

(Model.)

O. E. PACKARD.
Rivet.

No. 243,679.

Patented June 28, 1881.

Fig. 6.

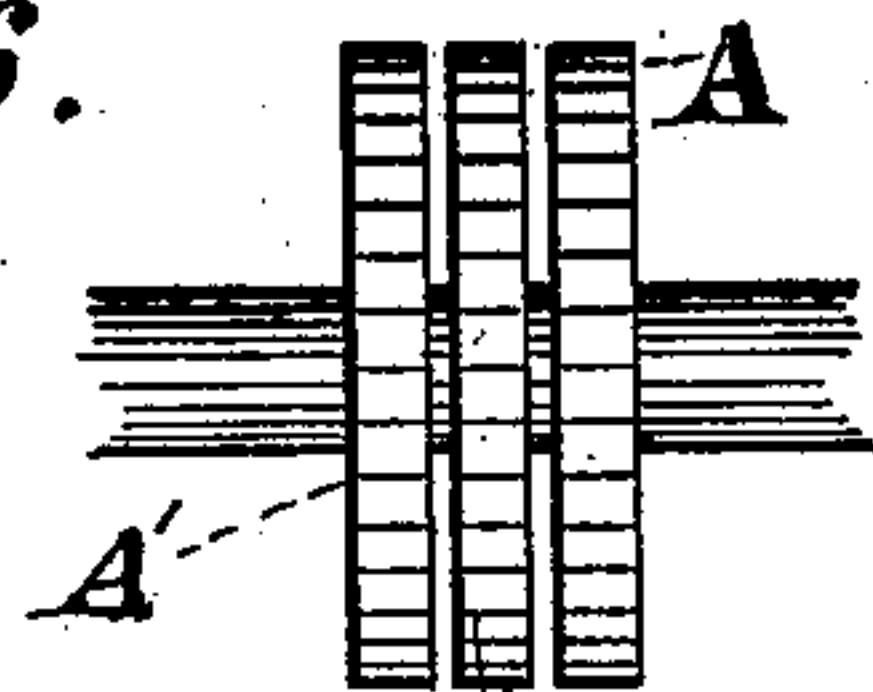


Fig. 5.

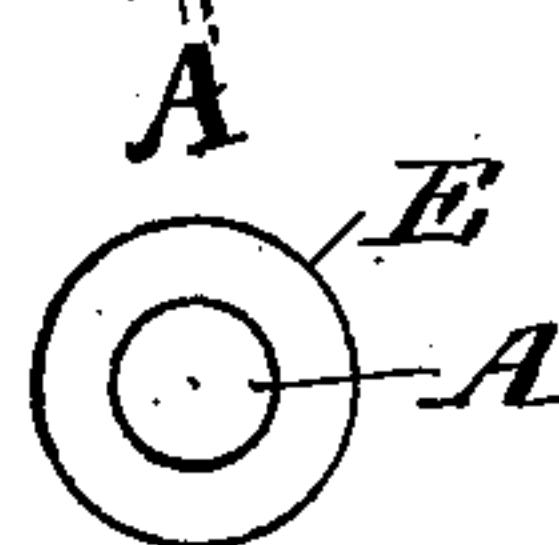


Fig. 8.

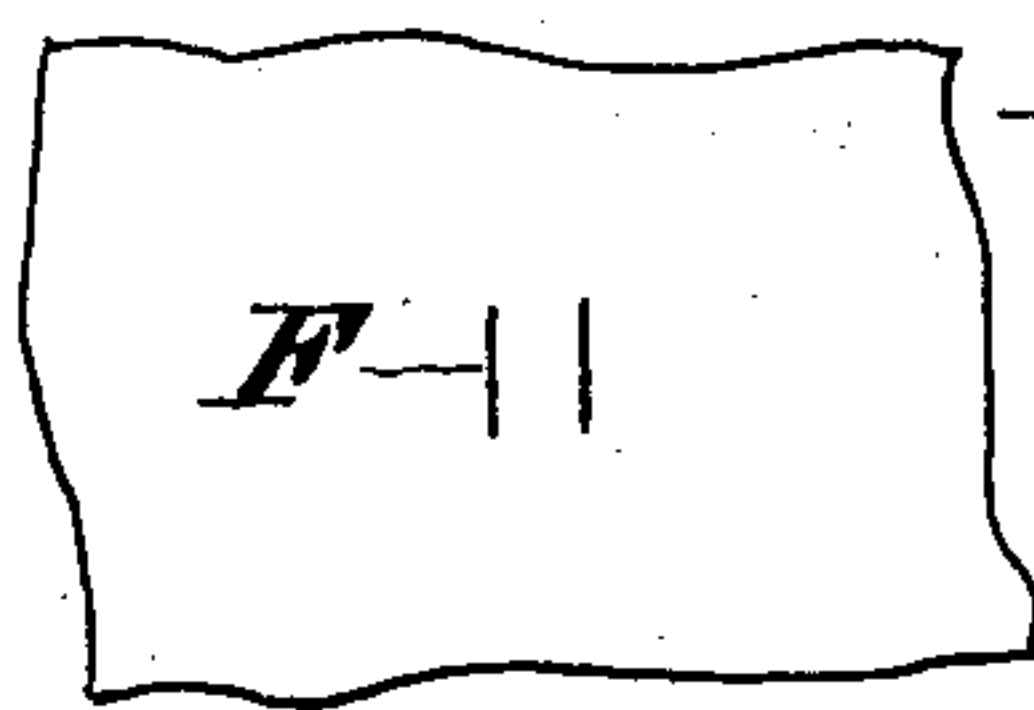


Fig. 4.

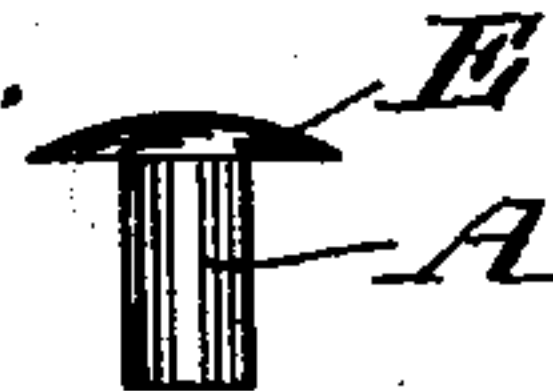


Fig. 7.



Fig. 3.

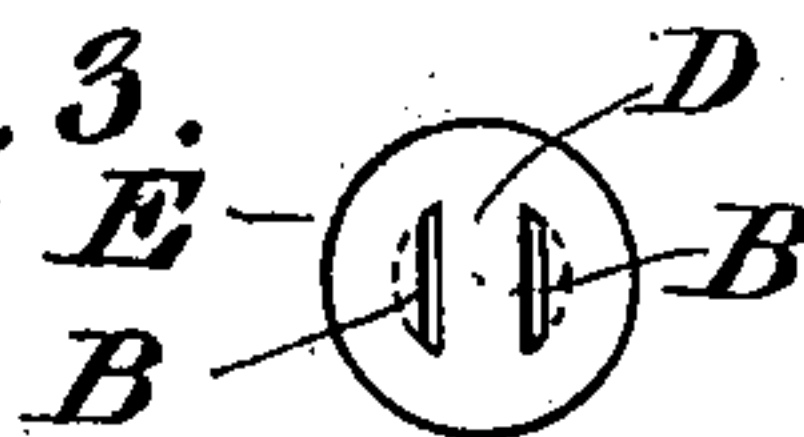


Fig. 2.

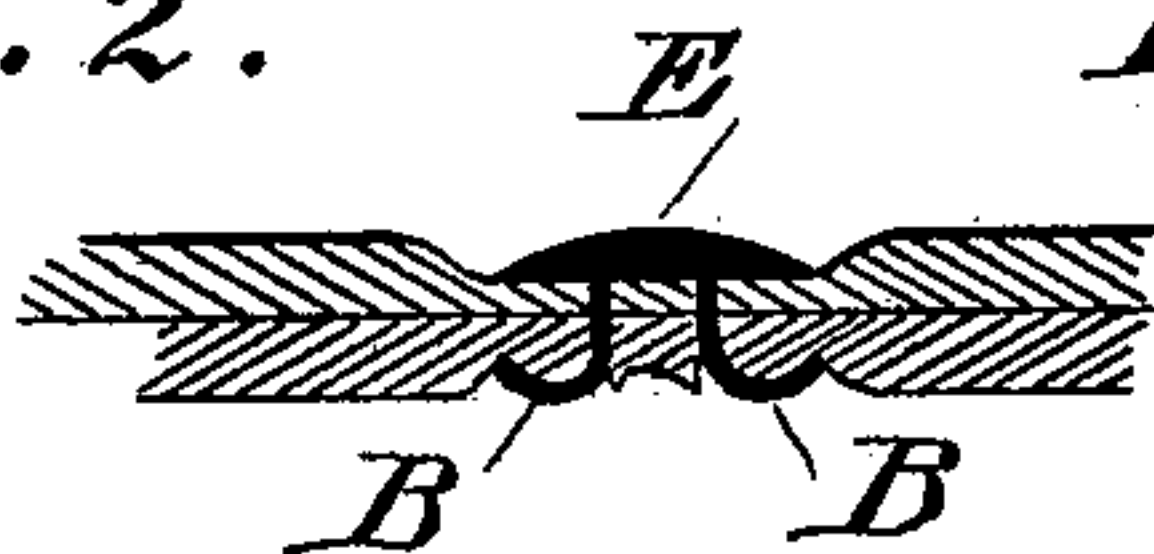
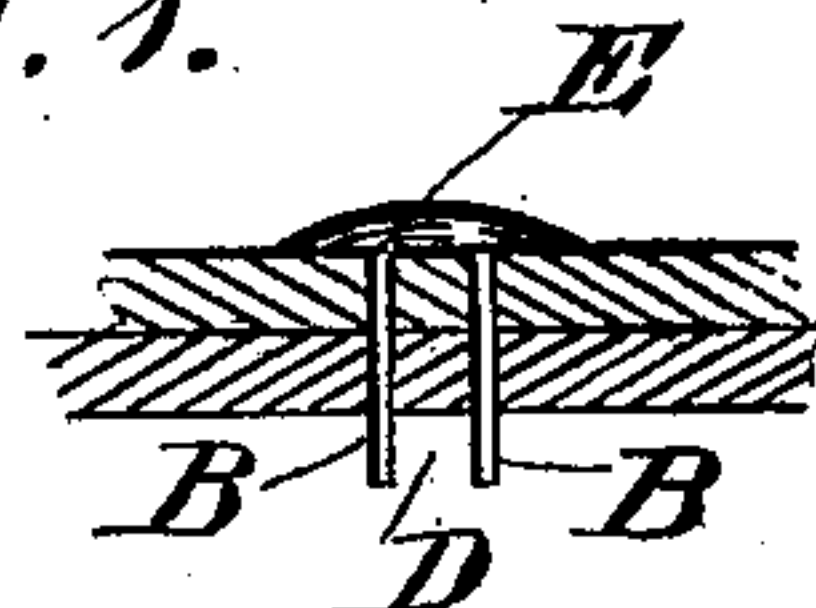


Fig. 1.



Witnesses

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QUINCY E. PACKARD, OF MONTREAL, QUEBEC, CANADA.

RIVET.

SPECIFICATION forming part of Letters Patent No. 243,679, dated June 28, 1881.

Application filed June 26, 1880. (Model.)

To all whom it may concern :

Be it known that I, QUINCY EDWARD PACKARD, of the city and district of Montreal, Province of Quebec, Canada, merchant, have
5 invented certain new and useful Improvements in Rivets; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention has reference to the construction of rivets for holding the seams (and other
10 portions without seams, if required) of leather, fabrics, and other similar substances together. It is arranged to obviate the necessity of punching a hole first to put the rivet into and that
15 of, by punching said hole, removing a portion of the material. It also gives a better form of rivet for clinching, and one that may be inserted and clinched in one stroke of a press or die.

20 In the drawings hereunto annexed similar letters of reference indicate like parts.

Figure 1 is a side elevation of my invention as it is passed through two plies of material, but not clinched. Fig. 2 is a side elevation of
25 Fig. 1 clinched. Fig. 3 is a plan of Fig. 1. Fig. 4 is a side elevation of the rivet as first formed. Fig. 5 is a plan of Fig. 4. Fig. 6 shows the milling-tool by which the rivets shown in Figs. 4 and 5 are reduced to that
30 shown in Figs. 1 and 3. Fig. 7 shows the formation of the surface of clinching-tool. Fig. 8 shows the holes made by the rivet in the material it is used in or to attach.

Letter A, Figs. 4 and 5, is a rivet of ordinary configuration made solid and in one piece,
35 having a head, E, as shown, or other desired configuration. The body of this rivet A is cut by the milling-tool A', (shown in Fig. 6.) This consists of the cutters of circular-saw
40 configuration, and by the two spaces between the three cutters, when it operates on the rivet, which it is caused to do in any ordinary manner, it leaves the two fastening-prongs B concentrically arranged in relation to the solid
45 flanged head E by the center cutter removing

the center portion of the rivet and forming the slot or cut D. At the same time the outer cutters remove the outer portion of the body of the rivet beyond the prongs B, indicated by
dotted arcs of the circle. (See Fig. 3.)

The rivets thus formed are applied to the material preferably by a press of similar construction to those at present in use for similar purposes, the bed-die of which is, in this case,
50 formed into the clinching-tool. The upper die or plunger of the press is provided with a suitable concavity for coming down on the head E when the ends of the projections B are held
55 or placed on the material at the position they are to pass through it, the force of the press forcing down the rivet until the ends of B are
60 clinched, as shown in Fig. 2.

Thus it will be seen that only two small openings, F, as shown in Fig. 8, are formed in the material, and that no portion is actually
65 removed or cut out, so that when the rivets are removed (if required) the material will be all there and have only two small slits in it, which is a great advantage in very many cases, besides that already described of having a self-
70 punching or self entering and clinching rivet, all of which are accomplished in one stroke of the machine or press, &c.

What I claim, and wish to secure by Letters Patent, is as follows:

1. As an improved article, a rivet having a solid flanged head, provided with fastening-prongs concentrically arranged in relation to the head of the rivet, substantially as shown and described.

2. That improvement in the art of manufacturing rivets consisting in cutting out or removing portions of the solid shank of a rivet, leaving a solid head with attaching-prongs, all substantially as shown and described.

Q. EDWARD PACKARD.

Witnesses:

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