

# E. Schmelz Belt-Fastening

N<sup>o</sup> 75704

Patented Mar. 17, 1868

Fig. 1.

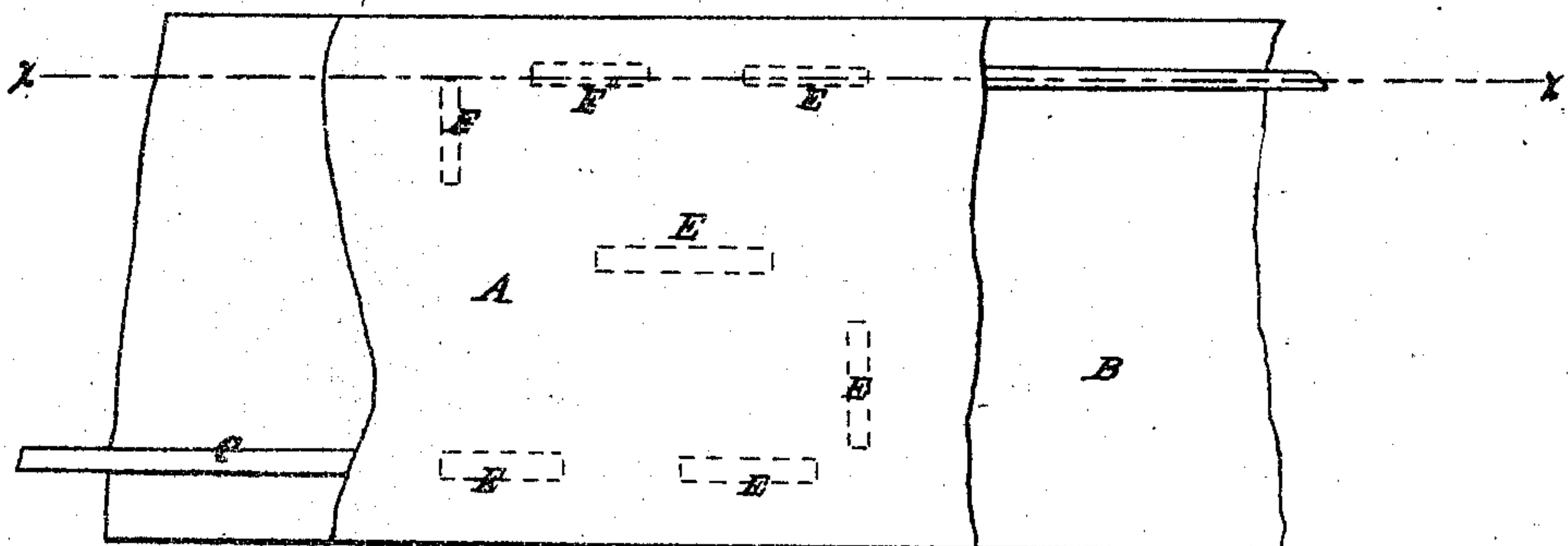


Fig. 2.

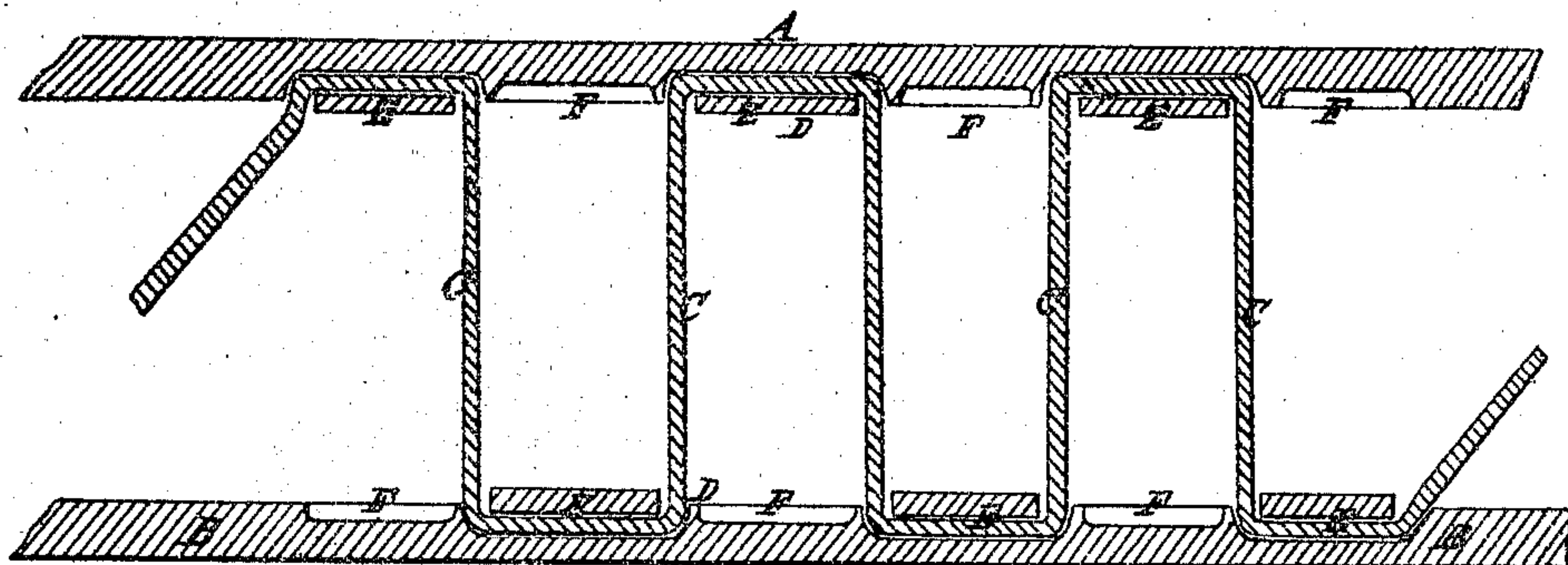


Fig. 3.

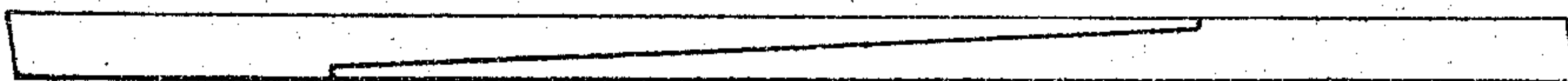
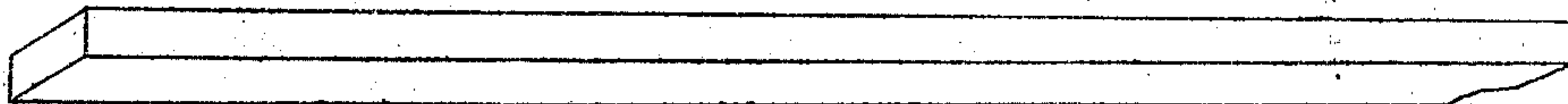


Fig. 4.



Witnesses

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Inventor

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# United States Patent Office.

EUGENE SCHMELTZ, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND  
PAUL E. FLEURY.

*Letters Patent No. 75,704, dated March 17, 1868.*

## IMPROVED BELT-FASTENING.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, EUGENE SCHMELTZ, of the city, county, and State of New York, have invented a new and improved Mode of Securing, Fastening, or Lacing Together Belts of Leather, &c.; and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The present invention relates to the fastening or lacing together of the ends to machine-belts or bands more particularly, although it can be adapted to other purposes; and the invention consists in joining or fastening together the two ends of a belt or band, which at their ends are overlapped, the one upon the other, by means of a lacing, cord or cords, or other lines, that is or are made, as the case may be, to pass from one to the other of the contact faces to the two ends of the belt as overlapped, and partially through the thickness of the belt, as and in a manner to be now in detail described, reference being had to the accompanying plate of drawings, in which—

Figure 1 is a plan or face view of a portion of a belt where joined or laced together, according to this invention.

Figure 2, a longitudinal section, taken in the plane of the line  $xx$ , fig. 1, but with the overlapped ends pulled apart.

Figure 3, an edge view of the two ends of a belt as laced or joined together; and

Figure 4, a perspective view of a portion of a belt.

A and B, in the drawings, represent the two ends to a machine-belt or band, which two ends are overlapped, the one upon the other. C, a lacing, cord, or string, by means of which the two ends, A and B, are secured or fastened together. This cord C is passed from one contact face D to the other of the two ends to the belt, through pockets or loops E, made in the leather of which the belt or band is composed. These loops E are in any positions relative to each other, and at such points or distances apart as may be found necessary or requisite for this or that width or size of the belt or band. The cord passed through the loop, from one to the other, and from one contact face of the belt to the other, as above stated, is, before being used, first tied with a knot at one end to prevent the pulling through when it is pulled upon to bring the two faces of the belt together, which being done, the cord is then secured by tying a knot or otherwise in its outer end.

From the above description it is plainly obvious that the two ends of the belt are fastened together, and in such a manner that the lacing, cord or cords are entirely encased or embedded, as it were, within the body of the belt, the advantages of which will be hereinafter recited.

In order to enable the two ends of the belt or band to lie or be brought the more closely together, I intend to form, at suitable points in the contact faces of the two ends A and B, cavities or recesses F, to receive the pockets E of the opposite contact face, thus allowing space for the lacing, cord or cords, to set into the thickness of the belt. The formation of these recesses or cavities F enables the loops or pockets to be the more easily pierced by a bodkin or other suitable instrument in the belt surface, a partial distance through its thickness, as before stated. And, furthermore, for the more perfect union of the two ends to the belt, cement or other suitable adhesive material may be employed between the contact faces.

The inner face of the belt is to have its overlapping end skived or bevelled off, for a more perfect bearing on the pulleys or wheels with which it may have to come in contact.

Among the many advantages of my improved mode of securing or lacing belts, &c., may be here mentioned, first, that there are no projecting parts on the outside of the belt where united together, whereby an even, steady, and uniform friction can be maintained upon the wheels or pulleys, &c., when it is running; second, that it is much more simple and cheap than the metallic or other fastenings heretofore used, and can be readily applied by any one to the various kinds of belting in present use; third, that in my improved mode of fastening or lacing, there are no metallic contrivances used, and that when used in rooms where steam is permanent,

such as distilleries, &c., it is not in any manner affected, as is the case with others, the steam gradually oxidizing the metallic parts, thus loosening them, and wearing out the leather around the same.

*Claim.*

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

The improved mode of lacing together belts or bands, &c., substantially as herein described, the same consisting in passing a lacing, cord or cords, or other lines, from one to the other of the contact faces to the belt or band, &c., where overlapped, and partially through the thickness of same, substantially as specified.

E. SCHMELTZ.

Witnesses:

CHS. FLEURY, Jr.,

JAS. HIMELY.