No. 775,355. PATENTED NOV. 22, 1904.

C. E. SMITH.

CHAIN CONNECTING DEVICE.

APPLICATION FILED JULY 7, 1904.

NO MODEL.

Fig. 1.

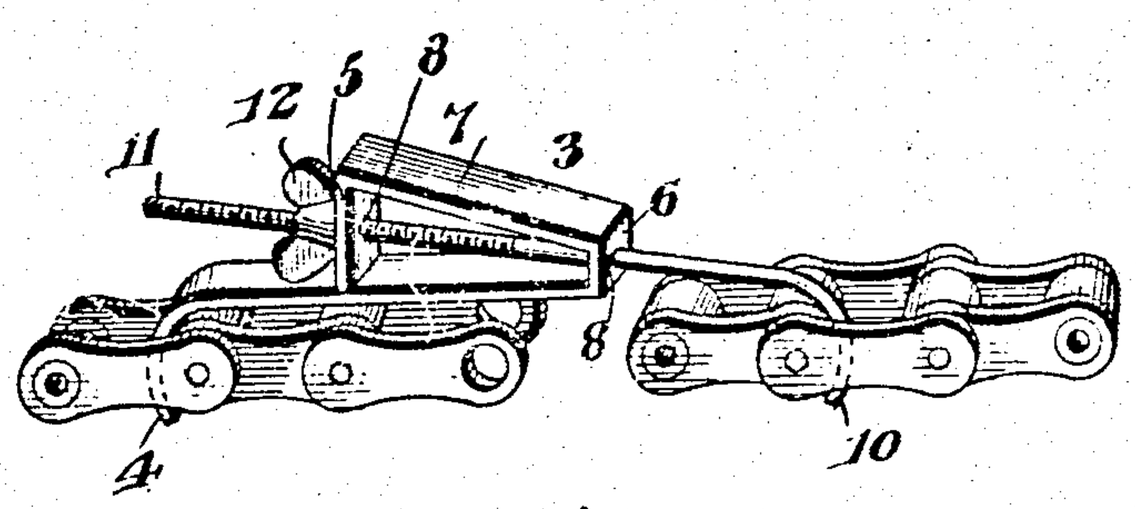
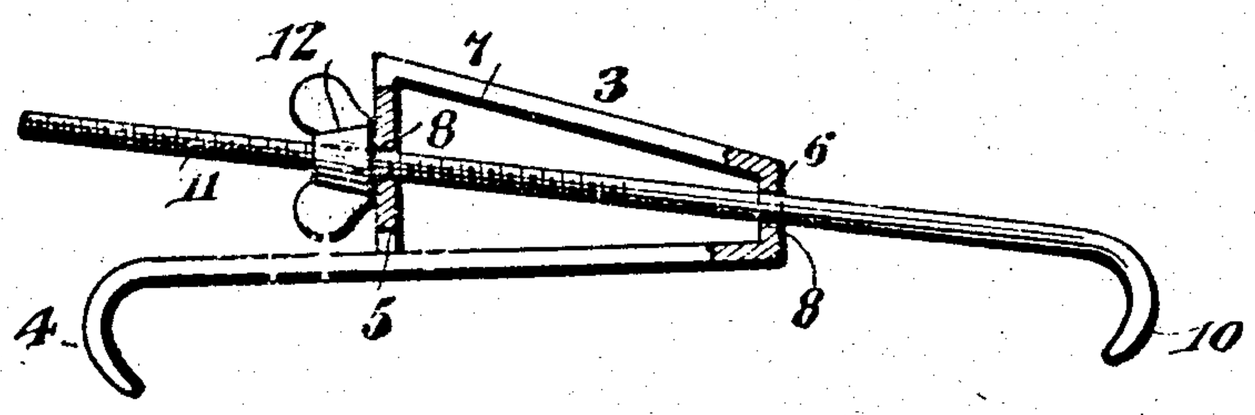


Fig. 2.



Witnesses
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No. 775,355. Patented November 22, 1904.

UNITED STATES PATENT OFFICE.

CYRUS EDWARD SMITH, OF FALL RIVER, MASSACHUSETTS.

CHAIN-CONNECTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 775,355, dated November 22, 1904.

Application filed July 7, 1904. Serial No. 215,359. (No model.)

To all whom it may concern:

Be it known that I, CYRUS EDWARD SMITH, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful Chain-Connecting Device, of which the following is a specification.

The present invention relates to means for drawing the terminals of sprocket and similar chains together for the purpose of fastening the same. In many structures employing endless sprocket-chains—as, for instance, automobiles—certain of the sprocket-wheels are incased, and therefore it is difficult to remove or apply the chains, as it ordinarily requires the sprocket-wheels to be moved toward each other and afterward reset.

The object of the present invention is to avoid these objections by providing a simple device of a novel nature, whereby the terminal chain-sprockets may be drawn together and consequently conveniently connected.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein

Figure 1 is a view showing portions of a chain with the improved device connecting the same. Fig. 2 is a longitudinal sectional view through the device.

Similar reference-numerals indicate corresponding parts in both figures of the drawings.

In the embodiment illustrated a frame 3 is employed, preferably formed of a single strip of sheet metal having a rearwardly-extending offset terminal hook 4 and spaced bearing-lugs 5 and 6, these bearing-lugs being connected by a brace portion 7 and the lug 6 being preferably smaller than the lug 5. The formation of the frame will be clearly apparent, particularly by reference to Fig. 2. The hook portion 4 is formed by bending one end of the strip. Said strip is then bent substantially midway and looped over, thereby forming the lug 6, the opposite terminal being bent inwardly and abutted against the strip slightly in advance of the hook 4. The bearings 5 and 6 are formed with openings 8, and through the same is slidably passed a shank 9, the end thereof that projects beyond the bearing 6 having a hook 10. The opposite end is threaded, as shown at 11. An adjusting thumb-nut 12, screwed upon the threaded shank 11, bears against the lug 5.

In using the device the hook 4 is engaged in one of the chain-sprockets at one terminal of the chain, while the hook 10 is engaged in a sprocket of the other terminal, as clearly illustrated in Fig. 1. The nut is then screwed upon the shank, so as to draw the hooks toward each other, thereby moving the terminals of the chain in a similar direction, so that they may be readily connected, as will be seen.

It will be apparent that this device is very simple in its nature and can be readily constructed at small cost. The frame, being made of a single strip of metal, can be easily bent to proper shape, and the loop portion, formed at one end, constitutes spaced bearings for the shank, so that there can be no lateral movement between the two chain-engaging elements. Moreover, the device constitutes a handy article which can be carried with any ordinary repair kit for automobiles, so that in case of accident with the sprocket-chain said chain may be repaired or tightened with facility.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a device of the class described, the combination with a frame having spaced bearings and carrying a hook, of a shank movably extending through the bearings and having a hook, and an adjusting device engaging the frame and shank for moving the latter through the bearings of the former and thereby moving said hooks toward each other.

2. In a device of the class described, the combination with a frame having a terminal

hook and provided with a loop portion having offset spaced bearings, of a shank slidably passed through the bearings of the loop portion and having a hook at one end, and an adjusting-nut threaded through the end of the shank and abutting against one of the bearings.

3 In a device of the class described, the combination with a frame including a longitudinally-disposed bar terminating in an integral sprocket-chain-engaging hook, of a bearing carried by the bar, a shank slidably mounted in the bearing and located at an inclination to the bar, said shank carrying a sprocket-chain-engaging hook that is located in opposing relation to the hook of the bar, and an adjusting device engaging the shank.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CYRUS EDWARD SMITH. [L.S.]

Witnesses:

HECTOR LE BOEUF,

PHILIPPE A. BROSSEAU.