

(No Model.)

2 Sheets—Sheet 1.

J. W. FAWCETT & E. JONES.
CARD FLAT CLOTHING FASTENER.

No. 504,572.

Patented Sept. 5, 1893.

Fig. 5.

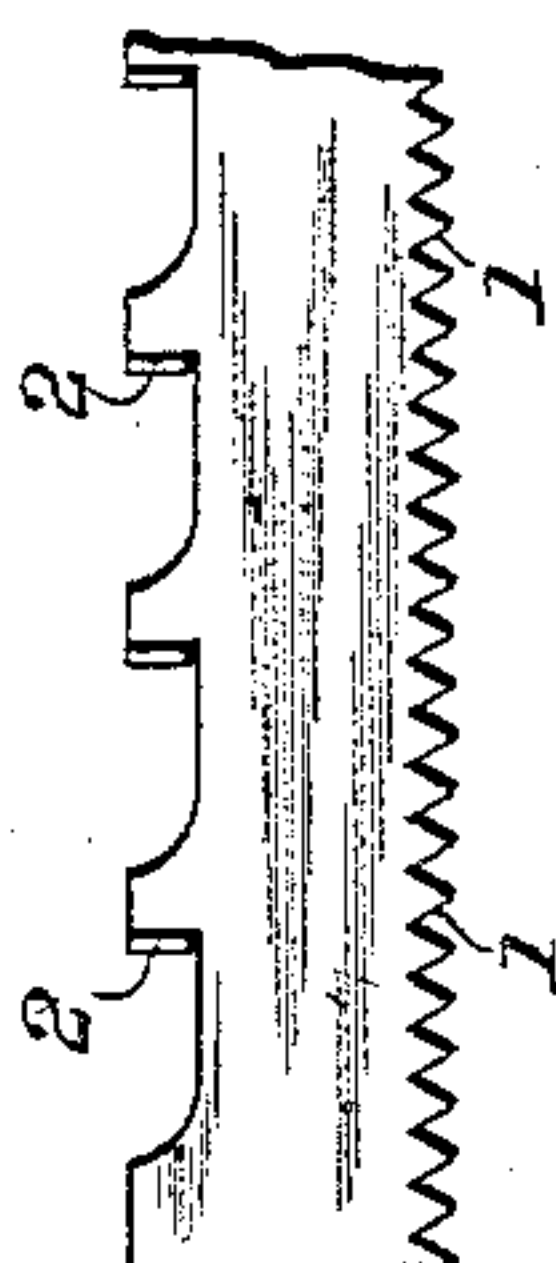


Fig. 4.

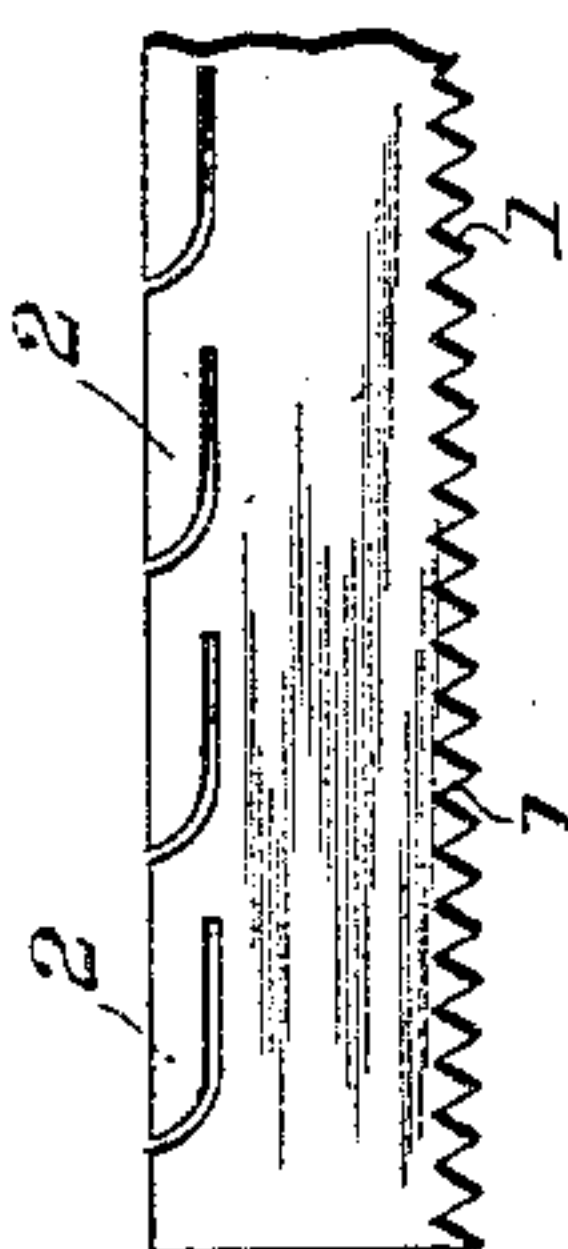


Fig. 3.

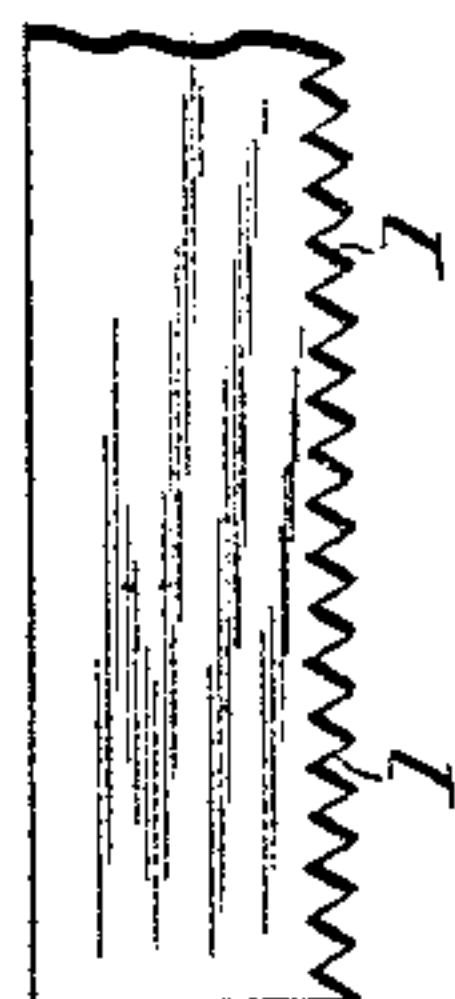


Fig. 2.



Fig. 1.



Fig. 10.

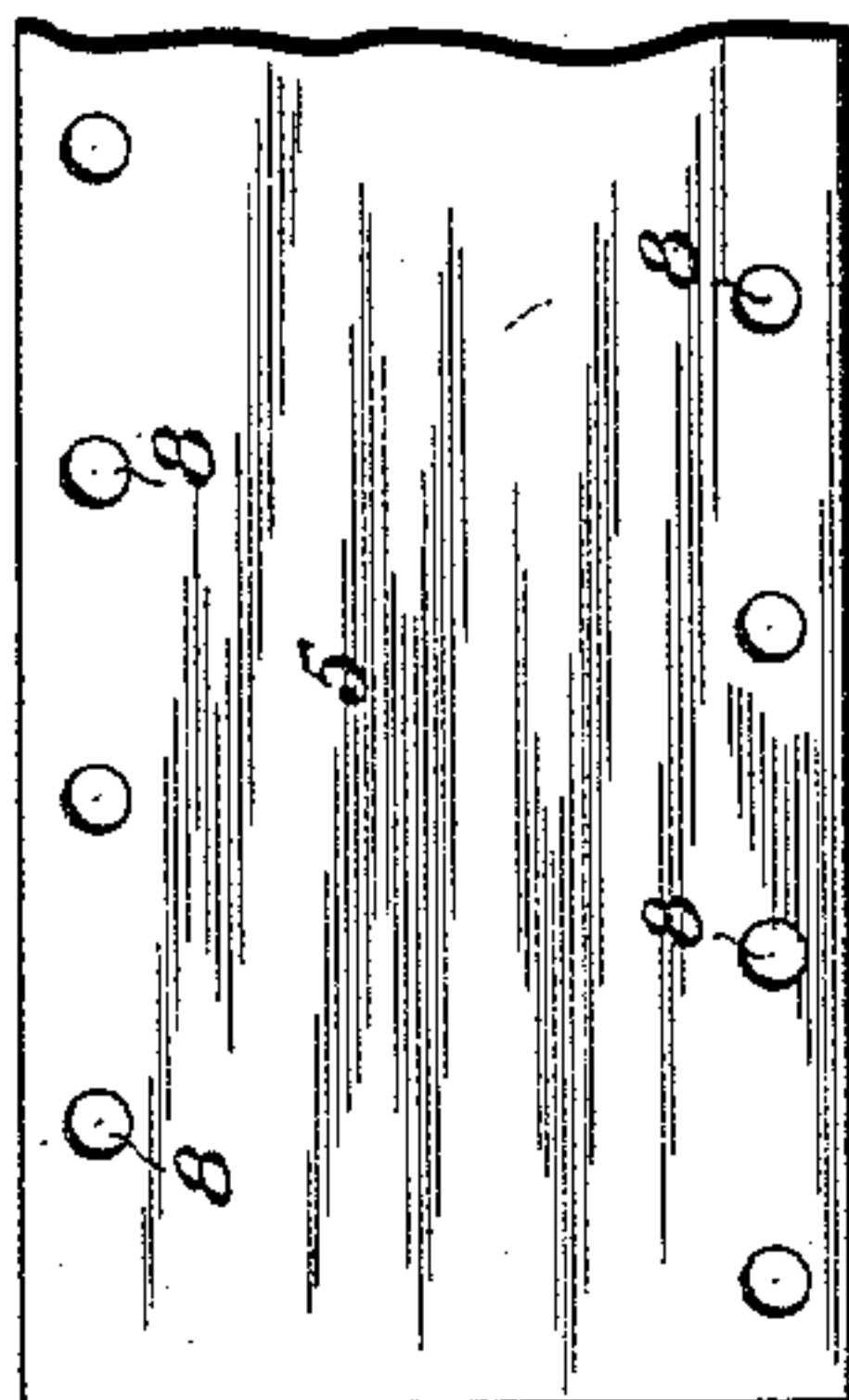


Fig. 9.

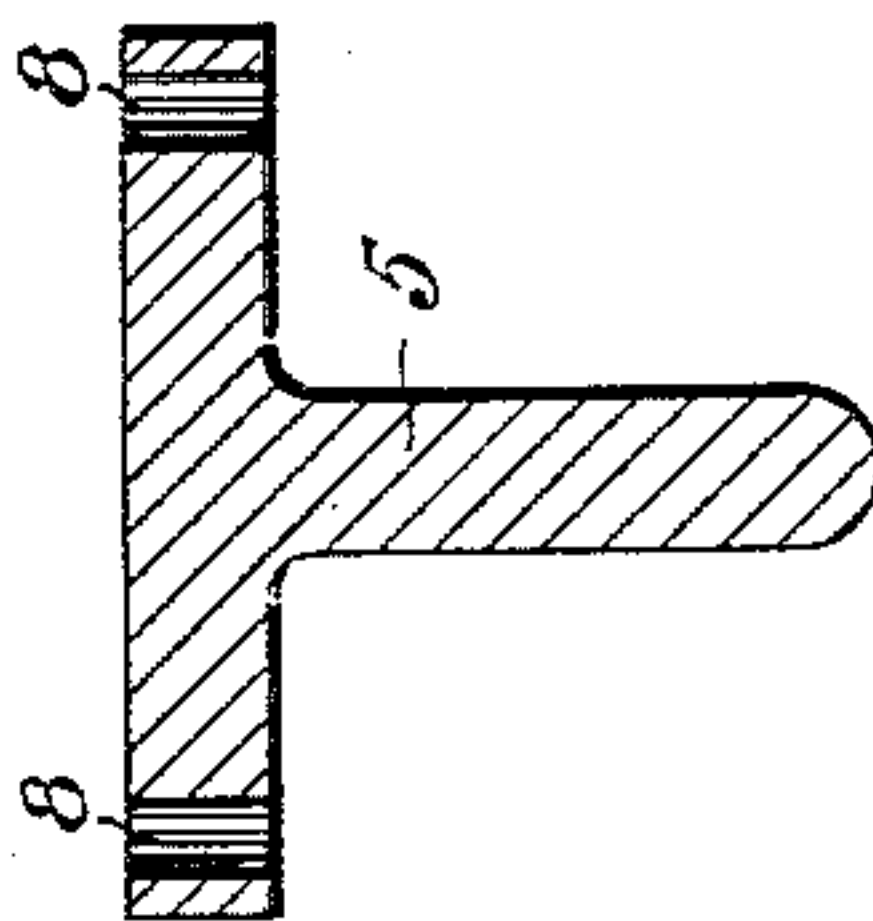


Fig. 8.

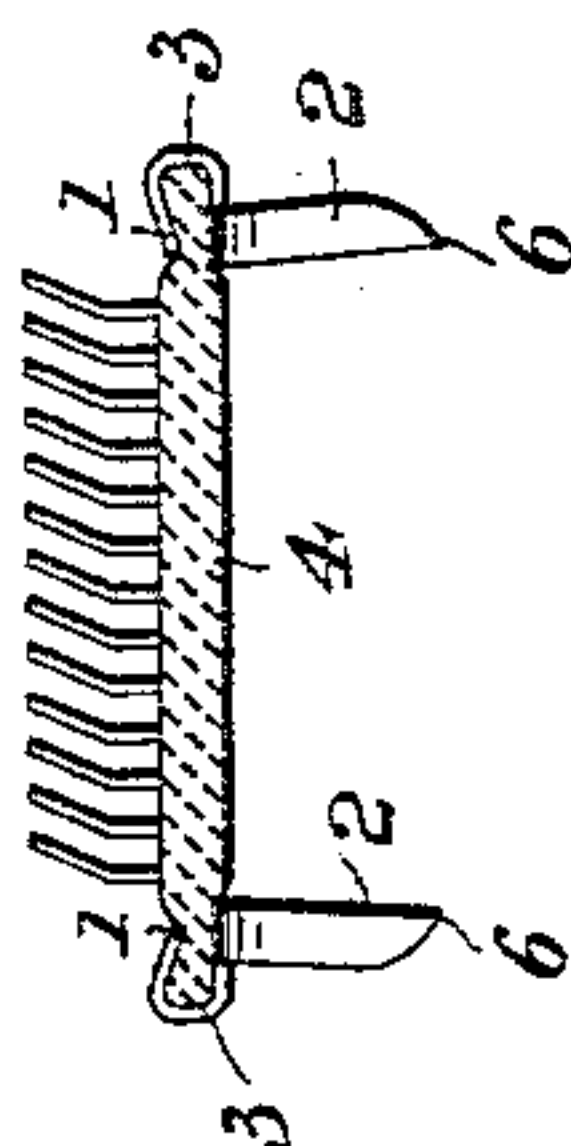


Fig. 7.

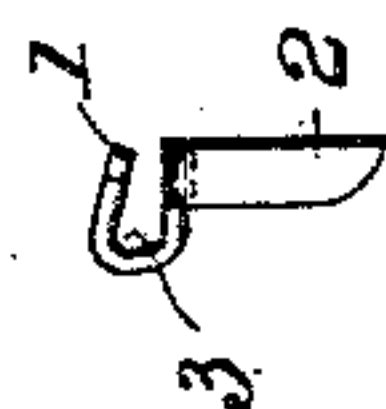


Fig. 6.



Witnesses.

Walter Brierley
J. Brierley Howard

Inventors.

John W. Fawcett.
Ernest Jones

(No Model.)

2 Sheets—Sheet 2.

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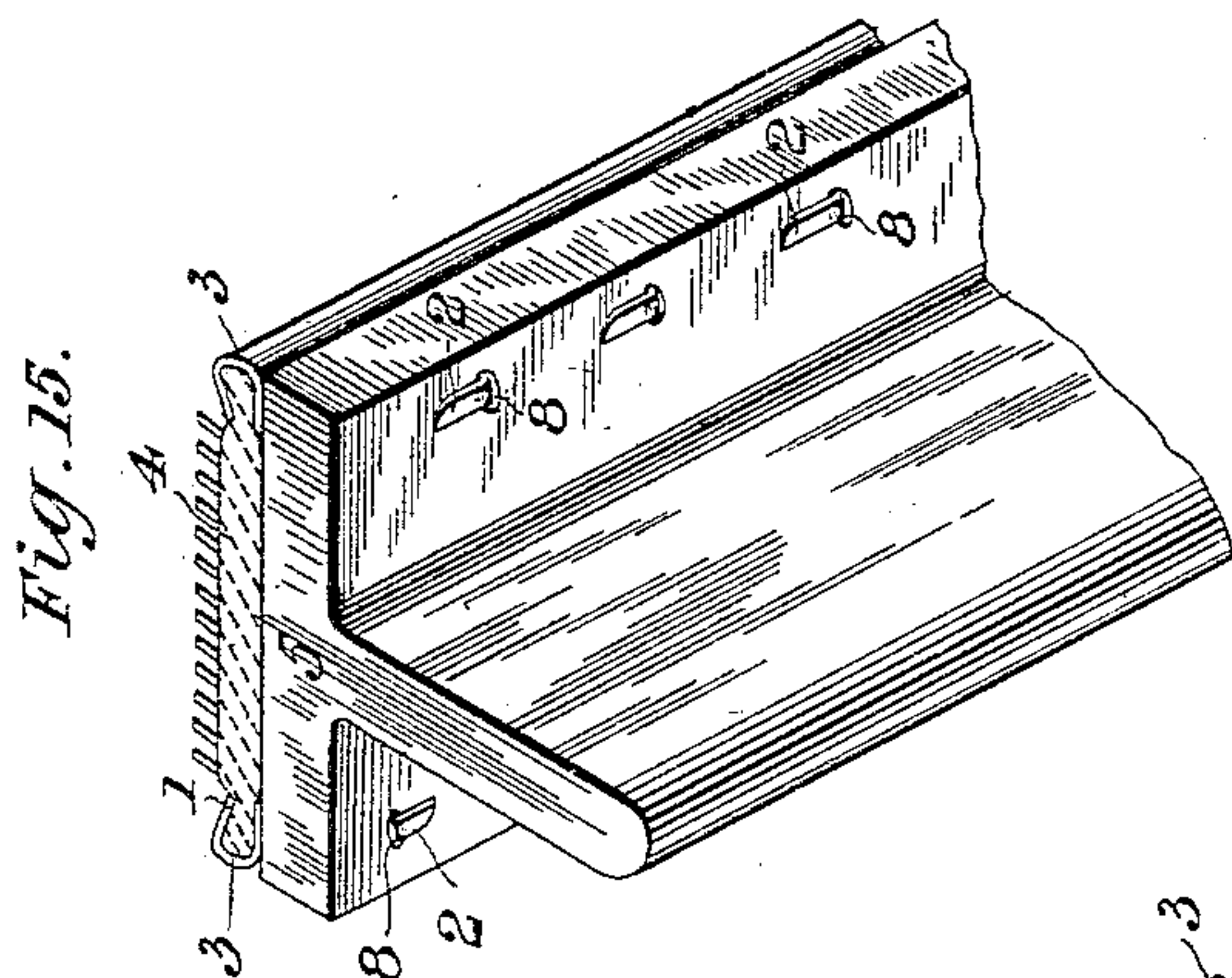


Fig. 12.

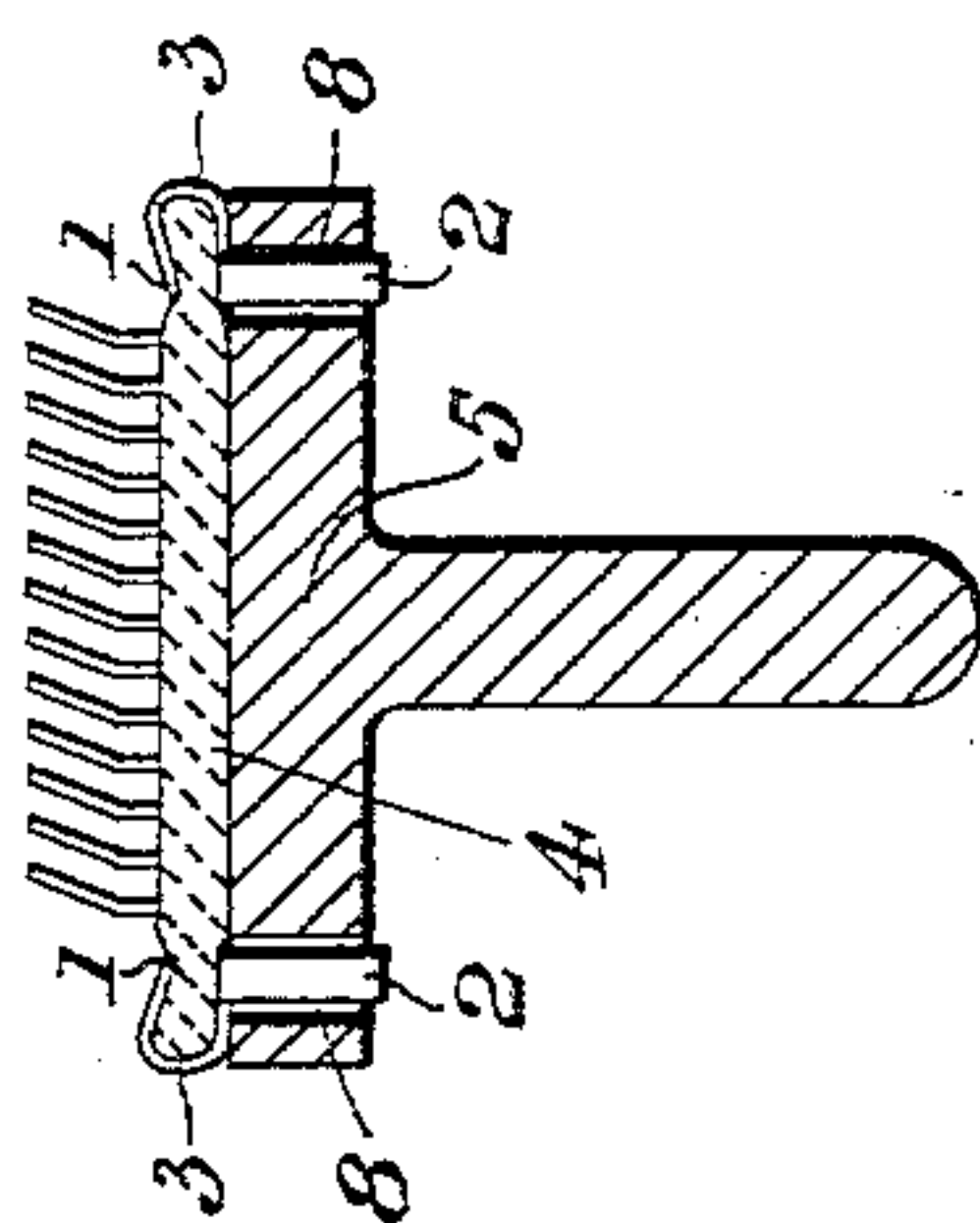


Fig. 14.

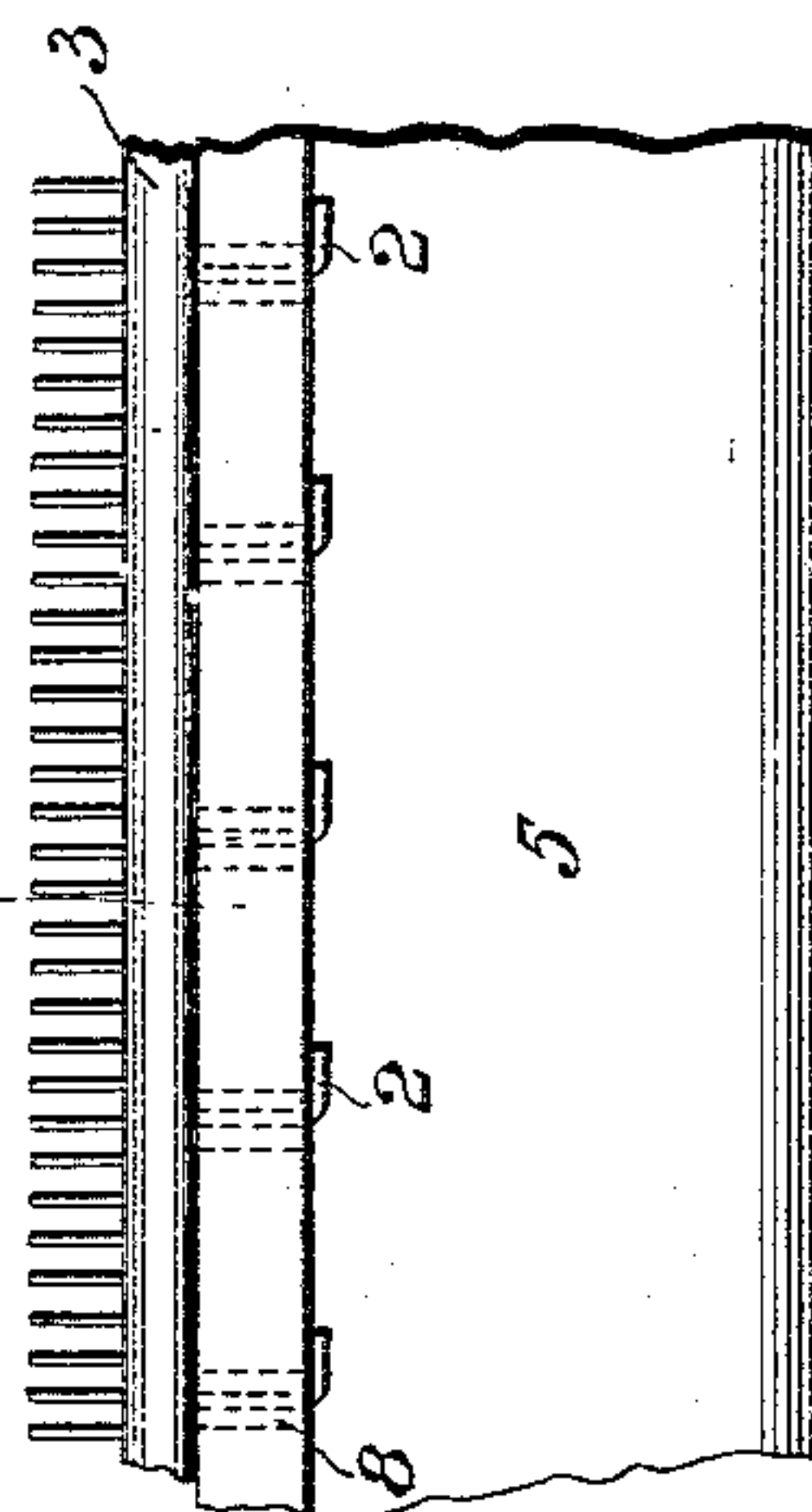


Fig. 11.

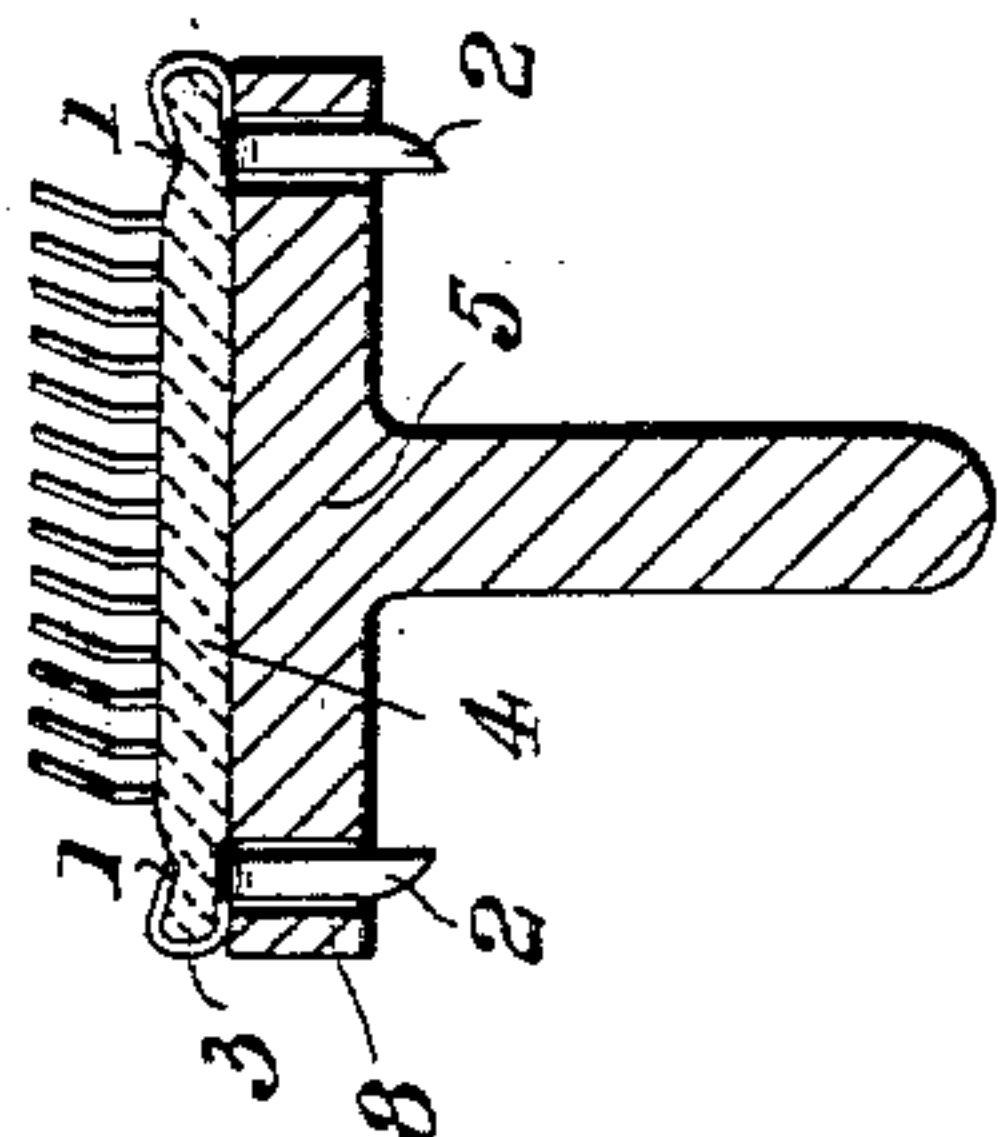
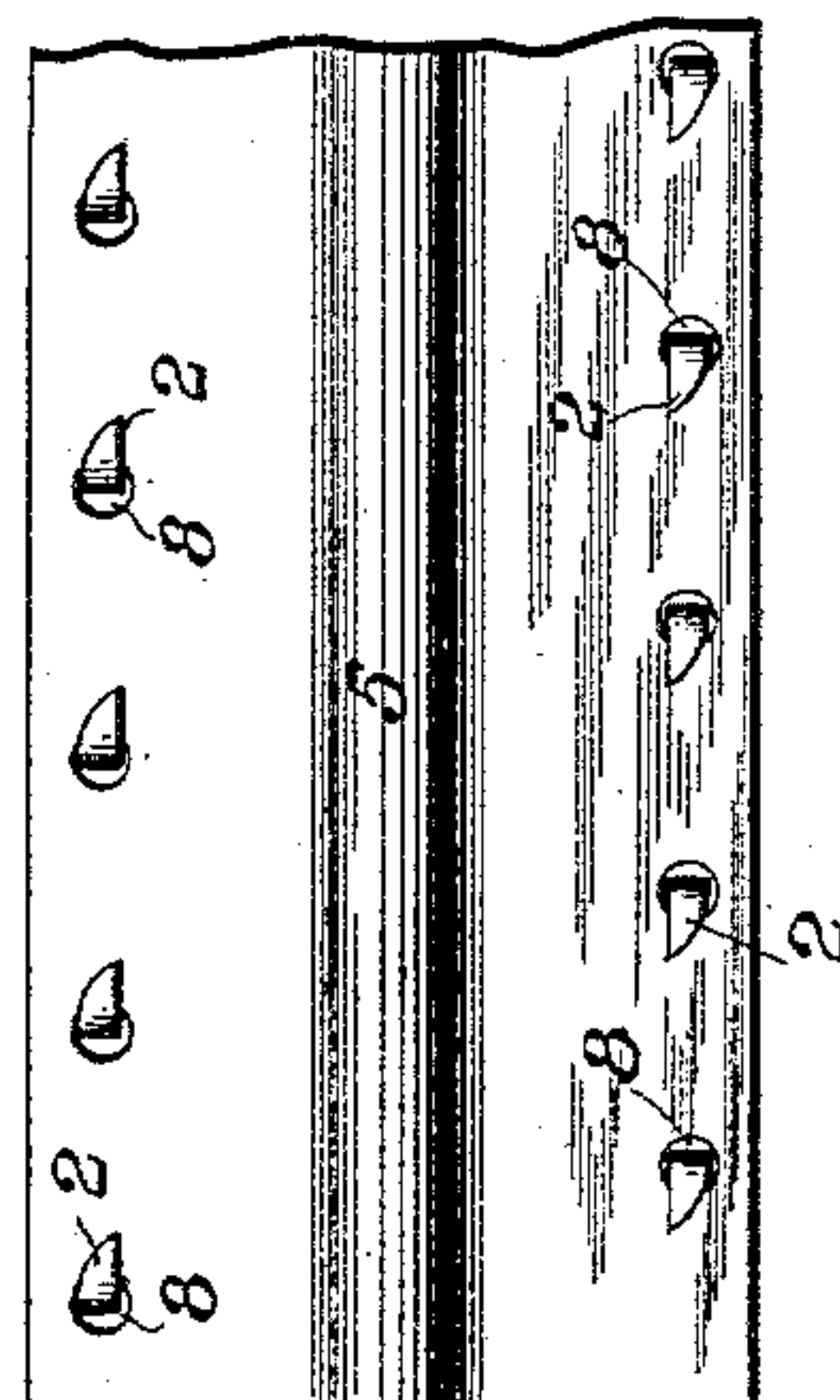


Fig. 13.



Witnesses.

Walter Brierley
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UNITED STATES PATENT OFFICE.

JOHN WM. FAWCETT, OF RASTRICK, AND ERNEST JONES, OF WHITCLIFFE,
ASSIGNORS TO THE SAMUEL LAW & SONS, LIMITED, OF CLECKHEATON,
ENGLAND.

CARD-FLAT-CLOTHING FASTENER.

SPECIFICATION forming part of Letters Patent No. 504,572, dated September 5, 1893.

Application filed October 25, 1892. Serial No. 449,922. (No model.)

To all whom it may concern:

Be it known that we, JOHN WILLIAM FAWCETT, residing at Rastrick, and ERNEST JONES, residing at Whitcliffe, in the county of York, England, subjects of Her Majesty the Queen of Great Britain, have invented a certain new and useful Improvement in Card-Flat-Clothing Fasteners, of which the following is a specification.

10 This invention consists of a fastener for securing card clothing to the flats of flat carding engines such fastener consisting of a clip for holding the foundation and prongs or staples which are passed through holes in the flat and clinched or bent thereunder. It is to be observed that the prongs or staples are not passed through the foundation fabric so that there is no puncturing or damaging of the latter.

20 The following description with reference to the drawings fully sets out and illustrates the improved fastener in its various stages of manufacture and also its application to the foundation clothing and flat.

25 Figure 1 shows a strip of metal preferably soft steel. Fig. 2 is an end elevation of same. Fig. 3 is a similar view to Fig. 1 but showing one edge of the strip serrated. Fig. 4 shows the other edge of the strip punched at intervals to liberate portions of the edge. Fig. 5 shows these cut out portions turned down. Fig. 6 is an end view of the strip showing the cut out portions or prongs turned down and the plain portion with its serrated edge turned up. Fig. 7 is a similar view showing the plain portion further bent down into a clip form. Fig. 8 is an end view of a strip of card clothing with the pronged clips attached to either edge. Fig. 9 is an end elevation of a card flat having holes along the edges to receive the prongs of the clips. Fig. 10 is a plan of same. Fig. 11 is an end elevation showing the clothing applied to the flat by means of the pronged clips, the prongs however not being clinched. Fig. 12 is a similar view showing the prongs clinched. Fig. 13 is a view looking at the under side of Fig. 12. Fig. 14 is a side elevation of Fig. 12, and Fig. 15 is a perspective view.

50 In forming the improved fastener we take

a strip as shown in Figs. 1 and 2, serrate it by some suitable means on one edge as shown at 1, punch the other edge so as to liberate portions of same as shown at 2 such portions or prongs 2 being turned down while the flat portion is next bent as shown in Fig. 6 and again bent as shown in Fig. 7 into a clip 3. One of the fasteners is now applied to each of the margins of the clothing 4 by means of the clips 3, such clips being pressed tightly so as to force the serrated edges 1 into the foundation fabric and so grip the margins of same.

The effect of closing the clips upon the fabric is to force slightly outward the ends 6 of the prongs 2 as shown in Fig. 8 so that when the fabric is placed upon the flat 5 and the prongs are placed through the holes 8 of same, the foundation fabric is slightly stretched cross wise and lies evenly on the flat 5, the protruding points of the prongs 2 being bent or clinched under the flat 5 as shown in Figs. 12, 13, 14 and 5. It is to be observed that the prongs 2 when cut as shown in Figs. 4 and 5 all lie in the direction of the length of the flat so that there is no twisting or turning of them necessary before their ends or points can be clinched underneath the flat.

We are aware that card flat fasteners which clip the edges of the fabric are at present in use and we do not therefore claim the same but—

What we claim is—

The combination with a card flat provided with holes in its opposite edges, of card clothing and separate fasteners for each edge of said clothing, each of the said fasteners gripping the upper and under side of one edge of the clothing, and having prongs passing through the said holes in the flat, substantially as described.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

JOHN WM. FAWCETT.
ERNEST JONES.

Witnesses:

WALTER BRIERLEY,
J. BRIERLEY HOWARD,
Penny Bank Chambers, Halifax, Yorkshire.