

S. Green,

Belt Fastener.

N^o 19735.

Patented Mar. 23, 1858.

Fig. 1.

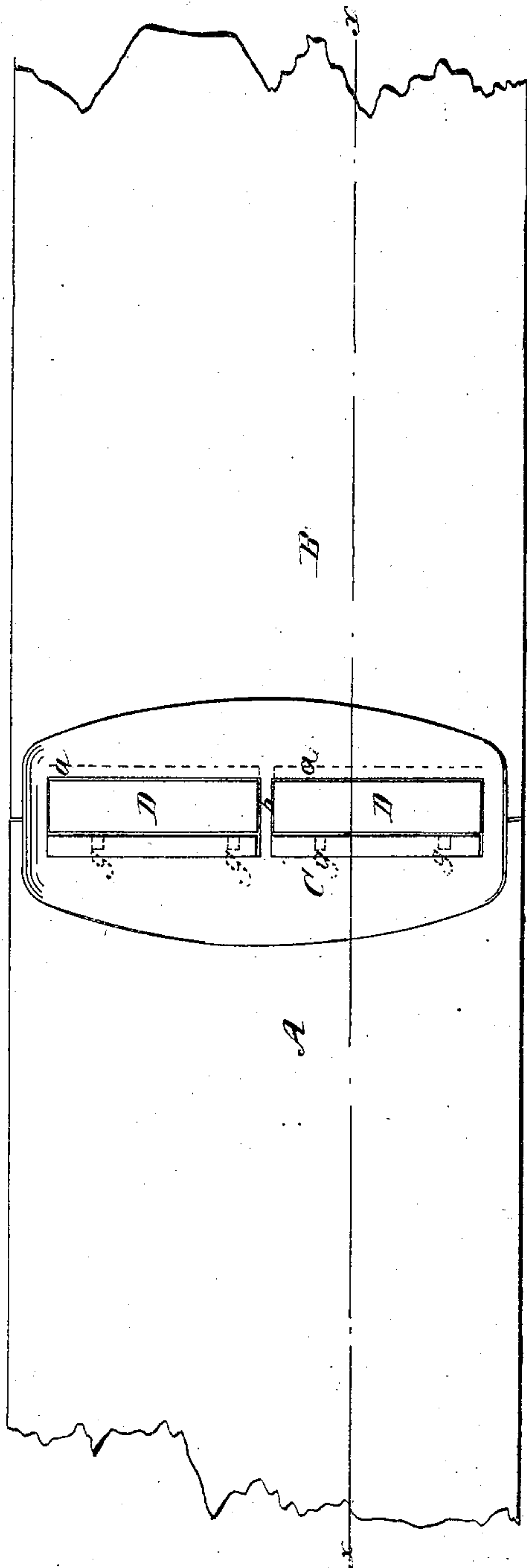
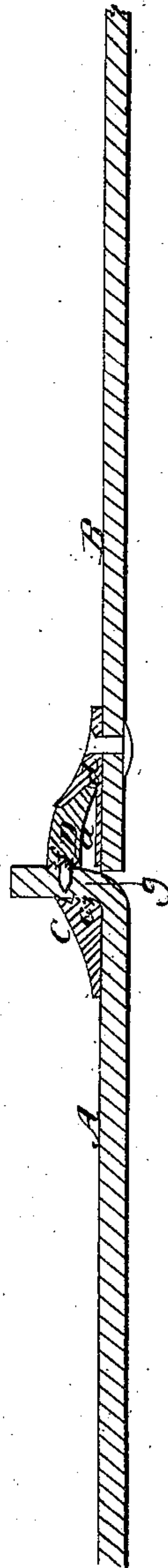


Fig. 2.



UNITED STATES PATENT OFFICE.

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BELT-COUPLING.

Specification of Letters Patent No. 19,735, dated March 23, 1858.

To all whom it may concern:

Be it known that I, SAMUEL GREEN, of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and Improved Belt-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is an outer or face view of my improvement applied to a belt. Fig. 2, is a section of ditto, taken in the line (x), (x), Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists substantially of a metal plate or stock of oblong form, equal in length to the width of the belt to which it is applied and firmly riveted to one end of the belt parallel with its edge. This plate or stock has one or more slots in it in which slots, tongues corrugated or grooved at one edge and provided with spurs are fitted. The opposite end of the belt is passed through the slot or slots in the plate or stock, and owing to its relative position with the tongues and plate is firmly secured therein by the tension of the belt and the two ends of the same consequently firmly connected.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, B, represent the two ends of a belt and C, is a metal stock or plate of oblong form and equal or nearly equal in length to the width of the belt. This stock or plate is firmly riveted to one end B, of the belt and it has two slots or openings (a) (a) made longitudinally through it, said slots being in line with each other and divided by a narrow partition (b). One edge (c) of the slots or opening (a) are corrugated longitudinally, and the opposite edges are grooved or recessed so as to form concaves (d) to receive one edge (e) of tongues D, see Fig. 2. The length of the tongues corresponds to the length of the slots. The opposite edges (f) of the tongues D, are grooved or corrugated longitudinally. The tongues D, are not equal in width to the slots (a). Sufficient space is allowed to permit the end A, of the belt to pass through between the edges (c) of the slots and the

edges (f) of the tongues, and in the edge (f) of each tongue two spurs (g) (g) are secured. The end A, of the belt is slitted longitudinally so that a part may pass through each slot (a).

The plate or stock C, may be of cast metal. Brass probably would be the preferable material. The tongues D, may be of steel or other metal.

I would remark that instead of the slots or opening (a) and two tongues D, D, one continuous slot and tongue may be used. The principle however is the same in both cases.

When the two parts of the end A, of the belt formed by the slit are passed through the slots (a) of the plate or stock C, between the edges (c) of the slots and the edges (f) of the tongues D, the tension of the belt when in operation will cause the edges (f) of the tongues D, to press the two parts of the end A, of the belt firmly against the edges (c) of the slots, for the edges (e) of the tongues are lower than the corrugated edges (f), and the spurs (g) which are forced into the end A, of the belt prevent the tongues D, from moving outward and releasing the end A, of the belt, when the belt is suddenly cast off from the driving pulley, a contingency likely to occur under the circumstances if not provided against, owing to the sudden cessation of the tension of the belt and a slight degree of elasticity which it possesses. The end A, of the belt is detached when necessary by drawing it outward through the slot (a), by means of pincers or by the hand until the spurs (g) pass out of the part A, thereby allowing the tongues to be removed.

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

The plate or stock C, slotted and provided with tongues D, one or more, corrugated at one edge and provided with spurs (g) the whole being constructed arranged and applied to the ends A, B, of the belt so as to act substantially as and for the purpose set forth.

SAMUEL GREEN.

Witnesses.

WM. ASHLEY, Jr.,

H. W. GRANGER.