

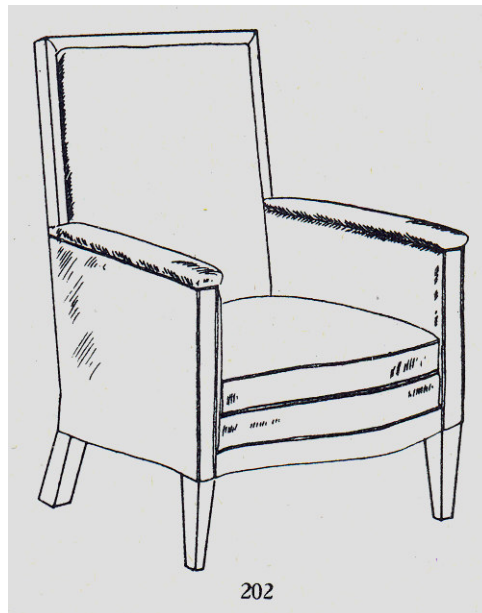
Part 8:

Chapter 13 Over-Stuffed Pad Upholstering

IN recent years with the advent of large overstuffed pieces, which provide ample room for deep spring supports, simple padded types which are more or less governed in their proportions by the shape of the frame have become less and less common.

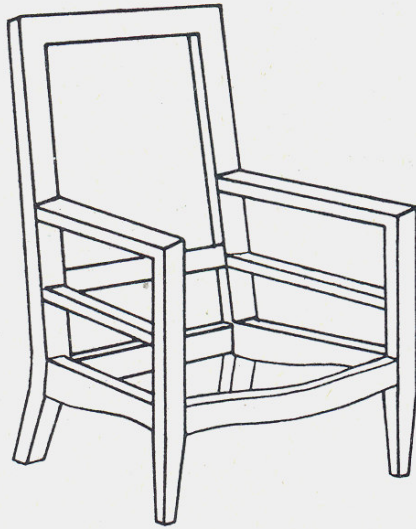
In the last year, however, the return to favor of so called pull-up or occasional chairs has brought once more into current stocks a number of types of pieces that employ the pad principle of upholstery.

Of such a character is the chair illustrated in Figure 202. The frame of this chair, Fig. 202A, has simple lines that in the hands of a deft upholsterer could be made to take a number of different finished forms.

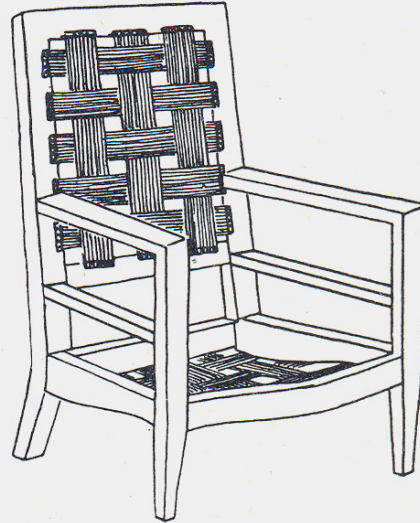


In short, the upholstering of a chair of this kind is essentially an upholsterer's creation because, the ultimate comfort such a chair will provide depends in a very great measure on the relative proportions, thickness, density and form of its upholstery.

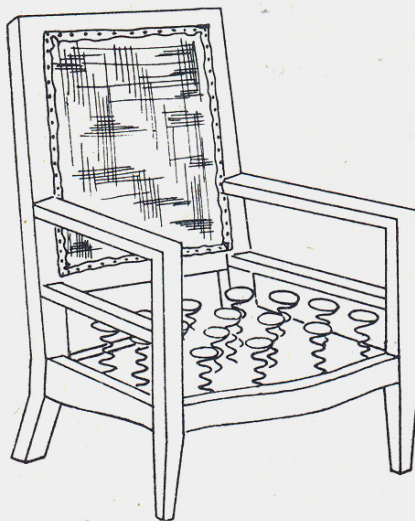
Fig. 202B shows the seat of this chair webbed for springing, also the face of the back webbed to support the back padding. There is no intention to imply in any of the drawings of this series that the true progressive steps of each condition are exactly shown, but, for the sake of keeping the illustrations within a minimum number, practically every drawing shows two stages in the progressive treatment of the chair.



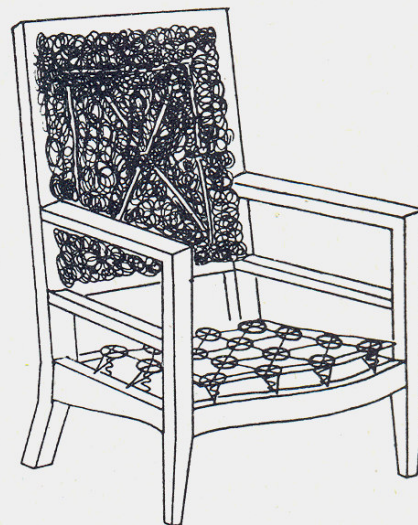
202A



202B



202C



202D

For instance in Fig. 202B the webbing shows on both the back and seat of the chair, but it would neither be convenient nor desirable to web both of these spaces at the same time.

In Fig. 202C springs have been placed for the seat and in Fig. 202D the springs have been tied down for a spring edge, canvased in 202E, double-stuffed in 202F for a cushion platform, finished in muslin in 202G and in the cover in 202H.

We suggest the employment of a spring edge ID connection with the formation of the cushion platform of this chair because the use of a down-filled cushion, such as suggested in the finished chair, requires the use of a spring edge in order to obtain the maximum degree of comfort in the finished unit.

It is not, however, intended that in the double stuffing a high stitched edge would be producer but rather that a low stitched nosing sufficiently firm to hold its shape and maintain the serpentine curve of the front rail will be all that is needed, whereas a deep stitched edge would be too high and unnecessarily bulky to provide the trim lines required in this type of chair.

The nosing, mentioned above, will be described in connection with later illustrations, therefore, the description is omitted here.

With the seat in the stage indicated in Fig. 202H the back is proceeded with beginning with 202B which represents the webbing on the face of the frame. The burlaps is applied as Fig. 202C, next the stuffing as 202B and the muslin as 202E, F and G.

A trim square edge in the muslin is essential to a chair of this type both for arms and back, and for this reason we show the edge as it would appear if blind stitched in the muslin. With the back in the stage indicated in Fig. 202G the arms are next proceeded with, beginning with the canvasing of the panels shown in Fig. 202F and the building up of the padding as 202G and H.

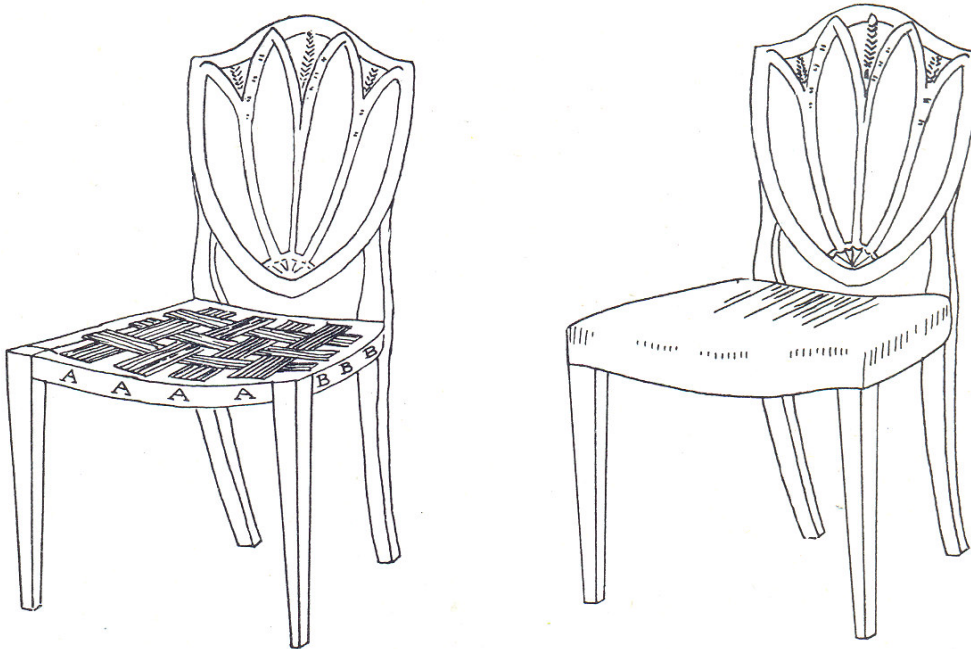
It should be unnecessary to go into the details of the various steps in this procedure because the principles employed in producing padded surfaces of this character have already been detailed in connection with previous illustrations.

There is, however, a characteristic of the chair here illustrated that produces an appearance not heretofore described. It will be noticed in illustration 202G that the top rail of the right arm of the chair has been upholstered to produce a flat overhanging pad which is first back tacked along the top edge of the arm panel, stuffed and the muslin tacked at the outside of the top arm rail.

The frame of the back as shown in 202H is covered with the same material as the upholstering and may be either slightly stuffed or pulled around flat so as to present a uniformly neat appearance. The illustration Fig. 202H indicates the back tacking of the

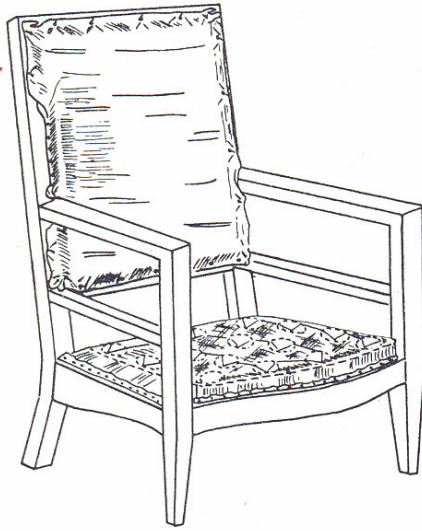
fabric which covers the frame and shows the provision of the necessary allowance at the corners.

In Fig. 202 the finished chair is represented including the down cushion, the making of which will be described in a subsequent chapter.

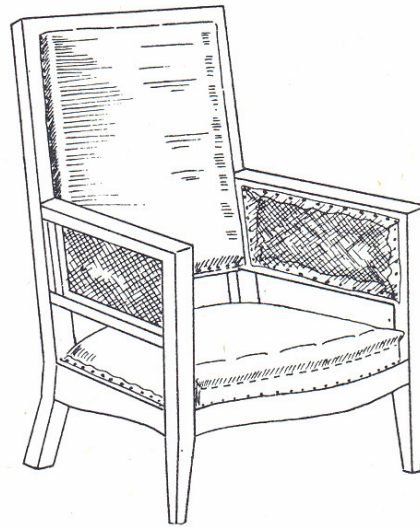


DETAILS OF OVER-STUFFED SCOOP-PAD SEAT

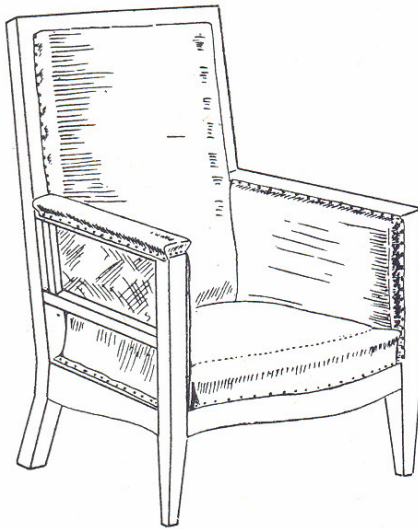
The (A) webs are stretched to take the major strain, the (B) webs being only tight enough to help support the load.



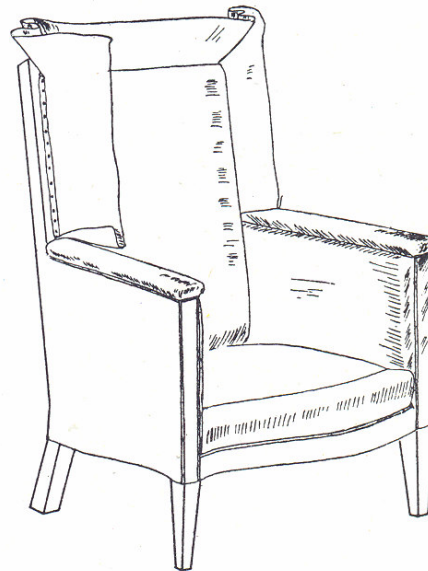
202E



202F



202G

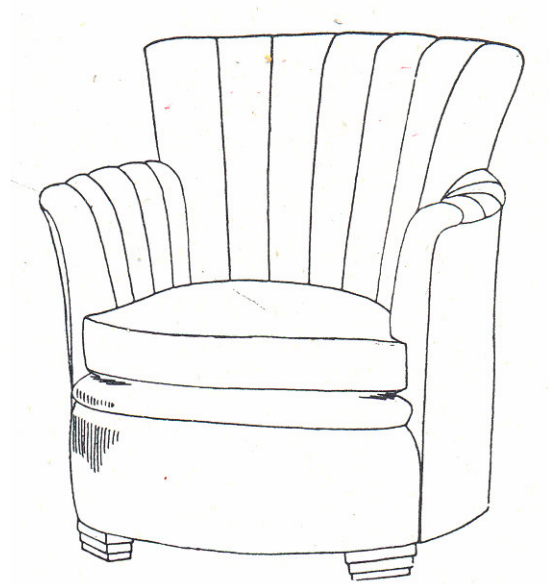


202H

IN NATURAL sequence barrel chairs are a logical development of the type of chairs described in the last chapter.

Barrel chairs are of many types and many dimensions, but the common characteristic of all is the rounded shape of the back which gives rise to the name by which such chairs are ordinarily known.

The upholstering of barrel-chair seats involves no particular difficulties that are not common to other types of circular chairs. For this reason we commence our explanation of barrel upholstering with Fig. 203 which is a typical chair of the so-called barrel type.

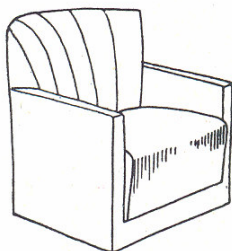


203

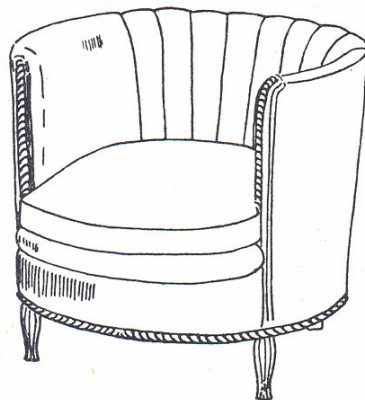
The frame of this chair will appear about as shown in Fig. 203A, and, with the seat built up in muslin, as Fig. 203B. This frame is provided with lower rails for back and arms, a condition which simplifies the task of applying the burlaps.

The chair we have chosen for the purpose of explaining the principle of barrel tufting or piping as it is more correctly called has 7 stuffed vertical pipes developed either in the under muslin or, in cheaper chairs, in the covering direct.

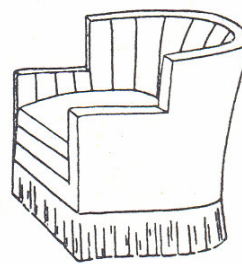
After covering the back with burlaps the next step in the upholstering of a barrel back is the division of the back into the required number of spaces. These spaces are either equal or varied according to taste and may be perfectly vertical or "flared" at the top as the chair frame may require.



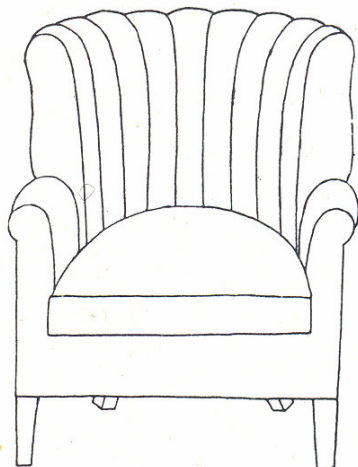
204A



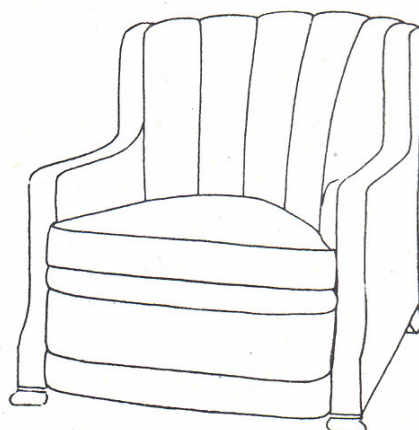
204B



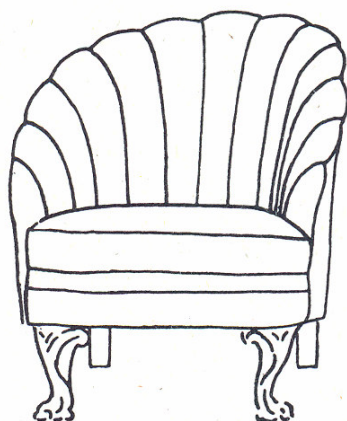
204C



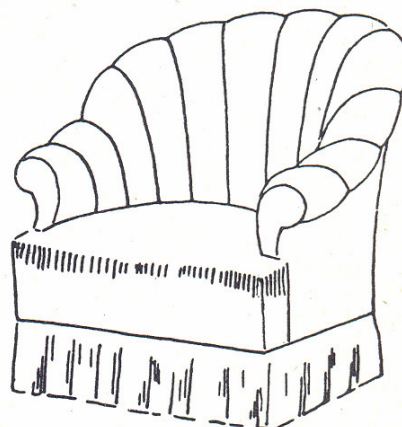
204D



204E

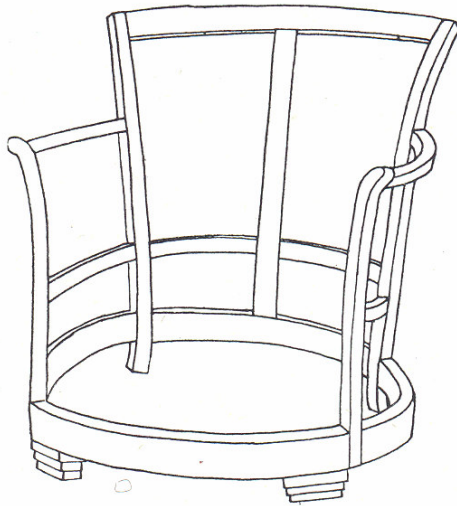


204F

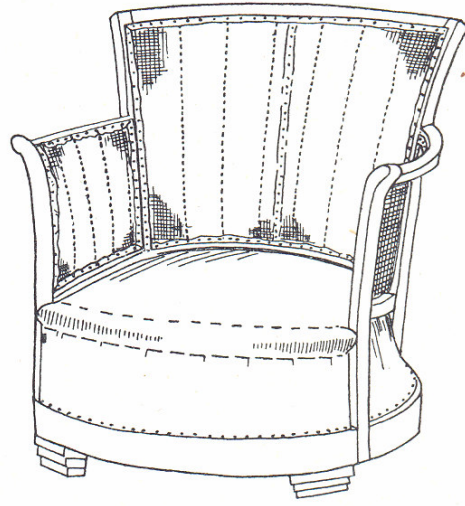


204G

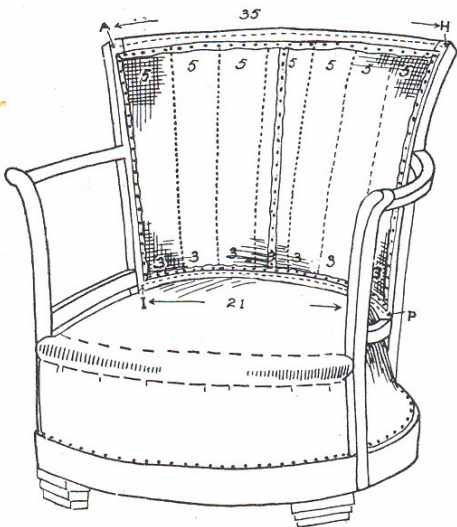
BARREL CHAIRS



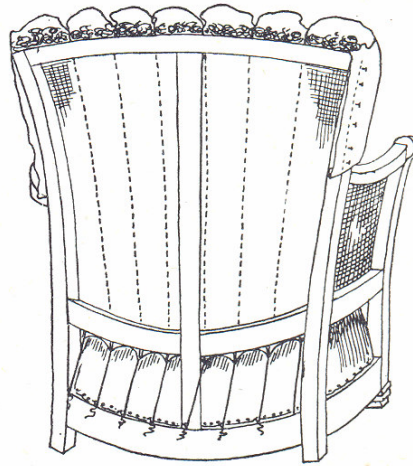
203A



203B



203C



203H

The chair of Fig. 203 has a flare of several inches at the top, therefore, it is necessary to divide both top and bottom back rails into the same number of spaces.

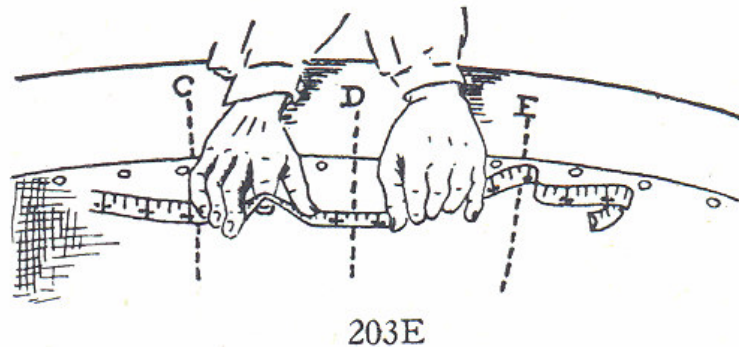
In Fig. 203C it will be noticed that the spaces on the bottom rail are 3 inches wide and those on the top rails inches. It is not always necessary to rule from the marks on the bottom rail to those on the top rail, but if there is any intention of "sewing in" the muslin, ruled lines will help to keep the pipes symmetrical.

Having ruled the spaces as shown in Fig. 203C, the next step is to measure the back for the muslin under cover.

A normal allowance for pipe fullness on a flat chair back would be about $1\frac{1}{2}$ inches for a 3 inch pipe.

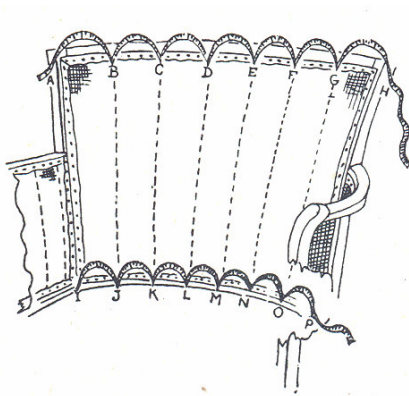
On a concave surface like the barrel back of the chair we are considering the curve of the back adds a percentage of fullness so that a one inch allowance would be found ample.

By placing the end of a tape line at A, Fig. 203D and drawing the tape without fullness to B, the measurement at B is noted, then holding the tape with the thumb and second finger of the hand which holds the tape in place insert the first finger beneath the tape and lift the tape until an extra inch (or more if necessary) has been allowed (see Fig. 203E).

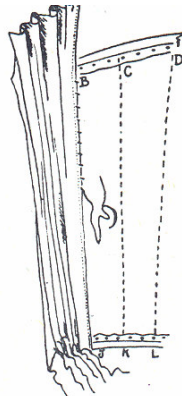


Proceed to the next space and measure in the same way and so on across all spaces - measure the bottom spaces and then transfer these measurements to paper for calculating.

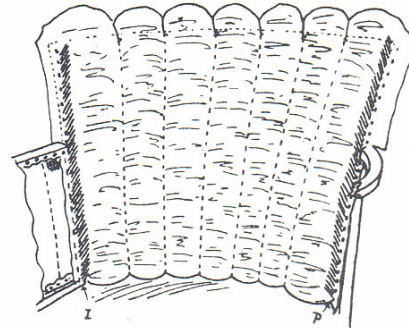
The chair back of Fig. 203B shows a width of 35 inches at top, divided into 5 inch spaces, and 21 inches at bottom divided into 3 inch spaces. If to each of these spaces an inch is added for fullness the top spaces will require to be 6 inches each and the corresponding bottom spaces will need to be 4 inches.



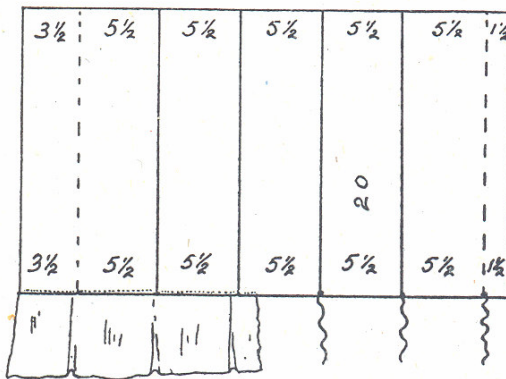
203D



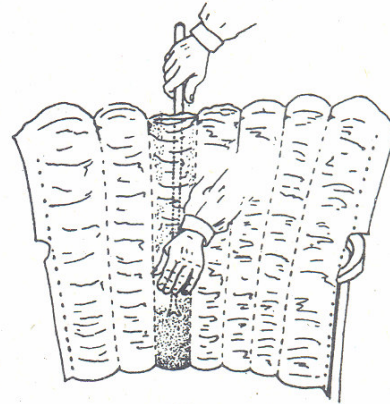
203G



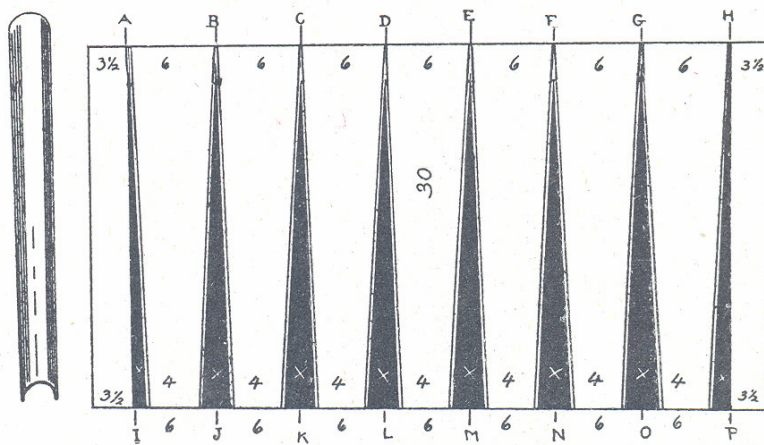
203I



203K



203J



203F

Allowing 30 inches to be the required height to cover the back and leave ample surplus for the stuff-over top, the piece of muslin would be of the dimensions shown in Fig. 203F, that is 49 inches wide by 30 inches high.

From this dimension all surplus not needed by the diminishing pipes must be removed. Each pipe must be calculated separately to correspond with the markings on the burlaps covered chair back.

Each pipe, according to the figures shown by our tape measure, will need a piece of material 6 inches wide at the top, 30 inches long and 4 inches wide at the bottom, so with the muslin spread out on the table it is first marked off into vertical divisions each 6 inches wide with a surplus of several inches beyond each outside division. This latter allowance is to carry around from the outside pipe to the rear of the chair.

These vertical divisions must be reduced at the lower ends to 4 inches each and with the exception of a seaming allowance, the surplus is cut away. This cut away part in Fig. 203F is represented by the black portions.

Finally these vertical muslin strips are sewn together. Thus creating a piece of material 49 inches wide at the top, 30 inches high and 35 inches wide at the bottom.

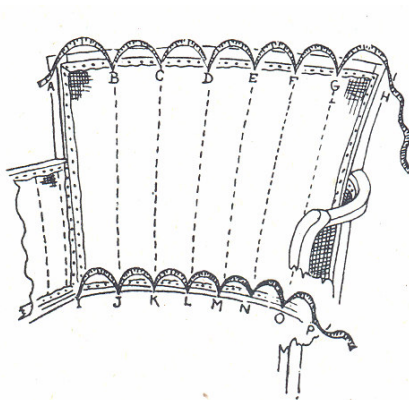
Now commencing with the strip B-C-J-K the seam from B to J is slid up on the corresponding line on the chair back. (see Fig. 203G.) A piece of stitching twine is attached at J, pulled through between the lower back rail and the seat and slip tacked to the seat rail as shown in the rear view Fig. 203H.

The top of this seam at A is pulled up to the corresponding position at the top of the line and slip-tacked. Now with the unattached muslin in a loose condition so that it may be pushed aside so that the line can be observed the seam line B to J is sewn through to the burlaps with long twine stitches after which the twine is pulled tightly and fastened.

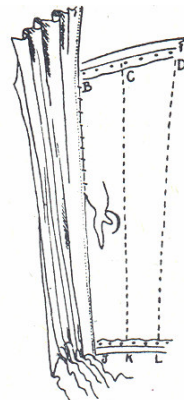
Repeat this procedure with each seam and slip tack the outside edges so that the back will now have the appearance shown in Fig. 203I. It is possible to stuff these muslin strips without sewing the seams down but the tension on the seams order to make them act as a dividing line is to lead to disaster and it is much better to them to the burlaps as we have suggested.

It is feasible to sew these seams to the burlaps catching the seam edges to the burlaps from behind the cotton, sewing each seam down with balance of the muslin turned back out of the way, but as there is no particular point in concealing the stitches we prefer the method shown in 203G.

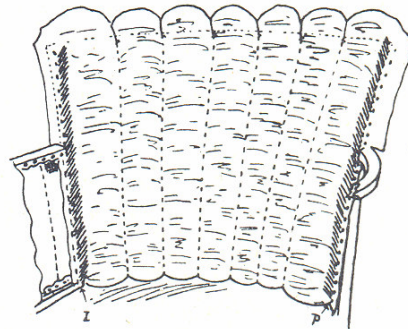
With the muslin in the condition of Fig. 203I the next procedure is to stuff each of the pipes using a "packing stick" as shown in Fig. 203 J or utilizing a "can" shown to the left of Fig. 203F.



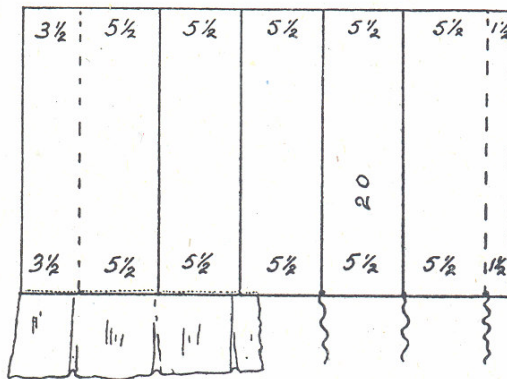
203D



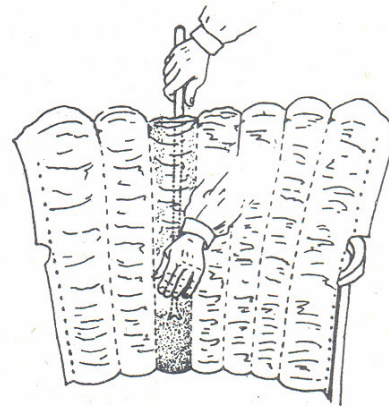
203G



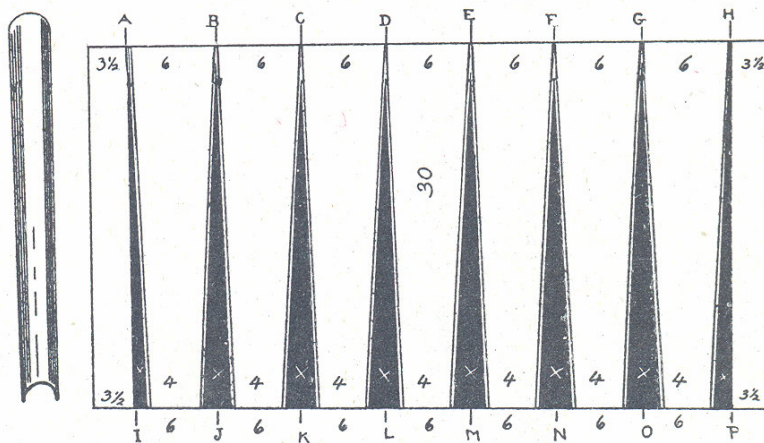
203I



203K



203J



203F

This "can" is a rounded piece of tin or other light metal that is inserted within the pipe which is then filled by means of the packing stick and the can pulled out. After the several pipes are filled the top slip tacks are removed and the tops of each pipe are carried over the top rail. Each seam is formed into a pleat and the top edge is finished by tacking behind the top rail.

The arms of these barrel chairs are sometimes piped in keeping with the back or they may be treated as a plain over-stuffed arm, but there is rarely any flare that calls for diminishing pipes.

The arm muslin for the left arm of the chair we have been describing would be marked as shown in Fig. 203K. This figure also shows at the bottom of the left side a piece of muslin with fullness allowed at the seam lines which may be substituted instead of the twines for pulling the bottom of the seams into position for stuffing.

The twines suggested earlier in this description are illustrated at the right side of this figure.

To cover a chair of this description it is necessary to measure - for and plan the covering in exactly the same way we have described for the muslin.

It is necessary also to remove the surplus width of each pipe and to join the various pipe sections together by sewing but it is not imperative that the seams of the cover be sewn through to the burlaps. When properly fitted and each seam drawn into the crevice between the stuffed pipes there is small danger of the fullness ever being disturbed.

Other details of the finishing of this type of stuff-over chair will be covered in connection with other chairs and are omitted here to avoid unnecessary duplication.

Similar methods are employed for the upholstering of the chairs shown in Figures 204A to 204G.

Barrel chairs, no matter what their general dimensions or shape, have one particular characteristic in common in that the dividing lines between the pipes follow a straight line from top to bottom. This is so whether these dividing lines are sewn back to the burlaps, held in by vertical tension on the seam, or supplemented by buttons which assist in holding the seam lines in place.

It is true that these dividing lines though straight are not always vertical because where the top of the back of a chair has a greater circumference than the bottom of the back where it joins the seat, the necessity for providing for the necessary flare causes the dividing lines to depart from the vertical but it does not interfere with the rigid straight-line character of the pipes.

The chair which forms the subject of the present description differs from the barrel chair type principally with reference to the fact that these dividing lines which separate the pipes and the pipes themselves are each curved from top to bottom to a greater or lesser degree, according to their position on the chair back.

The graduation of these curved pipes and the flare required in the shaping of the back has led to their being called shell-back chairs.

A typical example of a shell back chair is illustrated in Fig. 205, and we have chosen to delineate the handling of the upholstering of this chair because its treatment involves most of the difficulties encountered in the average shell back type. The frame of this chair will appear about as 205A.

The canvased chair will appear as Fig. 205B, but in applying the burlaps to a back of the character here illustrated care must be taken to avoid drawing the cross threads so tightly that the burlaps will flatten across the spaces instead of following around the true curve of the back.

To avoid this flattening effect put the greatest stretching tension in applying the burlaps in a vertical direction. This keeps the back curve off frame without change and the horizontal threads are merely tightened enough to avoid wrinkles.

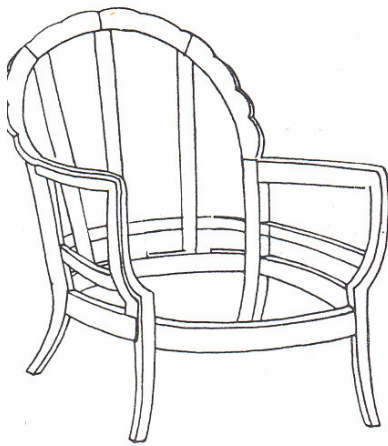
Fig. 205 B also shows the burlaps ruled for piped divisions and the placing of these lines which are indicated by the broken lines leading into the crotch of each scallop, shows the division of the back into the required spaces.

The next step is that of measuring for the fullness allowance and the widths and lengths of each pipe. At the base of the back these pipes are all of practically equal width and as shown in Fig. 205C, this width between the marks on the burlaps in the chair we are delineating is $2\frac{3}{4}$ inches.

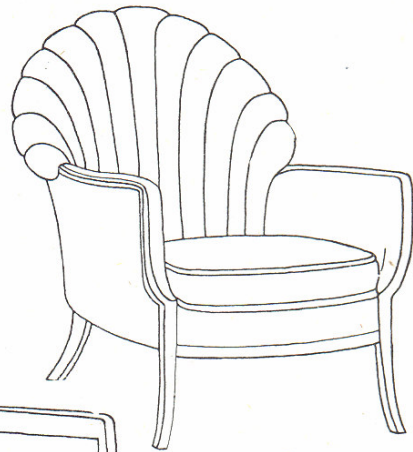
As in the case of the barrel chair, explained earlier in this chapter, the curve of the back creates a slight fullness allowance in itself so that an additional inch allowance for each pipe would probably be ample. Using the tape line, as indicated in the illustration, Fig. 205C, the total necessary width is determined but this measurement can only serve as a check because the total width is really made up of the combined widths of the individual pipes.

The height of each pipe division must be measured from its base to the highest side of the scallop and these figures recorded for cutting reference.

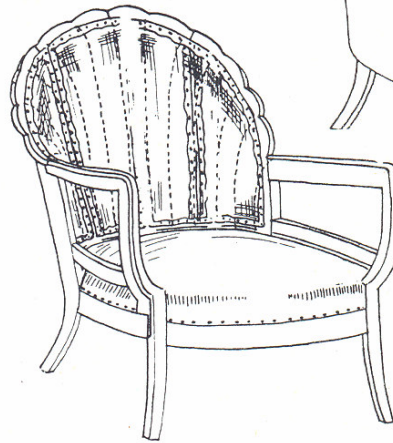
The scalloped edge of a shell back chair is not always divided into equal spaces. The scallops are, as often as not, graduated in width and the outline of the frame should be preserved.



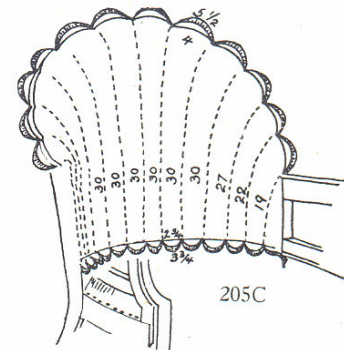
205A



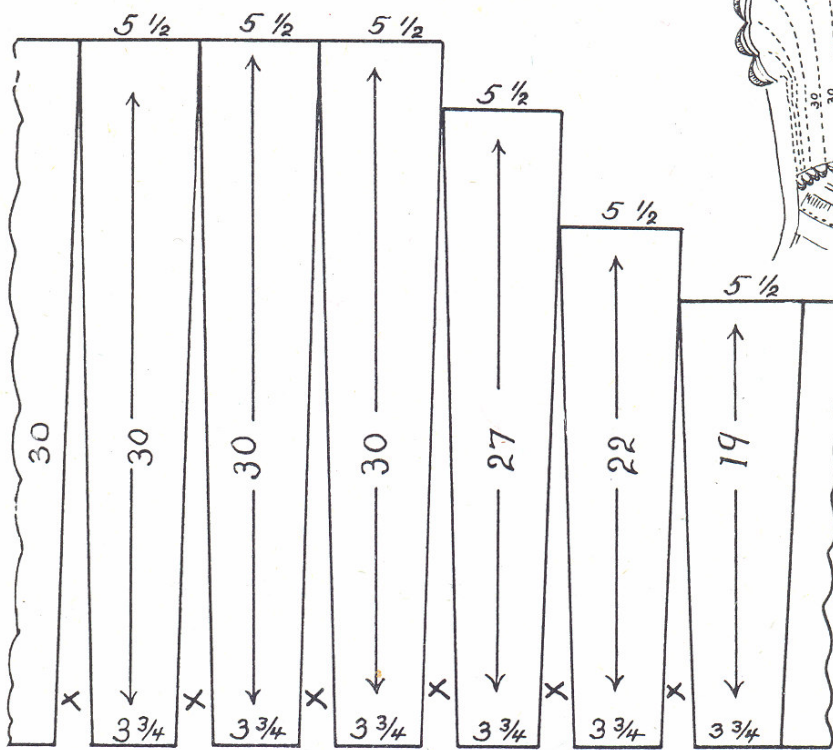
205



205B



205C



205D

In order to determine the exact width allowance at the top it is necessary to record each scallop separately, and the measurement must be taken on the scallop edge. An allowance of 1½ inches will be found ample for fullness for the scallops of the chair we are discussing so the allowance for the width of each pipe at the top will be 5½ inches and this width gradually diminishes as the pipe descends.

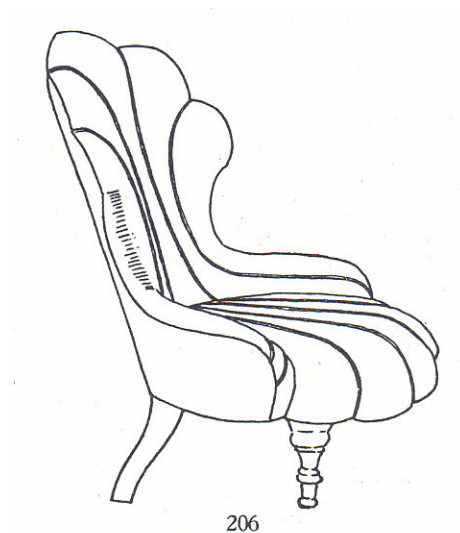
The muslin under-cover for a shell-back of the character of Fig. 205 is planned as indicated by the portion shown in Fig. 205D. In this diagram the portions marked X are removed and the various sections are joined together by a seam.

The arrow on each of these divisions indicates that the thread of the material runs perfectly vertical with the strip. If the muslin has been cut and joined to make the complete measurements necessary for the back, each seam is sewed to its own line on the marked burlaps and the various pipes are then stuffed by means of a packing stick as already has been described in the article on barrel chairs.

Other types of shell back chairs both of the show-wood and stuff-over variety, are treated in the same manner as has been here described.

Because of the curve of the pipes in shell back chairs it is necessary always to sew back the seams of the covering to the burlaps in order that in the smoothing of the vertical threads of the covering the vertical tension will be prevented from pulling the dividing lines out of shape.

On deep piping it is possible to sew the seams back by stitches that will be out of sight in the crevice between the pipes. It is better, however, in all cases not to have the twines exposed within the crevice, sewing through the front of the seam in such a way that a blind stitch is created.



It has already been suggested that the pipes of shell backs, having no greater curve than those represented in the illustrations 205 to 205D can be filled with a packing rod. Where a greater curve occurs it is not always feasible to stuff the pipes by means of a packing rod, and it is necessary to employ a different system of building up the pipes, a system which will be explained in connection with the next figure.

What is probably one of the most interesting forms of piped upholstery as well as one of the most difficult is represented in the true shell-back chair illustrated in Fig. 206.

We designate this a true shell-back chair because in its construction there has been no compromise with convenience. The lines laid out in chair frame have been carefully followed in application of the padded superstructure and result leaves nothing to be desired in gracefulness of outline and comfortable proportions.

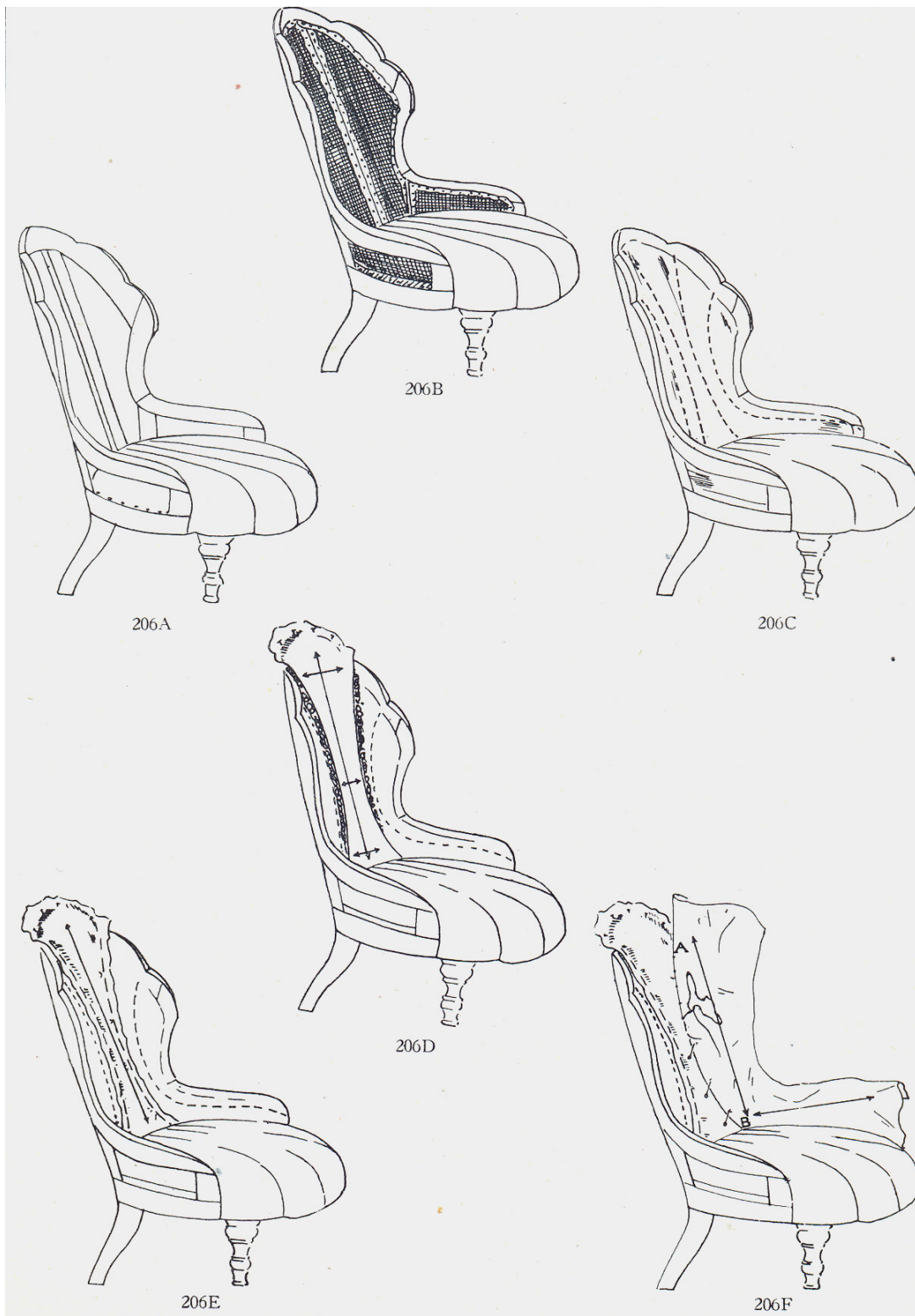
The piped seat developed with a soft filling confined between curving pipe-like forms upon a double-stuffed foundation requires no special explanation, the covering being planned and applied after the manner explained in connection with the back of Fig. 205.

With the seat in the condition indicated in Figure 206A, the next step is the covering of the back with burlaps, which, as already explained, must be applied with the principal tightening strain upon the vertical threads so as to maintain the concave form of the frame, as indicated in Fig. 206B.

The next step is the marking of the back to define the lines of the curving pipes. This must be very carefully done because it is on the pleasing character of these curves that the entire chair must depend for its graceful appearance. Using the scallops of the frame as a guide a flexible steel rule which can be bent to the desired curve is used to layout the piping lines indicated in Fig. 206C.

It will be perfectly obvious that the graduated pipes defined by the curves in the last mentioned figure can neither be filled with a packing rod nor can they be constructed in any way except one at a time, each with its own separate piece of muslin.

Fig. 206D shows the start of the formation of the center pipe. The vertical and horizontal arrows which have been drawn upon the muslin in our illustration are to indicate the direction of the muslin threads. In the last mentioned figure it will be observed that the hair filling, showing at the edges of the muslin, forms an interwoven pad either held in position by bridling or merely distributed by the manipulation of the fingers within the space outlined by the dotted lines indicating the pipe dimensions.

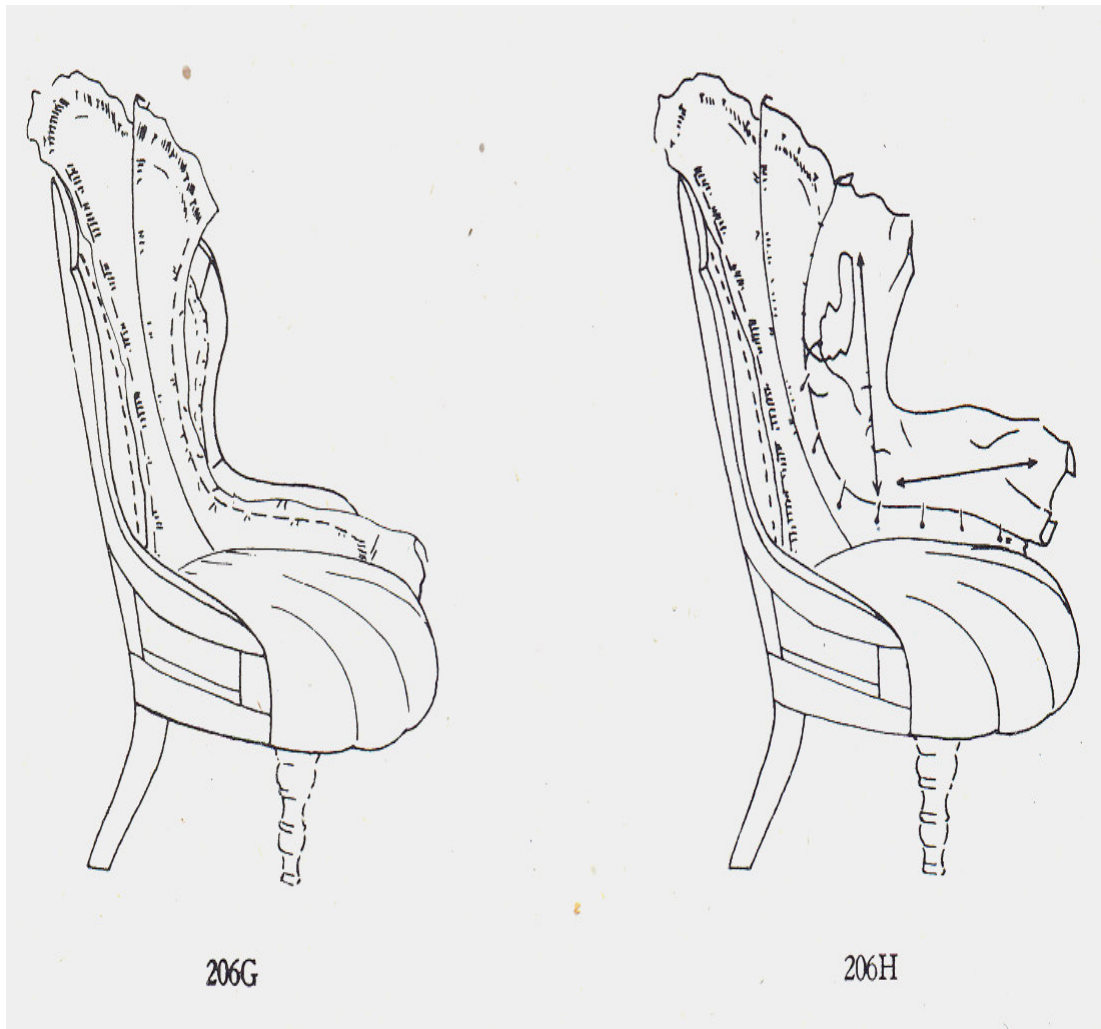


In Fig. 206E this pad has been confined by the muslin which is sewn back through the burlaps in line with the marking in connection with Fig. 206C. Next a piece of muslin having the necessary dimensions to form the adjoining pipe is temporarily placed in position as indicated in Fig. 206F.

The vertical and horizontal arrows in this case also indicating the direction of the muslin threads. With the muslin temporarily tacked in position, the edge on the line A - B is rounded to meet the line formed in the sewing down of the right side of the center pipe.

In addition to being rounded off this edge may need to be "nicked" because it must be blind sewn into the position indicated in Fig. 206F without any semblance of a wrinkle. This pipe is also stuffed by laying in the filling material from the loose side of the muslin and this pipe is then sewn down to the line of the burlaps as indicated in Fig. 206G.

The outer pipe which carries over the side of the frame, see Figure 206H, is formed in the, same way completing the right side of the chair back and the corresponding pipes on the left side are formed after the same manner.

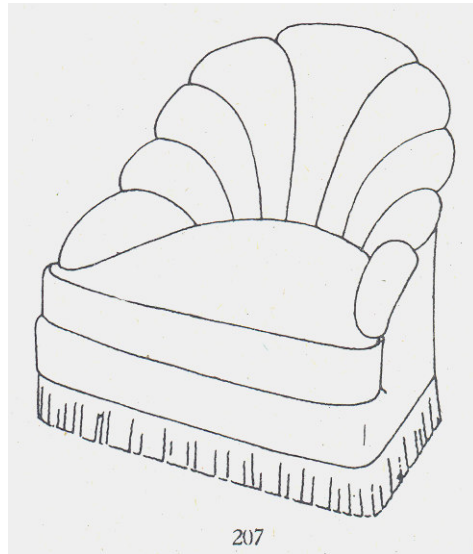


It is possible to plan out and sew up the covering for a shell chair of this character, including welts where pipe joins pipe, as indicated in Fig. 206, but to do so calls for a very expert and thorough measuring and tailoring job.

Practically the same result can be accomplished by covering each individual pipe and scallop after the same manner as the muslin pipes have been formed. The important thing to bear in mind in connection with all curved pipe upholstery is to so dispose the fabric that it can be smoothly applied to avoid the development of wrinkles.

To produce a chair of the type we have just been describing calls for a high degree of skill. It is not to be attempted without considerable experience as a craftsman and because of the fact that it appears to best advantage in a plain glossy material, such as satin, a well-executed chair of this type is a credit to the craftsman who builds it and a matter of pride to its owner.

Figure 207 also a true shell back is produced after the manner just described in connection with Figure 206. The size of the pipes, however, in this instance, as well as the shorter curves, somewhat simplify the problem of avoiding wrinkles.



This chair rather graphically illustrates the possibility of giving a modernistic flavor to a type that is in fact reminiscent of Mid-Victorian.

Chapter 14

Tailored Piping and Buttoning

FOR want of a better name we have adopted the name "tailored piping" for that type of upholstery employing sectional divisions in the form of extremely shallow stuffed pipes separated by machine stitching of the character shown in Fig. 208.

This character of upholstery had its origin in the automobile field and is in reality a descendant of the stitched whip-cord tufting used in buggy seats and backs half a century ago.

Although intricate looking in the finished state this type of upholstery is not extraordinarily difficult to plan and perform. The surface of the seat and back shown in Fig. 208 is a stitched and stuffed pad made up like a quilt on a foundation canvas and used as an over-all covering on a foundation previously built up to receive it.

The preliminary steps in the preparation of the foundation of the piece illustrated in Fig. 208A follow well-known upholstery principles from the tying of the springs up through the double stuffing, the shallow stitched edge and the thin final filling layer covered with muslin.

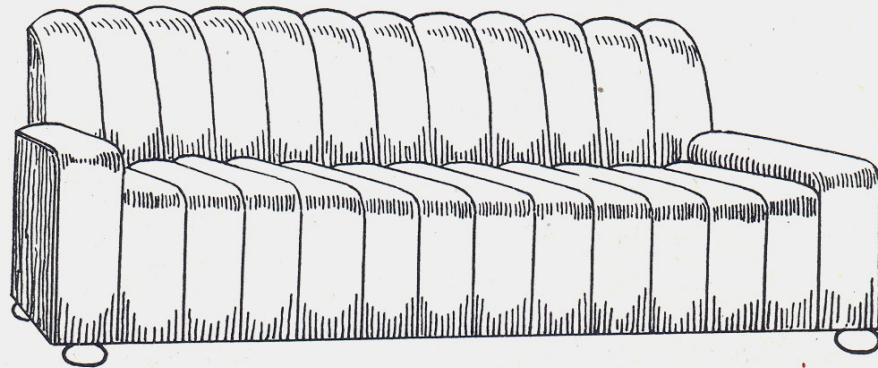
These steps are illustrated progressively in Fig. 208E. From this point on an entirely different principle to that usually followed by upholstery craftsmen comes into play. First of all a piece of light duck or stout muslin is measured off of sufficient dimension to cover the seat as it appears in Fig. 208E.

It will be noted that the left half as illustrated in this figure has been planned to show the filling material before it has been covered with the muslin under cover. The right half shows the final stage of the seat when completely covered in muslin.

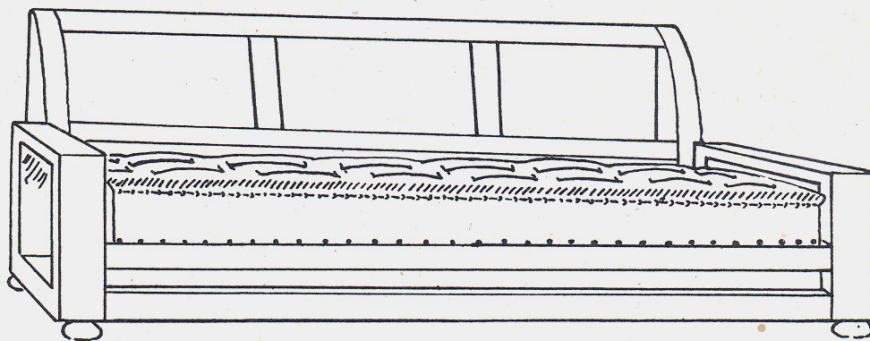
With the foundation duck spread upon the table and accurately marked out to the size required for the covering of the seat with tacking 1110wances provided on all edges, parallel lines are laid off from front to back of the foundation, shown in Fig. 208D.

In this figure the lines B - B are the stitching lines and in this instance five inches apart so that the twelve divisions shown in Fig. 208 constitute the distance of 60 inches between the arms of this particular davenport. The dotted lines A, A, A, in Fig. 208D are the extra tacking allowance for attaching the finished pad.

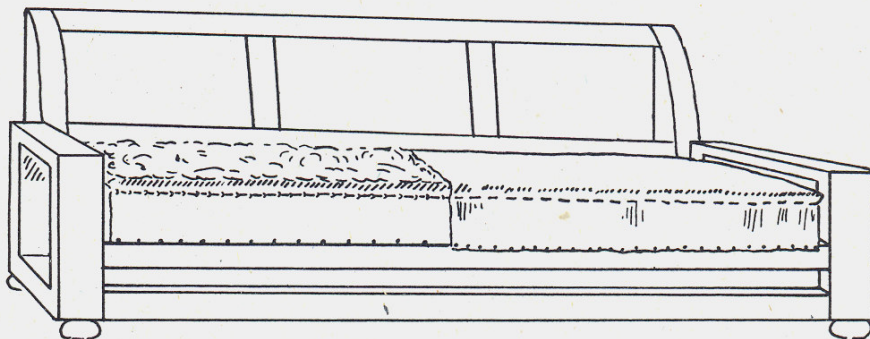
Next the cover cloth is spread out and ruled with stitching lines as was done in the case of the foundation cloth, but the lines B.B.- B.B. are a half inch farther apart than the lines on the foundation cloth, this half inch serving to provide both a fullness allowance of a $\frac{1}{4}$ inch and the remaining $\frac{1}{4}$ inch is used in the seams C - C Fig. 208E, which attach the cover to the foundation.



208



208A

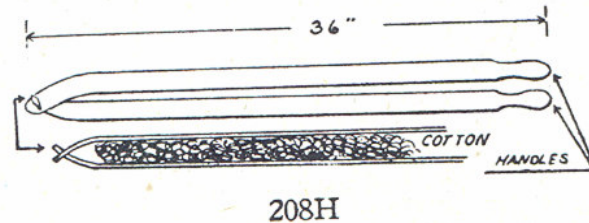


208B

DETAILS OF TAILORED PIPING

It will be observed that these seams are required to be extremely accurate as a difference of even the width of a pencil line will destroy the uniformity of the finished appearance.

After the cover cloth has been stitched progressively, pipe by pipe, to the foundation fabric shown in Fig. 208E, the entire "quilt" is fastened to the table top and with the stuffing tool indicated in Fig. 208H the pipes are filled with cotton or other soft matted material.



This stuffing tool, as shown consists of two separate leaves made of two pieces of 20-gage steel, three inches wide and about thirty-six inches long, each to have one end shaped as a handle. At the opposite end one of these pieces is narrowed slightly and rounded off with a lot in the center to take the end of the other piece which is shaped with a tongue to fit into the slot just referred to.

For a five inch pipe, fill the tool with a layer of cotton, five inches wide, uniformly distributed from end to end of the tool. With this five inch width of cotton filling locked between the metal slats, by the grasping of the handles, insert the loaded tool full length into the pipe.

When in place withdraw first the tongued piece and then the slotted piece which will permit the cotton to remain in the pipe as shown by letter D in Fig. 208E.

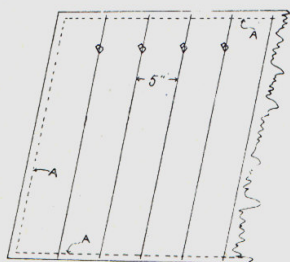
When the pipes have all been filled the quilt thus constituted is spread upon the seat and held in place by tacks and pins as shown in Fig. 208C. The front which has been purposely left loose is then thrown back in order that the foundation may be blind-stitched to the under muslin as shown at C in Fig. 208G.

Before drawing the cover down into place, the front if composed of a two-piece rail, as is illustrated in the piece we are discussing, must be covered with a piece of burlaps as shown at A Fig. 208G, and subsequently padded and covered with muslin as B of the same figure.

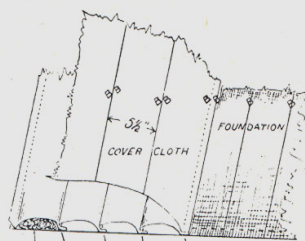
This provides a smooth foundation over which the quilt is drawn down into position and finished off by tacking beneath the rail as indicated in Fig. 208.



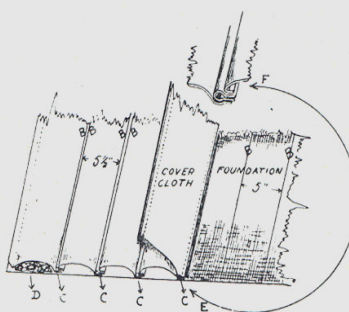
208C



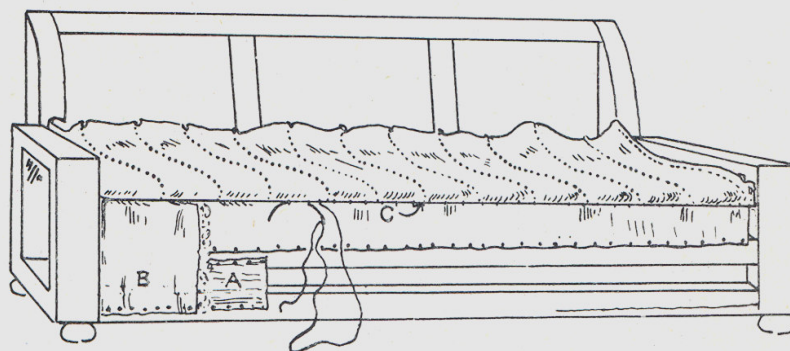
208D



208E



208F



208G

A more elaborate form of tailored piping is indicated in Fig. 208F, which in addition to having the seams which hold the cover to the foundation cloth in parallel rows has a separate welt inserted within each seam.

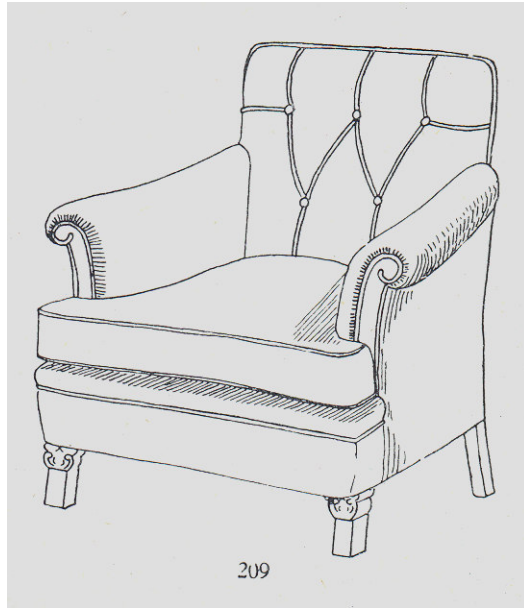
This, of course, requires that the cover cloth represented by the points B.B.-B.B. on Fig. 208F shall in each case be a separate strip to permit of the insertion of the welt and is back-sewn to the foundation as shown at E Fig. 208F, and also in enlarged detail in F on the same figure. The insertion of a welt between the pipes increases the difficulty of insuring uniform and regular stitching and although our diagram shows only 50 inches as the width of the cover from B.B. to B.B. on certain types of pile fabrics or on loose, raveling material it may be necessary to use a wider strip to provide ample seaming allowance, but in no we should more than X inch be allowed for space to contain the subsequent cotton filling.

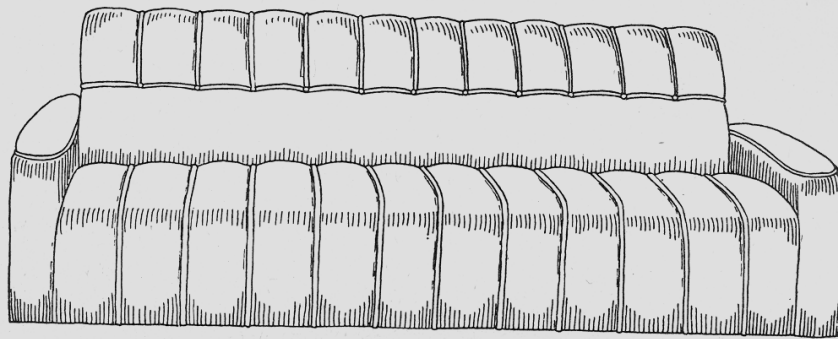
For certain types of furniture where this form piped cover is employed one or more rows of buttons may be utilized to create additional interest or to hold the pad in shape on a concave surface. Such as for instance, the back of a shallow barrel chair, which it is also possible to treat after the plan here described.

Similar in form but produced by a somewhat different procedure, Fig. 209X follows in logical sequence the piece illustrated in connection with 208. The welts which cross the back from button to button, as well as those which outline the tops of the, arms, are covered cords constructed separately after the manner shown in Fig. 209E.

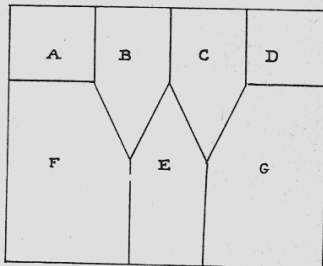
The other welts which divide the back and seat into vertical divisions are formed in the cover and stitched after the manner to be described in connection with the arm chair of Fig. 209.

This chair (Fig. 209) illustrates a simplified form of buttoning which derives much of its style from the manner in which the cover is stitched to provide welting running from button to button and from the outside buttons to the outer edge of the back. With the chair upholstered in muslin in the condition shown in Fig. 209A, the back which has purposely been kept rather soft is marked as shown by the dotted lines indicating welts and the X marks indicating buttons.

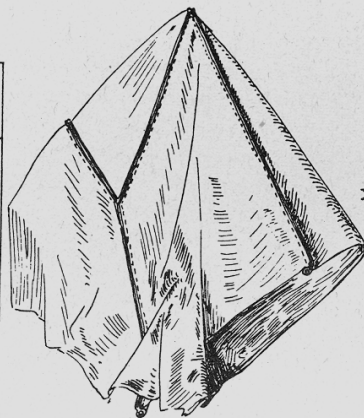




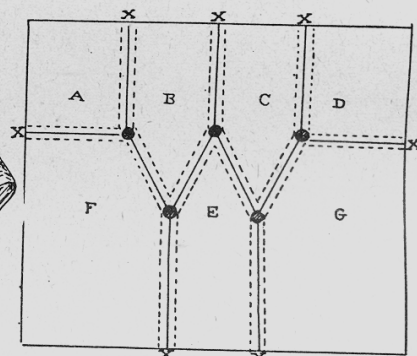
209X



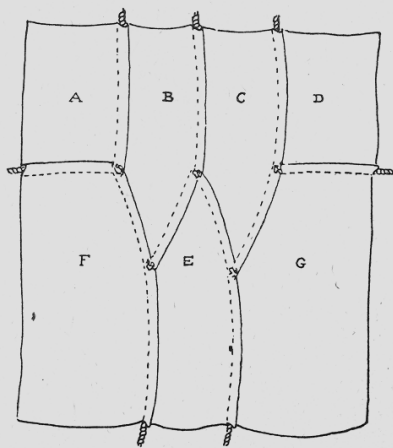
209B



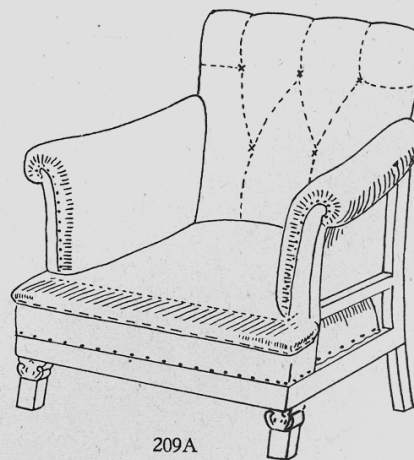
209J



209C



209G



209A

The dimensions of the sectional divisions of the back, as shown in the last mentioned figure, are transferred to a pattern paper after the manner shown in Fig. 209B. The letters A B C etc., have no other significance except that of identification so that it will be easy to distinguish between the back view and the front view in our illustrations of the stitched cover.

The dimensions indicated in Fig. 209B, are a duplicate of the marked back of Fig. 209A, and must be increased to permit of the seams which, with the assistance of a cord, constitute the welting. It is also necessary to add additional material at each of the edges as a tacking allowance to be carried around to the back of the frame on top, both sides and bottom.

By referring to Fig. 209G, which indicates the welting cord placed in position and held in place by a single machine stitching close up to the cord, it will be seen that the act of forming the welt takes up a certain amount of covering vertically, horizontally and on the angle.

This allowance is indicated between the dotted lines of Fig. 209C, which parallel the solid lines from X-X, etc., indicating the welt. Fig. 209C may also be taken to represent the marking of the covering for stitching because to permit of the insertion of sectional welting in a series of exact positions requires that the face of the fabric shall show chalk lines which can be followed by the machine operator in sewing the welt into place.

There are two operations required in the stitching of the welt. The first operation is indicated in Fig. 209F where the cover is right side out and doubled over the welt on the lines indicated in Fig. 209C, followed by machine stitching close up to the enclosed cord.

After stitching, the fabric sections indicated by A and B in the last mentioned figure are doubled back upon themselves, bringing the cover wrong side out, and again stitched after the manner shown in Fig. 209H.

It is rather a difficult task to manipulate the covering for this second stitching because of the interference of the welting cord at the various right-angle and bias-angle intersections.

On heavy or stiff material, where the welting is eventually finished with a button, as shown in Fig. 209, it is sometimes helpful in laying out the cover, see illustration in 209C, to remove a circular piece of fabric about the size of a dime from each of the intersections as shown by the shaded circles in Fig. 209C.

The act of stitching in the welt and the re-stitching as shown in Fig. 209B, has a tendency to draw the cut-out edges together where the circular portions have been removed. They may be completely joined by hand sewing and finally covered with the button as indicated in the illustration of the finished chair.

Fig. 209I is a representation of the condition of the finished cover, the lower left hand section showing the appearance of the face of the fabric and the upper right hand section showing the appearance of the back of the fabric.

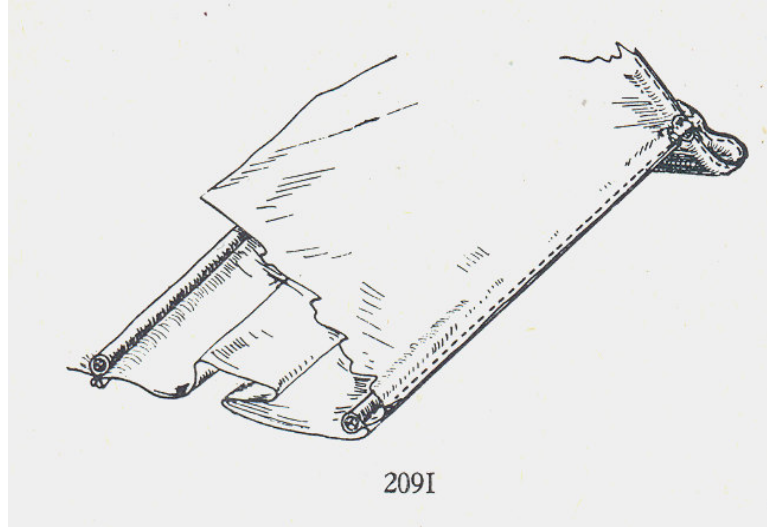
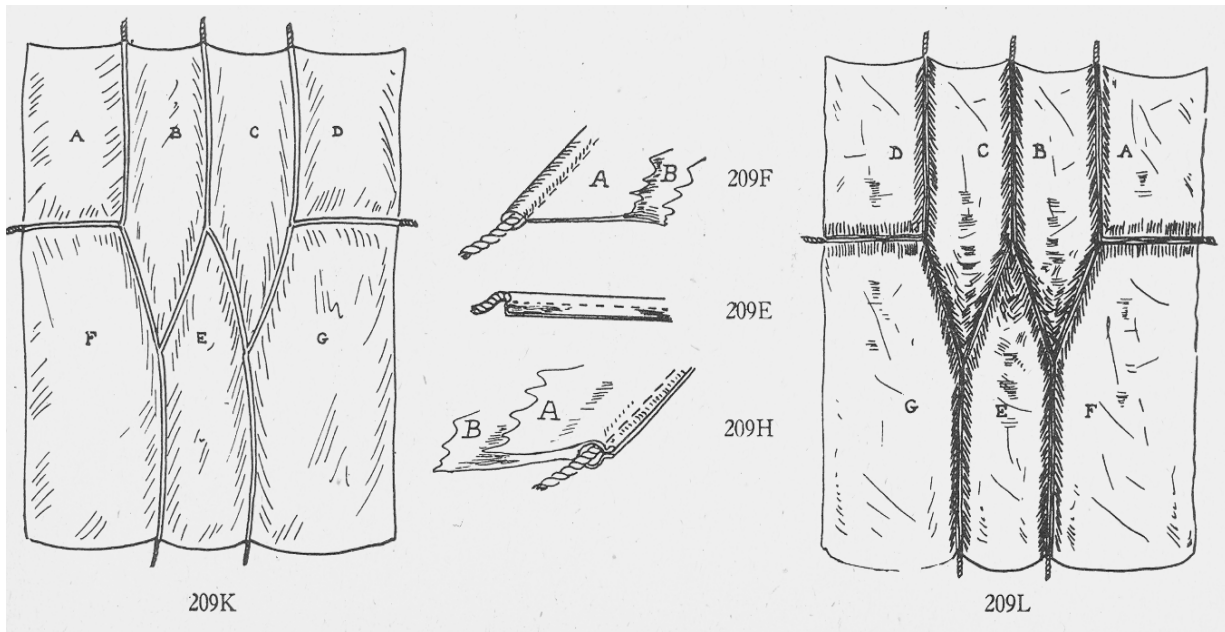


Fig. 209J is a sketch of the back of the cover ready for use, and indicates the neatness with which this welting stitching must be performed to create the finished appearance shown on the back of Fig. 209.



The stitched covering, ready for application, as viewed from the face side, would appear as shown in Fig. 209K, and from the reverse side would have the appearance indicated in Fig. 209L.

By referring again to the chair, Fig. 209, as well as the davenport Fig. 209X, it will be seen that the stitched and welted covering is so applied as to create somewhat of a piped appearance, being full between the buttons.

This is due to the tension placed upon the seams and boy pulling the buttons deeply into the lightly stuffed back. It is possible to stuff the pipes shown in the seat and upper back of the davenport of Fig. 209X by means of the tool illustrated in connection with Fig. 208H, a procedure that would follow the instructions already given in connection with Fig. 208.

