

June 6, 1944.

J. A. KRASNOV ET AL

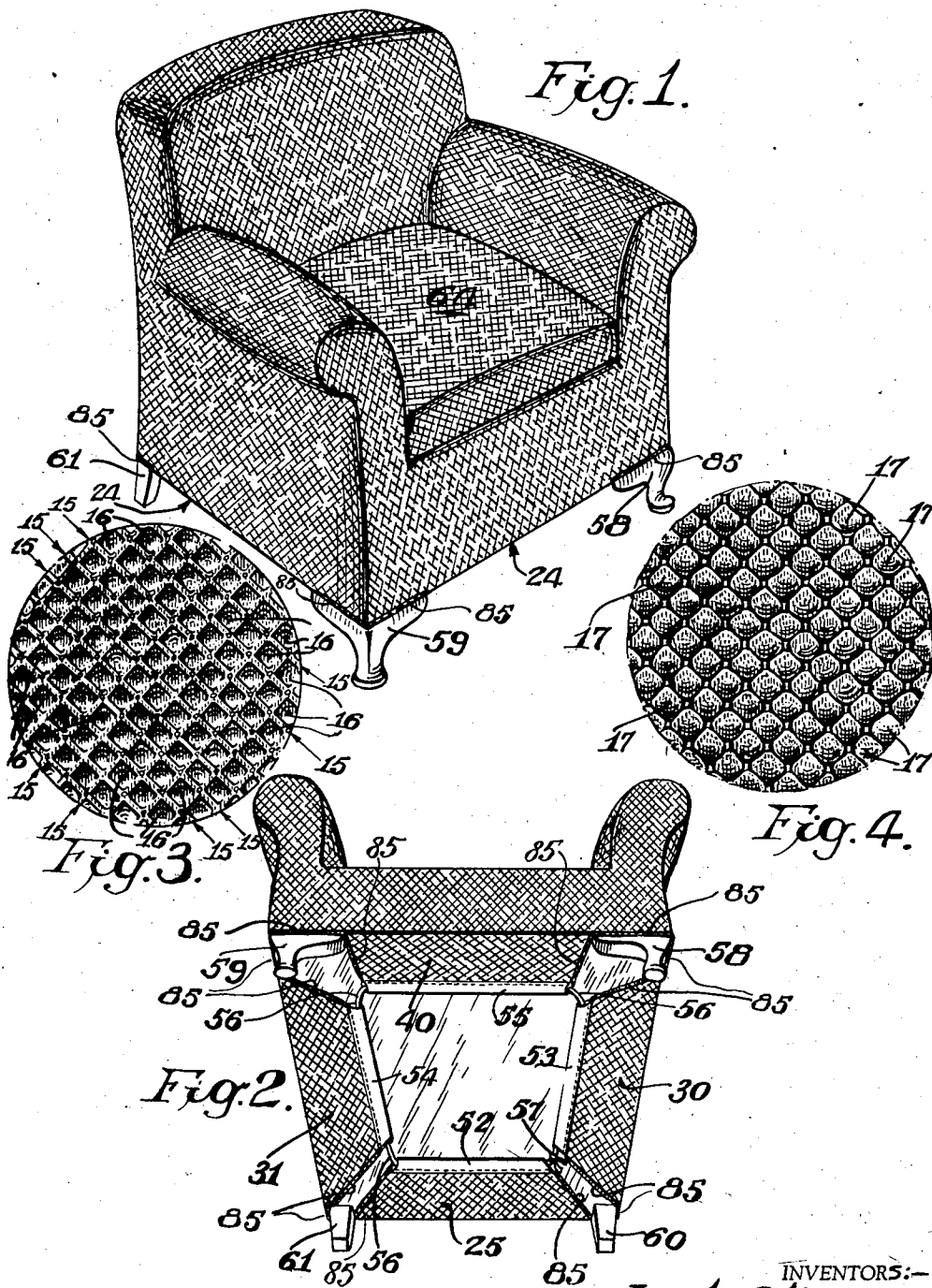
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SELF-CONFORMING, SURFACE-GRIPPING, READY-MADE KNITTED

SLIP-COVER FOR OVERSTUFFED UPHOLSTERED FURNITURE

Filed Nov. 8, 1941

10 Sheets-Sheet 1



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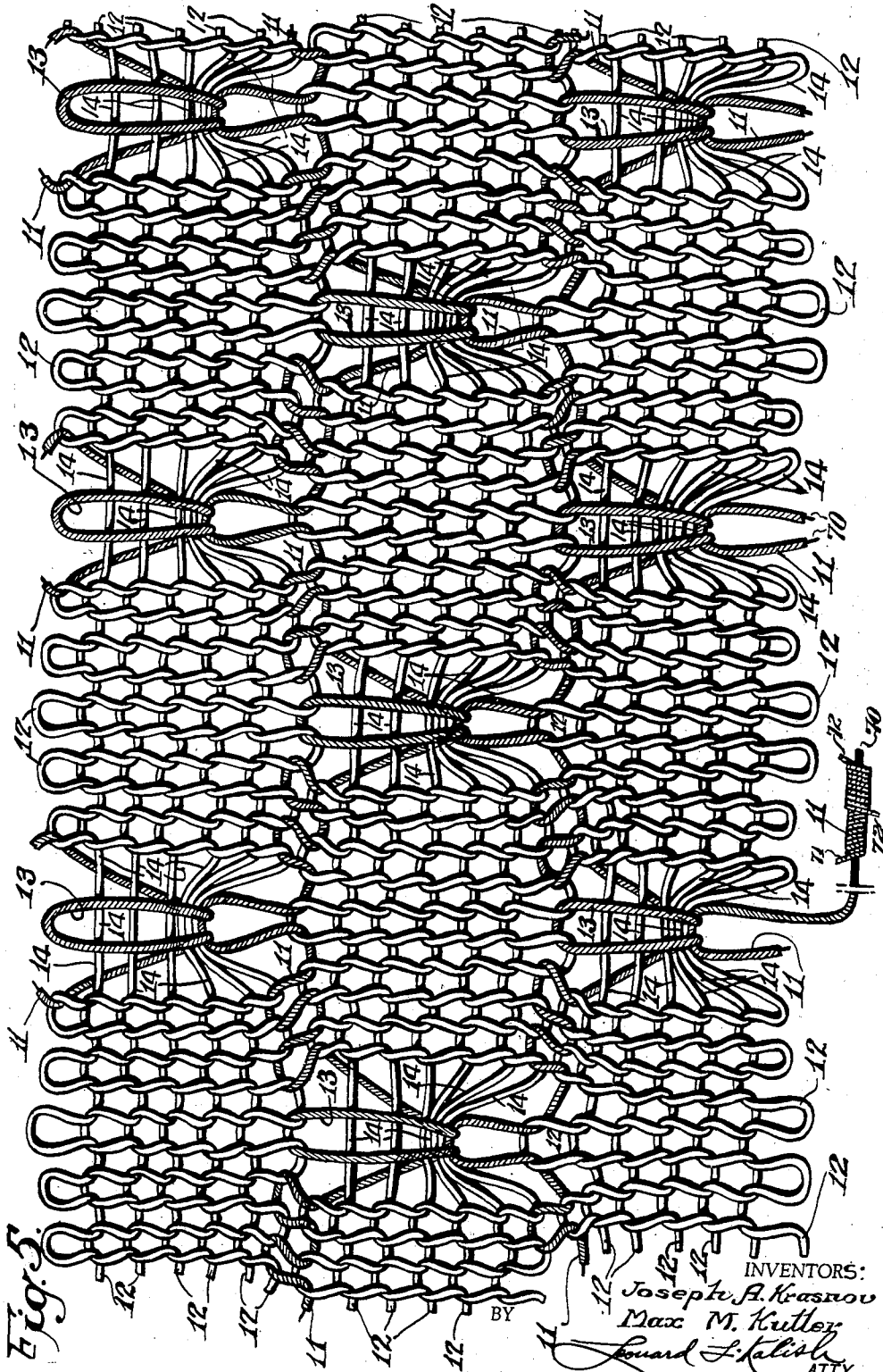
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10 Sheets-Sheet 3

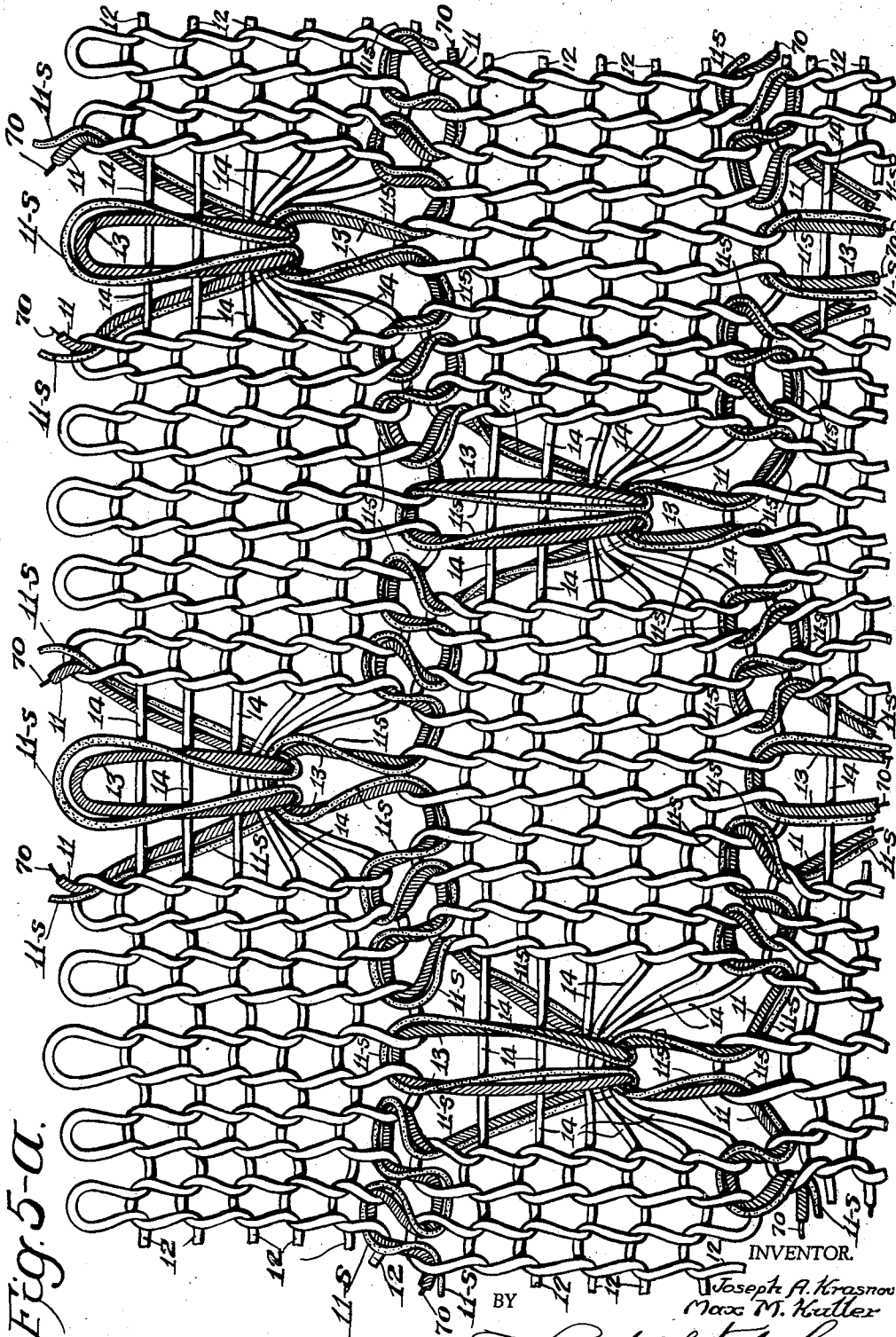


Fig. 5-a.

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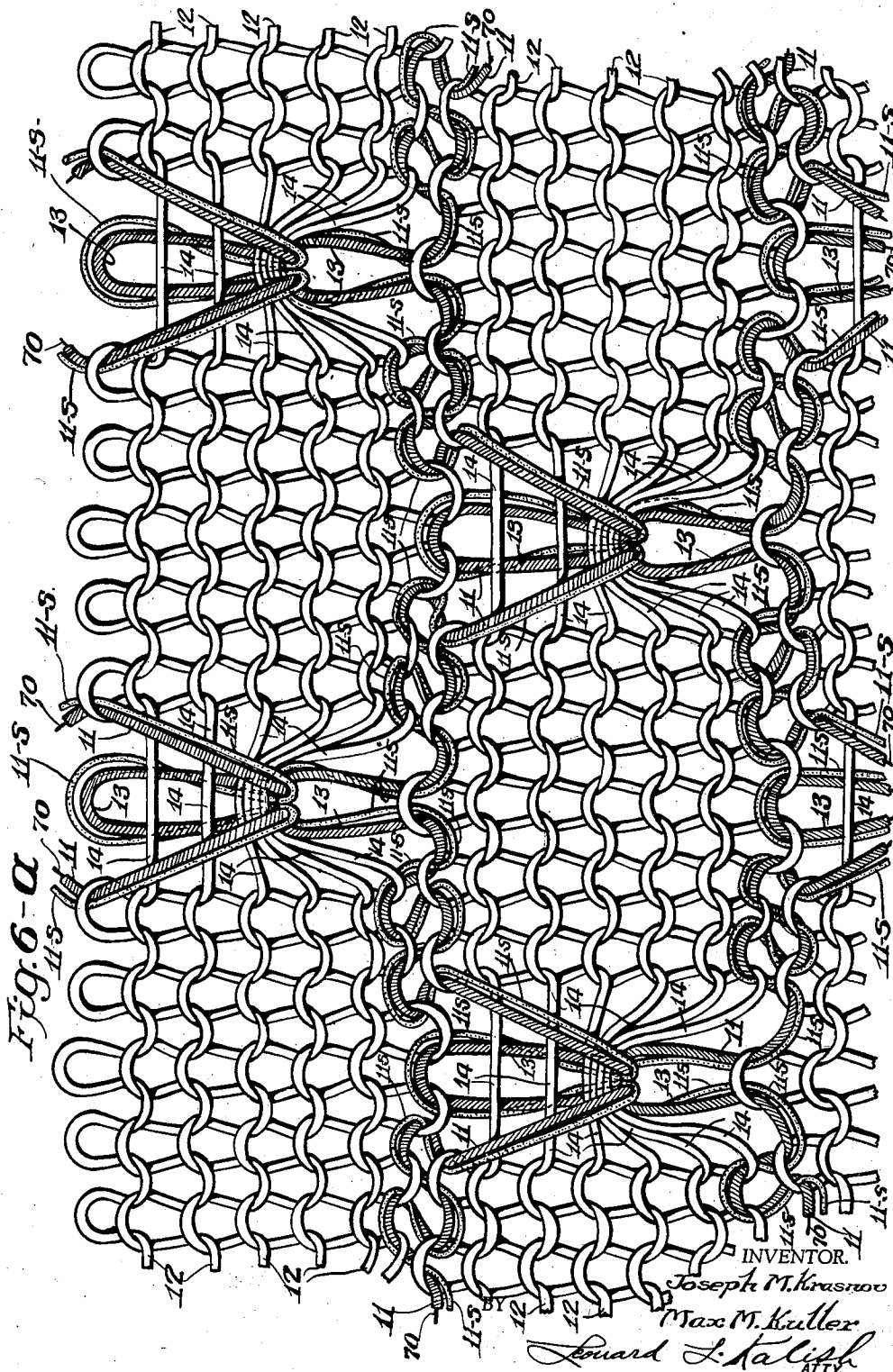
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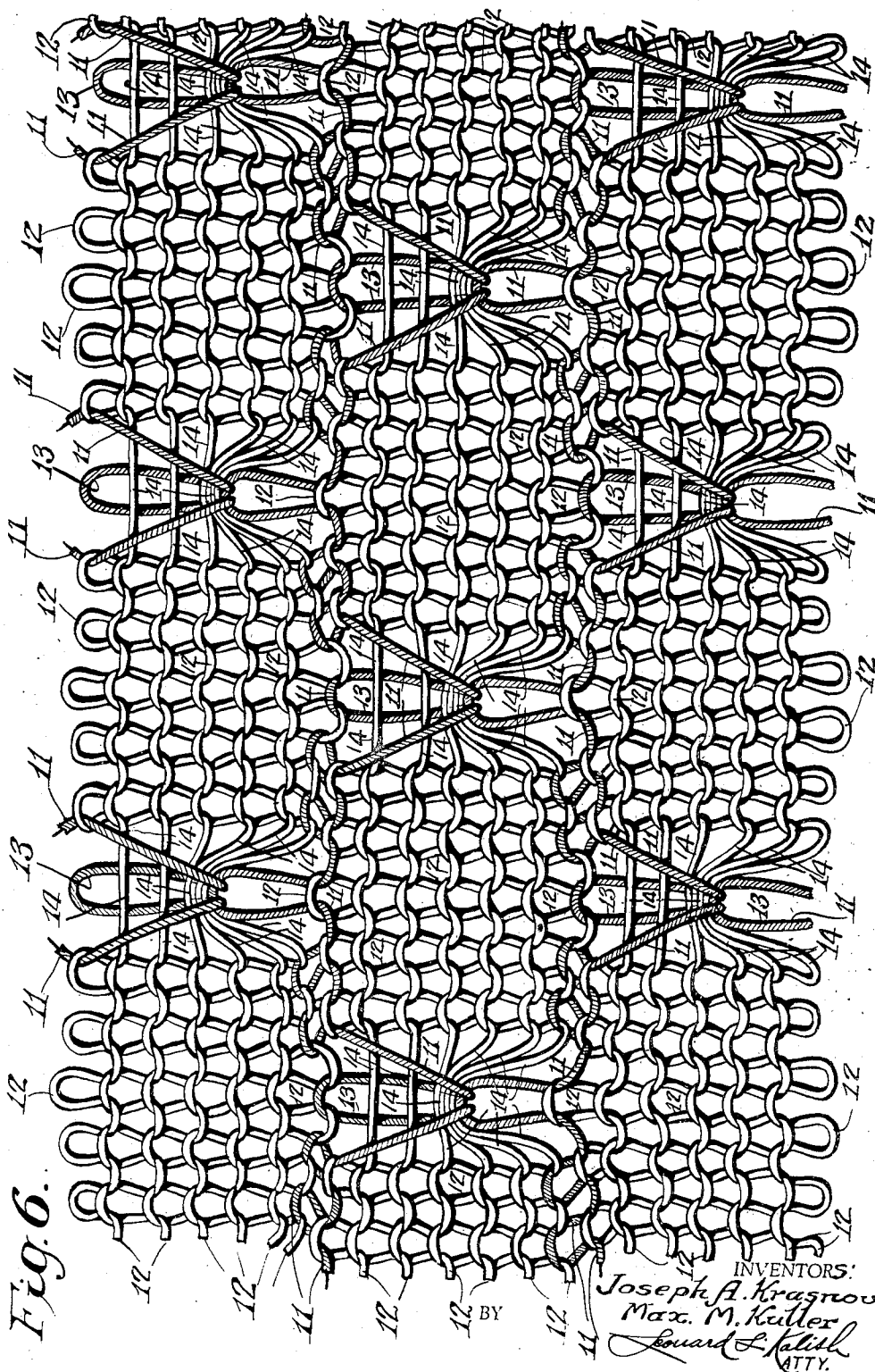
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10 Sheets-Sheet 5

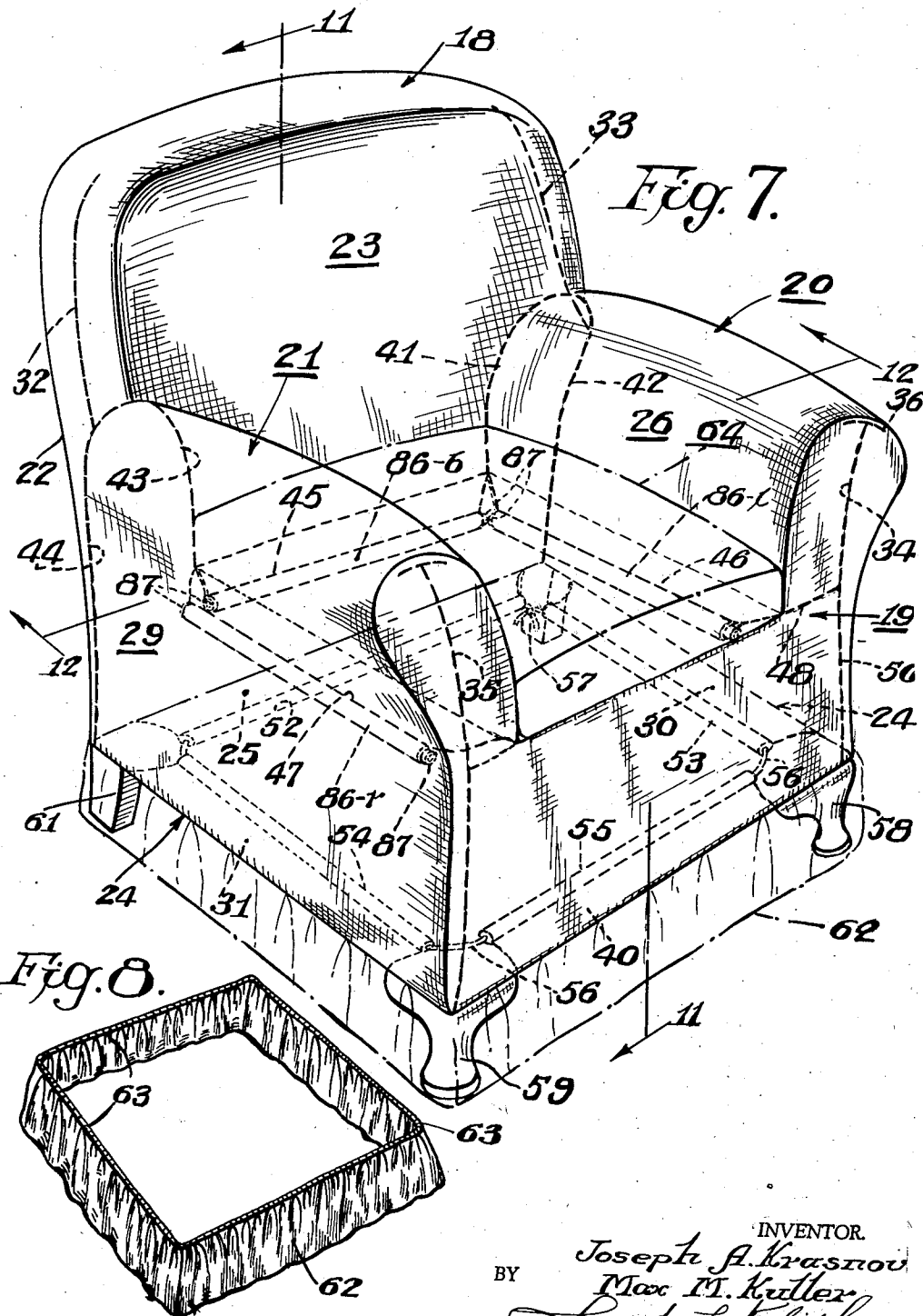


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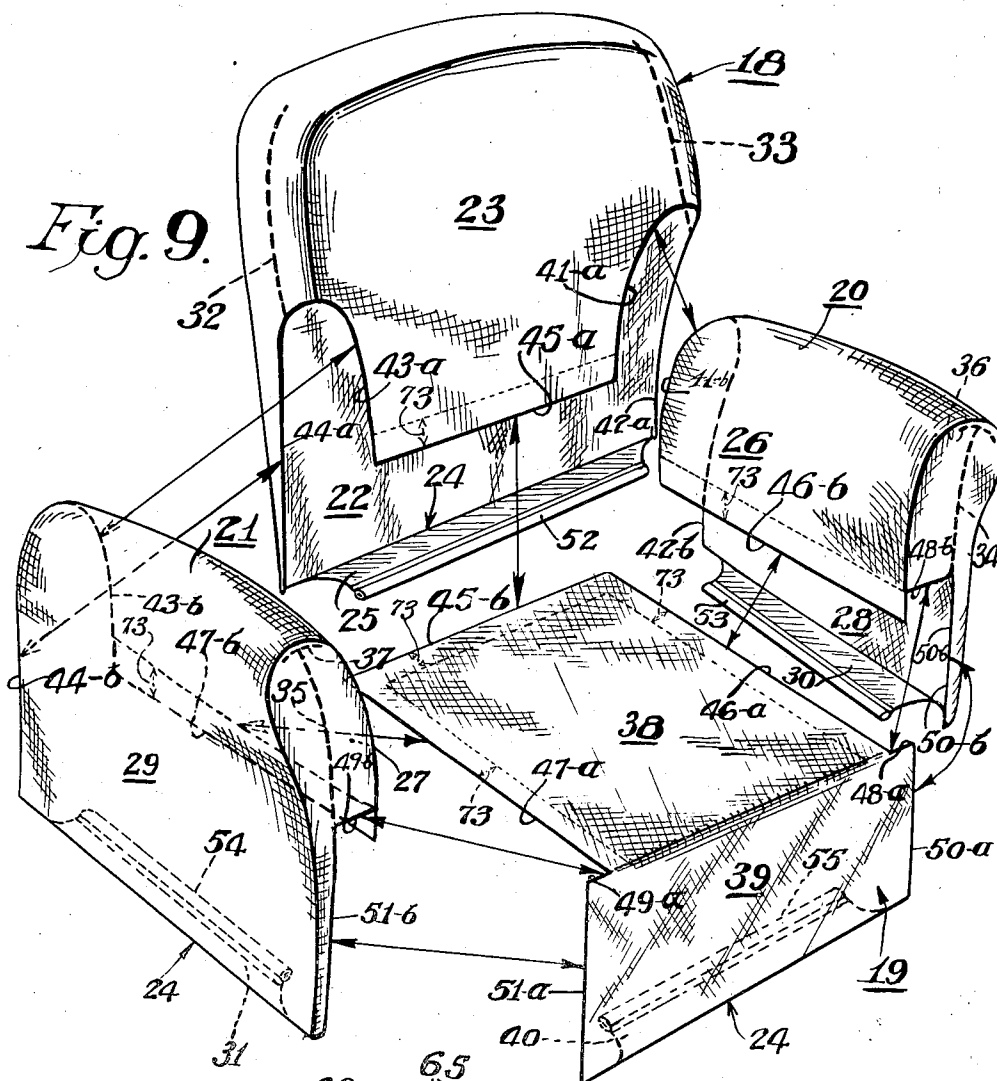
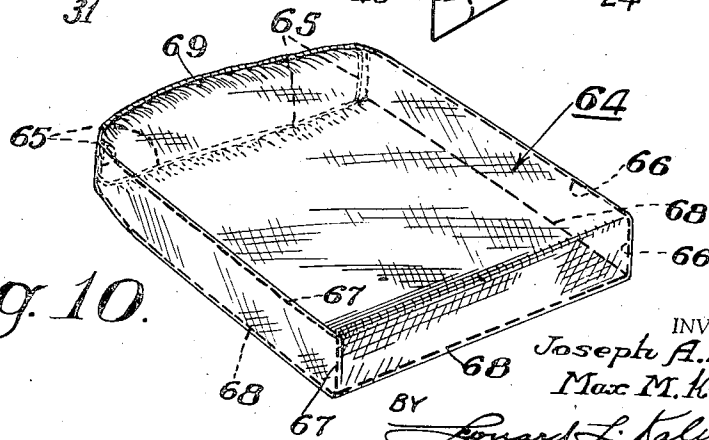


Fig. 10.



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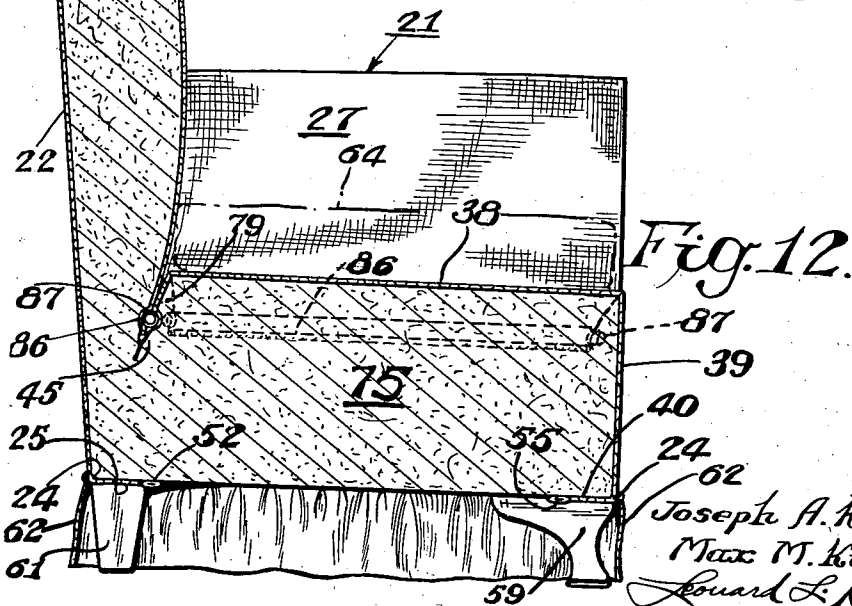
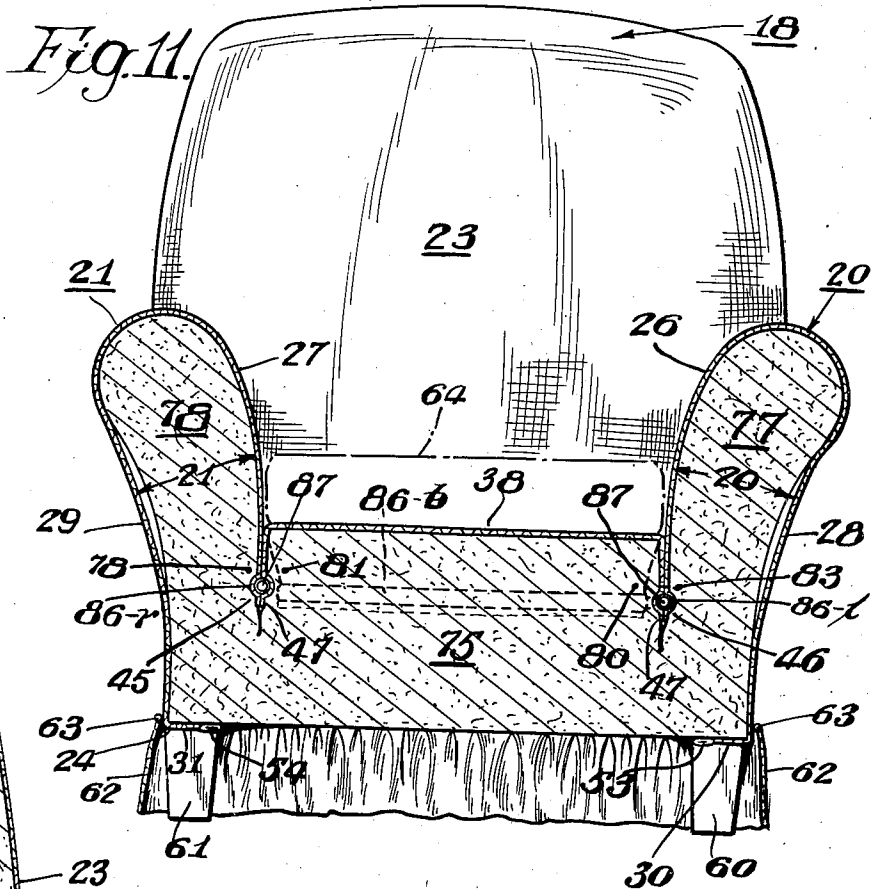
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10 Sheets-Sheet 8



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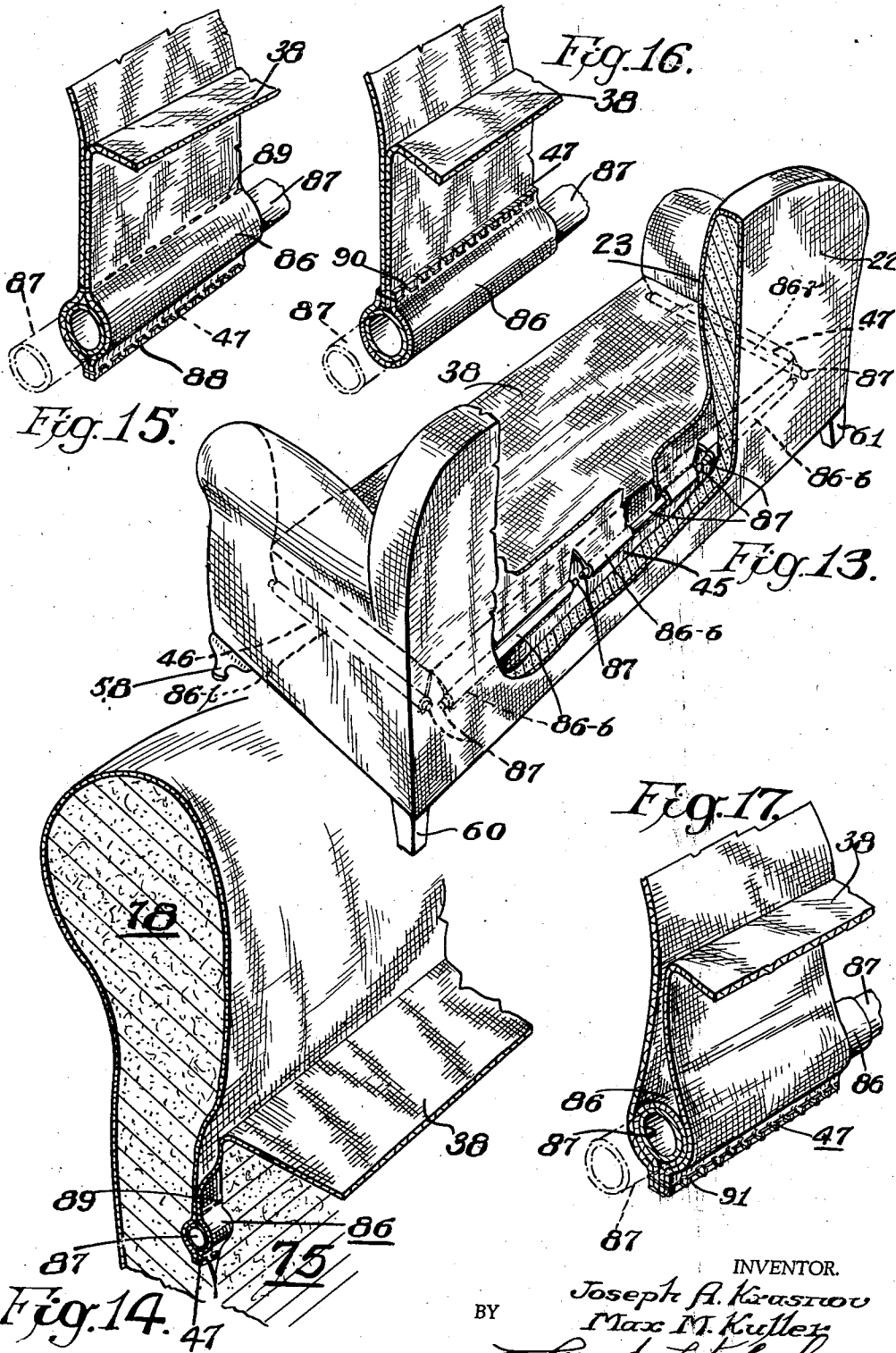
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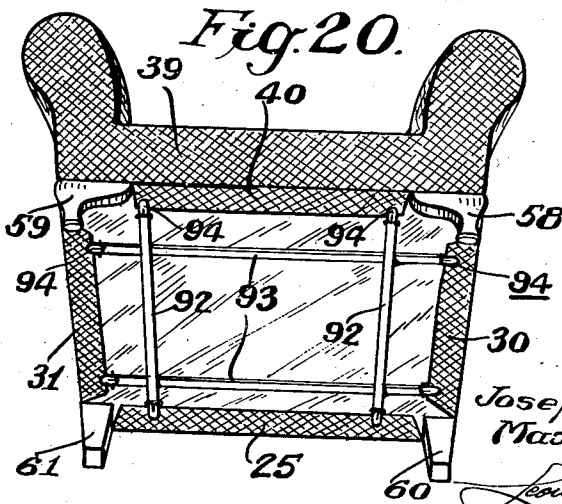
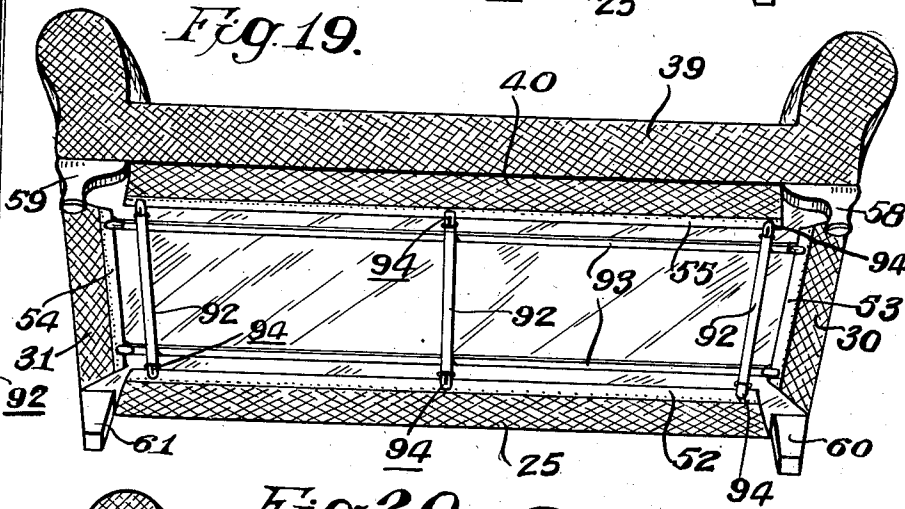
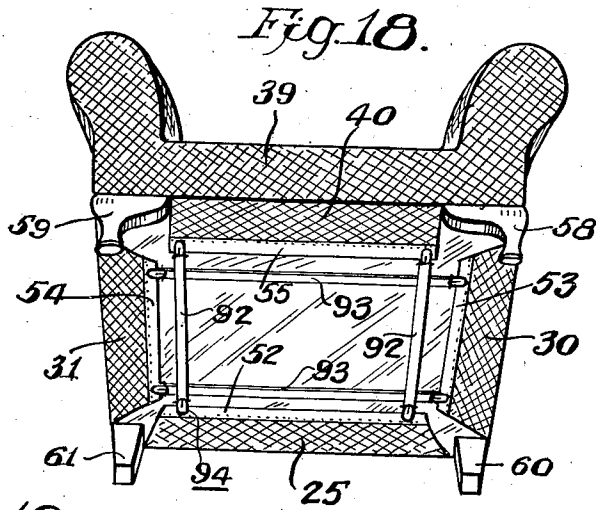
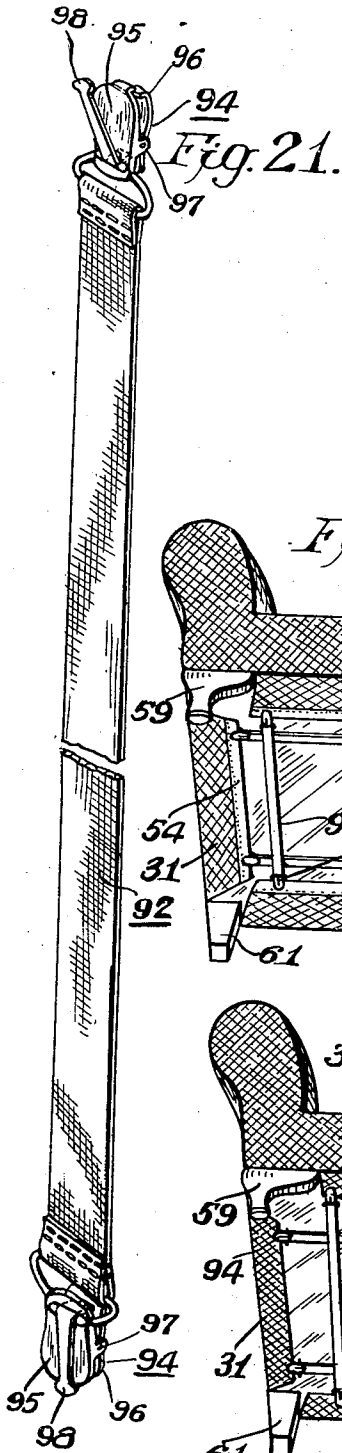
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UNITED STATES PATENT OFFICE

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SELF-CONFORMING, SURFACE - GRIPPING, READY-MADE KNITTED SLIP COVER FOR OVERSTUFFED UPHOLSTERED FURNI- TURE

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Application November 8, 1941, Serial No. 418,400

9 Claims. (Cl. 66—170)

The present application is a continuation, in part, of our application Serial Number 400,998, filed July 3, 1941, which issued into Patent No. 2,266,678 on December 16, 1941.

The present invention relates to a new and useful slip-cover for overstuffed upholstered furniture, and relates more particularly to a ready-made knitted slip-cover, which will have not only the stretchability of an ordinary knitted slip-cover such as that of United States Patent No. 2,100,868, but which will grip the surface and better conform to the shape of the overstuffed upholstered furniture, by virtue of a certain peculiar construction of the fabric panels of which the slip-cover is composed, whereby the tendency of the slip-cover to shift on the furniture is much reduced, so that a more perfect fit and appearance is obtained, coupled with a greater adjustability of the slip-cover (to varying sizes and shapes of overstuffed furniture) than has been obtainable heretofore by such construction as that of United States Patent No. 2,100,868.

The present invention further relates to a new and useful slip-cover for overstuffed upholstered furniture which will be more durable and more dependable and secure against failure of the elastic content thereof.

With the above and other objects in view, which will appear more fully from the following description and accompanying drawings, the present invention consists of a ready-made knitted slip-cover for overstuffed upholstered furniture, composed of knitted fabric panels and sections formed of a soft knitted cotton base which is stretchable and whose threads and loops do not have a hard but instead a soft and more or less fuzzy thread surface, and covered-rubber threads inter-knitted with the cotton threads and extending through the fabric in such a way as to pull and contract the fabric in two directions generally transversely of each other, thereby drawing the fabric together into a series of pocket-like formations which, when partly stretched over an overstuffed upholstered furniture, will cause the slip-cover panels to get a firmer grip upon, or better to hug the surface of the furniture and thus prevent slipping or sliding of the slip-cover over the furniture.

The present invention further consists of a ready-made knitted slip-cover for overstuffed upholstered furniture composed of knitted fabric panels and sections formed of a knitted cotton base which is stretchable and rubber or other elastic threads extending through the fabric in such a way as to pull and contract the fabric in

two directions generally transversely of each other to form pocket-like formations, in which an additional textile thread, preferably a thin smooth thread, parallels the rubber or elastic thread with the paralleling textile thread in a generally loose or limp condition, so as to act as a brake or as a limiting means upon the stretch of the rubber or elastic thread, so as to prevent the elastic thread from being stretched beyond its elastic limit and also to act as a safety means to keep the fabric together and to keep the fabric from running or unravelling should a rubber or elastic thread break at any time for any reason whatsoever.

The present invention further consists of other novel slip-cover features and constructions, all of which will appear more fully from the following description and accompanying drawings and the appended claims.

For the purpose of illustrating the invention, there are shown in the accompanying drawings, forms thereof which are at present preferred, since the same have been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and that the invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

In the accompanying drawings, in which like reference characters indicate like parts,

Figure 1 represents a perspective view of a ready-made knitted slip-cover embodying the present invention shown as applied to an overstuffed armchair.

Figure 2 represents a bottom perspective view thereof.

Figure 3 represents a fragmentary portion of the under surface of the fabric panels composing the knitted slip-cover of the present invention, in one embodiment thereof; shown approximately on a full-size scale.

Figure 4 represents a fragmentary portion of the outer surface of the fabric panels composing the knitted slip-cover of the present invention, in one embodiment thereof, namely the embodiment of which Figure 3 shows the opposite surface; shown approximately on a full-size scale.

Figure 5 represents a plan view of the fabric structure viewed from the outer surface, namely, the surface shown in Figure 4, but shown on a much enlarged scale, namely, a scale of approximately ten or fourteen times actual size, and

thread formations are shown as they would appear if the fabric were stretched out completely, in both directions, so as to better show the interlacings of the cotton and covered-rubber threads; the courses extending parallel to the greater dimension of this figure, and the wales extending parallel to the smaller dimension of this figure (this figure representing the embodiment shown in Figures 3 and 4).

Figure 6 represents a plan view of the fabric structure viewed from the inner surface, namely, the surface shown in Figure 3, but shown on a much enlarged scale, namely, a scale of approximately ten to fourteen times actual size, and shown more or less schematically, insofar as the thread formations are shown as they would appear if the fabric were stretched out completely, in both directions, so as to better show the interlacings of the cotton and covered-rubber threads; the courses extending parallel to the greater dimension of this figure and the wales extending parallel to the smaller dimension of this figure (this figure representing the embodiment shown in Figures 3 and 4).

Figure 5—*a* represents a plan view, similar to that shown in Figure 5, but on a still further enlarged scale, showing a modified form of construction wherein a relatively thin and smooth-surfaced textile thread or yarn, as for instance rayon or "Celanese" or "nylon" is extended through the fabric alongside the rubber yarn or thread.

Figure 6—*a* represents a plan view, similar to that shown in Figure 6, but on a still further enlarged scale, showing the modified form of construction of Figure 5—*a*, wherein a relatively thin and smooth-surfaced textile thread or yarn, as for instance rayon or "Celanese" or "nylon" is extended through the fabric along side the rubber yarn or thread.

Figure 7 represents a perspective view of the slip-cover, similar to that shown in Figure 1, but with the seam lines shown.

Figure 8 represents a perspective view of a detachable skirt which is shown as and applied in Figure 7.

Figure 9 represents a perspective view of the slip-cover taken apart into four parts to show the manner of its formation and assembly; while Figure 10 represents a perspective view of the cushion part of the slip-cover of the present invention.

Figures 11 and 12 represent cross-sectional views, taken on lines 11—11 and 12—12, respectively, of Figure 7.

Figure 13 represents a perspective view, partly broken away, of a davenport having mounted thereon a slip-cover embodying the present invention.

Figure 14 represents a fragmentary perspective view, partly in section, showing, on a much enlarged scale, details of the clip-cover shown in Figures 7, 11, 12 and 13, namely the manner in which the tubular anchorage hem is retained when in actual use.

Figure 15 represents a fragmentary perspective view, partly in section, of the same detail, on a further enlarged scale, and shown disassociated from the furniture, so as to show more clearly the manner of construction.

Figure 16 represents a fragmentary perspective view, similar to that shown in Figure 15, but showing a modified form of construction of the anchorage hem.

Figure 17 represents a fragmentary perspec-

tive view, similar to that shown in Figures 15 and 16, but showing a still further modified form of construction of the anchorage hem.

Figure 18 represents a perspective view of the bottom of an upholstered armchair showing a modified form of elastic retainer construction or tensioning construction.

Figure 19 represents a similar perspective view of a davenport, showing the same construction as in Figure 18.

Figure 20 represents a perspective view similar to that shown in Figure 18, but showing a modified form of construction.

Figure 21 represents a perspective view, partly broken away, of one of the elastic tensioning devices shown in Figures 18, 19 and 20.

Many attempts have been made to obtain a self-conforming ready-made slip-cover for overstuffed upholstered furniture, which will fit an upholstered armchair, for instance, with some latitude as to shape, contour and dimensions of the chair. U. S. Patents 2,100,868; 2,212,485 and 2,098,684 represent some of these efforts. These and other past efforts have still left something to be desired in the final appearance and effectiveness of ready-made slip-covers, particularly in respect to their ability to "stay put" on the upholstered furniture, while the furniture is being actively used.

We have found that by forming the surface of the fabric panels of a ready-made knitted slip-cover (particularly those fabric panels most subject to be shifted and pulled and dislodged when the upholstered furniture encased in such slip-cover is in active use) with a multiplicity of self-contracting pocket-like formations, which therefore present, at once, a reduced contact area between the slip-cover panels and the original surface of the upholstered furniture and at the same time tend to grip or hug the original surface of the upholstered furniture, the slip-cover better "remains put" on the upholstered furniture against the normal tendency to shift and pull and dislodge the slip-cover by sitting upon it, or leaning on the arms, or getting up from the chair or otherwise applying dislodging forces to the slip-cover.

We have found that by a combination of a relatively soft knitted cotton base, and covered-rubber threads interknitted therewith at suitable intervals and so interknitted with the soft knitted cotton threads as to contract the fabric in two directions, a surface-gripping effect is attained which is highly effective to keep the slip-cover in place and which also materially increases the range of size and shape variations, in the upholstered furniture piece, which the same slip-cover can satisfactorily and adequately "fit" without any special or individual adjustment (as by taking in or letting out a seam or two) of the ready-made slip-cover.

In carrying out the present invention we may form the fabric panels of knitted fabric like that shown in Figures 3, 4, 5 and 6, which may be made either on a flat knitting machine or a circular knitting machine; preferably the latter. Thus, for instance we may form the fabric on a multi-feed circular latch-needle type knitting machine, of suitably large diameter, as, for instance, a circular knitting machine containing 1080 needles in the cylinder thereof and having a multiplicity of feeds, as, for instance 28 or 32 feeds for feeding yarn to the needles. A machine suitable for this purpose is the "Supreme" circular knitting machine made by the Supreme

Knitting Machine Company of Brooklyn, New York; although any other equivalent or suitable knitting machine may be used.

Every sixth or seventh yarn feed is fed or supplied with a cover-rubber thread, while the rest of the yarn-feeds are fed or supplied with soft-twisted cotton or mercerized cotton threads. In this manner every sixth or seventh or so course is knitted of the covered-rubber yarn. Thus, for instance, on a 32-feed circular knitting machine, 28 of the feeds may be used, with every seventh feed supplied with a covered-rubber yarn or strand and the intervening six feeds (that is, those between two successive rubber feeds) supplied with a soft low-twist cotton yarn or mercerized cotton yarn. Similarly, if every sixth feed is to be rubber, 30 of the feeds may be used; five feeds rubber and twenty-five feeds cotton; with five cotton feeds intervening successive rubber feeds.

In the schematic views of Figures 5 and 6 and 5-a and 5-b, we have illustrated a seven-to-one cotton and rubber course arrangement, in which every seventh course is knitted of covered-rubber yarn 11, while the intervening courses are knitted of cotton yarns 12.

As will be seen from Figures 5 and 6 and 5-a and 5-b, every sixth needle is caused to remain in an inoperative position at the cotton feeds, but to remain operative at the rubber feeds. In this manner, the six cotton threads 12 forming the six successive courses intervening two successive rubber courses, are caused to float across and within the rubber loops 13, as for instance at 14. After each rubber course, the needles rendered inactive or inoperative at the cotton feeding points, are staggered in relation to each other as shown clearly in Figures 5 and 5-a and 6 and 6-a. This causes certain areas to be bounded on all sides by rubber, as shown in Figures 5 and 5-a and 6 and 6-a, so as to cause the rubber in the fabric to contract the fabric in two directions, that is in a direction parallel to the courses and in a direction at right angle to the courses. This 2-way contraction of the fabric causes pocket-like formations to be formed, each pocket being bounded by rubber, as indicated particularly in Figures 3 and 4; with the ridges 15, separating the pockets 16, serving as reduced contact areas between the fabric panels of the slip-cover and the original fabric surface of the upholstered furniture. In the alternative, the surface shown in Figure 4 may be used as the contact surface, as this also presents reduced contact areas; the contact areas here being however the convex protuberances 17 shown in Figure 4.

The fabric panels of which the slip-covers are composed are subject to many destructive forces and influences, including the increased strain placed upon the fabric, from time to time, in localized areas when the slip-cover is in use and including the deteriorating effect of washing, laundering and aging of the rubber.

Under these, and other influences, there is a tendency for the rubber threads to be stretched beyond their elastic limit and thus broken at some points, and there is also a tendency for the rubber to lose some of its strength in spots, after a long period of time due to the influence of laundering and also due to aging. To safeguard against the first of the above-named influences, we have devised a snubbing means for limiting the stretch of the rubber, which snubbing means will be relatively inert or ineffective while the

fabric is subjected to more or less normal strains and stresses, and which will come into play only when the fabric is stretched beyond a certain point, and which will also come into play should the rubber thread be broken, at any time, these rubber threads or strands to prevent an actual rupture in the fabric even though the rubber threads may break.

This modified form of snubber construction is shown particularly in Figures 5-a and 6-a, wherein snubber threads 11-s are provided alongside the rubber threads 11; being fed from separate spools or sources to the feeding stations or points of the knitting machine where the rubber threads are fed to the needles, so that these snubber threads 11-s will go through the fabric just as the rubber thread goes through the fabric and will form the same loops along with the rubber thread.

These snubber threads 11-s, which are fed to the knitting machine along with the rubber threads 11 are preferably smooth-surfaced threads, as for instance, rayon yarn, nylon yarn, Celanese yarn, and other similar regenerated cellulose or cellulose ester yarns, or possibly even silk yarn and are preferably thinner or less bulky than the yarns 12 of which the main fabric body is composed, so that the snubber yarns will slide freely through the connecting loops of the rubber threads which they parallel with a minimum of restraining influence to the free stretch and free contraction of the rubber threads so long as these rubber threads are stretched and contracted within the limits set by the snubbing threads 11-s.

The snubbing threads 11-s are preferably fed to the knitting machine comparatively loosely or sufficiently loosely to have the requisite looseness in the ultimate fabric. Thus, in the ultimate fabric, when the fabric is not stretched at all, the rubber threads 11 will be contracted while the snubber threads 11-s will be lying loosely alongside the rubber threads 11 with enough excess so that the rubber may be stretched or extended a substantial amount before the paralleling snubber threads 11-s become taut in the fabric.

In Figures 5-a and 6-a, the snubber threads 11-s are indicated in their taut condition, namely, when the fabric is stretched.

The main slip-cover is formed preferably of four sections or four pieces of fabric, one forming the back-encasing portion 18, the other forming the seat and front portion 19 and the other two forming the left and right arm-encasing side portions 20 and 21 respectively. Each of the sections 18, 20 and 21 is formed by folding the fabric back upon itself to form a pocket-like upper portion with the outer portion extending further down to encase the corresponding vertical side of the upholstered furniture. Thus, the back-encasing portion 18 is formed by folding a piece of fabric into rear and front panels 22 and 23, respectively; with the rear panel 22 extending to the lower edge line 24 of the furniture and extending beneath the furniture in the form of a securement tab 25. The side members 20 and 21, are likewise formed by folding a piece of the fabric into pocket-like formation, closed at the top and open at the bottom, and each member composed of an inner panel 26 and 27 respectively, and an outer panel 28 and 29, respectively, which latter likewise extend down to the lower furni-

ture line 24, where they are folded under to form securement tabs 30 and 31, respectively.

The front and rear panels 22 and 23 of the back-encasing portion 18 are seamed along the vertical side-seams 32 and 33, while the side members 20 and 21 are seamed along the front vertical seams 34 and 35, respectively, and possibly also along short upper horizontal seams 36 and 37, respectively, particularly where the front ends of the arms come to a more or less abrupt edge (as distinguished from the rounded upper corners of the back as shown in the drawings). The front and seat portion 19 includes the seat panel 38 and the front panel 39 which also extends down to the bottom edge 24 of the furniture, where it is folded inwardly to form a securement tab 40. The four sections 18, 19, 20 and 21 are then united along the seaming edges 41-a and 41-b, 42-a and 42-b, 43-a and 43-b, 44-a and 44-b, 45-a and 45-b, 46-a and 46-b, 47-a and 47-b, 48-a and 48-b, 49-a and 49-b, 50-a and 50-b and 51-a and 51-b, to form the inter-sectional seams 41, 42, 43, 44, 45, 46, 47, 48, 49, 50 and 51 (shown in Figure 7).

Because of the relatively soft character of the basic fabric and the 2-way contraction thereof, and the formation of the series of concavities on one side and convex protuberances on the other side, the seam lines are substantially obliterated or rendered considerably obscure in the finished product; the seams being formed by an over-lock stitch which gathers the two adjacent edges, which gathered edges are formed on the inside of the slip-cover, where they are not visible.

Tubular hems 52, 53, 54 and 55 are provided along the inner edges of the securement tabs 25, 30, 31 and 40, which may be formed of the same fabric as of which the slip-cover is formed, or that may be formed of a separate piece of woven fabric such as a piece of strong woven cotton fabric, sewn to the edge of the securement tabs. Through these tubular hems a draw-string or cord 56 is drawn, in series, which can then be drawn together or tied at one point, as for instance at 57, in order to pull the securement tabs firmly together as indicated in Figure 2; the securement tabs being sufficiently narrowed just to clear the legs 58, 59, 60 and 61 of the furniture.

A detachable skirt 62 may also be provided, in the form of a continuous piece of fabric, shirred along its upper marginal zone, and also preferably sewn to or bound by an upper marginal elastic band or cord 63 which will cause it to hug the basal portion of the furniture, just above the lower edge 24 of the furniture to give a finished effect.

The cushion casing 64 is formed completely to encase the separable cushion of the upholstered furniture with a suitable opening 65 in the rear through which the furniture cushion may be inserted; the cushion casing being seamed along seams 66, 67 and 68, and being provided in the rear with a tubular hem 69 through which a draw-string and tie-string may be extended, or the edge of the rear opening 65 may be bound with an elastic band or tape or cord which contracts the opening by reason of its elasticity.

While in the accompanying drawings, as for instance Figures 5 and 5-a and 6 and 6-a, two forms of construction are shown, it is to be understood that these may be varied both dimensionally and otherwise. Thus, for instance, instead of rendering inactive every sixth needle at the cotton feed portions (or when the cotton feed reaches it), every fifth or seventh (or so) needle

may be rendered inactive at this cycle of operation. The essential feature of our construction is that the elastic course, interspersed at suitable intervals, is caused to stretch across the several intervening courses non-elastic yarn, to contract the fabric also transversely of the courses, or wale-wise; with the wale-wise contracting rubber loops (extending between successive rubber courses) being staggered.

By the present invention, the resultant ready-made slip-cover not only conforms more readily and with greater fidelity to the varying contour of the upholstered furniture, but the panels of the slip-cover tend to grip or hug the surface, of the upholstered furniture and resist dislodgement or "shifting" of the slip-cover upon the furniture, while in actual use.

In Figure 5, we have also illustrated, a fragmentary portion of the covered-rubber yarn 11, on a still further enlarged scale, showing the central rubber core portion thereof, and the two oppositely wound outer cotton, mercerized or rayon wrapping threads 71 and 72, which encase and cover the inner rubber core 70.

The inner back-panel 23 and the inner arm-panels 26 and 27 are made "full" in the zone of their lower edges 45-a, 46-b and 47-b, respectively, that is, they are extended a suitable distance 73 below the level or line 74 of the seat 75 of the chair or davenport or sofa. The seat panel 38 is made similarly "full" in the zones of its rear edges 45-b and of its side edges 46-a and 47-a, that is, these edge zones are also extended a suitable distance 73 beyond the corresponding horizontal dimensions of the seat 75 of the chair, davenport or sofa. The intersectional seams 45, 46 and 47 are accordingly extensible downwardly between the seat 75 and the back 76 and arms 77 and 78, respectively, as shown more particularly in Figures 11 and 12. By tucking the excess material 73 in the marginal zones adjacent the seams 45, 46 and 47, between the rear and side surfaces 79, 80 and 81, respectively, of the seat 75 and the closely adjacent inner surfaces 82, 83 and 84 of the back and arms 76, 77 and 78, respectively, the slip-cover can be drawn and maintained taut over the back and over the arms of the chair, davenport or sofa, and over the front thereof and all slack in the exposed portions of the fabric panels can thus be taken up.

By reason of the surface formations and contractions of the fabric panels of the slip-cover, the tucked-in portions 73 tend better to remain in place, in actual use.

Along the lower marginal edges of the slip-cover, intermediate the tubular hems 52, 53, 54 and 55, rubber or rubber-containing or other elastic tapes, band, or cords 85 are affixed, as by over-lock stitches, or the like, thereby causing a tight, elastic encirclement of each of the legs 58, 59, 60 and 61, and any slight slack in the fabric, is further taken up.

The covered elastic strands or arms may be formed with a cord of other elastic materials, that is other than natural rubber, as for instance, synthetic rubber-like or elastic organic compositions used as substitutes for rubber or the equivalents of rubber. Therefore, in using the term "rubber" in the claims, it is to be understood that this term is intended to comprehend equivalent materials such as a synthetic rubber-like elastic compounds and compositions used as substitutes for an equivalent of rubber.

Likewise, in place of the rayon or nylon snubber threads 11-s, a highly mercerized cotton

yarn may be used, also serving to snub or limit the elastic stretch and to act as a safety thread in relation to the rubber thread 11 throughout the fabric.

In Figures 11 to 17 inclusive, we have shown a further novel feature of our ready-made self-conforming slip-cover, namely, the tubular hems 86 along the sides and rear of the seat panels 38 of the arm chair or davenport, three forms of construction of which are shown in Figures 15, 16 and 17, respectively.

By providing the tubular hems 86—r and 86—l along the right and left sides of the arms of the chair or davenport, and the tubular hems 86—b along the back of the chair or davenport, more or less stiff cardboard tubes 87 may be slipped into these hems, preferably from the rear ends thereof, so as to act as anchorages, better to anchor the excess portions of the slip-cover panels between the cushion or the seat portions 38 of the chair or davenport, and the side-arms and back thereof, in a manner indicated more particularly in Figures 11, 12, 13 and 14. In the case of a davenport, the rear tubular hem 86—b is preferably not made in a continuous fashion, but is split up into three sections, more or less of equal length, corresponding to the three cushions customarily used on a davenport. This permits a greater adjustability of the slip-cover.

The tubular hems 86 may be formed in the manner indicated in Figure 15, wherein the raw edges of the fabric panels in the seams 45, 46 and 47 are seamed by a row of overlock stitches 88, and in which a secondary seam 89 is provided by a row of any suitable stitches such as overlock stitches or plain lock stitches or stretchable zig-zag stitches or the like, paralleling the seam 88, at a suitable distance therefrom, so as to form, between the two parallel rows of stitches 88 and 89, a tubular passageway which may be spread apart to receive the cardboard tubes 87, in the manner shown in Figure 15. In this form of construction, the tubular anchorage hems 86 are formed of the same fabric as that of which the corresponding panels of the slip-cover are formed.

In the form of construction shown in Figure 16, the tubular hem 86 is formed of a separate strip of fabric, which may be a piece of non-knitted fabric, as for instance, a piece of woven muslin or duck, or it may be a piece of woven or printed tape, of suitable width, or it may be of a separate piece of knitted fabric, the edges of which overlap and flank the edges of the fabric panels of the slip-cover, and are sewed thereto by the row of zig-zag stitches or other suitable stitches 90, which may be formed at the same time when the fabric panels themselves are united in the seams or juncture zones 45, 46 and 47.

In Figure 17, a further modified form of construction is shown, in which the tubular hem 86 is inside the fabric panels of the slip-cover instead of being on the outside as in Figure 16. This form of construction may be made by utilizing a portion of the panels of the slip-cover, as in Figure 15, or by utilizing a separate strip of fabric, as in Figure 16. In the form of construction shown in Figure 16, a separate piece of fabric is shown, it being understood, however, that the fabric of the panels may be turned in for the same effect, in which case a second seam would be provided at the top of the tubular hem 86. In the form of construction shown in Figure 17, the row of stitches 91 unite both the edges of the

fabric strip of which the tubular hem 86 is formed as well as the edges of the fabric panels; the stitches 91 being either overlock or zig-zag stitches or any other suitable stitches.

It is to be understood, of course, that the tubular anchorage hems 86 used in either the davenport slip-covers or arm chair slip-covers may be of any of the forms of construction illustrated in these figures or described in connection therewith.

In the phase of our present invention illustrated particularly in Figures 11 to 17 inclusive, we may also dispense with the insertion of the more or less stiff cardboard tubes 87, and may effect the anchoring of the juncture zones of the panels by means of the fabric hems or strips 86 which extend substantially beyond the juncture line between the panels and the slipcover. Thus, the strips 86 may be tucked in between the arms and the seat or between the back and the seat or between the back and the side wings of a wing-type upholstered chair, and will serve as anchorages because of the fact that they extend beyond the juncture line of the panels to be anchored. Thus, where, as in some of the former constructions, the panels themselves were made excessive in size and such excess was tucked in between the arms and the seat or between the back and the seat or between the back and the side wings (as in the case of a wing chair), the anchorage was not as effective, because a pull on the panels would more nearly tend to pull out the tucked-in portions of the panels; whereas in the present construction the tendency to dislodge the anchorage is reduced by virtue of the fact that the juncture line between the panels is not tucked-in, or at best is not far in the crease between the parts of the furniture, so that any pull on a panel is distributed partly between the adjoining panel and partly between the anchorage member, so that the anchorage member may better resist ultimate dislodgment.

The anchorage strips 86, which extend beyond the juncture line of adjoining panels and which therefore, in effect, are distinct from the panels themselves (or are functionally separated from the panels themselves by the juncture line between the panels), are preferably made tubular or multi-ply, by folding a piece of woven or knitted fabric back upon itself, even though the cardboard tubes be omitted. This is for the purpose of giving these anchorage strips added bulk or thickness. However, a single thickness of such anchorage strips may also be used. The edges of the anchorage strips 86 may also be corded.

In Figures 18 to 21 inclusive, a further modified form of construction is shown, in which the tie cords 56 are replaced by elastic bands 92 and 93, which may be elastic tapes, preferably containing rubber or other elastic strands, and having either one end of each tape permanently affixed to the securement tabs 25, 30, 31 or 49, while the other end is detachably secured to the opposite securement tab, or both ends of said tapes may be detachably secured to opposed securement tabs of the slip-cover. The detachable securement may be effected by fabric gripping clasps 94, of any of the well known forms of construction in which a pair of hinged jaws 95 and 96, hinged at 97, are caused to grip the fabric by being brought together by any suitable wedging or camming lever 98. These clasps may be of any of the forms shown in United States

Patents Nos. 206,552; 277,700; 367,371; 458,485; 657,752; 718,418; 762,629; 875,418; 876,161; 881,372; 1,962,186; 2,014,979; 2,091,420; 2,104,955, or may be of any other suitable construction. Likewise, in place of such clasps, hooks may be used on the ends of the elastic tapes or cords 92 and 93, to be hooked into suitable hook-receiving members or eyelets or grommets fixed to or in the marginal zone of the securement tabs.

These elastic cords or tapes 92 and 93 may be affixed either directly to the marginal zones of the securement tabs, formed as a part of the slip-cover panel fabric, as shown in Fig. 20, or they may be secured to separate muslin, duck or other more or less firmer fabrics such as the fabric strips 52, 53, 54 and 55, which in this form of construction, may be single-ply instead of double, as discussed in connection with Figure 2.

By means of the elastic tapes or cords 92 and 93, an additional tension is placed upon the corresponding panels of the slip-cover, thereby tending to maintain them more nearly taut and in place, at all times. These elastic retainer cords or tapes 92 and 93 cooperate more particularly with the rubber in the panels of the slip-cover, so that by properly tensioning the rubber in the slip-cover panels, by means of these rubber-elastic cords or tapes 92 and 93, a proper balance may be maintained which would more securely keep the slip-cover in place, while in actual use.

In some forms of construction, the elastic cord 85 around the legs of the furniture may be omitted.

The present invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and it is therefore desired that the present embodiments be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

Having thus described our invention, we hereby claim and desire to secure by Letters Patent, the following:

1. A self-conforming knitted slip-cover comprising a generally envelope-like casing formed at least in part of complete knitted fabric panels composed of a preponderance of relatively non-elastic textile yarn loops having interspersed therethrough elastic threads tending to contract said panels, and relatively non-elastic snubber strands extending through said complete fabric panels limiting the extent to which said elastic threads may be stretched in said panels when the slip-cover is in use.

2. A self-conforming knitted slip-cover comprising a generally envelope-like casing formed at least in part of complete knitted fabric panels composed of a preponderance of relatively non-elastic textile yarn loops having interspersed therethrough elastic threads tending to contract said panels, and relatively non-elastic snubber strands extending through said complete fabric panels limiting the extent to which said elastic threads may be stretched in said panels when the slip-cover is in use, said snubber strands lying in the fabric in a relatively slack condition alongside the elastic threads when the elastic threads are more or less contracted in the unstretched condition of the panel; said slack being taken out of these snubber strands as the panel is stretched.

3. A self-conforming knitted slip-cover comprising a generally envelope-like casing formed at least in part of complete knitted fabric panels

composed of relatively non-elastic textile yarn loops, and loops of elastic threads interknitted therewith tending to contract said panels and relatively non-elastic snubber strands extending through said complete fabric panels limiting the extent to which said elastic threads may be stretched in said panels when the slip-cover is in use.

4. A self-conforming slip-cover for furniture comprising a generally envelope-like casing generally open at the bottom and closed at the top and including a complete knitted fabric panel composed of a preponderance of relatively non-elastic textile yarn loops having interspersed therethrough elastic loops tending to contract said panel, and snubber strands extending through said complete fabric panel limiting the extent to which said elastic loops may be stretched in said panel when the slip-cover is in use.

5. A self-conforming slip-cover for furniture comprising a generally envelope-like casing generally open at the bottom and closed at the top and including a complete knitted fabric panel composed of a preponderance of relatively non-elastic textile yarn loops having interspersed therethrough elastic loops tending to contract said panel both wale-wise and course-wise, and snubber strands extending through said complete fabric panel limiting the extent to which said elastic loops may be stretched in said panel when the slip-cover is in use.

6. A self-conforming knitted slip-cover for furniture, which consists of an encasing cover closed at the top and open at the bottom, formed of a complete knitted fabric composed of a preponderance of soft cotton yarn loops having interspersed therethrough rubber threads interknitted therewith and stretched both wale-wise and course-wise to contract the fabric in two directions so as to form series of concavities on one side of the slip-cover surface and corresponding protuberances on the other side of the slip-cover surface, thereby to resist shifting of the slip-cover upon the furniture, and relatively non-elastic snubber threads extending through said complete fabric alongside the rubber threads but in a relatively slack condition when the fabric is contracted.

7. A self-conforming knitted slip-cover for furniture, which consists of an encasing cover generally closed at the top and open at the bottom, formed at least in part of complete knitted fabric panels composed of a preponderance of soft cotton yarn loops having interspersed therethrough covered-rubber threads interknitted therewith and stretched both wale-wise and course-wise to contract the fabric in two directions to form reduced surface-contact areas for contact with the surface of the furniture covered, and relatively non-elastic snubber threads extending through said complete fabric alongside the rubber threads but in a relatively slack condition when the fabric is contracted.

8. A self-conforming knitted slip-cover for furniture, which consists of an encasing cover formed at least in part of complete knitted fabric panels composed of alternating preponderant groups of courses of knitted loops of a relatively non-elastic textile thread and minor courses of knitted loops formed of relatively elastic thread under tension, with the loops of the relatively non-elastic courses being dropped at spaced intervals and with the thread of the non-elastic courses floated in an unknitted condition at such spaced intervals, through an elastic loop, and

with the floated portions of one group of relatively non-elastic courses being staggered in relation to the floated portions of adjacent groups of relatively non-elastic courses, and relatively non-elastic snubber threads extending through said complete fabric alongside the elastic threads but in a relatively slack condition when the fabric is contracted.

9. A self-conforming knitted slip-cover which comprises an encasing envelope-like cover formed at least in part of complete knitted fabric panels composed of alternating preponderant groups of courses of knitted loops of a relatively non-elastic textile thread and minor courses of knitted loops formed of relatively elastic thread alternating

with such preponderant groups of courses, with loops of one of the two kinds of courses being dropped at spaced intervals, with the thread thereof in the dropped positions floated in an unknitted condition through the loops of the other of the two kinds of courses, and with the floated portions of the threads of some of said courses staggered in relation to the floated portions of the threads of others of said courses, and relatively non-elastic snubber threads extending through said complete fabric alongside the elastic threads but in a relatively slack condition when the fabric is contracted.

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