No. 612,070. Patented Oct. 11, 1898.

L. VYNE.

DEVICE FOR FORMING BELT LACINGS.

(Application filed Mar. 21, 1898.)

(No Model.)

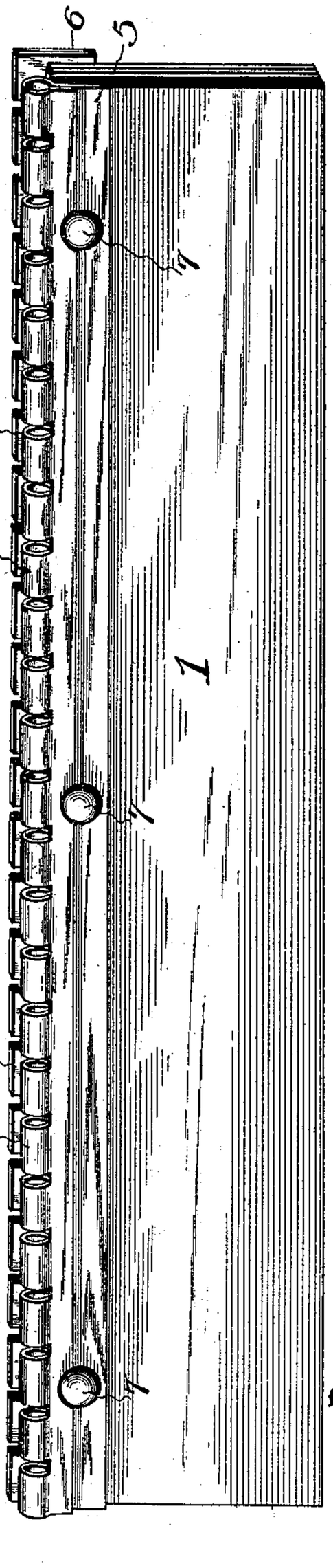

Fig. 1.

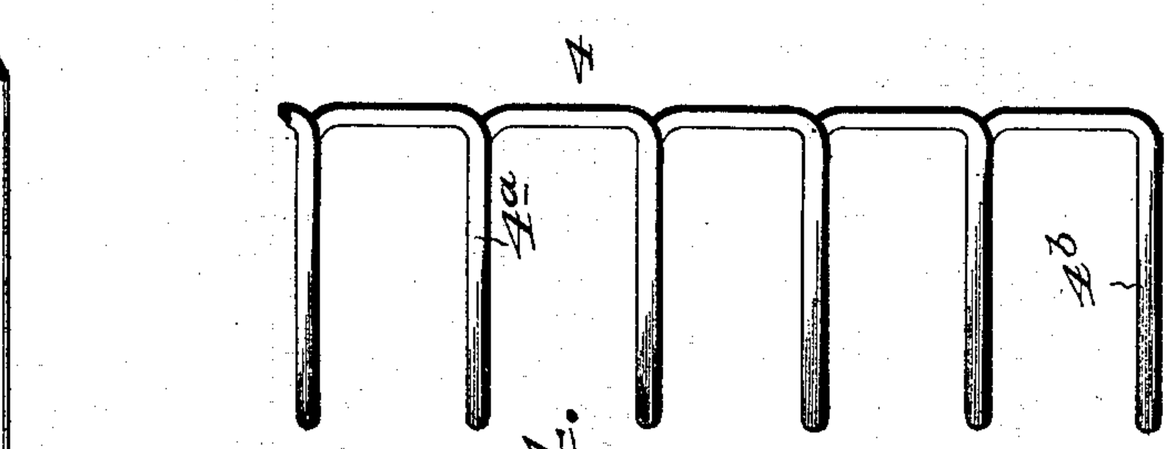

Fig. 4.

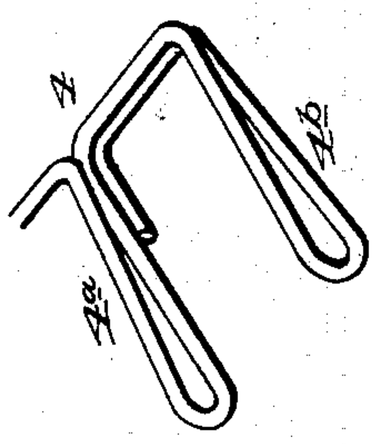

Fig. 5.

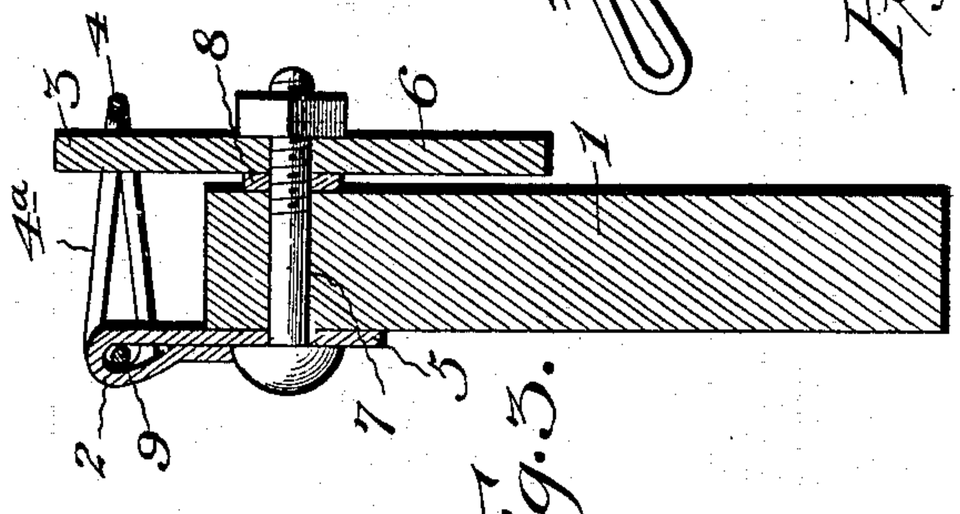

Fig. 3.

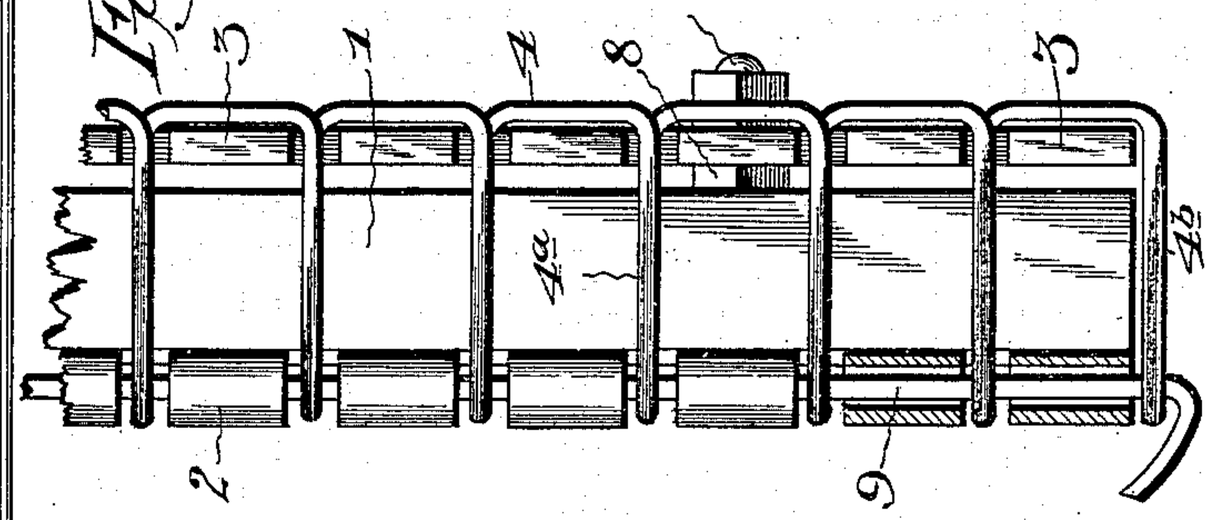

Fig. 2.

Witnesses
A. Roy Appleman

By his Attorneys,

Leonard Vyne, Inventor.

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UNITED STATES PATENT OFFICE.

LEONARD VYNE, OF WILKESBOROUGH, NORTH CAROLINA.

DEVICE FOR FORMING BELT-LACINGS.

SPECIFICATION forming part of Letters Patent No. 612,070, dated October 11, 1898.

Application filed March 21, 1898. Serial No. 674,665. (No model.)

To all whom it may concern:

Be it known that I, LEONARD VYNE, a citizen of the United States, residing at North Wilkesborough, in the county of Wilkes and State of North Carolina, have invented a new and useful Wire-Forming Tool, of which the following is a specification.

My invention relates to wire-working tools, and particularly to a device adapted for use in forming belt-lacings designed for connecting the extremities of a flexible driving or other belt; and the object in view is to provide a simple and efficient device for facilitating the forming or bending of a wire to form a lacing suitable for application to a belt.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a forming-tool constructed in accordance with my invention. Fig. 2 is a detail plan view of a portion of the tool, partly in section. Fig. 3 is a vertical section of the same, taken in the plane of one of the adjusting-bolts. Fig. 4 is a plan view of a portion of a lacing formed by means of a tool constructed in accordance with my invention. Fig. 5 is a detail view in perspective of one end of the lacing.

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

Upon a suitable supporting frame or bar 1 are arranged spaced forming-tongues 2 and 3, the tongues 2 being of hollow or looped construction, constituting eyes, and being arranged in an alined series at an interval from the flat alined tongues 3, the interval between said series of tongues being suitable to the length of the loops 4 in a belt-lacing to be formed thereon. In order that the spaced series of tongues may be adjustable, to enable lacings having loops of different lengths to be formed thereon, I preferably construct each series of tongues upon a carrier mounted upon the supporting frame or bar, and in the construction illustrated the carriers of the tongues 2 and 3 respectively consist of plates 5 and 6, held to the supporting frame or bar by means of bolts 7. Obviously the bolts, which in the construction illustrated constitute the adjusting devices for the tongue carriers or holders, may be variously constructed to attain the desired facility of adjustment; but for ordinary purposes I have found it sufficient to extend bolts, as illustrated, through the supporting bar or frame and employ fastening plates or washers 8, removably interposed between the bar or frame and the carriers or holding-plates, whereby one or more may be applied or removed to dispose the tongues as required.

In the preferred construction of the looped or saddle plate 5 it is folded upon itself upon a longitudinal line to form an inner main fold, which is engaged by the above-mentioned securing-bolt 7, and an outer narrow fold, which is arranged near its lower edge in contact with the exterior surface of the main fold, but is not caught by the securing-bolt. This enables the outer or narrow fold to yield to avoid cramping the pattern-rod and also provides for spreading the alined seats or loops formed by the tongues of the plate 5 to accommodate pattern-rods of different diameters.

In operation the wire blank which is to form the lacing is carried back and forth between the tongues 2 and 3 to form a series of narrow loops 4^a, a locking-pin 9 being threaded through the tongues 2 as the weaving operation progresses. For instance, starting at one end of the tool, as disclosed in the drawings, the web wire or blank is constructed to form a terminal loop 4^b, the extremity of the blank being arranged in the interval between the terminal tongue 3 and the adjacent tongue, after which the body portion of the wire is carried through the same interval across to the interval between the terminal and contiguous tongues 2, is engaged with the locking-pin 9, is carried back and through the same interval between the tongues 3, is thence extended longitudinally of the machine at the outer side of the second tongue 3 and again laterally through the interval between the second and third tongues 3 and across to the opposite or registering interval between the second and third tongues 2, and again engaged with the locking-pin, which has been advanced longitudinally through the bores of the tongues 2 in order

to intersect said interval. This operation is continued to produce a lacing of sufficient length to suit the width of the belt of which the extremities are to be connected. The locking-pin is advanced through the seats formed by the registering openings in the tongues 2 as the lacing of the wire blank proceeds, said blank being carried through the proper interval between two contiguous tongues 2, the locking-pin then being advanced to span said interval, and the blank being then folded backwardly over the locking-pin to form a loop 4^a.

The simplicity of the apparatus as above described is obvious, and it will be understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

A crimper for wire lacing having a parallel-sided support, front and rear plates secured to the opposite surfaces of the support and detachably secured thereto by common bolts, said plates being arranged to project above the upper edge of the support and being kerfed to form parallel spaced series of tongues, and one of the plates being folded upon a longitudinal line to form a series of alined seats or loops, and having its inner plate engaged by said bolts and an outer narrow fold which is free to move toward and from the plane of the inner fold, and a pattern-rod to fit in said alined seats or loops, substantially as specified.

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

LEONARD VYNE.

Witnesses:
J. R. FINLEY,
H. W. HORTON.