March 24, 1936. A. H. TEMPLE 2,035,028

FASTENER

Filed Oct. 17, 1933 2 Sheets-Sheet 1

Fig. 1.

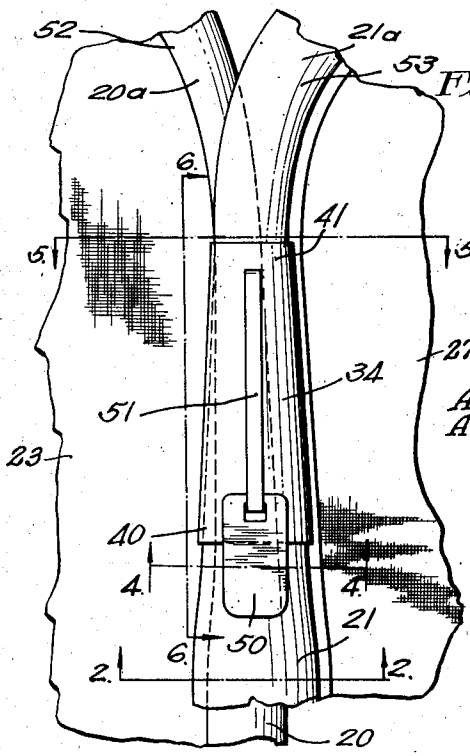


Fig. 2.

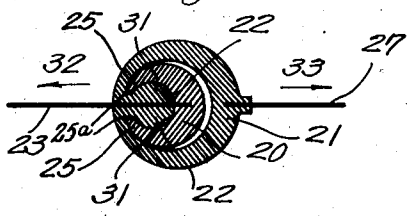


Fig. 3.

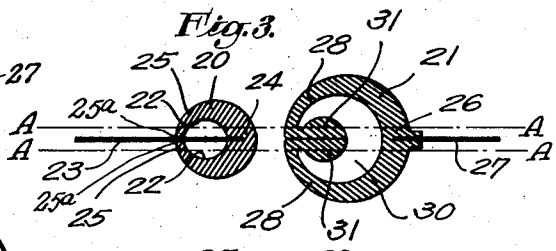


Fig. 4.

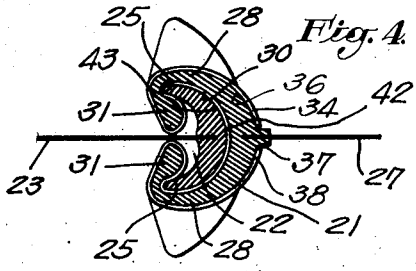


Fig. 5.

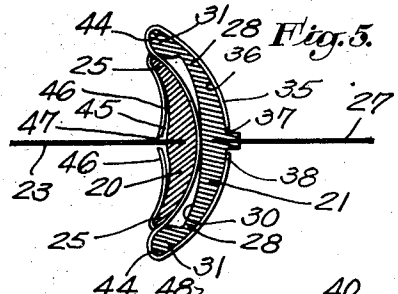


Fig. 10.

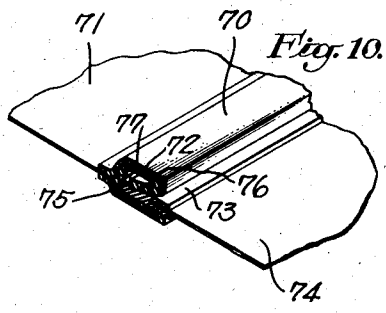


Fig. 6.

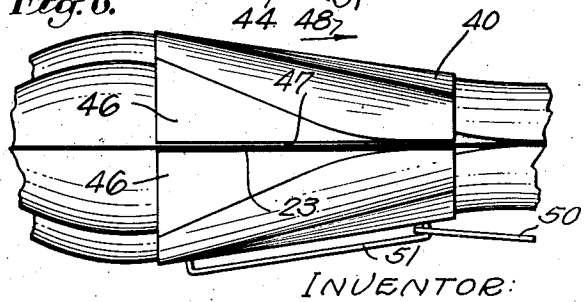
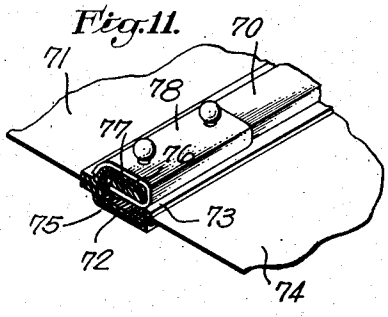


Fig. 11.



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Fig. 7.

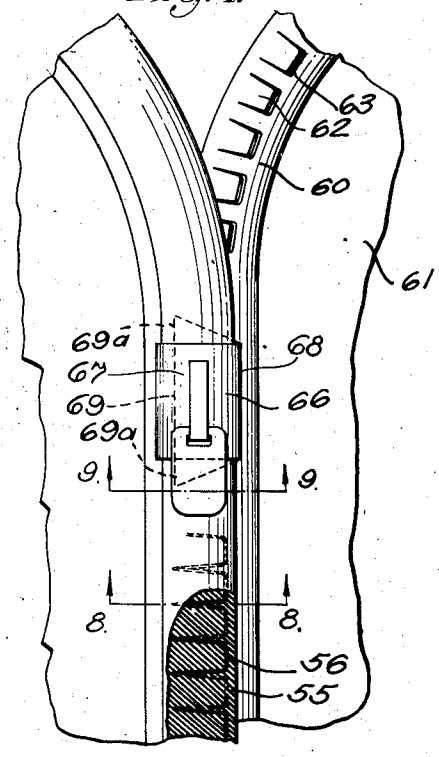


Fig. 12.

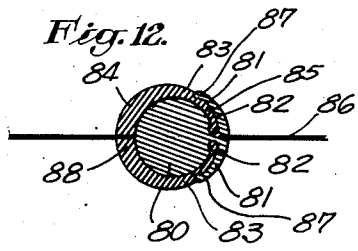


Fig. 13.

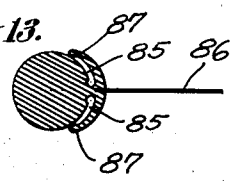


Fig. 14.

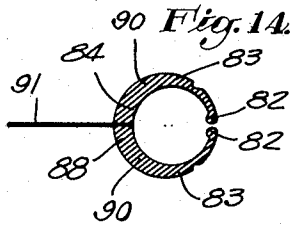


Fig. 8.

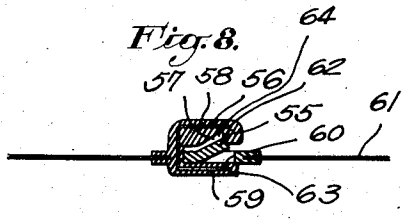


Fig. 15.

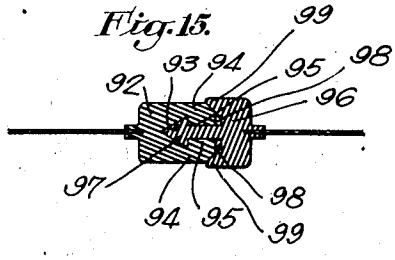
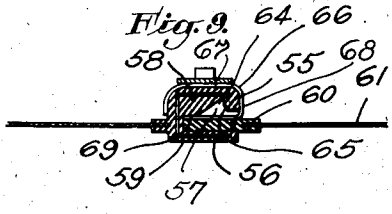


Fig. 9.



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Patented Mar. 24, 1936 2,035,028

UNITED STATES PATENT OFFICE

2,035,028

FASTENER

Arthur H. Temple, West Hollywood, Calif., assignor of one-half to Joseph Hernstam, Los Angeles, Calif.

Application October 17, 1933, Serial No. 693,918

22 Claims. (Cl. 24—205)

My invention relates to a fastening means for securing two members together and is of especial utility for securing together the edges of members having sheet form, such as fabric.

Although the invention may be of relatively extensive utility, the present principal value and use thereof are conceived to be in a means for securing together the edges of members forming cooperative parts of a garment or other textile fabric or rubberized structure, such, for instance, as the flaps of a tent. The particular advantages of my present invention are that it forms a seam or joint of comparatively waterproof character, is cheaply constructed, is of flexible character since it is made chiefly from rubber, and has no exposed metal parts of a character to catch in clothing.

It is an object of the invention to provide a device of the above character having a pair of cooperating strip members which for convenience may be referred to as primary and secondary members, one of which members is adapted to be held in a channel formed in the other of such members, the fastening device having means for engaging and disengaging these primary and secondary strip members.

A further object of the invention is to provide a device of this character having primary and secondary strip members in inner and outer relation, so constructed that when they are in engagement, separation thereof as the result of tension applied to the sheet members to which they are applied will be forcibly resisted.

A further object of the invention is to provide in a device of this character inner and outer strip members formed with parts in interengaging or interlocking relation contributing to the effect of holding these members together in a sturdy manner.

A further object of the invention is to provide a relatively simple sliding means having the utility of progressively engaging or disengaging the inner and outer strip members, depending upon the direction of movement of such means lengthwise of the strip members.

A further object of my invention is to provide a fastening device of interlocking character as above set forth, in which the co-engaging elements are both made in the form of continuous strips in contravention to the practice of placing a plurality of engagement members in side-by-side relation along or within a supporting strip of material. In the preferred practice of my invention the co-engaging elements are either extruded or molded from a rubber material in continuous strip form and therefore may be made at a minimum cost and with minimum equipment.

Further objects and advantages of the invention will be made evident throughout the following part of the specification.

Referring to the drawings, which are for illustrative purposes only, and most of the figures of which are drawn to enlarged scale,

Fig. 1 is a fragmentary elevational view showing a form of my invention.

Fig. 2 is a cross section on a plane represented by the line 2—2 of Fig. 1, showing the inner and outer strip members in engaging position.

Fig. 3 is a sectional view showing the relatively inner and outer strip members in side-by-side positions of disengagement.

Fig. 4 is a cross section on a plane represented by the line 4—4 of Fig. 1, showing the rearward end of the operating device for engaging and disengaging the strip members.

Fig. 5 is a cross section on a plane represented by the line 5—5 of Fig. 1 looking toward the forward end of the slider or operating member.

Fig. 6 is a sectional view of the slider taken on a plane represented by the line 6—6 of Fig. 1.

Fig. 7 is a fragmentary face view of another form of the invention.

Fig. 8 is a cross section on a plane represented by the line 8—8 of Fig. 7.

Fig. 9 is a cross section taken as indicated by the line 9—9 of Fig. 7.

Fig. 10 is a fragmentary perspective view showing a form of my invention having the general characteristics of the device disclosed in Figs. 7, 8, and 9 but having the movable latch means mounted within the outer strip member of the device.

Fig. 11 is a similar view cooperating with Fig. 10 for showing the slider or actuator means adapted for use with this last form of the invention.

Fig. 12 is a cross sectional view showing a further form of the invention.

Fig. 13 is a cross sectional view showing the inner member of Fig. 12.

Fig. 14 is a cross sectional view showing the outer member of Fig. 12.

Fig. 15 is a cross sectional view showing a deviation from the form but employing the principles of the device shown in Fig. 12.

The form of the invention shown in Figs. 1 to 6 employs an inner strip member 20 and an outer strip member 21 individually shown in cross sec-

tion in Fig. 3 and which are preferably made from rubber compound. The inner strip member is of circular cross section and has a pair of channels 22 open to the leftward side thereof and lying on opposite sides of a thin wall 23, preferably of fabric, which extends leftwardly from the bottom or back portion 24 of the member 20. These channels 22 are preferably semi-circular in cross section and lie within the fin portions 25 of the member 20 which extend leftwardly from the body portions 24. The outer member 21, as shown in Fig. 3, is preferably of approximately circular cross section having a thickened portion 26 on the right-hand side thereof to which the edge of a fabric 27 is secured, and extending semi-circular walls or lips 28 of such size as to define an inner space or longitudinal channel 30 slightly larger than but adapted to receive the strip member 20, there being beads or ribs 31 extending relatively inwardly from the leftward edges of the lips or walls 28 and in a direction parallel to the thin wall or sheet 23, and being of approximately semi-circular cross section so as to fill the channels 22 of the member 20 when the inner and outer members 20 and 21 are in interengagement as shown in Fig. 2, such interengagement consisting of the placement or holding of the strip member 20 in the space or groove 30 of the member 21 so as to connect together the fabric parts 23 and 27 which may be cooperating edges of a garment or may be tapes adapted to be secured to cooperating edges of sheets or fabrics. The strip members 20 and 21 make what may be termed an interlocking engagement consisting of the hooking of the beads or lips 31 into the channels 22 of the inner strip member 20. This is accomplished by forming the channels 22 so that they are undercut in the direction of or toward the bottom or back portion 24 of the inner strip member 21. In the preferred practice of the invention the channels 22 are so placed that they define planes A—A which are parallel to the plane of the sheet 23. Likewise, the beads 31 define the planes A—A. The term "define planes" is used in the same sense as the expression that a straight line is defined by two points or that three points which are not all in a straight line define a plane. From Fig. 2 it will be perceived that the ribs 31 formed along the edges of the fins or walls 28 are in interlocking engagement with the longitudinal channels 22 formed within the member 20 in a position facing and coextensive with the fabric 23. The interlocking engagement of these parts produces a very strong resistance to disengagement thereof by pull on the fabrics 23 and 27 respectively in the directions of the arrows 32 and 33 of Fig. 2. With respect to the inner strip member 20, the channels 22 are reentrant in character and are each formed between side walls which project from a bottom wall in such a manner that a channel of material depth is produced. Each channel 22 has a lip or fin 25 as one of its side walls, and the rightward portion of the sheet or thin wall 23 as the other of its side walls, the rightward portion of the inner strip member 20 forming the bottom wall of the channels 22. It will be noted that the side walls of the channels 22, as represented by the rightward portion of the sheet 23 and the lips 25 in Fig. 2, are in a substantially parallel relation, at least through part of the distance through which they individually extend. In the manner shown, channels are formed between definite side walls, and such channels are of U-shaped relation or form.

To disengage the members 20 and 21, it is necessary to swing the fin portions 25 of the member 20 outwardly through the position thereof shown in Fig. 4 to the position of Fig. 5, so that the semi-circular ribs 31 may readily move out of the longitudinal channels 22, and to spread the walls or fins 28 of the member 21 through the position of Fig. 4 to the position of Fig. 5. This is accomplished by use of a slider or operator 34, the ends of which are respectively shown in Figs. 4 and 5. This device comprises a metal wall 35 adapted to define within the confines thereof a longitudinal channel 36 with a slot 37 formed between the edges 38 of the wall 35. The wall is so shaped from end to end thereof, as shown in Figs. 4 and 5, that the member 21 in passing through the space 36 will be bent through the positions shown in Figs. 4 and 5. In other words, the shape of the channel at the forward end of the slider 34, as shown in Fig. 5, is such that the fins or lips 28 will be held in open position to permit entry of the member 20 into the space 30 between the lips. As the member 21 approaches the rearward end 40 of the slider 34, the change in the shape of the passage 36 is such that the edges of the walls 28 and the longitudinal ribs 31 will be curled in around the fins 25 of the member 20, with the result that as the parts 20 and 21 leave the rearward end 40 of the slider, the tension in the rubber material from which these members are formed will cause them to drop into positions of interengagement on substantially the line 2—2 of Fig. 1 and as shown in Fig. 2. As shown in Fig. 4, the central portion 42 of the wall 35 is formed at the rearward end of the slider 34 in such a manner that a space 43 will lie substantially within the space 36, this space 43 forming one end of a channel for receiving the member 20 and for partially opening the lips 25 of the member 20. As the central portion 42 of the wall 35 proceeds from the rearward end 40 toward the forward end 41 of the slider, it tends to straighten out, as shown in Fig. 5, so that the space lying to the left thereof moves toward a position outside the end portions 44 of the space 36. The space 43 or rearward end of the channel 45 for receiving the member 20 is formed entirely within a portion of the wall 35, but as the central portion 42 of the wall 35 tends to straighten out, as shown in Fig. 5, walls 46 of triangular form, as shown in Figs. 5 and 6, must be provided to cooperate with the central portion 42 of the wall in the forming of the channel 45 having a longitudinal slot 47 through which the fabric 23 extends. The channel 45 is so formed that at the forward end thereof, as shown in Fig. 5, the lips 25 of the member 20 will be held quite wide apart, the result being that as the slider 34 is moved rearwardly in the direction of the arrow 48 by use of a pulling tab or handle 50 slidably mounted on a longitudinal bar 51 secured to the upper face of the member 34, the members 20 and 21 will be deformed from closed position, as shown in Fig. 2, consecutively through the positions shown in Figs. 4 and 5, so that as these respective members 20 and 21, as indicated at 20*a* and 21*a* in Fig. 1, will pass from the forward end 41 of the slider 34 in disengagement. A short distance from the end 41, as indicated at 52 and 53, the members 20 and 21 will reassume their normal form, as shown in Fig. 3. When the slider 34 is moved in a direction opposite to that indicated by the arrow 48, it will open the members 20 and 21 and move the member 20 into the space 30

of the member 21, thereby interengaging these members and joining the fabrics 23 and 27.

A feature of the invention resides in a combination of parts comprising the inner strip member 20 and the outer strip member 21 wherein the leftward or free edges of the lips 28 are held inwardly around the inner strip member 20 by means such, for example, as the beads or fins 31 which connect the free edges of the lips 28 to the inner strip member. When the parts 31 are in the channels 22, the outward movement of the lips 28 is restrained. Since the outer strip member 21 is formed of rubber and must have flexibility, it is difficult to put sufficient strength in the wall thereof to effectively hold the outer strip member in closed relation around the inner strip members. This result is accomplished, however, by the provision of channels 22 in the inner strip member, which channels 22 extend lengthwise along the inner strip member adjacent the sheet 23. It will be perceived that these channels 22 form undercuts in the direction of the rightward side of the inner strip member 20, or, in other words, the side of the inner strip member 20 from which the sheet 23 extends. The leftward or free edges of the lips 28 are bent rightwardly toward the rightward side of the outer strip member 21, to which rightward side the sheet 27 is attached, and accordingly hook into the undercut channels 22 of the inner strip member. Each of the channels 22 has a continuous opening extending lengthwise of the inner strip member 20 along and parallel to the sheet 23. In the preferred practice of the invention this opening or mouth which exists between the leftward edges of the fin portions 25 and the sheet 23 is of lesser width than the interior or central portions of the channels 22. Likewise, the width of the mouth of each channel 22 is preferably less than the depth of each channel, the word "depth" meaning the dimension of the channel from the leftward edge of the lip 25 to the rightward wall of the channel 22.

The term "mouth" is used in the sense of an opening leading into a space enclosed by walls. Such a mouth may be in closed or open position. For example, the human mouth is an entrance way leading to the esophagus and still remains a mouth whether or not it is closed or open. In the same sense, the lips 25 and the adjacent portions of the sheet 23 form mouths 25a leading rightwardly into the channels 22. Such mouths are in closed position or relation in Fig. 3 and are in open condition in Fig. 2. As shown in Fig. 3, the lips 25 forming parts of such mouths merely touch the cooperating portion of the sheet 23, and this fact does not change the existence of the mouths 25a. The lips 25 are so formed that when they are flexed outwardly to open positions as shown in Fig. 2, they exert an inward pressure relative to the channels 22 and tend to press the beads 31 into the channels, thereby producing an interlocking co-engagement between the free edges of the lips 28 and the strip member 20 to hold or restrain the edges of the lips 28 against outward movement.

In the form of the invention shown in Figs. 7, 8, and 9, I provide an outer member 55 of molded rubber preferably having a zigzag bent reinforcing wire 56 therein and a longitudinal channel 57 formed between wall portions 58 and 59. Of a size to enter the channel 57, I provide a flat rubber inner strip 60 which may be secured or molded onto the edge of a fabric 61, this inner strip 60 having a series of tongues 62 formed therein so as to project diagonally from openings 63 into a channel 64 formed on the inner face of the wall portion 58 of the member 55, so as to be in position for engagement with a shoulder 65 should force be exerted tending to pull the member 60 from the channel 57. The rubber tongues 62 form a series of latch dogs which operate to hold the members 55 and 60 together. For releasing these latch dogs, I provide a slider 66 adapted to slide along the wall portion 58 of the member 55 and having an outer wall 67, an intermediate or edge wall 68, and an inner wall 69 which passes within the channel 57 across the channel 64 of the wall portion 58. The inner wall 69 has triangular projecting ends 69a for engaging the leftward parts of the tongues 64 as the slider 66 is moved, with the result that these tongues will be depressed into the opening 63 and out of engagement with the shoulder 65 to permit separation of the strip members 55 and 60, as shown in the upper part of Fig. 7.

In the form of the invention disclosed in Figs. 7, 8, and 9, the latch dogs 62 are formed on the inner member or strip 60. In Figs. 10 and 11 I show the same principles of construction applied to a device in which the latch means are formed within the outer member and engage a groove in the inner member. In these Figs. 10 and 11 an outer member 70 of molded or extruded rubber is shown secured to a fabric 71, such outer member being preferably reinforced with a zigzag bent wire 72. An inner member 73 is provided, which is of flat form and preferably secured to the edge of a fabric 74. In the upper surface of the member 73 is a shoulder 75 adapted to be engaged by a rubber strip 76 which projects diagonally downwardly from the upper wall 77 of the member 70, the rightward edge of the portion 76 being joined with the rightward edge of the upper wall portion 77. In this form of the invention a slider 78 is provided of essentially the same form as the slider 66 shown in Fig. 7 but functioning to lift the strip 76 from engagement with the shoulder 75 when it is desired to remove the inner portion 73 from the channel of the outer portion 70.

In the form of the invention shown in Figs. 1 to 6, the lips 25 have served in positions within the outer member 21 to force against the ribs 31 formed on the lips 28. In Figs. 12, 13, and 14 I show an inner member 80 having external means 81 for forcing ribs 82, formed upon lips or edge walls 83 of an outer member 84, into channels 85 provided for the reception thereof in the inner member. In this form of the invention the inner member 80 is substantially cylindrical, the grooves or channels 85 being formed along the rightward side thereof from which a fabric or other sheet 86 extends. To the right of the channels 85, lips or webs 87 extend upwardly and downwardly in parallel relation to the rightward portion of the body of the member 80. The outer member 84 has a thickened body portion 88 at the leftward side thereof forming the inner ends of lips 90 which support the ribs or beads 82. When the members 80 and 84 are in positions of interengagement, as shown in Fig. 12, the fins or lips 87 constituting the means 81 press the ribs or beads 82 into the channels 85 in a manner to resist disengagement of these parts due to an outward pull exerted on the sheet 86 and the fabric or sheet 91 secured to the leftward side of the outer member 84.

In Fig. 15 I show another form of the invention in which external means are provided for holding a rib or bead in a receptive channel. In this

form of the invention an outer member 92 is provided having a channel 93 formed between flexible edge walls 94 having relatively inwardly projecting bead portions 95. The inner member 96 of this form of the invention has a bead 97 of triangular cross section adapted to fit into the channel 93 of the outer member 92, there being channels 98 formed in the member 96 to the right of the bead 97 for reception of the ribs or beads 95 of the strip member 92. The member 96 has extending flanges or lips 99 adapted to project in leftward projection across the rightward portions of the edge walls 94 for the purpose of holding the ribs or beads 95 in the channels 98 provided therefor. These lips or flanges 99 are of flexible material, as also are the edge walls 94, so that these parts may be flexed outwardly by the use of a suitable slider of the general character previously described herein, to enable ready engagement and disengagement of the cooperating parts 92 and 96.

Although I have herein shown and described my invention in simple and practical form, it is recognized that certain parts or elements thereof are representative of other parts, elements, or mechanisms which may be used in substantially the same manner to accomplish substantially the same results; therefore, it is to be understood that the invention is not to be limited to the details disclosed herein but is to be accorded the full scope of the following claims.

I claim as my invention:

1. A securing device of the character described, including: an inner strip member having the edge of a sheet secured thereto in longitudinal relation, there being a lip along said inner strip member forming a channel in said inner member along said sheet; and an outer strip member having a groove-like opening therealong to receive said inner member, said outer member having a bead extending into said channel of said inner member, and said lip being formed so as to press said bead into said channel.

2. A securing device of the character described, including: an inner strip member having the edge of a sheet secured thereto in longitudinal relation, there being a lip along said inner strip member forming a channel in said inner member along said sheet; an outer strip member having a groove-like opening therealong to receive said inner member, said outer member having a bead extending into said channel of said inner member, and said lip being formed so as to press said bead into said channel; and an operating device having sliding engagement with said inner and outer members shaped to disengage said bead from said channel and separate said inner and outer members.

3. A securing device of the character described, including: an inner strip member of circular cross section having an edge of a sheet secured thereto in longitudinal relation, there being a pair of lips extending outwardly from said inner strip member and in a direction back over and approximately parallel to said sheet so as to form reentrant channels in said inner member along said sheet and on opposite sides thereof; and an outer strip member having a pair of co-extensive lips forming a groove-like opening therealong to receive said inner member, said lips having beads along the edges thereof extending radially inwardly relative to said groove-like opening and into said channels of said inner member.

4. A securing device of the character described, including: an inner strip member of circular cross section having an edge of a sheet secured thereto in longitudinal relation, there being a pair of lips extending outwardly from said inner strip member and in a direction back over and approximately parallel to said sheet so as to form reentrant channels in said inner member along said sheet and on opposite sides thereof; an outer strip member having a pair of co-extensive lips forming a groove-like opening therealong to receive said inner member, said lips having beads along the edges thereof extending radially inwardly relative to said groove-like opening and into said channels of said inner member; and an operating device having sliding engagement with said inner and outer members shaped to flex said lips outwardly to disengage said beads from said channels and separate said inner and outer members.

5. A securing device of the character described, including: an inner strip member of circular cross section having an edge of a sheet secured thereto in longitudinal relation, there being a pair of channels of substantially semi-circular cross section in said inner member along said sheet and on opposite sides thereof in facing relation; and an outer strip member having a pair of co-extensive lips forming a groove-like opening therealong to receive said inner member, said lips having beads of substantially semi-circular cross section along the edges thereof extending into said channels of said inner member.

6. A securing device of the character described, including: an inner strip member of circular cross section having an edge of a sheet secured thereto in longitudinal relation, there being a pair of channels of substantially semi-circular cross section in said inner member along said sheet and on opposite sides thereof in facing relation; an outer strip member having a pair of co-extensive lips forming a groove-like opening therealong to receive said inner member, said lips having beads of substantially semi-circular cross section along the edges thereof extending into said channels of said inner member; and an operating device having sliding engagement with said inner and outer members shaped to flex said lips outwardly to disengage said beads from said channels and separate said inner and outer members.

7. A securing device of the character described, including: an inner strip member having an elongated body portion with a channel formed therein between side walls disposed in substantially parallel planes; and an outer strip member having a lip therealong adapted to enclose a part of said body portion of said inner strip member, there being a bead along said lip to lie in said channel, and there being means carried by said inner strip member bearing against said bead so as to hold the same in said channel.

8. A securing device of the character described, including: an inner strip member having an elongated body portion with a channel formed therein, said channel being so formed that its mouth is at least as narrow as the remaining portion of said channel; and an outer strip member having a lip therealong adapted to enclose a part of said body portion of said inner strip member, there being a bead along said lip to lie in said channel, and there being a lip formed on said inner member along said channel in a position to bear resiliently against said named lip and first hold said bead in said channel.

9. A securing device of the character de-

scribed, including: an inner strip member having the edge of a sheet secured thereto in longitudinal relation, there being a channel in said inner member along said sheet, the mouth of which channel has a width dimension which is less than the dimension of the depth of said channel, and an outer strip member having a lip forming a groove-like opening therealong to receive said inner member, said outer strip member having an edge portion bent inwardly from the lip thereof into said groove-like opening and so as to lie within said channel of said inner strip member.

10. A securing device of the character described, including: an inner strip member having the edge of a sheet secured thereto in longitudinal relation, there being a channel in said inner member along said sheet; an outer strip member having a lip forming a groove-like opening therealong to receive said inner member, said outer strip member having an edge portion bent inwardly from the lip thereof and in a direction parallel to said sheet into said groove-like opening and so as to lie within said channel of said inner strip member; and an operating device having sliding engagement with said inner and outer members shaped to disengage said edge portion from said channel and separate said inner and outer members.

11. A securing device of the character described, including: an inner strip member of circular cross section having an edge of a sheet secured thereto in longitudinal relation, there being a pair of channels in said inner member along said sheet and on opposite sides thereof; and an outer strip member having a pair of co-extensive lips forming a groove-like opening therealong to receive said inner member, said lips having edge portions bent inwardly therefrom in directions substantially parallel to said sheet and radially toward the interior of said groove-like opening and so as to lie in said channels of said inner strip member.

12. A securing device of the character described, including: an inner strip member having a channel extending longitudinally, said channel being formed between opposing, substantially parallel side walls and a bottom wall and having a mouth at the outer edges of said side walls; and an outer strip member comprising a lip forming a longitudinal groove adapted to receive said inner strip member, said lip having a bead portion bent inwardly from the edge portion thereof so as to extend through said mouth into said channel.

13. A securing device of the character described, including: an inner strip member having a channel extending longitudinally, said channel being formed between opposing, substantially parallel side walls and a bottom wall and having a mouth at the outer edges of said side walls; and an outer strip member comprising a lip forming a longitudinal groove adapted to receive said inner strip member, said lip having a bead portion bent inwardly from the edge portion thereof so as to extend through said mouth into said channel, said bead portion being of such cross-sectional area as to substantially fill said channel and having opposing side faces presented to said opposing side walls of said channel.

14. A securing device of the character described, including: an outer strip member having a groove therealong; and an inner strip member having an elongated body portion fitting into said groove, there being bead and channel means on said strip members in interlocking engagement, said channel means being of such cross-sectional area as to have a constricted mouth, and said bead corresponding in cross-sectional area to said channel.

15. A securing device of the character described, including: an inner strip member having an elongated body portion and comprising a substantially U-shaped wall forming a longitudinal channel along said inner strip member; and an outer strip member having a lip therealong adapted to enclose a part of said body portion of said inner strip member, there being a bead along said lip to lie in said channel, and there being means carried by said inner strip member bearing against said bead so as to hold the same in said channel.

16. A securing device of the character described, including: an inner strip member adapted to be secured to the edge of a sheet in longitudinal relation, there being a channel in said inner strip member along said sheet, said channel being undercut in a direction to define a plane parallel to the plane of said sheet; and an outer strip member having a groove-like opening therealong to receive said inner strip member, said outer strip member having a bead extending therefrom in a direction to define a plane parallel to said plane of said sheet and into said channel of said inner strip member.

17. A securing device of the character described, including: an inner strip member adapted to be secured to the edge of a sheet in longitudinal relation, said inner strip member having a lip therealong forming a longitudinal channel adjacent said sheet; and an outer strip member having a groove-like opening longitudinally therein to receive said inner strip member, said outer strip member having a bead extending into said channel of said inner strip member, and said lip being so formed as to substantially enclose said bead and hold said bead against outward movement in a direction away from the plane of said first named sheet.

18. A securing device of the character described, including: an inner strip member having the edge of a sheet secured thereto in longitudinal relation, there being a channel in said inner member along said sheet; and an outer strip member having a lip forming a groove-like opening therealong to receive said inner member, said outer member having a bead extending from said lip into said channel of said inner member, said channel of said inner strip member being of such cross section that said channel will have a relatively narrow mouth.

19. A fastener of the character described, including: an inner strip member adapted to be secured to the edge of a sheet; an outer strip member having a pair of lips forming a channel to receive said inner strip member, said lips extending across opposite sides of said inner strip member so as to substantially enclose the same; and means of co-engagement disposed at the free edges of said lips and forming an engagement between the free edges of said lips and said inner strip member for holding said edges against said inner strip member near the plane of engagement of said inner strip member with said sheet.

20. A fastener of the character described, including; an inner strip member having a sheet extending from one side thereof, there being a channel formed in said inner strip member so as to run lengthwise of said member adjacent said

sheet, said channel forming an undercut in said member in a direction toward the back of said member; and an outer strip member having one side thereof adapted to be attached to the edge of a sheet and having the other side thereof forming lips defining a groove to receive said inner strip member, the free edge of one of said lips being bent inwardly toward said side of said outer strip member which is adapted to be attached to said second named sheet, so as to form a bead along said free edge which will hook into said channel of said inner strip member and restrain said free edge from outward movement relative to said inner strip member.

21. A fastener of the character described, including: an inner strip member having a sheet extending from one side thereof, there being channels in said inner strip member extending lengthwise thereof adjacent opposite sides of said sheet so as to form undercuts in said inner strip member in a direction toward the back of said strip member; and an outer strip member having one side thereof adapted to be attached to the edge of a sheet and having the other side thereof forming lips defining a groove to receive said inner strip member, the free edges of said lips being bent inwardly toward said side of said outer strip member which is adapted to be attached to said second named sheet, so as to form beads along said free edges which will hook into said channels of said inner strip member and restrain said free edges from outward movement relative to said inner strip member.

22. A detachable fastening device of the character described, including: an outer strip member adapted to be secured to the edge of a sheet, said strip member having a lip forming a longitudinal groove therein, said lip having a bead bent inwardly from the free edge thereof into said groove and in a direction toward said sheet so as to produce in conjunction with said lip a reversely curved hook; and an inner strip member adapted to be secured to a second sheet and to extend into said groove so as to be substantially enclosed thereby, said inner strip member having a side wall forming a channel along said second sheet to receive said bead of said lip, said side wall of said inner strip member overlying said bead when said bead is in said channel and restraining said bead and said edge of said lip of said outer member from outward movement in a direction substantially normal to the plane of said second sheet independently of forces applied to said strip members to separate the edges of said sheets which are fastened together by the device.

ARTHUR H. TEMPLE.

CERTIFICATE OF CORRECTION.

Patent No. 2,035,028. March 24, 1936.

ARTHUR H. TEMPLE.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 4, second column, line 73, claim 8, strike out the word "first" and insert the same after "said" first occurrence, in same line; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 28th day of April, A. D. 1936.

(Seal)

Leslie Frazer
Acting Commissioner of Patents.