connecting the ears with the outer faces of the side bars. These webs project downward and forward.

e e (see particularly Fig. 4) are notches or recesses formed in the lower ends of these brackets to receive the flanges C *c c*, whereby the outer vertical webs of the flanges form overlapping guards or stops, which project into close proximity with the circular parts A A of the end bars. The rear walls or webs *e′* of these brackets are not perpendicular to the ears, but are inclined, substantially as indicated in Figs. 2 and 3, to receive the upper edges of adjacent side bars when the links are placed at an angle for coupling or uncoupling, as in Fig. 3. It is well known that with U-shaped links of this general character coupled together by pintles which are not riveted at their ends there is liability, when under heavy tension, of the free ends of the side bars spreading apart and either slipping off from the ends of the pintles or bending or breaking the pintles by reason of the increased strain which is thus thrown upon their extreme outer ends. By an examination of the drawings it will be readily understood that these brackets or webs E′ serve the double purpose of bracing and supporting the flanges E E and of preventing the outer ends of the side bars from spreading by reason of the engagement of the lower portions of the brackets overlapping the outer faces of the flanges C *c c*.

I am aware that it is common to provide detachable chain-links with laterally-projecting flanges to receive and support carriers, and that such flanges have been provided with bracing-webs in the angles formed by the intersection of the flanges with the bars of the links, and hence do not claim such construction, broadly; but I believe I am the first to combine with the open end of a U-shaped link and a removable pintle the closed end of a U-shaped link provided with laterally-projecting flanges and downward and forward projecting brackets notched at their lower end to receive and overlap the adjacent side bars and support them against spreading apart, whereby there is secured a broad upper face

to receive the bar or other carrier and wedge-shaped recesses to receive the side bars of the adjacent link when folded to receive the pintle.

What I claim is—

The combination, with a U-shaped link and a removable pintle passing through the free ends of its side bars, of a link having a tubular end bar integral with its side bars and mounted upon said pintle and provided with laterally-projecting flanges, and the downward and forward projecting brackets notched at their lower ends and overlapping the free ends of the side bars of the adjacent U-shaped link, substantially as set forth.

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

DAVID J. SHELDRICK.

Witnesses:

DAVID E. WILLIAMS,

WILLIAM F. GARRETT.