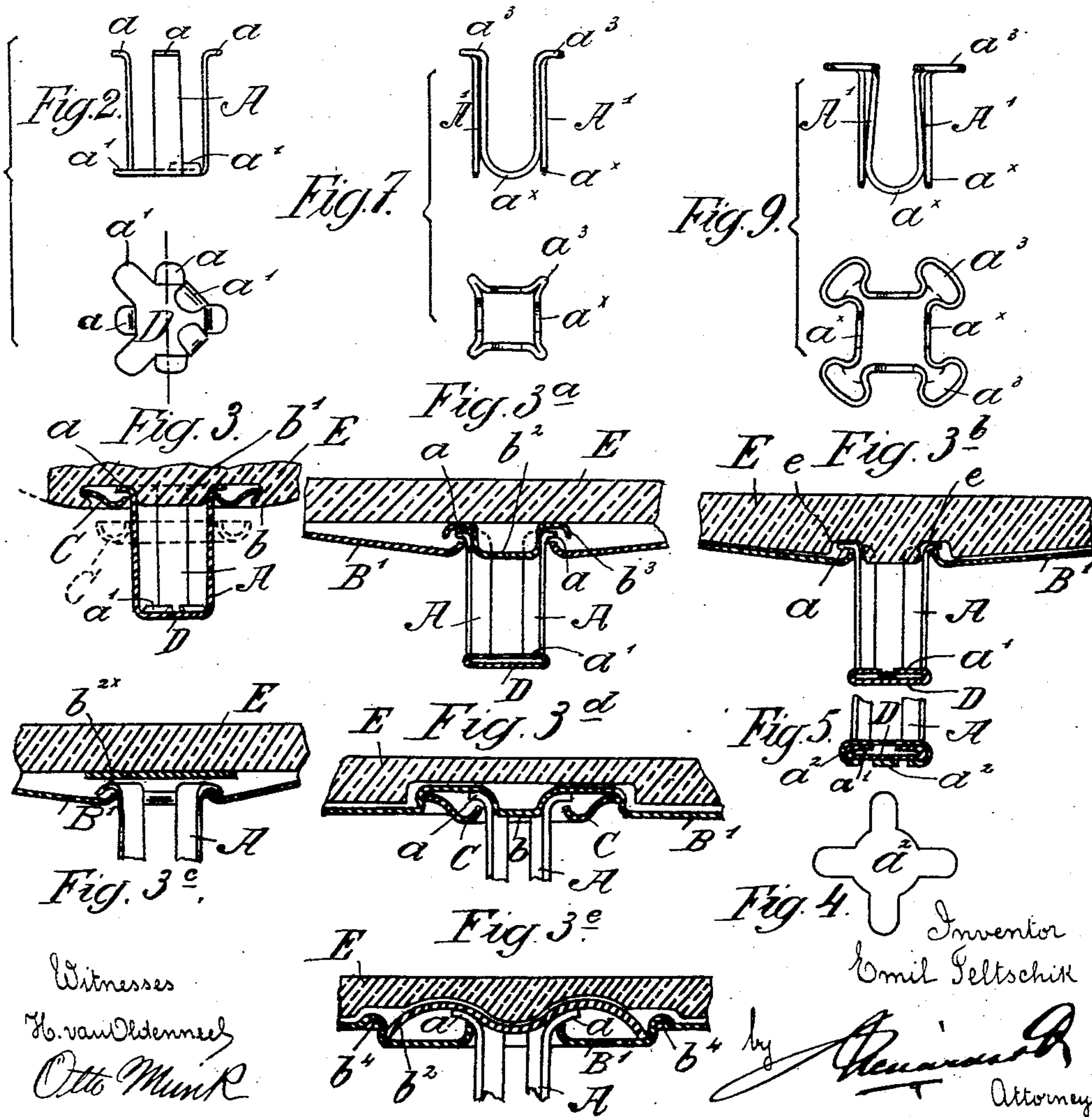
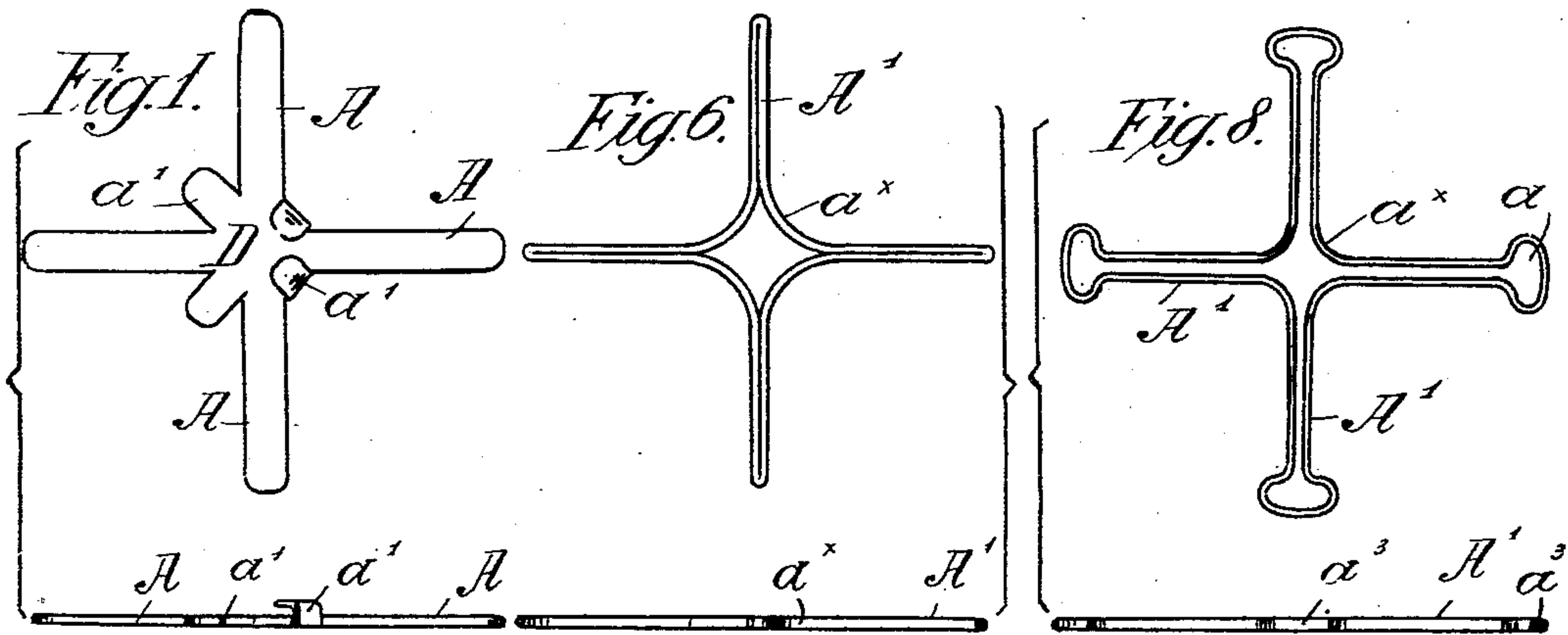


(No Model.)

E. TELTSCHIK.
BUTTON SHANK AND BUTTON.

No. 571,986.

Patented Nov. 24, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

EMIL TELTSCHIK, OF VIENNA, AUSTRIA-HUNGARY.

BUTTON-SHANK AND BUTTON.

SPECIFICATION forming part of Letters Patent No. 571,986, dated November 24, 1896.

Application filed March 19, 1896. Serial No. 583,975. (No model.)

To all whom it may concern:

Be it known that I, EMIL TELTSCHIK, manufacturer, a subject of the Emperor of Austria-Hungary, and a resident of Vienna, Empire of Austria-Hungary, have invented certain new and useful Improvements in Button-Shanks and Buttons, of which the following is a specification.

This invention relates to a device for fixing buttons of all kinds, which device can be cheaply and readily applied to the button and which enables the button to be easily and firmly sewed onto the fabric, and is, moreover, of great durability.

The invention thus comprises a shank to be fixed in a particular manner to the body of the button, by the aid of which shank the button can be sewed onto the fabric, and further means for attaching such shank to the body of the button.

In the accompanying drawings, Figure 1 is a plan and a side elevation of a blank for producing the shank; Fig. 2, a plan view and a side elevation of a shank made out of a blank such as shown in Fig. 1. Fig. 3 shows in vertical section a device for attaching this shank to the body of the button. Figs. 3^a, 3^b, 3^c, 3^d, and 3^e show modified devices for fixing the shank to the body of the button, likewise in vertical section. Fig. 4 shows a plan of a sheet-metal covering-piece. Fig. 5 illustrates the method of applying the same to the shank in vertical section. Fig. 6 shows a plan and a side elevation of a blank made of wire and serving to produce a somewhat modified shank. Fig. 7 represents the shank as produced from the blank shown in Fig. 6 in plan and side view. Fig. 8 shows a plan and a side elevation of a blank, likewise made of wire and serving to produce another slightly-modified shank. Fig. 9 shows a side and plan view of a shank made of a blank as represented in Fig. 8.

The device consists of a special form of shank of wire or sheet metal fixed to the button, this shank being made in such a manner that the arms A, starting from the center piece D of a flat star of flexible metal, having three, four, or more arms, Fig. 1, are turned up vertically, while a short piece of their extremities is bent outward, Fig. 2. Thereupon this shank, with its bent-up free

extremities *a* of the arms A, is inserted into a cavity B, provided at the bottom of the button, Fig. 3, the exterior edge *b* of which is undercut. Then a ring C of U-shaped cross-section is slid upon this shank, so that the hollow side of the ring is directed toward the button, as is illustrated in dotted lines in Fig. 3, and subsequently the ring C is driven in by means of a press, so that the exterior edge of said ring grips underneath the edge *b*, which is undercut, while the inner edge of the ring rests upon the bent extremities *a* of the arms A. The shank is thus connected to the button in the most simple manner. Any accidental compression which might cause the shank to easily drop out is prevented in such a manner that in the center of the cavity B of the button a small projection *b* is provided, which enters between the extremities of the arms A, as shown in Fig. 3. On sewing the button to the fabric the thread is drawn through the openings between the arms A of the shank, which arms freely project from the button and the bottom D of the star.

Fig. 3^a shows another device for fastening the shank to the button, which is especially suitable for fabric or cloth buttons. The free extremities of the arms A, which may, if required, be bent outward at their outer extremities, (at *a*,) are in this device pressed between the sheet-metal portion B', forming the back of the button, and the edge or rim *b*³ of a sheet-metal cap *b*², placed upon the rear of the button core or body E. The said edge *b*³ may or may not be bent upward, and the aforesaid free extremities of the arms A are held fast in such a manner that the sheet-metal cap entering between the arms A prevents these arms from being accidentally pressed together. Instead of the cap a flat disk *b*^{2x}, Fig. 3^c, may be used. In this case the shank A is held fast in such a manner that the inwardly-bordered interior edge of the sheet-metal back B' grips beneath the extremities *a* of the arms A, which extremities are in this case bent outward and downward.

Fig. 3^b shows another constructional form of this fastening device, which differs from that illustrated in Figs. 3^a and 3^c only by the fact that inside the button core or body E a groove *e* is provided, into which enter the bent extremities *a* of the arms A and are held

fast by the overlapping sheet-metal cover B', while the interior edge of the groove *e* prevents the arms A from being accidentally pressed together.

5 The mode of fastening the shank shown in Fig. 3 may also be applied to fabric or cloth buttons, as shown in Fig. 3^d. A sheet-metal back B' is secured to the button-core E. This sheet-metal back B' is provided with a central
10 recess with an undercut edge *b* and a projection *b'* in its center, which enters between the arms of the shank. The shank is inserted into this recess and is held in place by a ring C, pressed down upon the button-back, so that
15 its inner edge bears upon the outwardly-bent extremities of the arms of the shank, while its outer edge enters under the undercut edge *b* of the recess in the sheet-metal back B'.

Another modification of the mode of fastening the shank to the button illustrated by
20 Fig. 3^a is shown in Fig. 3^c. The cap *b*², placed on the button-core E, is held in position by the inner face of an inwardly-projecting rib *b*⁴ in the sheet-metal back, while the
25 inwardly-bent edge of the central hole of the sheet-metal back clamps the outwardly-bent extremities of the shank-arms between itself and the cap *b*².

If, as shown in Figs. 1 and 2, the star is
30 made of sheet metal, the danger may occur of the thread being cut off by contact with the sharp edges of the arms A and the bottom D, and in order to meet this disadvantage small tongues *a'*, starting from the center
35 piece D, are stamped out between the rays or arms A of the star, as is illustrated at the left-hand side of Figs. 1 and 2, which tongues are bent upward and inward, as is shown upon
40 the right-hand side of Figs. 1 and 2. Sometimes these bent-up tongues *a'* are covered up inside by a small star *a*², Fig. 4, which is placed above upon the bent extremities of the tongues *a'*, whereupon the arms of this small
45 star *a*² are turned down and inward, as shown in Fig. 5. The shanks may also be suitably made of wire. Such shank may be produced in such a manner that an even or flat star is made of wire, Fig. 6, the arms or rays A' of
50 which consist of wire pieces arranged parallel in pairs side by side, which wire pieces are connected at the outer extremities, while the adjacent wire pieces of adjacent rays pass over into each other by a rounding *a*^x, the center of the star being empty. If, then, the
55 arms of this star are turned up vertically, as shown in Fig. 7, so that the adjacent wires of adjacent arms, together with the roundings *a*^x forming the transition between the said arms, will form the lateral surfaces of a
60 prism, a shank consisting of several parts is obtained, which only differs from that shank illustrated in Figs. 2 and 3 by the fact that it has no bottom, so that the thread during the sewing operation is drawn over the
65 rounding *a*^x. The outer extremities of the arms A' are in this case likewise bent outward, as shown at *a* in Fig. 7. These outer

extremities may, as shown in Figs. 8 and 9, also be so formed that the outer extremities of the wires forming one arm of the star are
70 made to pass over into each other by a semi-annular curve *a*³.

The shank, as is apparent, consists in every case of a number of arms A or A' parallel to each other and vertical to the button-surface,
75 these arms being, on the one hand, fixed inside the button and, on the other hand, connected to each other by the bottom D or by stays *a*^x, the said shank being in all cases
80 sewed on in such a manner that the thread is passed through the intermediate spaces between the arms A and the bottom D or stays *a*^x, respectively.

I claim—

1. An attaching-shank for buttons comprising a number of parallel arms forming the lateral edges of a prism, such arms being adapted to be secured at one end to the button, further comprising a bottom connecting
85 these arms at the other extremity, and tongues fixed between these arms to the bottom or integral with the said bottom the said tongues being turned back upon the bottom. 90

2. An attaching-shank for buttons comprising a number of parallel arms forming the
95 lateral edges of a prism such arms being adapted to be secured at one end to the button, further comprising a bottom connecting these arms at the other extremity and a separate sheet-metal star, which is placed upon
100 one side of the bottom and the arms or rays of which are bent down upon the other side of the bottom.

3. An attaching-shank for buttons comprising a number of parallel arms forming the
105 lateral edges of a prism, such arms being adapted to be secured at one extremity to the button, further comprising a bottom connecting these arms at the other extremity, further tongues fixed between these arms on the bottom or integral with the said bottom, which
110 tongues are bent back upon this bottom, and a separate sheet-metal star which is placed upon the turned-back tongues of the bottom, and the arms or rays of which are bent down
115 upon the other side of the bottom.

4. An attaching-shank for buttons comprising a number of parallel arms arranged in pairs, the upper ends of said pairs being joined and bent outwardly and a connection between
120 the lower ends of the parallel arms, substantially as described.

5. The combination of a button-body, of an annular groove at its rear surface, of a centrally-perforated sheet-metal back fixed to the
125 rear surface of the button-body, the said sheet-metal back having its inner edge bent toward the button-body and of an attachment-shank inserted into the hole of the sheet-metal back, the said shank consisting of a
130 number of parallel arms lying vertically to the button-surface and forming the lateral edges of a prism the arms of which shank are at the outer extremity connected to each other

and at the inner extremity bent outward and located in the groove at the back of the button-body between the bottom of this groove and the inner edge of the sheet-metal back.

5 6. The combination of a button-body, a sheet-metal back fastened to such body and having a central recess and a projection in the center of such recess, an attachment-shank comprising a number of parallel arms
10 lying vertically to the button-surface which arms are at the one extremity connected to each other and at the other extremity bent outward and inserted into the said recess,

so that the said central projection in the recess enters between the free ends of the shank- 15 arms and of a ring the exterior edge of which takes under the undercut edge of the said recess and the interior edge of which overlaps the bent extremities of the shank-arms.

In testimony whereof I have affixed my sig- 20 nature in presence of two witnesses.

EMIL TELTSCHIK.

Witnesses:

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HARRY BELMONT.