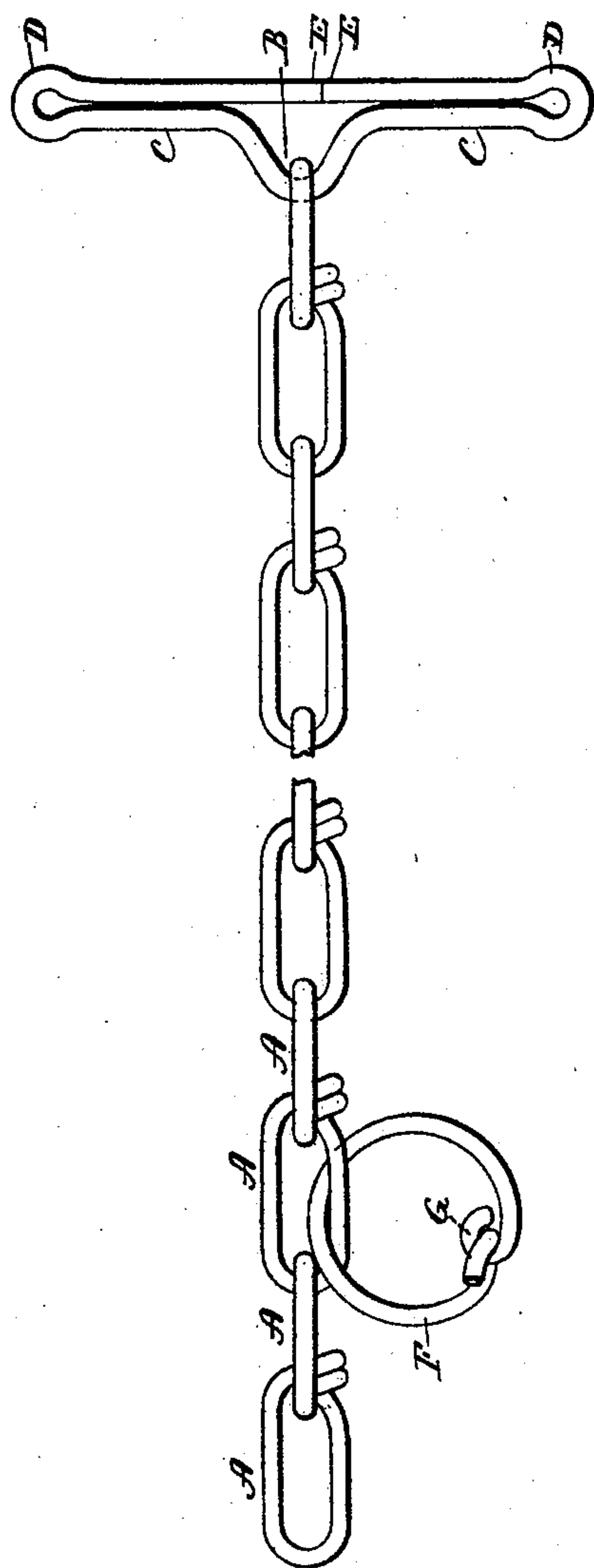


(No Model.)

R. A. BREUL.
CHAIN ATTACHMENT.

No. 455,032.

Patented June 30, 1891.



Witnesses
J. H. Shumway
Lillian D. Halsey

Richard A. Breul
G. A. Breul
E. H. Seymour

UNITED STATES PATENT OFFICE.

RICHARD A. BREUL, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE
BRIDGEPORT CHAIN COMPANY, OF SAME PLACE.

CHAIN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 455,032, dated June 30, 1891.

Application filed August 15, 1890. Serial No. 362,101. (No model.)

To all whom it may concern:

Be it known that I, RICHARD A. BREUL, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented new Improve-
5 ments in Chain Attachments; and I do hereby declare the following, when taken in connection with accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same,
10 and which said drawing constitutes part of this specification, and represents a broken view in perspective of a chain halter provided with my improved attachment.

My invention relates to an attachment for
15 chains, having for its object to form a cross-bar for chains from a single piece of wire in a simple and effective form; and the invention consists in the construction as hereinafter described, and particularly recited in
20 the claim.

The chain, represented in the drawing, which is continuously made, is composed of a series of links A, each formed of a single
25 piece of wire, the ends whereof are entwined in its center. The particular form of the links is, however, immaterial, and constitutes no part of this present invention.

The cross-bar is made, as herein shown, of a single piece of wire bent midway of its
30 length to form an open loop B, then extended in opposite directions for equal distances on each side of the loop, as at C C, then bent upon itself to form the rounded ends D D and the spring ends E E, which abut against
35 each other over the open side of the loop and align with the portions C C of the bar, to which the rounded ends D impart a good finish. The said ends E E are sprung laterally apart to permit the end link of the chain

to be engaged with the loop, in which it is re- 40
tained by the said ends, which at once recover their alignment when the lateral pressure upon them is removed. If desired, the said cross-bar may be formed from a rod or
45 bar of metal instead of wire, which, however, harmonizes better with the links. A cross-bar bent into shape, as described, suits a wire chain better than a sheet-metal bar or a straight bar having an eye soldered to it mid-
50 way of its length.

The ring F may be applied to the chain with which the bar may be engaged, to form
55 a loop in the chain, as for halters and for other purposes.

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

The herein-described attachment for chains, consisting of a cross-bar made from a single
65 piece of wire bent midway of its length to form a loop B, the wire extending to the right and left from the said loop, the wire at each end bent back and closed upon itself, so as to form a double body of the bar, the extreme ends E E of the wire meeting over the
70 open side of the loop and so as to yieldingly close that loop, the said loop adapted to receive one of the links of a chain, and so as to retain the link in that loop, substantially as described.

In testimony whereof I have signed this
specification in the presence of two subscribing witnesses.

RICHARD A. BREUL.

Witnesses:

ROBERT M. CURTIS,
McLAREN STEVENSON.