

(No Model.)

G. W. SOUTHWICK.
BELT FASTENER.

No. 305,540.

Patented Sept. 23, 1884.

Fig. 1.

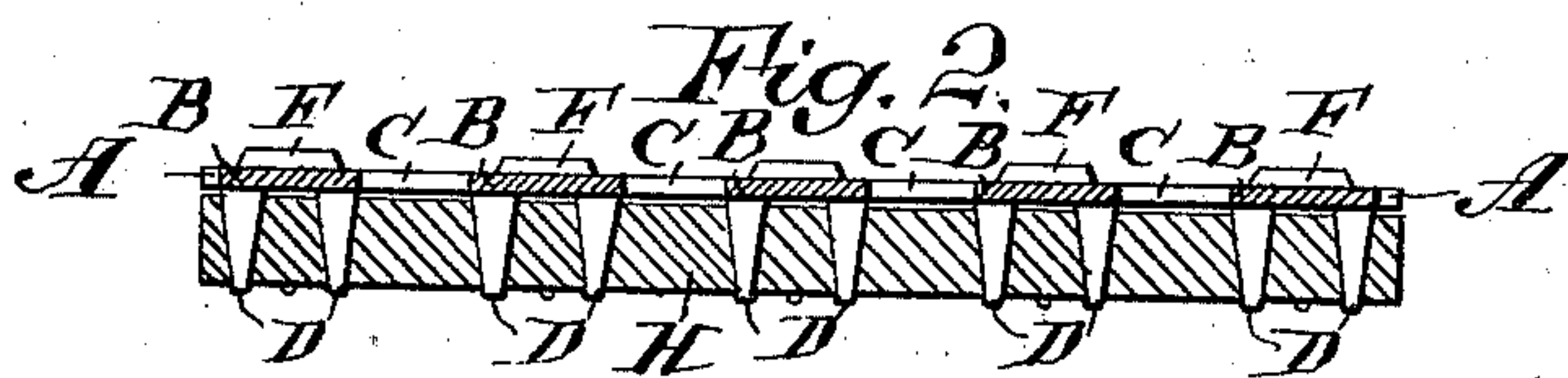
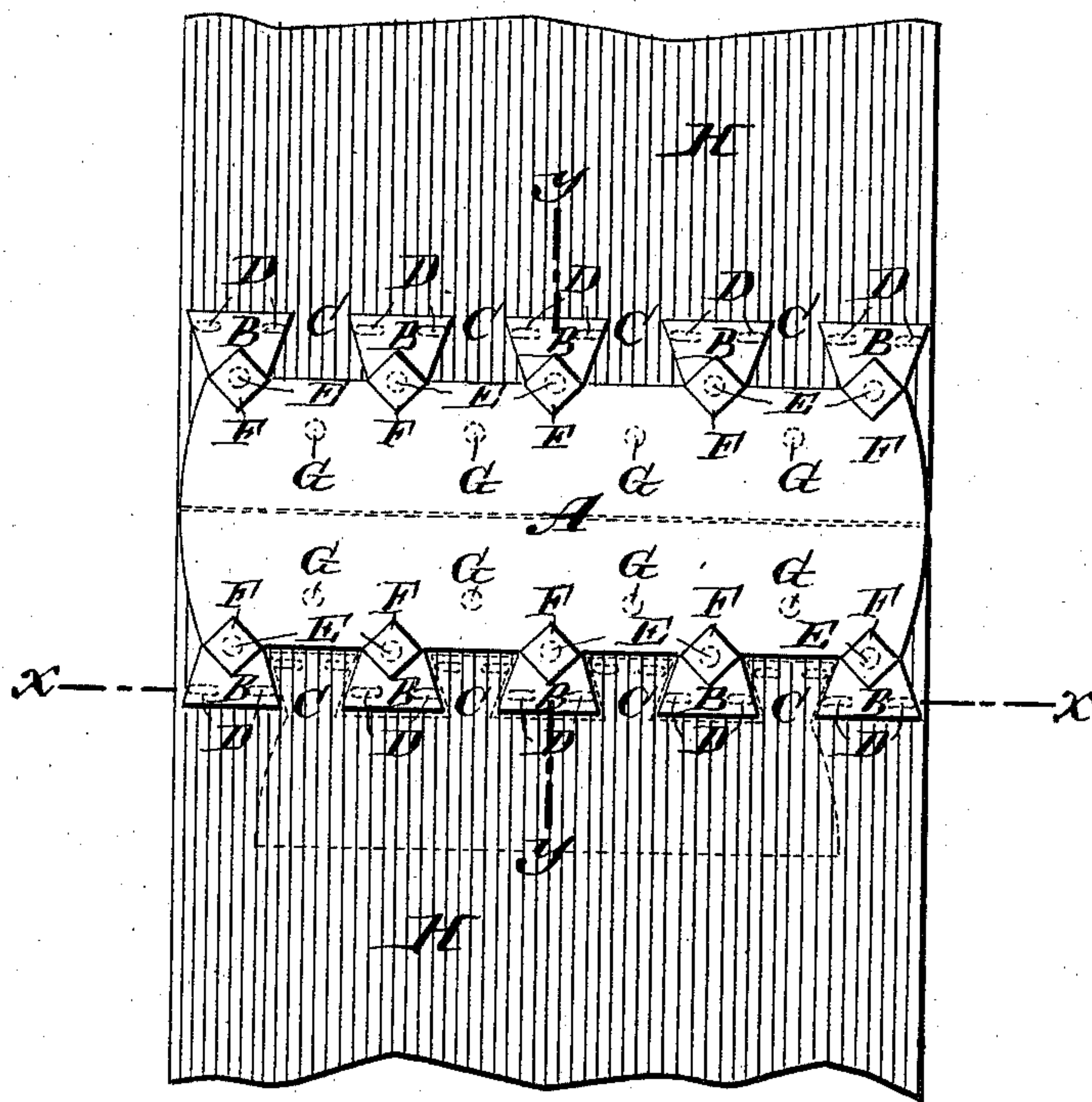
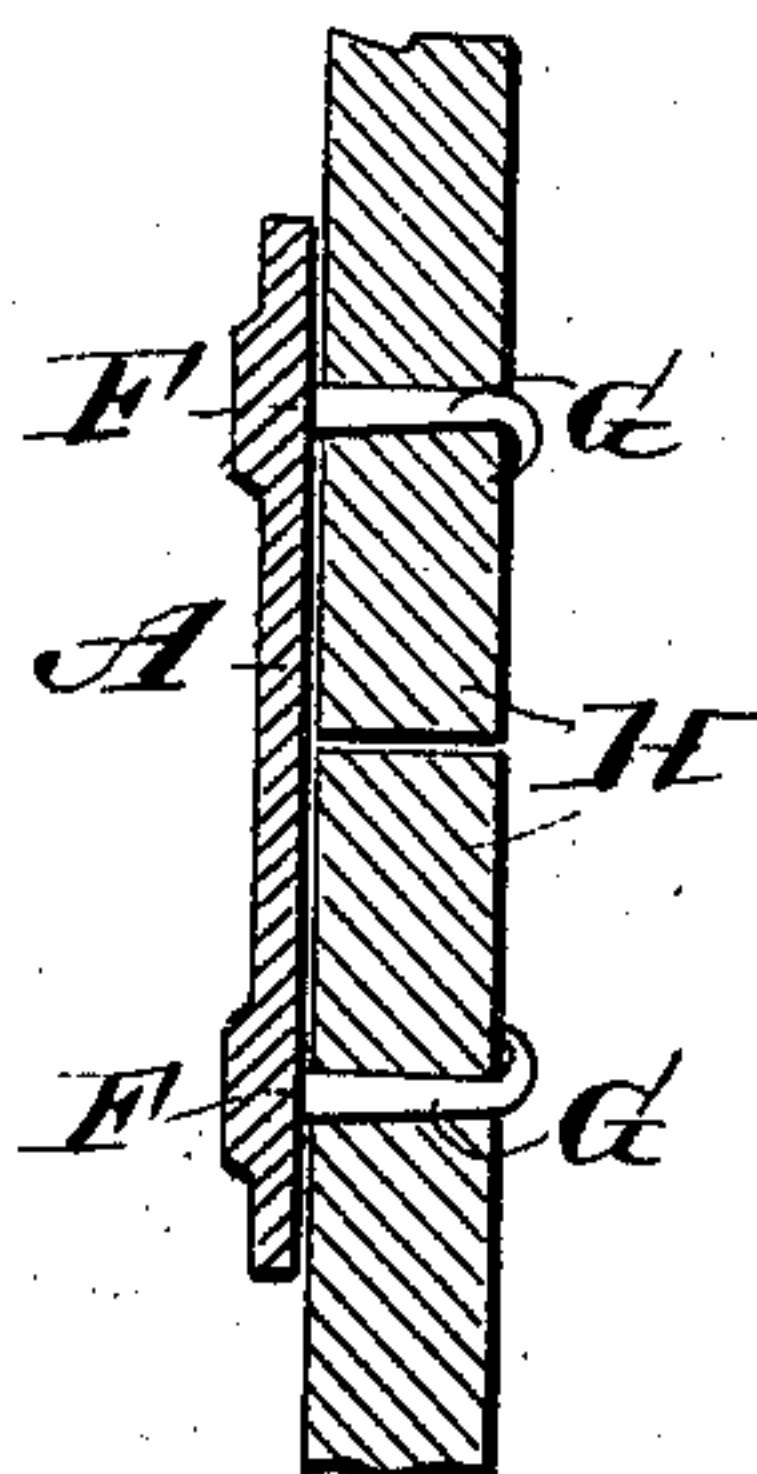


Fig. 3.



WITNESSES:

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GEORGE W. SOUTHWICK, OF SOUTHWICK, MASSACHUSETTS.

BELT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 305,540, dated September 23, 1884.

Application filed January 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. SOUTHWICK, of Southwick, in the county of Hampden and State of Massachusetts, have invented a new and Improved Belt-Fastener, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved belt-fastener for uniting the ends of driving-belts, which fastener can also be used for re-enforcing the belts in case they begin to tear at the joint.

The invention consists in the construction and arrangement of parts, as will be herein after described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved belt-fastener, showing the manner in which it is used. Fig. 2 is a transverse sectional elevation of the same on the line *xx*, Fig. 1. Fig. 3 is a cross-sectional elevation of the same on the line *yy*, Fig. 1.

The plate A is provided on each longitudinal edge with a series of dovetail tenons or teeth, B, between which dovetail notches C, of the same size as the teeth or tenons B, are formed. Two flat tapered teeth or prongs, D, parallel with the longitudinal axis of the plate A, project downward from each dovetail tenon B, at short distance from the end edge, the outer edges of the teeth D being flush with the side edges of the dovetail tenons. A round prong or tooth, E, projects downward from each dovetailed tenon at its inner end, and at that point at which the said prong E projects from each tenon the said tenon is re-enforced by a projection, F, on the upper surface. A row of round prongs or teeth, G, projects from the under side of the plate A a short distance back of the teeth E. The teeth D, E, and G are not on the same transverse lines of the plate, but both halves of the plate A are formed in the manner described, and as shown in Fig. 1. The plate A is placed on the outer surface of the belt at the meeting ends of the same, and the teeth or prongs D, E, and G are

forced into the belt, the teeth or prongs along one edge of the plate A being forced into one end of the belt, and the teeth or prongs along the other edge being forced into the other end. The ends of the prongs or teeth are then clinched. When the belt becomes old and worn, it is very apt to become ripped by the teeth. In such cases another plate A is secured on the belt, as shown in dotted lines in Fig. 1, the dovetailed tenons of the latter plate passing into the dovetailed notches of the plate already on the belt and being guided by the edges of the teeth D. The new plate is held on the belt by its prongs, and is connected with the old plate by the dovetailed tenons. The strain will thus be transmitted by the dovetailed tenons to that part of the belt that is not worn and ripped. The dovetail tenons permit the plates to bend while passing pulleys, &c.

By means of my improved belt-fastener the belt can be re-enforced readily, and need not be adjusted and tightened as often as when the usual lacing, &c., are used, and the belt does not wear out so rapidly.

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

1. A plate, A, provided on one or more edges with dovetailed tenons B, from the under outer edges of which project two teeth, and from the inner under side of each of which projects a tooth, E, and a re-enforcing projection on the upper side of the tenons or plate above said teeth E, in combination with a correspondingly mortised and toothed plate, substantially as set forth.

2. A belt-fastener consisting of the toothed plate A, provided with dovetailed tenons and mortises B C on one or more of its edges, whereby a similarly tenoned, mortised, and toothed plate may be connected with said plates A should the ends of the belt break or tear loose therefrom, substantially as shown and described.

GEO. W. SOUTHWICK.

Witnesses:

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