Jan. 8, 1946. J. POLK 2,392,338

SLIDE FASTENER

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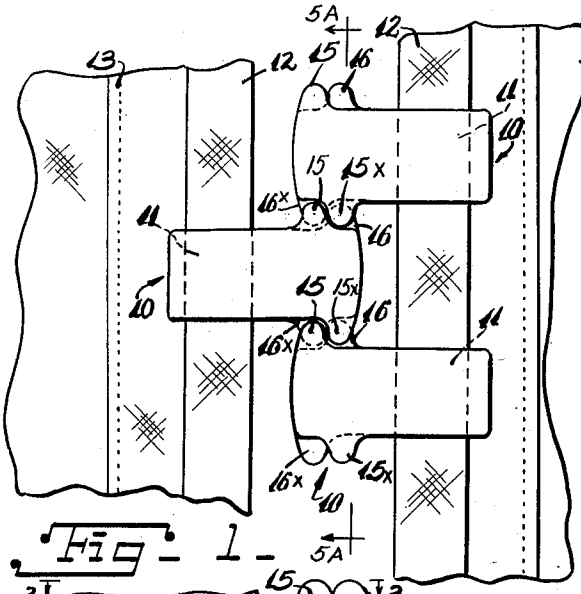


Fig. 1.

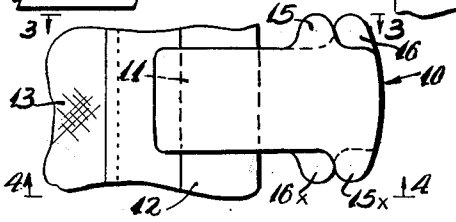


Fig. 2.

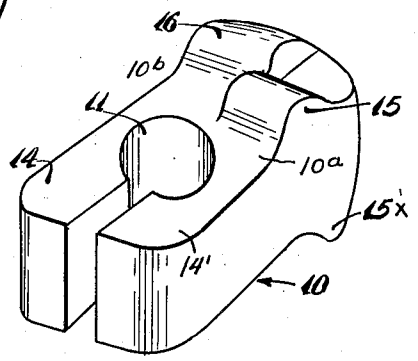


Fig. 5.

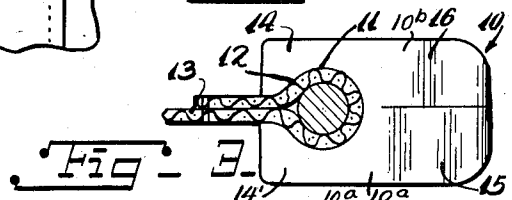


Fig. 3.

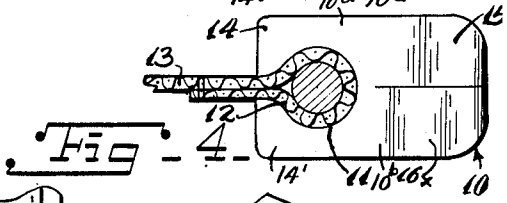


Fig. 4.

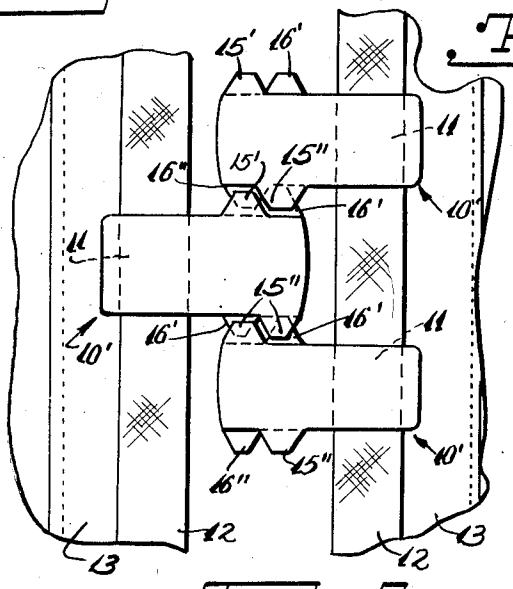


Fig. 6.

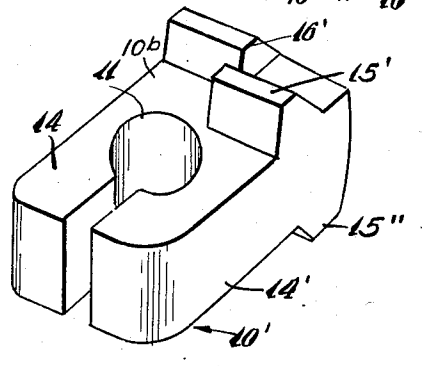


Fig. 7.

INVENTOR.
Joseph Polk
BY
Goltan & Holachek
ATTORNEY

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SLIDE FASTENER

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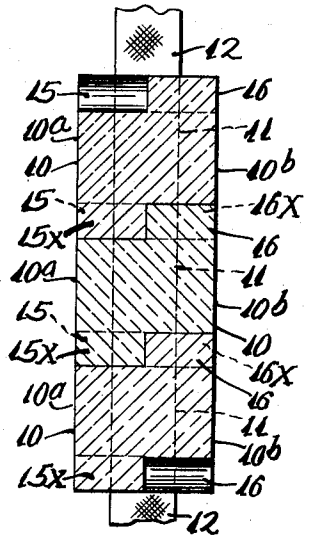


Fig. 5A.

INVENTOR.
Joseph Polk
BY
Zoltan H. Polachek
ATTORNEY

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SLIDE FASTENER

Joseph Polk, New York, N. Y.

Application December 15, 1943, Serial No. 514,318

1 Claim. (Cl. 24—205)

This invention relates to new and useful improvements in a plastic or die cast fastener element for a slide fastener.

More specifically, the invention proposes the construction of a plastic or die cast fastener element for a slide fastener which is adapted to be cast of plastic material and which has no surfaces extended into any of its faces forming recesses permitting the fastener element to be cast in a mold without the use of cores.

Still further it is proposed to characterize the fastener element by a member formed with a passage extended inwards from one end thereof in a manner to receive the edge portion of a conventionally constructed piece of tape of the type generally used for supporting fastener elements of a slide fastener stringer.

A further object of the invention proposes forming the other end of the member with staggered projections arranged in a manner to be engaged with corresponding projections of an adjacent slide fastener element by means of a conventionally constructed pull tab slide for engaging the slide fastener of adjacent rows to close an opening formed in an article to which the slide fastener is attached.

Still another object of the invention proposes forming the projections upon the fastener elements in such a manner that when they are engaged with each other by means of the pull tab slide they will be inter-engaged so as to retain the elements against relative movement in all directions.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a plan view of adjacent slide fastener stringers provided with plastic or die cast elements constructed in accordance with this invention.

Fig. 2 is a view similar to a portion of Fig. 1.

Fig. 3 is a view looking in the direction of the line 3—3 of Fig. 2.

Fig. 4 is a view looking in the direction of the line 4—4 of Fig. 2.

Fig. 5 is a perspective view of one of the fastener elements, per se.

Fig. 5A is a vertical sectional view on the line 5A—5A of Fig. 1.

Fig. 6 is a view similar to Fig. 1 but illustrating a modification of the invention.

Fig. 7 is a perspective view of one of the fastener elements used in the form of the invention shown in Fig. 6.

The plastic or die cast fastener element for slide fasteners, according to this invention, includes a member 10 having a passage 11 extended inwards from one end thereof. The passage 11 is provided for the purpose of receiving the edge portion 12 of a piece of tape 13 for supporting the fastener elements of a slide fastener stringer. The tape 13 is of conventional construction and has its edge portion 12 bulged so as to be engageable within the passage 11. The material of the member 10 surrounds the passage 11 forming arms 14 and 14' which are clamped about the bulged edge portion 12 preventing the fastener from being pulled off the tape 13.

The other end of the member 10 is formed with a pair of projections 15 and 15X on its sides and adjacently staggered in relation to each other. These projections 15 and 15X are located upon the half side 10^a of the member 10 located on one side the passage 11.

The member 10 is also provided with a second pair of projections 16, 16X which are adjacently staggered in relation to each other. These latter projections 16 are formed on the half side 10^b of the member 10 located on the other side the passage 11. In this first form of the invention the projections 15, 15X and 16, 16X have rounded extended surfaces of substantially semi-ellipsoidal configuration and the first pair of projections 15 and 15X are arranged in a staggered relation upon their respective sides with relation to the second pair of projections 16, 16X.

The members 10 are adapted to be engaged in a staggered relation upon the adjacent edges of an adjacent pair of tabs 13 so that when the fasteners are engaged with each other by a conventional pull tab slide (not shown on the drawings) the projections 15, 15X and 16, 16X will be inter-engaged between the adjacent sides of the members 10. The staggered relationship of the projections 15, 15X and 16, 16X when in their engaged position, as shown in Fig. 1, will cause the projections to strike each other on two adjacent sides to prevent relative movement between the members 10 in all directions, maintaining them in their inter-engaged position until such time as the pull tab slide is moved in a proper direction to separate them.

In the modification of the invention shown in Figs. 6 and 7 the construction of the members 10'

is similar to that previously described except for the configuration of the projections 15', 15'' and 16', 16''. The projections 15', 15'' and 16', 16'' are formed with straight sides and ends giving them a trapezoidal-like shape.

In other respects this form of the invention is similar to that previously shown and like reference numerals identify like parts in each of the several views.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claim.

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

A plastic or die cast fastener element for a slide fastener, comprising a member having a passage extending inwards from one end for receiving the edge portion of a piece of tape used for supporting the fastener elements of a slide fastener stringer, the material of said member adjacent said passage forming arms by which said member may be clamped upon said piece of tape, the other end of said member having a pair of projections on its sides and adjacently staggered in relation to each other and located beyond one end of said passage and said other end also having a second pair of projections on its sides and adjacently staggered in relation to each other and located beyond the other end of said passage, said second pair of projections being staggered in relation to said first named pair of projections, said projections being formed with rounded ends of semi-ellipsoidal configuration.

JOSEPH POLK.