

(Model.)

E. M. MORGAN.

DRIVE CHAIN.

No. 293,493.

Patented Feb. 12, 1884.

Fig. 1.

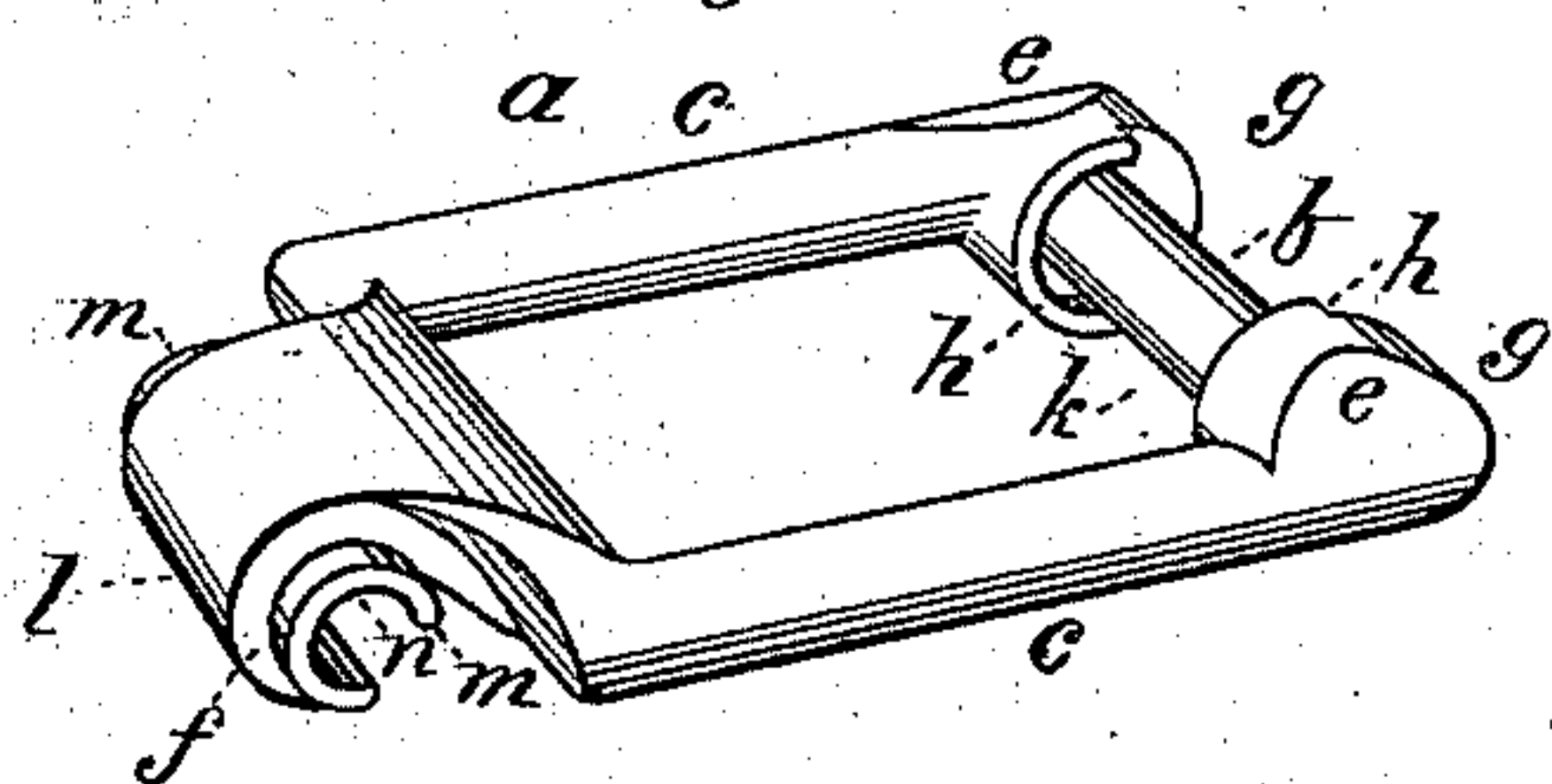


Fig. 2.

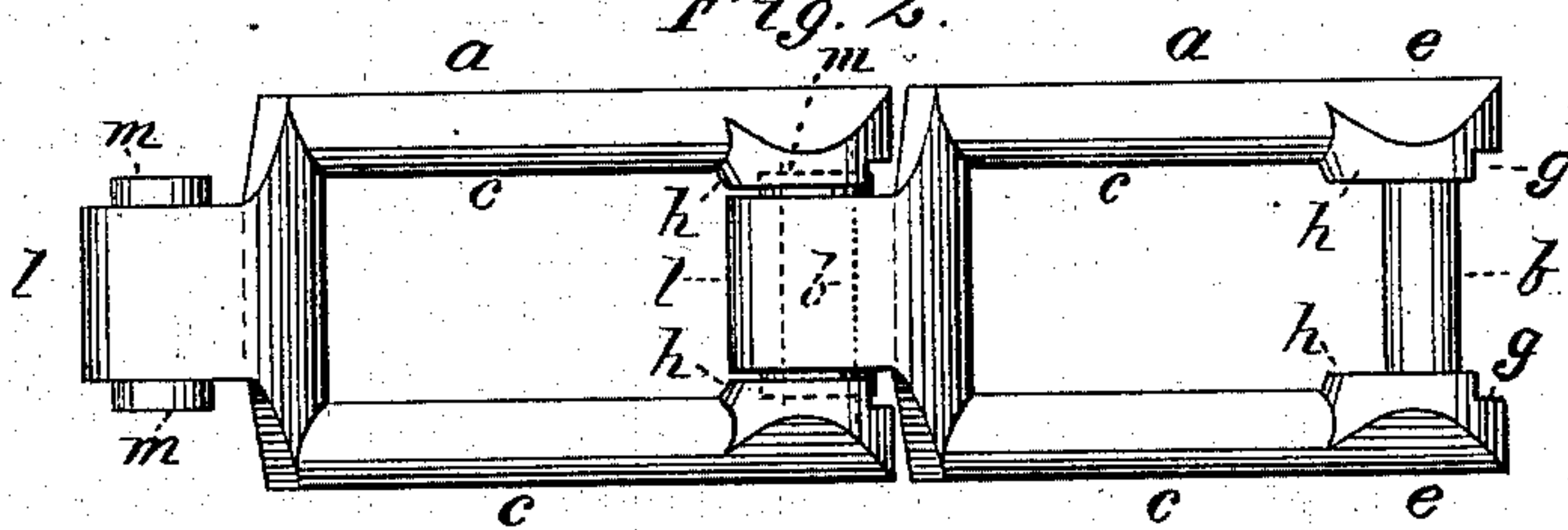


Fig. 3.

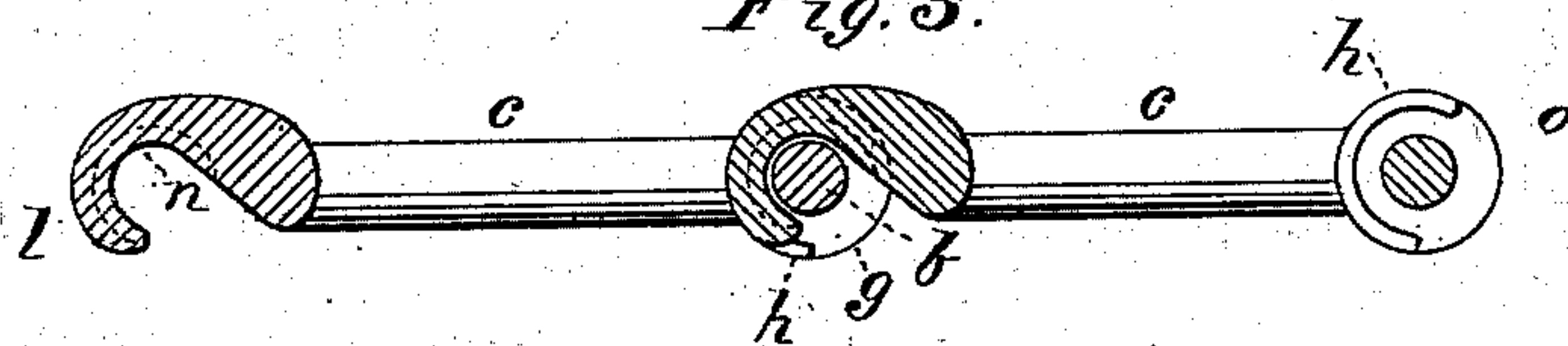
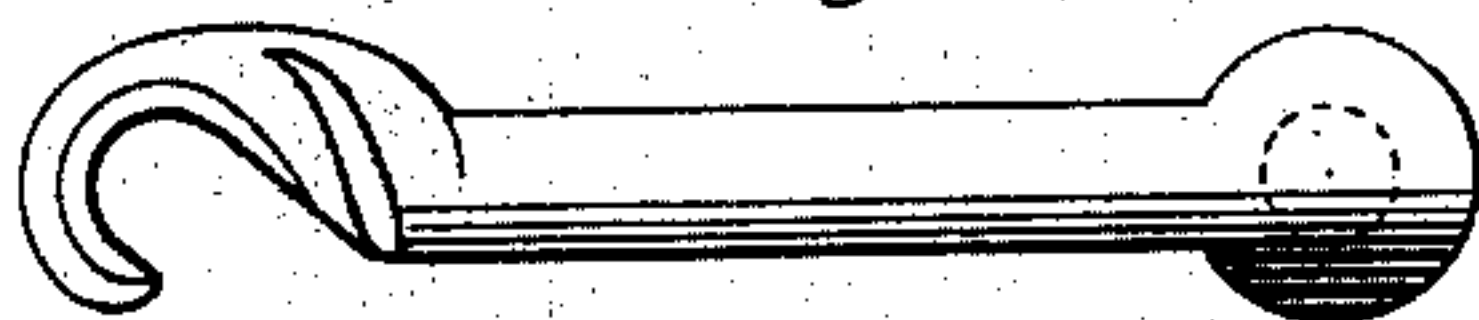


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

ELIAS M. MORGAN, OF BELLEVILLE, ILLINOIS.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 293,493, dated February 12, 1884.

Application filed December 4, 1883. (Model.)

To all whom it may concern:

Be it known that I, ELIAS M. MORGAN, a citizen of the United States, residing at Belleville, in the county of St. Clair and State of Illinois, have invented certain new and useful Improvements in Drive-Chain Links; 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 or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a perspective view. Fig. 2 is a top view, showing two links joined. Fig. 3 is a vertical section. Fig. 4 is a side view.

This invention has relation to drive-chain links; and it consists in the construction and novel arrangement of a rectangular link, having at one end a cross-bar bearing and lateral inwardly-facing shoulders at the ends thereof, formed with segmental inwardly-projecting flanges, separated from the cross-bar bearing by circular interspaces, and at the other end a hook formed with lateral segmental outwardly-projecting flanges of less radius than the flanges at the opposite end of the link, and adapted to work in the interspaces between said flanges and the cross-bar bearing, all as hereinafter set forth.

In the accompanying drawings, the letter *a* designates a drive-chain link of rectangular closed form, having at one end a cross-bar bearing, *b*, of full cylindrical form, connecting the side bars, *c*, which are enlarged at *e*, to provide at each end of said cross-bar bearing *b* an inwardly-facing shoulder, *g*, from which projects inwardly a segmental flange, *h*, between which and the cross-bar is an interspace, *k*. The flanges *h* are on the inner portions of the shoulders *g*, as shown. The other end of the link is provided with a hook, *l*, the body of which is of proper width to pass easily between the flanges *h* of the next link, and is provided with lateral outwardly-projecting segmental flanges *m* next the interior or bearing portion *n*. These segmental flanges *m* are circularly curved, and are of less radius than

the flanges *h*, being designed to pass readily within the flanges *h* of the next link, to work in the circular interspaces *k*, formed between said flanges *h* and the cross-bar. These outwardly-projecting flanges *m*, when in engagement, extend to or nearly to the lateral shoulders *g*, and serve to keep the links true, this effect being assisted by the contact of the flanges *h* with the lateral faces *f* of the body of the hook. The interlocking of the flanges *h* and *m*, while it allows the links to move freely, prevents them from becoming casually disengaged—a mishap which is apt to occur when a chain is loosely geared, or when the cross-bars of the links are worn. In this construction the side bars are of full strength, no lateral depression being required. This chain can be put together without using lateral room, as the connection between the links is made by endwise circular movement—that is to say, the hooked end of one link is held in a position at a proper angle to the end bar of the adjacent link, and after inserting the flanges *m* in the interspaces *k* the links are rotated until the said hook encircles the connecting-bar *b*, and the links assume the position shown in Fig. 2. To disconnect the links, this operation is simply reversed.

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

The rectangular drive-chain link having at one end the cross-bar bearing *b*, and at the ends thereof lateral inwardly-facing shoulders *g*, formed with segmental inwardly-projecting flanges *h*, separated from the cross-bar bearing by circular interspaces *k*, and at the opposite end a hook, *l*, formed with lateral segmental outwardly-projecting flanges *m*, of less radius than the flanges at the opposite end of the link, and adapted to work in the interspaces between the said flanges and the cross-bar bearing, substantially as specified.

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

ELIAS M. MORGAN.

Witnesses:

F. H. PIEPER,
JOSEPH PENN.