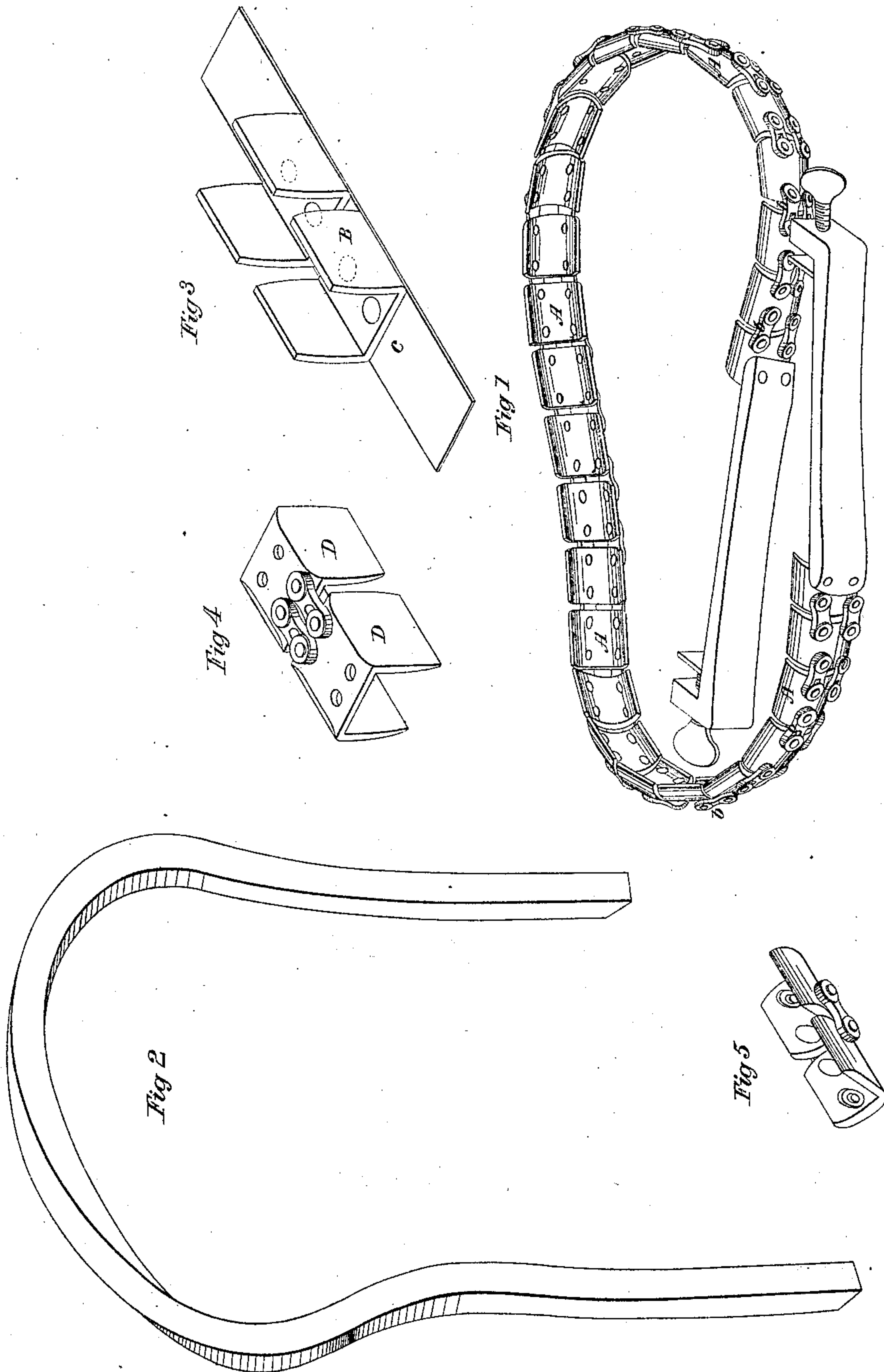


*L. Heywood,
Bending Wood.*

N^o 27,447.

Patented Mar. 13, 1860.



Witnesses:

*Thos. R. Beach
J. D. Moore*

Inventor.

L. Heywood

UNITED STATES PATENT OFFICE.

LEVI HEYWOOD, OF GARDNER, MASSACHUSETTS.

CHAIN FOR TIMBER-BENDING MACHINES.

Specification of Letters Patent No. 27,447, dated March 13, 1860.

To all whom it may concern:

Be it known that I, LEVI HEYWOOD, of Gardner, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Chains and Straps of Timber-Bending Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a view of the chain complete. Figs. 2, 3, 4, and 5, details to be referred to hereafter.

The outer side or surface of the stick of timber being bent is usually covered or protected by a strap or chain by which the fibers are prevented from elongating and bursting out as the bending proceeds. But it is found that the sides of the stick are also liable to burst at the bend and to prevent this accident which sometimes occurs is the object of my present invention which consists in so forming the links of the chain that they shall confine the stick upon two or even three sides as will now be more fully described.

In Fig. 1, is represented an entire chain for bending the backs of chairs the links A, being curved so as nearly to surround a circular stick, these links are united by others *b b*, which are united in pairs by loose rivets with the links A. A flexible chain is thus produced which may be bent

and even twisted at the same time that its links partially surround the stick and effectually prevent it from bursting or splitting as well upon the sides as the back.

In lieu of forming the links of the chain so that they shall themselves surround and protect the stick, the chain may be made of ordinary links to which may be secured separate confining boxes or clamps, or such clamps may be secured to an iron strap as in Fig. 3, in which the clamps B are firmly riveted to the flexible strap C.

Fig. 4 represents a portion of a chain in which the clamping links D confine the wood upon three sides and together with the strap represented in Fig. 3, is calculated to bend a square stick in a plane parallel with two of its faces.

Fig. 5, is a section of a chain for bending a square stick in a plane passing diagonally through its opposite edges as in Fig. 2, which represents a chair back that is bent and also twisted, an operation for the performance of which my chain is peculiarly adapted.

What I claim as my invention, and desire to secure by Letters Patent is—

The chain herein described operating as set forth.

LEVI HEYWOOD.

Witnesses:

C. W. CARTER,

WM. H. LEGATE, Jr.