(No Model.)

L. HUNTER.

ICE ELEVATOR CHAIN.

No. 545,690. Patented Sept. 3, 1895.

FIG. 1

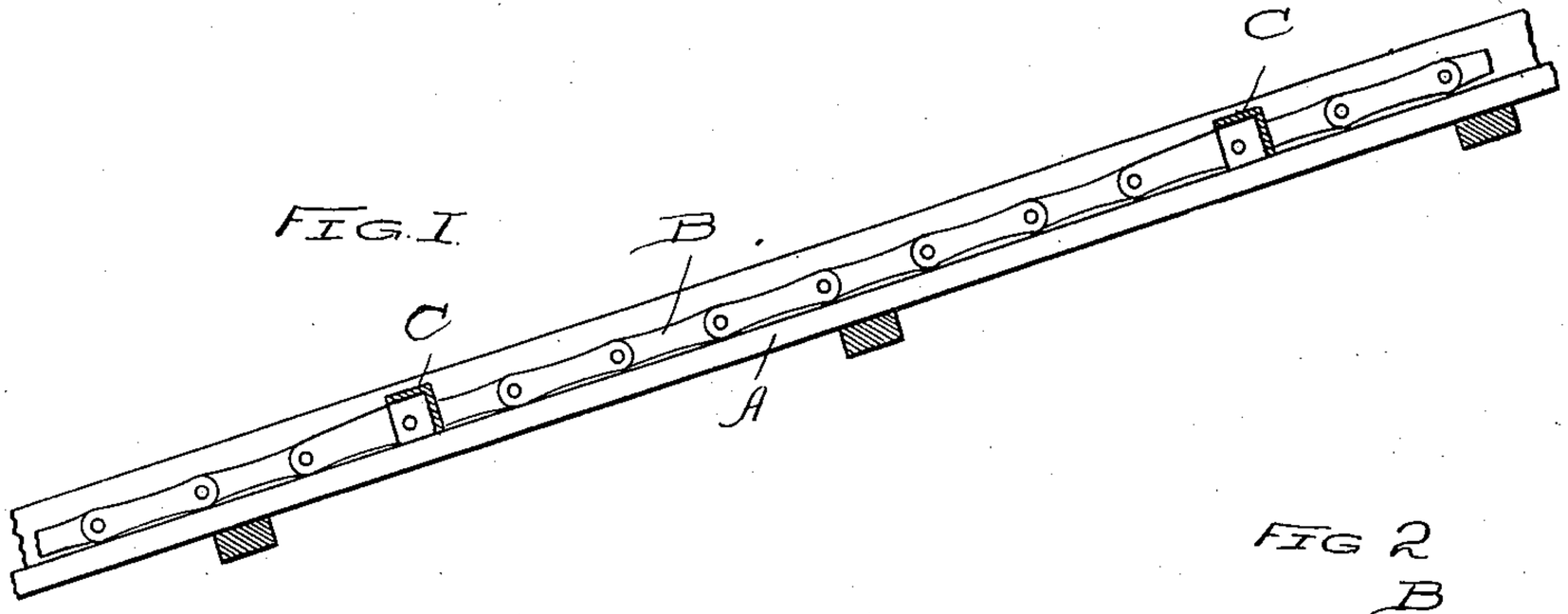


FIG. 2

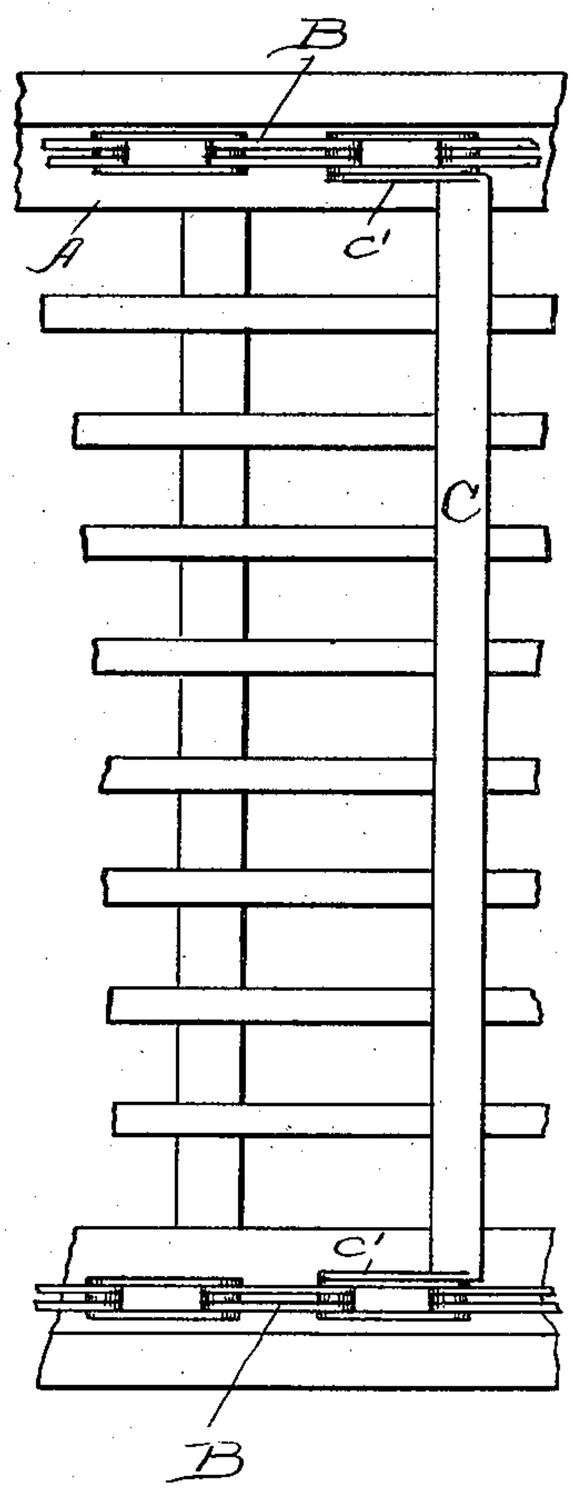


FIG. 3

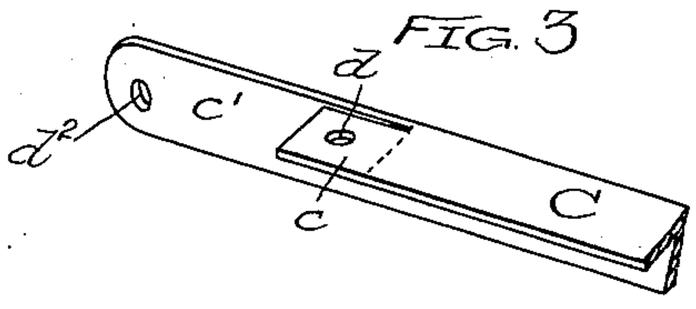


FIG. 4

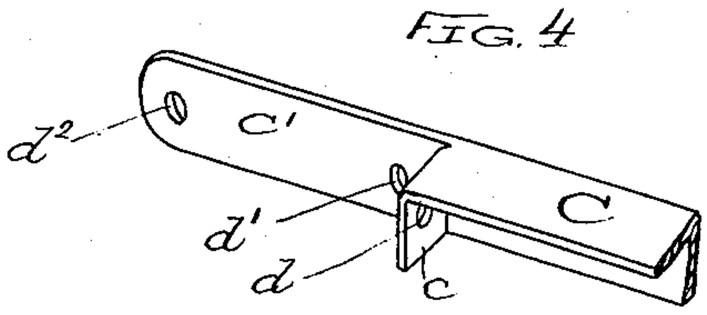


FIG. 5

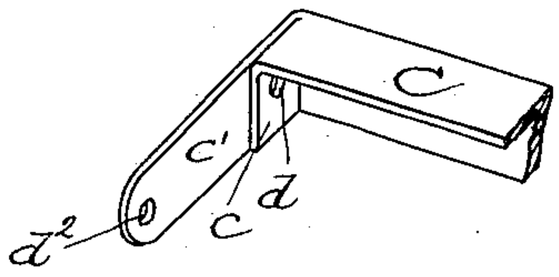
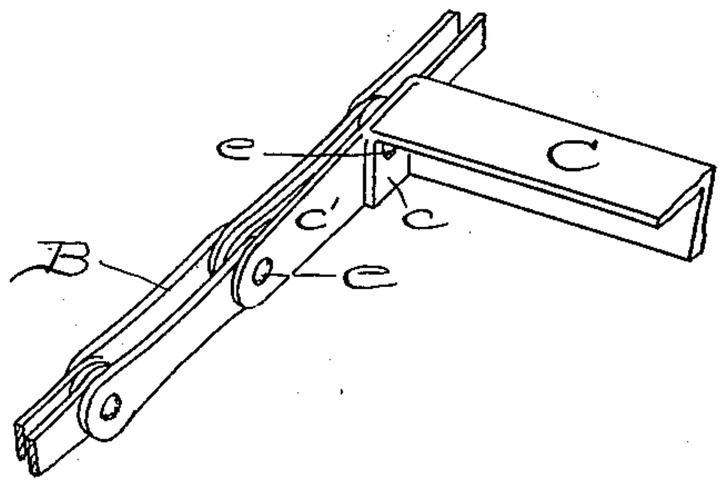


FIG. 6



WITNESSES:
Lew. E. Curtis
H. D. Munday,

INVENTOR:
LEMONT HUNTER
BY Munday, Evarts & Adcock,
HIS ATTORNEYS.

UNITED STATES PATENT OFFICE.

LEMONT HUNTER, OF CHICAGO, ILLINOIS.

ICE-ELEVATOR CHAIN.

SPECIFICATION forming part of Letters Patent No. 545,690, dated September 3, 1895.

Application filed April 10, 1895. Serial No. 545,157. (No model.)

To all whom it may concern:

Be it known that I, LEMONT HUNTER, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Ice-Elevator Chains, of which the following is a specification.

This invention relates to an improvement in the construction of ice-elevator chains, and more particularly to the construction and method of attachment of the cross-bars of such chains. These cross-bars have ordinarily been made of a solid wooden bar rectangular in cross-section and having a tenon at each end, fitting into a casting, to which it is pinned or bolted, and the casting in turn secured to the chain. Such bars frequently break, split, or become detached, with their castings are heavy, and, moreover, gather snow or ice chips or water, which freezes upon them, rendering the chain heavy to operate and causing stoppages for repairs, when a large force of men are thus caused to be idle during the mending. I have found that all of these defects may be overcome in an exceedingly efficient and simple manner by constructing the cross-bar and its end attachments all in a single piece of angle iron or steel, the end attachments being formed by slitting the iron at the angle and bending the two parts at right angles to each other in two unequal pieces, which are punched with holes to receive bolts or rivets from the chain; and my invention consists in this new structure, as will be better understood from the following description and claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a sectional side elevation of a portion of an ice-elevator, showing the invention. Fig. 2 is a plan view; and Figs. 3, 4, 5, and 6 are perspective views, upon a larger scale, illustrating the construction of the improved bar and its method of attachment to the chain.

Like letters of reference made use of in the several figures denote like parts wherever used.

In said drawings, A is a fragment of the ordinary elevator-way.

B B are the elevator-chains, one at each side of the way.

C is the improved bar, made of angle iron or steel. Each end of this bar is cut into two parts by a slit along the corner or angle. One of these parts c is shown equal in length to the width of a side of the bar. The other c' is shown equal in length to the length of one of the links of the chain. Through the part c is pierced a hole d and through the part c' two holes d' d^2. The parts c c' are bent at right angles, as indicated more clearly in Figs. 3, 4, 5, and 6, to form a means of attachment of the bar to the chain and to strengthen the bar. The holes d d' d^2 may be pierced either before or after the bending of the parts c c', according to the convenience of the work.

To attach the bars to the chain, the two rivets of a link are removed and bolts or longer rivets e e, long enough to pass through the link and through the holes d d', &c., substituted. This forms a firm attachment at two points for the bar at each end to the two chains, so that the bar cannot turn or roll over.

In attaching the bar to the chains, one of the flanges of the angle-iron is placed to the front to come in contact with the ice, and the other flange extends from the upper side, so that the cavity or hollow of the angle-iron will not catch or retain fragments of ice and so that the greatest strength of the bar may be utilized in moving the ice blocks to be elevated.

I claim—

1. The cross bar for ice elevators, consisting of an angle iron bar having its ends slit, bent at right angles and pierced for attachment to the elevator chain, one of said parts being the short part and the other a long part, substantially as specified.

2. The ice elevator, consisting of a suitable frame work, two chains, and a series of angle iron cross bars having both ends slit and bent into parts of unequal lengths and attached at each end at two points to a link of the chain at the connection between said link and the adjacent link, substantially as specified.

LEMONT HUNTER.

Witnesses:
H. M. MUNDAY,
EDW. S. EVARTS.