

(No Model.)

E. SMITH.

BELT HINGE.

No. 294,923.

Patented Mar. 11, 1884.

Fig:1.

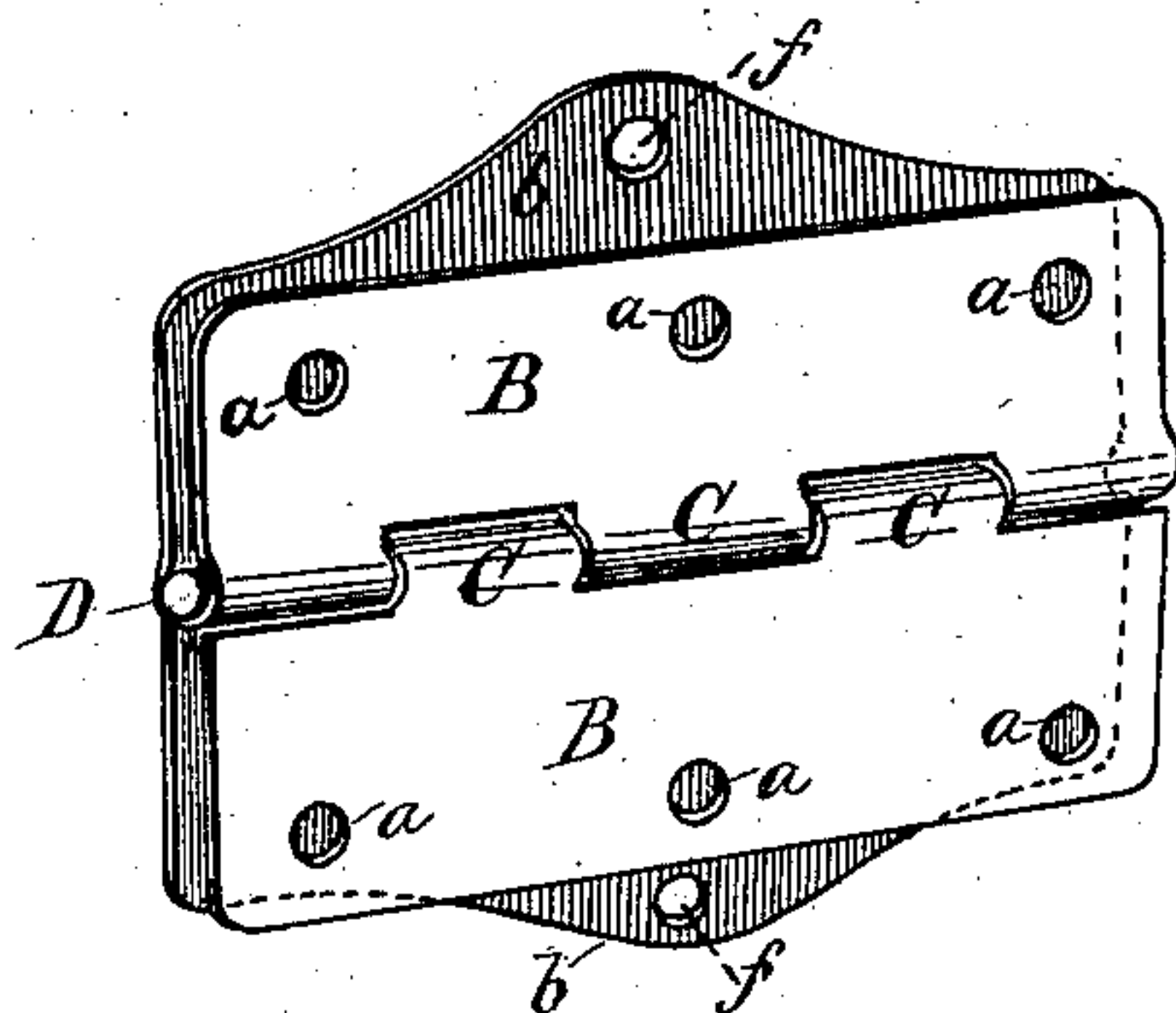


Fig:2.

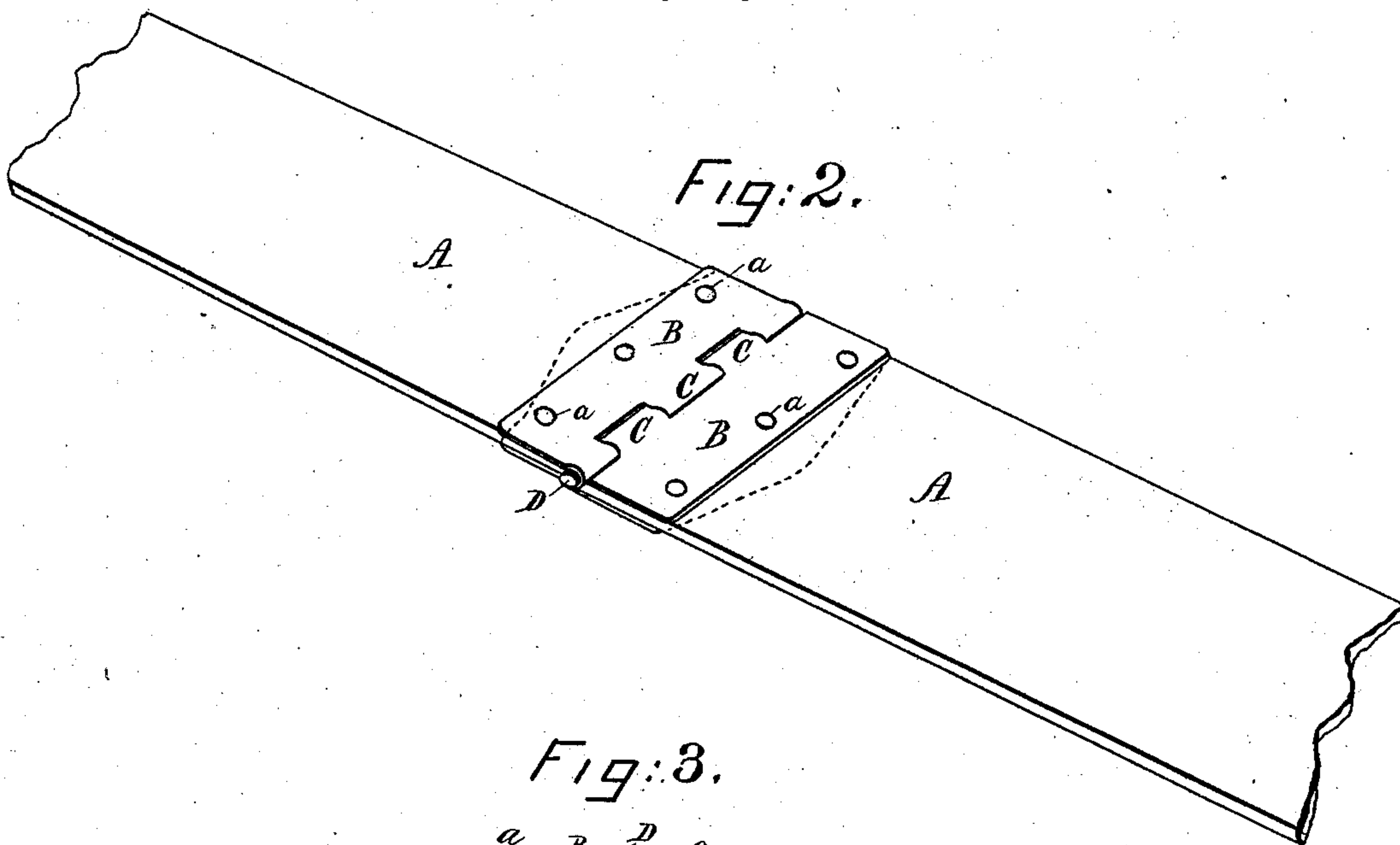
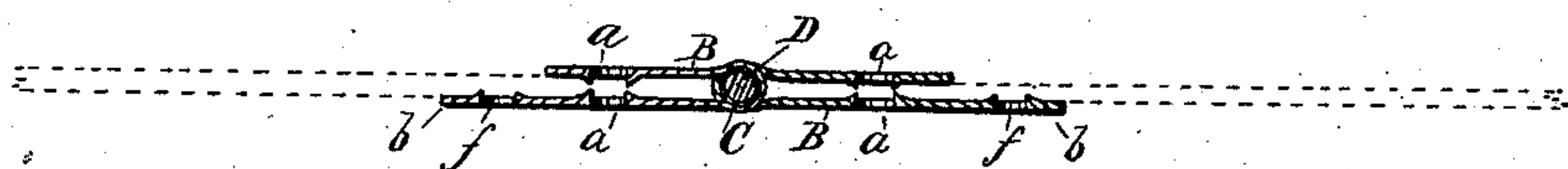


Fig:3.



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UNITED STATES PATENT OFFICE.

EUGENE SMITH, OF SAN FRANCISCO, CALIFORNIA.

BELT-HINGE.

SPECIFICATION forming part of Letters Patent No. 294,923, dated March 11, 1884.

Application filed December 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, EUGENE SMITH, of the city and county of San Francisco, and State of California, have invented an Improvement in
5 Belt-Hinges; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a hinge for uniting the ends of belts; and it consists of the combination of devices hereinafter shown and
10 claimed.

It also consists in certain details of construction, all of which will be more fully explained by reference to the accompanying
15 drawings, in which—

Figure 1 is a perspective view of my hinge. Fig. 2 shows its application to a belt. Fig. 3 is a transverse section.

This invention is designed to unite the
20 meeting ends of belts in a better and more durable manner than by lacing, and at the same time to protect the belt from cracking or chafing as it passes over pulleys.

A A are the two meeting ends of a belt. B
25 B are thin steel plates, which are of a width equal to that of the belt, and of such a length as to allow them to be folded over the ends of the belts and be riveted upon them. The bent edges C of these metal plates are cut out like
30 a hinge, so as to fit together and be held in place by a pin, D, which is riveted at both ends. Sufficient play in the joint is provided to allow the pin to be removed at will. The edges of the plates, which are on the inside
35 of the belt and next to the pulley, are shorter than the outside edges, and do not extend as far beyond the rivet-holes *a*, which pass through both plates. The outside portions of the plates have extensions *b* with rivet-holes *f*,
40 which pass only through them and the belt. These extensions prevent the chafing or cut-

ting of the belt upon the opposite or inner side as it passes over the pulleys, and also protects it upon the opposite side whenever it passes over tightening-pulleys, if such are used. 45 The rivet-holes are punched through the steel plates, so as to form a burr upon the inside. These burrs extend into the belt a short distance, and thus protect the belt from the chafing action of the rivets, and the rivet from 50 the chafing action of the hinge, and also help to prevent the tearing of the leather.

If the hinges are required for belts which run over very small pulleys, the projecting portion in which the rivet-holes are made may 55 be left off and the rivet-holes made straight across, thus shortening the hinge, so that it will readily conform to the curve of the pulley. The ends of the hinge are also bent or beveled from the inner edges next the belt 60 outward, so as to relieve the belt from any chafing action of the hinge. Those portions of the hinge which lie against the belt are indented or roughened, so as to increase the grip or hold upon the leather when the rivets 65 are headed up.

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

The plates B B, having their bent edges C 70 C cut out like a hinge, so as to fit together, and provided with the rivet-holes *a*, and extensions *b*, having the rivet-holes *f*, in combination with the pin D, substantially as and for the purpose herein described. 75

In witness whereof I have hereunto set my hand.

EUGENE SMITH.

Witnesses:

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