

April 27, 1954

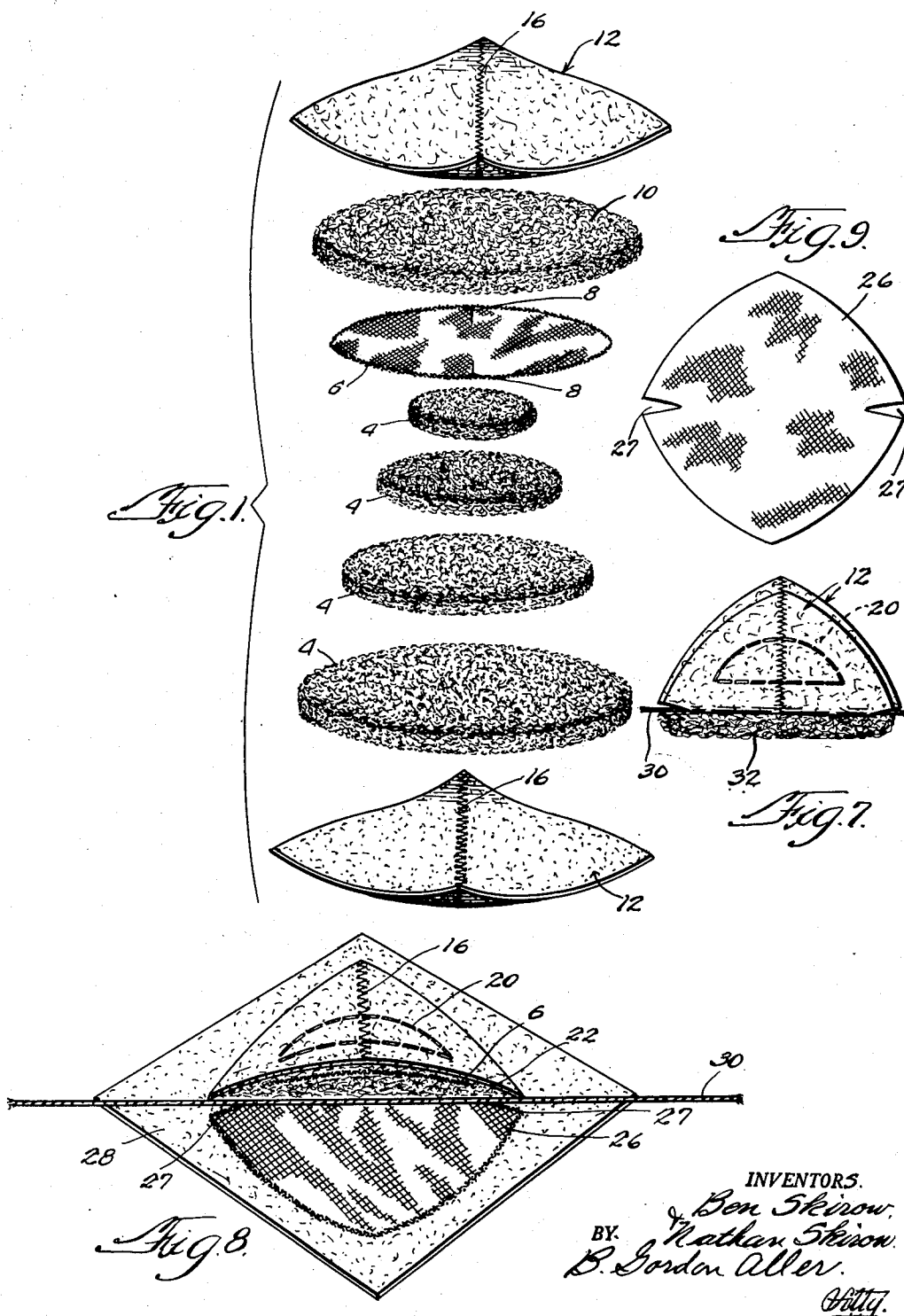
B. SKIROW ET AL

2,676,328

SHOULDER PAD FOR GARMENTS AND THE LIKE

Filed Feb. 28, 1951

3 Sheets-Sheet 1



INVENTORS.
Ben Skirrow.
Nathan Skirrow.
BY B. Gordon Allen.
Patty.

April 27, 1954

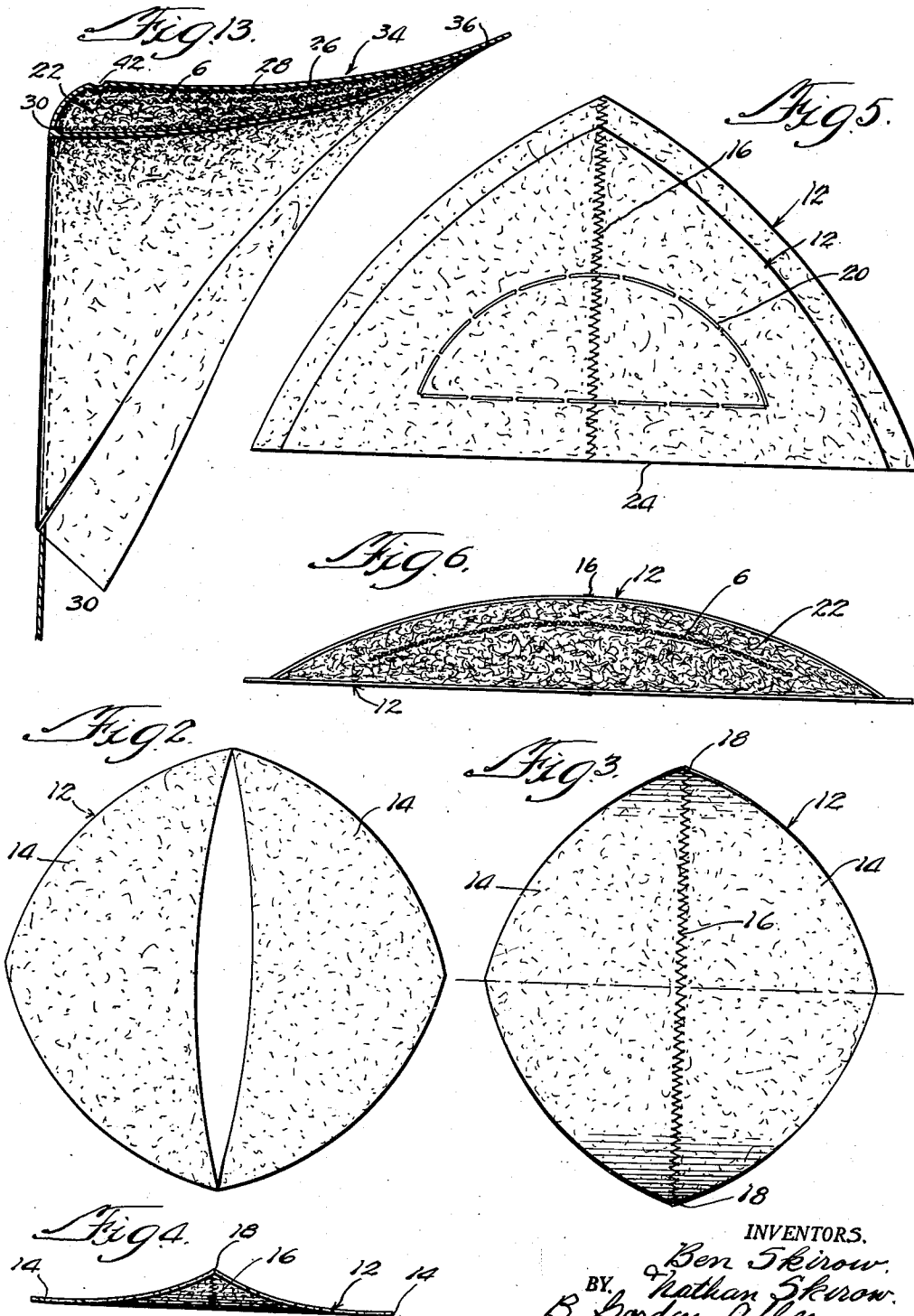
B. SKIRÖW ET AL

2,676,328

SHOULDER PAD FOR GARMENTS AND THE LIKE

Filed Feb. 28, 1951

3 Sheets-Sheet 2



INVENTORS.

Ben Skiröw.
Nathan Skiröw.
BY B. Gordon Allen.

Atty.

April 27, 1954

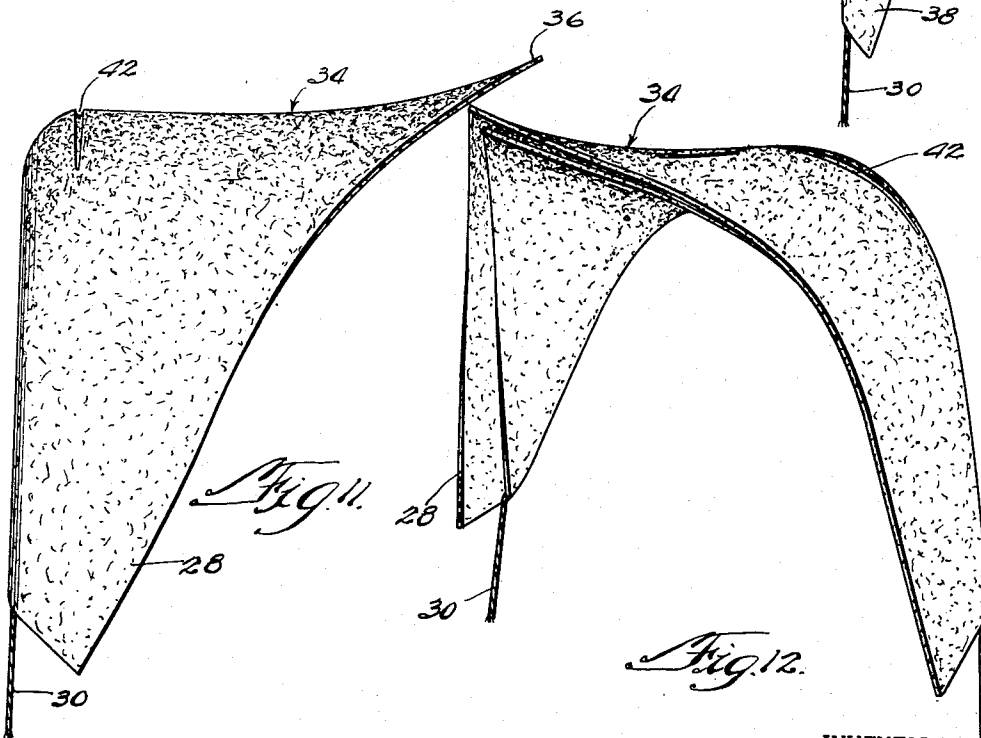
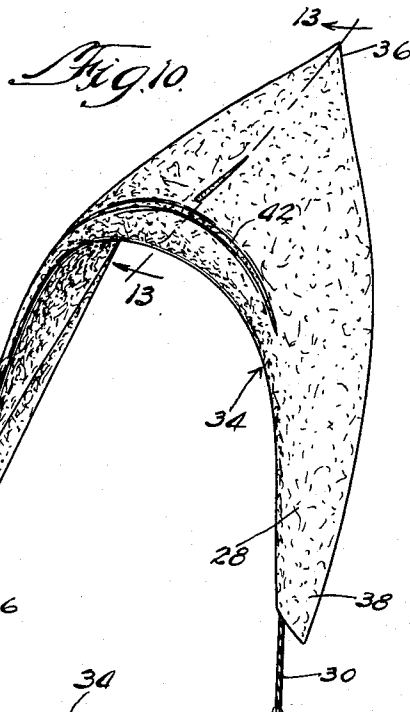
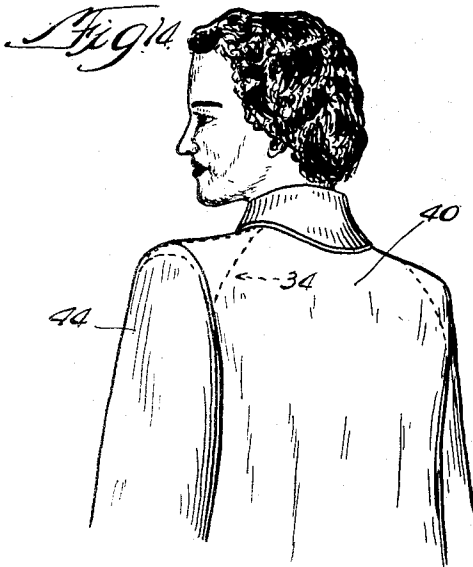
B. SKIROW ET AL

2,676,328

SHOULDER PAD FOR GARMENTS AND THE LIKE

Filed Feb. 28, 1951

3 Sheets-Sheet 3



INVENTORS
Ben Skirrow.
BY Nathan Skirrow.
B. Gordon Allen.

Patdy.

UNITED STATES PATENT OFFICE

2,676,328

SHOULDER PAD FOR GARMENTS AND THE LIKE

Ben Skirow and Nathan Skirow, Chicago, Ill.

Application February 28, 1951, Serial No. 213,218

3 Claims. (Cl. 2-268)

1

This invention relates to garment pads and more particularly to pads for use in garment shoulders to impart to the garment a desired shoulder effect. The present invention constitutes an improvement over that disclosed and claimed in United States Letters Patent No. 2,511,483, issued June 13, 1950.

A primary object of the present invention is to devise a pad of economical construction and having sufficient body to retain its shape indefinitely.

A further object of the invention is to provide, in a pad such as above described, means for holding the pad snugly against the shoulder to conform precisely to the configuration thereof.

Another object of the invention is to devise a pad which may be more economically fabricated than those known to the prior art.

A more specific object of the invention is to provide a stiffener embedded in the padding mass, which is contained within an envelope, to prevent shifting of the mass within the envelope during compression thereof in a preheated die which shapes the mass to shoulder pad configuration of generally lunate form, tapering in cross-sectional area from the shoulder end of the pad to the opposite end thereof.

Still another object of the invention is to provide means for maintaining tension between the shoulder end of the pad and its opposite end along the center line thereof, whereby when the pad is pulled into position at its shoulder end the opposite end snugly hugs the shoulder contour.

A further object of the invention is to devise a novel and economical method for fabricating a pair of identical shoulder pads such as above described.

A different object of the invention is to devise a method by means of which either square or rounded effect may be obtained at the shoulder end of the pad.

Still another object of the invention is to provide a groove in the top surface of the pad inwardly of the shoulder end thereof and approximately perpendicular to the longitudinal center line of the pad, thereby facilitating stitching of the pad to the garment.

The foregoing and other objects and advantages of the invention will become apparent from a consideration of the following specification and the accompanying drawings, wherein:

Fig. 1 is an exploded view of a padding pancake and its envelope utilized in the first step of fabricating the novel shoulder pad;

Fig. 2 is a plan view of a pair of backing seg-

2

ments adapted, when joined, to form the upper or lower half of the envelope;

Fig. 3 illustrates the layer segments of Fig. 2 after joinder thereof;

Fig. 4 is an edge elevation of the backing layer shown in Fig. 3;

Fig. 5 is a plan view of one-half of the pancake and its envelope;

Fig. 6 is an edge elevation taken from the bottom of Fig. 5;

Fig. 7 is a plan view, similar to Fig. 5, with a roll of padding material and an elastic cord assembled therewith prior to wrapping thereof in a reinforcing envelope;

Fig. 8 is a perspective view of the assembly shown in Fig. 7, with an inner layer of reinforcing material and an outer layer of backing material prior to wrapping of said layers around the assembly to form inner and outer envelopes;

Fig. 9 is a plan view of the reinforcing layer shown in Fig. 8;

Fig. 10 is a perspective view of the completed pad after compression thereof in a preheated die;

Fig. 11 is a side elevational view of the pad;

Fig. 12 is a perspective view of the pad taken from the inner end thereof;

Fig. 13 is a sectional view taken on the line 13-13 of Fig. 10; and

Fig. 14 is a perspective view showing a garment containing a pair of the pads in position upon the shoulders.

Describing the invention in detail and referring first to Fig. 1, a plurality of very soft compressible discs 4 of cotton or similar material are stacked in a pancake and are graduated in size from top to bottom. The discs 4 are preferably, although not necessarily, covered by a stiffener disc 6 of crinoline or other suitable material, such as tailor's canvas which has been sized to afford a stiff but flexible disc, substantially noncompressible under the pressure exerted by the preheated forming die as hereinafter described. The disc 6 is preferably provided with a pair of diametrically opposed aligned slots 8 to increase its flexibility, and is preferably covered by another soft compressible disc 10 of cotton or similar material. As will be readily seen in Fig. 1, the disc 10 is preferably of approximately the same diameter as the bottom disc 4.

The pancake-shaped stack of discs 4, 6 and 10 are preferably positioned between a pair of soft, oval-shaped backing layers 12 of felt or other suitable material; and each of these layers 12 is preferably formed of a pair of segments 14 (Fig. 2) generally crescent-shaped, as seen in plan

3
view. The mating concave edges of the segments 14 are joined together in any convenient manner, as by stitching, to form a seam 16 which constitutes a tension member across the layer 12 causing it to curl at opposite edges thereof, as at 18, for a purpose hereinafter described. It will be understood, however, that this feature may, if desired, be eliminated by forming each layer 12 of a single segment of backing material sufficiently large to form an envelope for the stack of discs 4, 6 and 10, and if desired the layers 12 may be entirely eliminated.

The layers 12 are then preferably stitched, as at 20, to each other through the discs 4, 6 and 10, which thus constitute a soft readily compressible pancake or mass 22, as best seen in Fig. 6. The disc 6 constitutes a stiffener structure embedded within the mass 22, which is then cut in half, as shown in Figs. 5 and 6, along a plane substantially perpendicular to that of the seam 16, if that feature is utilized. (It may be noted that this cut joins the slots 3 in the stiffener disc so that said slots may be used, if desired, to guide the cutting tool (not shown).)

The cutting process provides a pair of units, one of which is shown in detail in Figs. 5, 6 and 8, wherein it will be seen that the unit comprises a semiround readily compressible mass 22 of cotton with a similar shaped disc 6 embedded therein, said mass being contained within an open envelope defined by the top and bottom layers 12 of backing material which have been stitched together as previously described at 20. It may also be noted that the seams 16 of the envelope defined by the layers 12 are under tension from the flat end 24 of the unit to the opposite end thereof along the longitudinal center line thereof. As best seen in Fig. 6, the mass 22 is greatest at the vertical center line of its flat edge and tapers therefrom in all directions to its arcuate perimeter.

The unit shown in Figs. 5 and 6 is then preferably wrapped within an inner stiffener layer 26 of sized crinoline, tailor's canvas or similar material and is also wrapped within an outer backing layer 28 of felt or similar material, both of said layers being wrapped around the flat edge of the mass 22 to define inner and outer envelopes within which may be positioned a resilient cord 30. If a round rather than a square shoulder effect is desired, a roll 32 of compressible material, such as cotton, may also be folded within the layers 26 and 28 across the flat edge of the padding mass, as shown in Fig. 7.

The layer 26 is preferably slotted, as at 27 (Fig. 9), at diametrically opposite sides thereof to facilitate folding or wrapping thereof, and to permit the layer to conform more readily to the shape of the mass, as previously described, and preferably the layer 26 is wetted before it is wrapped around the mass 22, whereby upon compression of the entire assembly in a preheated die the envelope formed by the layer 26 is permanently united with the padding mass 22, the outer backing layer 28, and resilient cord 30 because of the adhesive action of the wetted sizing.

It may be noted that during this compression process the stiffener 6 is effective to give body to the mass 22 to thereby avoid excessive shifting of the mass within its innermost envelope defined by the layers 12.

After the layers 26 and 28 have been wrapped around the mass 22 and the resilient cord 30, as well as the roll 32 if desired, and after this entire assembly has been compressed in a preheated

molding die, the assembly is permanently formed to the finished shoulder pad configuration illustrated in Figs. 10 to 14, as generally designated at 34 therein. The completed pad, as best seen in Figs. 10 and 12, is approximately lunate in form at the shoulder end thereof and tapers toward the opposite end, the seams 16, which are not shown in these figures, causing tension along the longitudinal center line of the pad at approximately the line 13—13 of Fig. 10. As disclosed and claimed in the above-mentioned patent, the cord 30 is effective to yieldingly maintain the padding mass in this lunate form, and, as best seen in Figs. 11 and 13, the tension caused by the seams 16 causes the inner end of the pad to curl slightly, as at 36, whereby when the shoulder end of the pad 34 is pulled downwardly at the opposite sides thereof, as at 38, around the shoulder, the end 36 tightly hugs the contour of the shoulder to afford a smooth snug fit thereon, facilitating stitching of the pad to the garment 40 shown in Fig. 14.

As best seen in Figs. 10, 11 and 13, the pad 34 is provided with an arcuate groove 42 in its upper surface adjacent the shoulder end thereof, said groove affording a convenient means of positioning the sleeve portion 44 (Fig. 14) of the garment with respect to the pad. The sleeve portion is then stitched along said groove to the pad and to the garment 40.

Changes may be made in form and substance without departing from the spirit of the invention or sacrificing any of the advantages and the right is hereby reserved to make all changes which fairly fall within the scope of the following claims.

What is claimed as new and desired to be secured by Letters Patent of the United States is as follows:

1. A shoulder pad comprising a padding mass approximately crescent shape in cross section at its shoulder end and tapering in cross sectional area to a point at its opposite end, an inner envelope containing said mass and conforming to the shape thereof, an outer envelope enclosing said first envelope and said mass, said outer envelope comprising top and bottom layers, each in the form of a pair of segments having concave mating edges joined together in a seam extending approximately along the longitudinal center line of said mass, said seam being adapted to maintain constant tension between the shoulder end of said pad and its opposite end along the center line of said pad.

2. A method of fabricating a shoulder pad comprising the steps of forming a substantially semiround padding mass having a flat straight edge and tapering towards its perimeter from said edge, then wrapping said mass within a layer of backing material, then enclosing said mass and backing material in an envelope, then enclosing the envelope together with a roll of resilient compressible material positioned along the flat edge thereof in a second envelope and then placing the composite whole in a forming die until said mass is permanently shaped to shoulder pad configuration.

3. A method of fabricating shoulder pads comprising the steps of forming a padding mass of resilient compressible material approximately lunate in cross section at its shoulder end and tapering in cross sectional area at its opposite end, wrapping said mass in a layer of wetted sizing material, enclosing said mass in a fabric envelope to form a composite padding mass and

placing said composite mass in a preheated die to form a permanent predetermined shoulder pad configuration.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
2,258,937	Nielsen	Oct. 14, 1941
2,399,731	Gillman	May 7, 1946
2,414,534	Kaplan	Jan. 21, 1947
2,419,830	Freeman	Apr. 29, 1947

Number
2,425,227
2,431,616
2,448,141
2,461,881
2,476,798
2,511,483
2,530,392

Number
642,936

Name	Date
Bloom	Aug. 5, 1947
Lefi	Nov. 25, 1947
Farrell	Aug. 31, 1948
Diamond	Feb. 15, 1949
Bernstein	July 19, 1949
Skirow et al.	June 13, 1950
Lopato	Nov. 21, 1950

FOREIGN PATENTS

Country	Date
Germany	Mar. 4, 1937