## Gordon's Work on Cutting

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## AMERICAN

## Coat, Vestand Trousers System

BY

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By S. S. GORDON.



## PREFACE.

Charles Dickens, in his preface to "Pickwick Papers," has expressed our thought as follows: "An author who has much to communicate under this head, and expects to have it attended to, may be compared to a man who takes his friend by the buttonhole at a theatre door, and seeks to entertain him with a personal gossip before he goes in to the play."
"Nevertheless, as prefaces, though seldom read, are continually written, no doubt for the behoof of that so richly and so disinterestedly endowed personage, posterity (who will come into an immense fortune), I add my legacy to the general remembrance."

Great progress has been made in the science of garment cutting during the present century. System has followed system, nearly all of more or less merit.

From the simplicity of early so-called systems, to the complexity of those of the present day, there is a marked growth. In all advances, however, simplicity, or natural. ness of method, should never be abandoned It is self-evident that a straight line is the shortest distance between two points, and that the most simple method by which the distance from any given point to another may be obtained, is by measuring in the shortest and most direct manner, when possible, from one point to the other. This simple principle seems to have been lost sight of by at least very many, and indirect, out of-theway and unscientific methods have been substituted, so that with complexity has come confusion and uncertainty.

It is the purpose of the author of this work to present a system of garment cutting which is simple, because it is based upon scientific principles. They are therefore natural and easy of comprehension.

After all the thought which has been given to this science, it cannot be rightly claimed that there exists to day a generally-accepted standard for the guidance of the student, yet there are discernable two general principles which are contending for supremacy, viz, that of the direct application of the measurements of the form and its parts, and the other, that the lengths and widths of the parts can be better established by proportions of height, breast, waist and seat measures, or that the normal form furnishes the basis from which all irregular forms are to be treated.

It is not our purpose to bewail and bemoan. Emmerson counseled well when he wrote: "Don't waste yourself in rejection, nor bark against the bad, but chant the beauty of the good. When that is spoken which has a right to be spoken, the clatter and the criticism will stop."

We recognize that both of these principles are essential under existing conditions, but that each has its appropriate sphere. There should be no longer any conten-
tion as between the two principles, but our efforts should be directed so that we may better understand the spheres in which each should act, and that we may ascertain better methods for the application and perfection of both.

The science of garment cutting may be classified under two heads or departments, viz.:

Special or Custom, and General or Ready-Made. In the first department the student is required to produce a pattern which, in its lengths and widths, and in the lengths and widths of its parts, is adapted to the special requirements of each customer as presented to him. He must have regard for his taste regarding any special or general feature of the garment. It must conform to the special requirements of his form, be graceful in outline and curvatures, and give freedom to the form when in any natural attitude

In the second department his work has lost this special characteristic, and must be adapted to meet broader and more general requirements. Here a knowledge of the average proportions of the human form is indispensable, as garments are to be produced which in all their parts are best adapted to the requirements of the greatest possible number of any given size.

While a knowledge of proportions is of the greatest value to one when in the first department, it is not the first matter which should receive the attention of the student. If rightly understood and appreciated, the student, when in the first department, will find it to be the best of schools for the acquirement of the knowledge and experience which are essential to perfect himself in the duties of that department, and which will also better qualify him for the duties of the next.

One may ignore the first steps and seek to gain by a bound, positions where the highest education and experience are essential, but his success will not be of the highest order. In order that the best results may be obtained, no student can afford to ignore or neglect any part of the education which is necessary to perfect his knowledge. He must also have regard to the order in which his investigations are pursued.

After many years of experimental application of both the principles herein referred to, the author of this work does not hesitate to declare that the primary work of the student should be in qualifying himself so that he can, with sufficient accuracy, ascertain the lengths, breadths and posture by a direct measurement of the form, and the working out of a system by which these can be transferred to the draft. Thus garments can be produced for each form as they are presented to him, without any regard to their being either proportionate or disproportionate, and there will be no exceptions to which this system will not apply.

When he has become proficient in this he will be prepared to take the next step. which will be to inform himself in regard to average proportions. He will find his labor greatly lessened, or his capacity as regards the amount of work which he can perform greatly augmented by the use of proportionate blocks, which he himself is competent to produce, and is therefore qualified to use.

Those who favor proportionate systems to the exclusion of all others for custom cutting, have done much to enlarge their usefulness and scope, but there are limitations
beyond which they are not as yet able to go with satisfactory results. They meet the requirements of a large number, because a large number come within the range of proportionate forms.

But there are a large number who do not come within this range, and their needs also must be met and supplied in a satisfactory manner.

The principle of direct measurement and ascertainment of the lengths, widths, and of the lengths and widths of the parts, and of the posture, meets the demands of each case without exception as they are presented, proportionate or disproportionate.

It will thus be seen that we recognize the value of both principles, and advocate their use as conditions and requirements may govern.

We have endeavored to make our principles so plain that the thoughtful student will, as he progresses, see the reason for each step taken. If we have succeeded in doing this, mere "rule" will cease to control the action, unless it is based upon a scientific principle the correctness of which can be demonstrated.

With the reason fully aroused, the student who knows why he does thus or so, has a great advantage over one who merely works from a "rule," for the employment of which he can give no reason even satisfactory to himself. His advancement will be more rapid, and his work will be of an intellectual, rather than of a machine, character.

The study herein contained is comprehensive from basic principles to the full illustration and explanation of all garments worn at the present time, usual and unusual, and the manner of their production for all sizes and shapes.

We have aimed to set down nothing that will not aid somebody. Many years of practical experience in both departments of study, in positions of great responsibility, which have been marked by highly creditable results, have inspired this work. If the author has succeeded in adding anything to the volume of experience from out of which truer principles and a more scientific application may be evolved, he will feel amply rewarded for his labor.



## HOW TO MEASURE.

## FOR A SACK COAT.

Button coat upon client, pulling down gently until you have a fairly smooth surface in back from seat line up, observing that the center back seam is not drawn to one side of the center of back. Should there be any looseness at the back waist, unbutton the coat and draw it snugly to the form, securing it by a pin at front.

Locate the Natural Waist at C by a chalk mark at center of back.
Place the sliding arm measuring stick under arms of client, as shown in Fig. I, pressing up firmly. Then, holding the stick in this position by the right hand at the center of back, take a position at left of client, and support the brass arm near the end of same with the left hand. Press up firmly with both hands, bringing the brass arm to a level, and then holding the long arm of the stick in this position securely against the back, take position at back of client and make a mark on the top side of stick at B.

Remove the sliding arm, and place the fixed arm under the right arm of client, as shown in Fig. 2. Mark the half back width on the outer side of stick as at G.

Locate the collar seam at top of back by a chalk mark at A.
Place end of tape at A and call the measures first to B, then to C, then to seat line $D$, and full length $E$

Place end of tape at center of back (opposite G) and measure the half back width to G. Still holding end of tape in same position, raise the right arm to a level, the forearm bent forward at a right angle, measure to elbow, and to a point one half inch beyond the wrist joint for length of sleeve.

Place the measuring stick under left arm, as in Fig. 3, pressing it firmly up and against the front of shoulder with the left hand, and with the right hand carry the tape to center of back B. Take this quite snug. It is called the short blade measure.

Then bring tape up over front of shoulder and take a snug measure to A, also over the center of shoulder take a smug measure to B.

Still holding stick in same position, observe particularly that the long arm falls perpendicularly, and make a chalk mark at the back edge of stick at the Natural Waist C, as at the reference 3 .

Remove the stick, and with tape take a snug measure from 3 to C for Back Waist Suppression. (See Diagram i.)

Remove coat, and measure the arm scye snugly on the line where sleeve head joins the shoulder.

Take the breast measure fairly close over the vest, with the tape well up over the blades, observing that the client breathes uaturally and does not expand the chest.

Take the waist measure fairly snug over the vest at the natural waist, straight around the body, as on line C .

Take seat measure fairly close over the trousers, as on line D , the pockets being first relieved of contents.

## FOR A BODY COAT.

Proceed as for a sack coat, with the following exceptions and additions:
Having, as previously instructed, located the points $\mathrm{A}, \mathrm{B}$ and C , commence by measuring from $A$ to $B$, then to a point $3^{1 / 2}$ inches below $B$, then to a point $I$ inch above C , then to fashionable length of waist, and length of skirt E

Take the half back width, sleeve length, short blade, front scye depth, and center shoulder, as previously instructed.

Then, with the measuring stick under the left arm, as in Fig. 3, the long arm being in a perpendicular position, make a cross chalk mark $3^{1 / 2}$ inches down from arm scye at back edge of stick, and also at the natural waist, as at 5 . (Diagram Iv.)

Remove the stick, and with tape take a snug measure from 5 to center of back at full length of waist, then from 5 to the point I inch above $C$, for waist suppression.

Then measure from the point $3^{1 / 2}$ inches below 3 on line B , to the point $3^{1 / 2}$ inches below B Also from the same point to B. Take all measures snug.

Remove coat, and measure arm scye, breast, waist and seat, as already instructed.

## CLERICAL COATS, Etc.

For all coats which button to the neck, two additional measures are required, viz.: For size of coat collar, and slope of neck gourge. For the first, place end of tape at A and measure close around over the vest on the gourge line (which the eye can establish on client) to the front center of neck, noting the size. Then, still holding tape at A with the left hand, follow down with the right to about the breast line at center front. Hold there, release end of tape from A and extend it directly up to neck at center front, noting the number of inches where it intersects with the point established for the half length of collar.

## FOR OVERCOATS.

Measure in the same manner as for under coats, and in addition thereto take the breast, waist and seat measures over the under coat.

If to button to neck, take the two measures for size of collar and for slope of neck gourge in same manner as for an under coat, excepting that the measures are to be taken over the under coat.

## FOR VESTS.

Remove coat, and measure from A to the height of opening desired, then full length at center front in a direct line from $A$, then to natural waist at side, and full side length.

Take the breast measure fairly close under the vest.
Take the waist measure fairly close over waistband of trousers, straight around the body. For corpulent forms an additional measure may be taken on a line 3 inches below C to the full length in front.

When a vest only is required, take also the back scye depth, A to B, front scye depth, A to 3, short blade, B to 3, and waist suppression, C to 5 , in same manner as for coat.

## FOR TROUSERS.

First relieve the pockets of their contents, and, the client standing erect, measure from just over the hip bone to knee, and on to within $3 / 4$ inch of the floor for outside seam.

Then place end of tape with left hand close up in crotch, and measure to within $3 / 4$ inch of floor for inside leg seam.

Take waist measure fairly snug over waistband of trousers and just over the hip bone.

Take a fairly close seat measure over the fullest part of seat.
Take size for knee and bottoms as per prevailing style.
For corpulent forms an additional measure may be taken to ascertain the height of rise in front, by placing end of tape at the height desired for waistband seam at the center front, and extending tape first to the side of leg at knee, then to within $3 / 4$ of an inch of the floor at side of foot, noting the length to this last point. Apply this measure to the draft in the reverse manner to which it is taken, i. e., from the bottom of outside seam up to side of knee, and from there sweep across at center front.

When close-fitting legs are in vogue, take an intermediate measure between waist and knee at the fullest part of thigh, noting also the distance below the waist where this measure is taken. and applying it at the same distance down when making the draft. Also take a measure for size of calf, also noting the distance below the waist where it is taken.

## NOTES.

(I.) Take all measures uniformly close.
(2.) Notice if one shoulder is more sloping than the other, and make memoranda of any peculiarities of shape which may exist and not indicated by the measurements.
(3.) When properly taken there should be one inch difference between the coat and vest breast measures. If more or less difference is apparent upon first trial, remeasure both over and under, until this difference is obtained.
(4.) When the waist measures for trousers, vest and coat are properly taken (as on line C), there will be about I inch difference between that for trousers or vest and that for the coat, excepting for corpulent forms, when the size of waist will be about the same for the three garments.
(5.) When measuring for trousers, it is best to consult client as to whether he desires them to be close or easy at seat or waist. If easy, take a memorandum of


## EXPLANATION OF DIAGRAM I

Thf. Single-Breasted Sack Coat.
A clear comprehension of the principles which are illustrated herein will greatly lessen the work which the student, in this system of garment cutting, has undertaken, as they have to do with all of, and are the same in their application to, the drafts which are to follow.

It is drafted from the following measures, viz:
Back Scye Depth (A to B).............................................. $81 / 2$
Natural Waist (A to C).................................................. ${ }^{17}$
Seat Line (A to D)...................................................... $24^{1 / 2} 2$
Full Length (A to E)................................................ 30
Half Back Width (opposite G)............................................. 7
Sleeve........................................................................ 3 .½
Short Blade....................................................... (B to 2 ).... II
Front Scye Depth........................................... (2 to H).... $123 / 6$
Center Shoulder (front of scye up over center of shoulder to B)....... $16 \% /$
Back Waist Suppression.......................................(C to 3).... 8
Arm Scye............................................................. ${ }^{151 / 2}$
Breast. .................................................................... 36
Waist ..................................................................... 32
Seat.................................................................. 37
As the garment is to be of these lengths and widths when finished, the proper allowance for seams and ease must be added.

Begin by drawing a straight line from A to F .
This is the foundation line from which all cross lines are squared.
Make a mark at A, and go down $81 / 2$ inches to B, 17 inches to C, $241 / 2$ to D, and 30 plus $1 / 2$ inch to $F$.

Square across from each of the above points.
Go in at $D$ and $F 1 / 2$ inch, at $C 3 / 4$ inch, and mark the center of back seam from A through B, C and D to E.

Remember that all widths must now be applied from the center of back seam, and not from the foundation line A, F.

From A to I is $1 / 6$ of the breast on the divisions of square.
From I (line A) to O is $5 / \mathrm{s}$ inch.*
From B to I is the half back width 7 , plus $1 / 4$ inch.
From E to 2 is $1 / 3$ of breast on the divisions of square
From C to I is $1 / 2$ inch less than from $E$ to 2 .
From B to 2 is the blade measure II, plus $1 / 2$ inch.
From 2 (line B) to front of scye is I inch.
From 2 " to 3 is $1 / 6$ of breast on the division of square, plus $1 / 2$ inch.

[^0]From B to 4 is $1 / 2$ of breast.
From 4 to 5 (line B) is $21 / 4$ inches.
From 5 to 6 (line B) is $\mathrm{I} / 2$ inches.
Square up on breast line at $I, 2$, and 3 , and down at 2 .
From I (line B) to io is I inch.
From I " to G is $1 / 6$ of breast on the division of square, and $1 / 4$ inch.
From G to 12 is $11 / 2$ inches.
From 2 (line B) to H is the front scye depth, $123 / 8$ inches.
Sweep by 2 as a center, from H to K , and draw line 2 to J .
From J to L is $1 / 4$ of breast on the divisions of square.
Square out from line J 2 at L to M.
Sweep from 5 (line B) to J, finding a center at X, just below B, and from the same center sweep up from 6.

From $C$ to 1 , and 3 to $X$ is the back waist suppression 8, plus $1 / 2$ inch (the same as added to blade).

From C to I , and X to 4 is $\mathrm{I} / 2$ of waist, I 6 .
From 4 to 5 (line C) is $21 / 4$ inches, and from 5 to 6 is $1 / 2$ inches.
Square down from 4 and X (line C) to 3 and X (line D).
From X (line D) to 2 is $2 \mathrm{I} / 2$ inches. (See note 4.)
Form the back arm scye 12 to 10 as per diagram, making the half-back width opposite G $1 / 2$ inch more than the half-back measure, or $71 / 2$ inches.

Form the back shoulder from $O$ to 12 , and complete the side seam of back from io to I on line C .

Draw a straight line from 10 to 2 on line $F$.
Form the front and bottom of scye, beginning $1 / 4$ inch above $S$, mark past $R$, crossing breast line $1 / 2$ inch forward of 2 to bottom of scye, which is $3 / 4$ inch below line $B$, up to $I o$, as per diagram.

To get the height of point $P$, apply the full scye measure, $15 \frac{1}{2}$ inches, begin ning at $R$, measure along under arm scye and up past $G$ to 12 . deducting for five seams, or $1 \frac{1}{4}$ inches. Then place the tape with the size thus far obtained at R, and continue towards $P$, until you have the full size required, and $1 / 4$ inch, from which make a short sweep forward and back by S .
$G$ is the nick of back arm seam, and $R$ is the nick for front of scye. $R$ is $3 / 4$ inch above line B .

Form side seam of forepart from io through 2 on lines $C$ and $D$ to $I$ on line $F$, as in diagram.

Cut out the back, leaving about I inch of paper at the top (A to O), and place it in the position shown in the upper part of diagram, with the point $A$ resting on the sweep line H K, and O resting on the line J 3. Secure the back by a pin at O Now apply the center shoulder measure (from front of scye on line B up over center of shoulder to B, i $6 \%$ inches), as shown by the curved line in diagram. Allow the point $B$ to swing either up or down by the pivot at $O$ until the figures on the tape indicating the center shoulder measure touch at $B$.
(Nothing is added to the front and back scye depths, nor to the center shoulder
measure, for the reason that the sinking of the scye $3 / 4$ inch below line $B$ is an equivalent for the seams, which otherwise would have to be added.)

Having adjusted the back in manner described, so that the required distance has been obtained for the center shoulder measure (the point A still resting on sweep line H K ), place a weight on the back and mark along the edge of paper from $O$ to the intersection of the curved line R B , and on to P , as in diagram.

Make the length of front shoulder seam ( $O$ to $P$ ) $1 / 4$ inch less than from $O$ to 12 of back.

Form neck gourge, A O M, as per diagram, and trim top of back (A to O) to this line

Put a fish under center of scye, extending to pocket mouth, taking out $1 / 2$ inch at line C .

Y is $3 / 4$ inch below the square line extending out from F .
Draw slightly outward curved lines from 4,5 and 6 on line $B$, to 4,5 and 6 on line C.

Outline lapel N to 6 , and front of skirt, as per diagram or the prevailing style.
For Size and Location of Pockets, see Contents.
For Sleeve, see Diagram IX, and explanation.
For Corpulent Forms, see Diagram x, and explanation.
For Collar, see Diagram xvir, and explanation.

## NOTES.

(I.) The space from X to 2 on line C , as in the diagram, is as would be required for medium shapely backs. For close-fitting waists the entire space ( X to 2 ) must be disposed of by enlarging the fish at waist line, and the quantity to be taken out between I and 2 .
(2.) When it is desired that the coat shall be less shapely at back waist, omit the fish entirely, but to compensate for the two seams, which would otherwise be required at bottom of scye, take $1 / 2$ inch off of the forepart at $I$ on line B, extending to nothing at line $C$, as in Diagram XIV.
(3.) For whole backs, apply all width measures from a straight line, extending from A to $F$, and upon completing the draft, cut the paper $1 / 4$ inch forward of this line.
(4.) The space from X to 2 (line D ), viz., $21 / 2$ inches, is for proportionate forms, having a seat measure 5 inches greater than waist. As the relation of these parts vary in different forms, apply the following

## RULE

For each inch of difference between waist and seat measures, more or less than 5 inches, add to, or deduct from, the space from X to 2 (line D ) (as established for proportionate forms), $1 / 4$ of an inch. Example:

Waist 32, Seat 37, difference 5 inches. From X to 2, $21 / 2$ inches.
" 32, " 38 , 6 " From X to 2, 23/4 inches.
" 36, " 39, " 3 " From X to 2, 2 inches.


Diagram II.

## EXPLANATION OF DIAGRAM II.

## Double-Breasted Sack Coat.

The same measures are used as in Diagram i.
Follow the instructions as given in explanation of Diagram I, with the following exceptions and additions:

The space from 5 to 6 on line B depends upon how far apart latterally it is desired that the buttons shall be placed. To determine this, establish a center of front line as VVV, which is $1 / 2$ inch forward from 5 .

For example: It is desired that the buttons shall be $33 / 4$ inches apart, therefore go back from the center line VVV $1 / 2$ of $33 / 4$ inches to button line, and forward $1 / 2$, plus $3 / 4$ of an inch for making up to 6 .

From 4 to 6 on line C, and from 3 to 5 on line D, is the same as from 4 to 6 on line B

As the diagram represents a low roll, the neck gourge is dropped $1 / 2$ inch below the line extending from L at M. For short roll, raise the neck gourge about $1 / 2$ inch above the line.

Form top of lapel $T$ to N , according to style, taking out a $1 / 4 \mathrm{inch} \mathrm{V}$ between M and T . In the diagram from $T$ to N is $31 / 2$ inches.

Y is $3 / 4$ inch below line E
Outline front and bottom of forepart as per diagram.
Space for button holes as per style, and sweep from eye of lower hole, using M as a pivot, to button line for position of lower button, then space for those above on button line the same as the spaces between button holes.


Diagram III.

## EXPLANATION OF DIAGRAM III

The Shawl-Collar Sack Coat.
Proceed in the same manner as in explanation of Diagram i, except that there is no absolute width from 4 to 5 on line C , the coat not being required to button.

After having obtained the $1 / 2$ breast (B to 4), and $1 / 2$ waist (C to 4 ), all other parts being outlined as explained for Diagram I, draw a crease line as from 16 to 18 , fold the paper back on this line and outline lapel to taste or style. Being a low-roll coat, the neck gourge should be sunk from $1 / 2$ inch to an inch below $M$. The collar is also cut quite convex on the sew-on edge. (See Diagram xviri.)

For all short-roll, button-up coats of this class the full allowance of $33 / 4$ inches must be made from 4 to 5 on line B, and the collar must be cut more convex on the leaf edge, and concave on the sew-on edge.


Diagram IV.

## EXPLANATION OF DIAGRAMIV.

The 3-Button Body Coat.

The proportionate measures for a 36-breast body coat (see Tables of Lengths and Widths) are as follows, viz:
I. Back Scye Depth ..... $81 / 2$
2. To point $3^{1 / 2}$ inches below ..... 12
3. To I inch above the Natural Waist ..... 16
4. Full Length of Waist, say ..... $181 / 4$
5. Full Length of Skirt, say ..... 38
6. $1 / 2$ Back Width ..... 7
7. Blade. ..... 11
8. Front Scye Depth ..... $123 / 8$
9. Center Shoulder ..... $16 \%$
1o. Scye ..... 151/2
11. From 2 on Breast line to 5 below on the upper Waist line ..... $7^{1 / 2}$
12. From 5 on upper Waist line to center of back at lower Waist line, ..... 81/4
${ }^{1}$ 3. From the same point (5) to center of back directly opposite (Back Waist Suppression) ..... 8
14. From the point $3^{1 / 2}$ inches below 2 on Breast line to the point $3^{1 / 2}$ inches below B ..... 9
15. From the same point diagonally to $B$ ..... $10^{1 / 2}$
16. Breast (over the Vest) ..... 36
17. Waist (over the Vest) ..... 32
18. Seat ..... 37

> (Read carefully "How to Measure," p: 9.)

And commence by marking the foundation line A to F.
All cross lines are squared from this line, except for pitch of neck gourge, L M.
From A to B is the Back Scye Depth, $81 / 2$ inches.
From A to the upper waist line is I inch less than to the Natural Waist C, or 16 inches.
Mark full length of Waist, $181 / 4$, and length of Skirt F 38 , plus $1 / 2$ inch.
Also make a mark $3^{1 / 2}$ inches below B for the second measure 12 .
Square across at A B upper and lower waists and F.
Go in on the upper waist line $1 / 2$ inch from the foundation line, also the same from F to E , and mark the center of back line A , through B to E , hollowing the same from a straight line extending from $A$ to the lower waist line $1 / 6$ of an inch midway between B and C .

Remember that all width measures must be applied from the center of back seam, not from the foundation line.

From A to I is $1 / 6$ of the breast on the division of square.
From I (line A) to top of back O is $5 / 5$ inch. (For 38 breast, $3 / 4$ inch; 40 breast, $7 / 5$ inch ; etc., etc.)

From B to I is the half-back measure 7 , plus $1 / 4$ inch.
From center of back at lower waist line to I is $1 / \mathrm{s}$ of the breast on the division of square.

From E to E is $1 / 4$ inch more than the width at waist line.
Mark down from I on lower waist line to E at bottom, rounding out $1 / 4$ inch from a straight line, and add one inch on both sides of back skirt for plaits.

From B to 2 is the blade measure, plus $1 / 2$ inch.
From 2 (line B) to front of scye is I inch.
From 2 (line B) to 3 is $1 / 6$ of the breast on the division of square and $1 / 2$ inch.
From B to 4 is $1 / 2$ of the breast measure.
From 4 (line B) to 5 is $21 / 4$ inches.
From 5 (line B) to 6 is $11 / 2$ inches.
Square up at $\mathrm{F}, 2, \mathrm{R}$ and 3 , and down at 2 , and at a point midway between 1 and 2 (line B)

From I (line B) to G is $1 / 6$ of the breast on the division of square and $1 / 4 \mathrm{inch}$.
From G to I 2 is $\mathrm{I} 1 / 2$ inches.
From G to 10 is $11 / 2$ inches.
Form the back scye as per diagram, observing that the width of back opposite G is $1 / 2$ inch greater than the half-back measure.

Form the shoulder O to 12 and side seam of back io to I on lower waist line, as per diagram.

G is the nick for back arm seam, and R is for the nick at front of scye. R is $3 / 4$ inch above line B

From 2 (line B) to H (see Diagram I) is the front scye depth.
Using 2 (line B) as a pivot, sweep from H to K and draw line 2 to J. (See Diagram I.)

L is $1 / 4$ of the breast, on the division of square, below J.
Square out on line J, 2 at L.
Sweep from 5 (line B) to J, finding a center near the X just below B. Also from the same center sweep up from 6.

The sweep from 5 gives the button line for single-breasted coats (except such as button to the neck, for explanation of which see Diagram vi).

Square across from $G$ to $S$ and form the front and bottom of arm scye, beginning $1 / 4$ inch above $S$ mark past R, crossing line B $1 / 2$ inch forward of 2 to the bottom of
scye, which is $3 / 3 / 4$ inch below line $B$, continue to top of side-body, as shown in the diagram.

To get point P and to complete front shoulder and neck gourge proceed as in explanation of Diagram I.

Go in on the upper waist line from 1 to 2,2 inches.
Apply the back waist measure (8) from the center of back to 1 , and from 5 to X , adding $1 / 2$ inch (the same as is added to the blade measure).

The space between 2 and X (over the back-waist measure) is taken out between 3 and 4, one-half on each side of the perpendicular line falling from the bottom of arm scye.

Apply $1 / 2$ of the waist measure from the center of back to 1 , and the remainder from X to 6 .

From 6 to 7 is $21 / 4$ inches, and from 7 to 8 is $11 / 2$ inches.
Mark the side seams of forepart and side-body from bottom of scye through 3 to U , and through 4 to V , as in diagram.

To obtain the line of back seam of side-body apply measures I2, I3, I4 and 15 as follows, adding $1 / 2$ inch to each: Apply No. 12 from I to center of back on lower waist line, and from 5 (upper waist line) to the lower waist line just above T , omitting the space between 3 and 4 , making a mark on the lower waist line where the tape indicates the size required, plus $1 / 2$ inch.

Apply No. I3 from I to center of back on upper waist line, and from 5 to 4 and 3 to 2 , add $1 / 2$ inch and make a mark at 2 .

Apply No. 14 by taking the width of the back at the point $3^{1 / 2}$ inches below B, and placing the tape with the figures indicating this width, at the point $3^{1 / 2}$ inches below 2 on line B, measure then to side seam of forepart (omitting the space taken out between forepart and side-body), then across from the front of side-body, making a mark at back of side-body, as per measure, with $1 / 2$ inch added.

Apply No. 15 (to B) in the same manner, then by these four marks last obtained form the back seam of side body as per diagram. Slight deviation from these marks may be made when necessary to avoid any irregularity of curve which may arise from an imperfect measurement or application of these measures. They are of importance in determining the right quantity and disposition of cloth through the back, and the spring of side-body at T. After a little practice they can be taken and applied with accuracy.

Measure along the side seam of back from I at lower waist to where the line B crosses on to the side-body, then follow down on the back seam of side-body the same distance, plus $1 / 4 \mathrm{inch}$ to T .

V is $1 /$ inch above the lower waist line, and U is $3 / 5$ inch above.
Draw a slightly-upward curved line from $T$ to $U$.
W is 2 inches below the lower waist line.
Form bottom line of forepart, V to W , as per diagram. Take out fish from
waist seam of forepart up, having regard to the hollowness or flatness of client at that part. Usually cut out from nothing at bottom and top of fish to $1 / 8$ inch at the center. Outline front of forepart and mark the breast pocket.

Cut out forepart and side-body and proceed to draft.

## THE SKIRT.

Draw a straight line across paper 2 or 3 inches from the top, and place the forepart over with the lower waist line resting on the line just made. Secure by a weight and mark along the bottom edge of forepart, making a cross-mark at V and at W.

Add the width of side-body from U to T, which gives point 2 .
Square down from 2 towards 3 , which is 9 inches below the lower waist line.
From 3 to 4 is $21 / 2$ inches. (See note.)
Place the side-body with U against V , and T resting on the lower waist line at 2 (as shown in diagram in broken lines), and mark along bottom from V to 2.

Take out $3 / 8$ inch from $W$ to I , and thus complete the top of skirt $\mathrm{I}, \mathrm{V}, 2$.
By a curved stick, 24 inches in length, having a convexity of i inch, mark the back line of skirt from 2 through 4 to 5 , and add 1 inch for plait.

From 2 to 5 is the same as length of back skirt.
Y is the same distance, plus $1 / 2$ inch below the lower waist line.
Outline front of skirt as per the prevailing style, and cut out the remainder of the pattern.

For Sleeve, see Diagram x.
For Corpulent Forms, see Diagram xir
For Collars, see Diagram xviir.

## NOTE.

The space from 3 to 4 of skirt, viz, $21 / 2$ inches, is for proportionate forms having a seat measure 5 inches greater than waist. As the relation of these parts vary in different forms, apply the following

## RULE.

For each inch of difference between waist and seat measures more or less than for a proportionate form (viz., 5 inches), add to, or deduct from, the space from 3 to 4 (of skirt), $1 / 4$ of an inch. Example :

Waist 34, Seat 39, difference is 5 inches. From 3 to 4 will be $21 / 2$ inches.
" 36, " 39, " " 3 " From 3 to 4 will be 2 inches.
" 32," 38, " " 6 " From 3 to 4 will be $23 / 4$ inches.

## LOCATION AND SIZE OF POCKETS.

The length and style of a coat modifies the position of the hip pockets for under coats, but as a rule, subject to these exceptions, they should be placed in conformity with the height of the figure, on a line $1 / 3$ of the distance between C and D , above D , as in Diagram I, and I inch lower for overcoats.

For under coats make the hip pockets $3 / 4$ of the size of hand (see Table of Widths), and the breast pocket $1 / 2$ the size of hand, adding $1 / 2$ inch to each for tacks.

For overcoats use the same proportions, but add I inch.
Make the cash pocket $1 / 3$ size of hand and $1 / 2 \mathrm{inch}$.
Make the vest top pockets $1 / 3$ size of hand and $1 / 2$ inch.
Make the lower vest pockets $1 / 2$ size of hand and $1 / 2$ inch.
Make the front pockets for trousers $2 / 3$ size of hand, and the hip pockets $1 / 2$ inch less.


Diagram V.

# EXPLANATION OF DIAGRAM V. 

Single-Breasted Frock Coat.

The measures used are the same as in the preceding Diagram iv. It is drafted in the same manner, with the following exceptions, viz.:

W is I I/4 inches below the lower waist line.

## THE SKIRT.

After obtaining the line T, U, V, W, reduce the round by taking out $1 / 2$ inch midway between 1 and 2 , as in diagram.

The front length of skirt ( I to 6 ) is the same as from 2 to 5 .
Square down from W and go out $11 / 2$ inches from 6 to 7 .
The top line of skirt may be entirely straightened, or it may be hollowed from I to 2, all depending upon the prevailing style for Frock Coat skirts, whether they are cut plain, or with more or less drapery.

From 3 to 4 is 3 inches. (See note.) In this diagram the spring is increased $1 / 2$ inch more than in Diagram IV, which is necessitated by the taking out of the $1 / 2$ inch on the top line of skirt midway between 1 and 2 .

## NOTE

For each inch of difference between waist and seat measures more or less than 5 inches, add to, or deduct from, the space from 3 to 4 of skirt, $1 / 4$ inch. Example :

| Waist | 32, | Seat | 37 , difference | is | 5 | inches. | From 3 to 4 will be 3 inches. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| " | 33, | " | 39, | " | " | 6 | " | From 3 to 4 will be $3^{1 / 4}$ inches. |
| " | 34, | " | 38, | " | " | 4 | " | From 3 to 4 will be $23 / 4$ inches. |



Diagram VI.

## EXPLANATION OF DIAGRAM VI.

Clerical Single-Breastrd Frock Coat.

Proceed in the same manner as in explanation of Diagram v, with the following exceptions.

For this, and for all coats which are to button to the neck, establish the center of front, which is represented by the line M, 5. 7, and is $23 / 4$ inches forward of 4 on breast line, and 6 on the upper waist line. This will also be the button line, from which go out $3 / 4$ inch for front edge of left side, and $3 / 4$ inch additional to $\mathrm{N}, 6,8$ for button stand.

Drop the front of neck gourge about I inch below the line extending from L at M, but when obtainable, apply the neck measures. (See "How to Measure," Clerical Coats, etc.)


## EXPLANATION OF DIAGRAM VII.

## Double-Breasted Frock Coat.

Follow the instructions as given in explanation of Diagram v, with the following exceptions and changes:

From 4 to 5 on line B is $2 \frac{3}{4}$ inches.
From 5 to 6 on line B is $1 / 4$ of an inch.
From 6 to 7 on line B is $23 / 4$ inches.
From 6 to 7 on upper waist line is $23 / 4$ inches.
From 7 to 8 on upper waist line is $21 / 2$ inches.
The button line is 2 inches back from 5 on line B, and $13 / 4$ inches back from 7 on upper waist line.

The width of lapel and position of button line is governed by the prevailing style. The following rule will apply in all cases, viz:

Place the button line back from the center of front line one-half of the distance it is desired that the buttons shall be apart latterly, and go out the same distance, plus $3 / 4$ inch for width of lapel.

The line M, 5,7 , W, which is $23 / 4$ inches forward of the half breast (4) and half waist (6), is at the center of front.

W is $\mathrm{I} 1 / 4$ inches below the lower waist line.
Form the top line of skirt as in diagram, reducing the round $1 / 2$ inch half way between 1 and 2. Square down front of skirt 1 to 6 .

The front length of skirt, 1 to 6 , is the same as from 2 to 5 .
From 6 to 7 is $11 / 2$ inches.
The waist seam, or top line of skirt is subject to change when more fullness or drapery is required. The top round, as shown in diagram, may be entirely straightened, or it may be hollowed from I to 2 , all depending upon the prevailing style for frockcoat skirts, whether plain or with more or less drapery.


Diagram VIII.

## EXPLANATION OF DIAGRAM VIII.

## Dress Coat.

Use the same measures and follow the instructions given in explanation of Diagram Iv, with the following exceptions, viz:

From 5 to 6 on line B is $1 / 2$ inch.
From 6 to 7 on line B is $23 / 4$ inches.
From 6 to 7 on upper waist line is $11 / 2$ inches.
From 7 to 8 on upper waist line is $21 / 4$ inches.
From N to point of lapel is $21 / 4$ inches.
W is $11 / 2$ inches below the lower waist line.

THE SKIRT.
From W to I is I inch, and from I to 8 is 2 inches.
From 3 to 4 is $21 / 4$ inches. (See note 3.)
From 2 to 7 is $1 / 4$ of the waist and I inch.
From 5 to 6 is $1 / 3$ of the breast on the division of square, and 1 inch.
Sweep from 5 to 6 , using 2 as a center.
Outline as per diagram.

## NOTES.

( I.$)$ For forms quite small at the waist, the width of the forepart may be reduced from $1 / 2$ to $3 / 4$ inch at 5 on breast line and at ME to give good form, as otherwise the lapel would have too heavy an appearance.
(a.) Being a low-roll coat the front of neck gourge at M is dropped about I inch below the line extending from $L$
(3.) For a dress coat, the space from 3 to 4 is established at $21 / 4$ inches for forms having a seat measure 5 inches greater than the waist. In cases where the difference is greater or less than as above, increase or decrease the distance from 3 to $4 \frac{1}{4}$ of an inch for each inch of difference.


Diagram IX.

## EXPLANATION OF DIAGRAM IX.

## The Shawl-Collar Dress Coat.

It is drafted in the same manner as in the preceding diagram, with exception that the width of lapel is reduced at the top, and is increased slightly at 7 on breast line, and from $N$ to $I$ is cut on line with neck gourge. To best determine these widths, fold the pattern on broken line, bringing N and M together, lay collar in position (which has been cut on sew-on edge only), then shape for outer edge of lapel to style or fancy.

The top collar and facing are cut in one piece.


Diagram X.

## EXPLANATION OF DIAGRAM X .

## The Slifeve.

The diagram opposite shows the relation of the sleeve head to the arm scye of coat $\mathrm{P}, \mathrm{R}, \mathrm{I} 2$, and its balance in relation to a perpendicular line as $\mathrm{O}, \mathrm{O}$.

To draft the sleeve proceed as follows:
Fold paper lengthwise, thus forming a crease edge, which is represented by the broken line on diagram marked "first crease line." Open out the paper, keeping the hollow of crease underneath, and place the angle of square on the crease edge at R , the lower end of the long arm back $11 / 2$ inches from the crease line, and mark up and down the foundation line $\mathrm{O}, \mathrm{O}$.

From R to A is $3 / 4$ of an inch.
From A to B is $1 / 6$ of the breast, on the division of square and $1 / 4$ inch. (The same as from B to $G$ of back of coat.)

From A to C is $1 / 3$ of full size of arm scye, minus $1 / 4$ inch.
Square out from foundation line at $A, B$ and $C$, and extend the breast line at $A$ across the paper towards X .

From $B$ to $E$ is $1 / 4$, and on to $D$ is $1 / 2$ of the full size of arm scye. (Make up size.)

Get the separate dimensions of the top and bottom of scye from the draft of the coat. (See Diagram I.) For the top, measure from R to P and G to 12 , allowing for 2 seams (which, for a 36 breast coat, is 8 inches), and for the bottom, measure from R to G, $7^{1 / 2}$ inches, allowing for 4 seams.

From R to D is the top scye measure and $1 / 2$ inch.
Lay the forepart and side-body of coat on the draft of sleeve, the breast line resting on the cross-line at $A$, and $R$ touching the crease line, and form the top round of sleeve-head from D , touching line C directly above E , and crossing line $\mathrm{D}, \mathrm{B}, \mathrm{F} 1 / 4$ inch from the forepart, down to R , as illustrated on diagram.

For the top line of undersleeve apply the measure of bottom scye ( $7 \mathrm{I} / 2$ inches as above obtained) by measuring from R down on a line $1 / 4$ inch above the bottom of side body and up, locating the point $F$ where the size required ( $7 \mathrm{I} / 2$ inches, plus i inch for seams) intersects the line B D. Having thus located point F, mark from $F$ to $R$, as in diagram.

## GORDON'S WORK ON CUTTING.

Apply the sleeve length by placing the tape with the figures denoting the makeup width of the half back (7) resting at $D$, then sweep from $H$ to $J$ at the required length ( $3 \mathrm{I} 1 / 2$ ). Also sweep for length to elbow at G , as per measure.

From J to H is $1 / 2$ the size of bottom of sleeve and $1 / 2$ inch for seams. (See Table of Widths).

From crease line to G is $1 / 2$ the size at elbow, and I inch for seams and the amount to be taken out at the under-arm seam on the 2 d crease line.

Outline, as per diagram, D, G, H and F, G, leaving $1 / 4$ inch shoulder at F.
Fold the paper on original crease line and cut through both thicknesses from D to R, D to H, and H to J.

Open out pattern, mark nick across at R (which is $3 / 4$ inch above A) and cut singly on the lines of under sleeve $F$ to $G$, and $F$ to $R$.

From A to K, and from $J$ to $L$ is 2 inches.
Fold pattern on 2d crease line K L, and cut through both thicknesses from $K$ to $L$, taking out $1 / 2$ inch on the double opposite $G$.

## NOTES.

(1.) For whole sleeves omit the cut on 2 d crease line and add but $1 / 2$ inch to the $1 / 2$ width at elbow for 2 seams.
(2.) For sleeves requiring more shaping at the elbow to meet extra curvature of the arm, increase the quantity to be taken out on the 2d crease line, adding the same to the width at G .
(3.) For over-erect forms, or such as carry the arms with the hands further back than is usual, draft as previously instructed, with the exception that the foundation line is drawn nearer to the ist crease line at the bottom of sleeve. For stooping forms, or such as carry the arms with the hands more to the front than is usual, increase the distance between the 1 st crease line and the foundation line at bottom of sleeve.


## EXPLANATION OF DIAGRAM XI.

## Fat Man's Sack Coat. (One button Cutaway.)

Height, 5 ft . 8. Square shoulders. The formula of measures is as follows:
$85 / 5,17,241 / 2,29,71 / 2,311 / 2,12,131 / 4,181 / 8,171 / 4,10^{1 / 2}, 40,42,45$.
To draft the coat apply the above measures in the same manner as explained for Diagram I, with the following exceptions, viz.:

Instead of the fish under arms, as in Diagram i, there will be a straight cut to pocket opening, nothing being taken out at waist line. This diagram gives the outlines of a one-button cutaway sack, $i . e$, it is to button at top button only.

When laying the pattern on the cloth for cutting, mark down the front of forepart from N to opposite lower button, then neck gourge shoulder and scye to seam under arm. Cut the paper down this line and across the pocket opening. Spread the cut for pocket apart about $1 / 2$ an inch at the back of opening and mark the remainder of the forepart on the cloth, which will be in the position shown in the diagram by the broken lines. Cut cloth on the solid line to pocket opening.

The cloth between the solid and the broken lines at pocket opening must be cut out, while that between the solid and broken lines between front and side may be left for outlet if required.

The object in thus spreading the pattern at the pocket opening is to give good form over the stomach, and it should also be applied to sack overcoats for corpulent forms.

## NOTE.

For coats having pocket-flaps, make the cross-cut at top of flaps, and for those finished by a welt make the cut at bottom of welt.


Diagram XII.

## EXPLANATION OF DIAGRAM XII.

Fat Man's 3 Button Cutaway. (Body Coat.)

This diagram is produced by the following measures:
I. Back Scye Depth..................................................... . 85/,
2. To $3^{1 / 2}$ inches below same............................................. 12 . $1 / 8$
3. To one inch above Natural Waist..................................... 16
4. To Full Length of Waist........................................... 18 1/4
5. Length of Skirt....................................................... $3^{3}$
6. Half Back Width.................................................. $7^{1 / 2}$
7. Blade................................................... .............. 12
8. Front Scye Depth. ................................................ ${ }^{1311 / 8}$
9. Center Shoulder. ..................................................... . $18^{1 / 2}$ ¹/

10 Scye ................................................................. ${ }^{171 / 4}$
II. From 2 on breast line to 5 below.................................... $7^{3 / 3}$
12. From 5 (Upper Waist line) to center of back at lower waist..... 10 $1 / 4$
${ }_{13}$ From 5 (Upper Waist line) to center of back directly opposite (Back
Waist Suppression)................................................. . o
14. From point $3^{1 / 2}$ inches below 2 on breast line to point $3^{1 / 2}$ inches below B .............................................................. 103/4
15. From the same point, diagonally to B............................ 12
16. Breast, over the Vest. ................................................... 40
17. Waist, over the Vest................................................... 42
18. Seat. ................................................................... 45

To draft the coat proceed in the same manner as explained for Diagram iv (applying the above measures), except as follows:

As there is no surplus between X and 2 (the X and 2 being at the same point), there is therefore nothing to be taken out between 3 and 4 at side seam.

Take out small V at waist seam near the front, as in diagram.
There being but 3 inches difference between waist and seat measures, the distance from 3 to 4 of skirt is $1 / 2$ inch less than for a proportionate form, or 2 inches. See note, page 24 .

## NOTE.

You will observe that in Diagram iv the X is on the side-body, and in this diagram X and 2 are at the same point. In all cases where the application of the back waist measure brings the X between I and 2, make X the back edge of side-body instead of 2 .


Diagram XIII.

## EXPLANATION OF DIAGRAM XIII.

## Spring and Fall Over-Sack.

From light-weight goods, for Regular Form, height, 5 feet 8 inches.
The measures are taken in the same manner as for an under-sack, and are as follows:
$81 / 2,17,24^{1 / 2}, 42,7,20^{1 / 2}, 31^{1 / 2}$, II $.12 \frac{1}{4}, 16 \% / 8,151 / 2,8,36,32,37$, in addition to which take the breast, waist and seat measures over the under-coat as $38,34^{1 / 2}, 40$.

All divisions of the square are applied from the outside breast measure 38 .
From A to B is the back scye depth, plus $1 / 2$ inch, to C is the Natural Waist, to D the seat line, and to F is the full length required, plus $1 / 2 \mathrm{inch}$.

Go in at C $1 / 2$ inch and form the center back seam, as per diagram.
Square across at each of the above points.
From A to I is $1 / 6$ of the breast on division of square.
From I to O is $3 / 4 \mathrm{inch}$.
All width measures are applied from the center of back seam, not from the foundation line.

From B to 1 is the Half Back Width, plus $3 / 4$ inch, to 2 is the blade, plus $11 / 4$ inches, to 4 is $1 / 2$ of the breast.

From 2 (line B) to front of scye is 1 inch.
From 2 (line B) to 3 is $1 / 6$ of the breast on division of square, and $1 / 2$ inch.
From 4 (line B) to 5 is $2 \frac{3}{4}$ inches, and from 5 to 6 is 2 inches.
Square up at I, 2, R and 3, and down at 2 .
From I (line B) to Io is I inch. From I to G is $\mathrm{I} / 6$ of the breast on the division of square, and $1 / 4$ inch. From G to 12 is 2 inches.

Form the back shoulder O to 12 , and the back scye 12 to 10 , observing that the width of back at G is $3 / 4$ inch over the measure taken.

Square from G to S. (G is the nick for back-arm seam, and R for the front nick. $R$ is $3 / 4$ inch above line $B$ ).

From 2 (line B) to H (see Diagram 1) is the front scye depth, plus $1 / 2$ inch.
Sweep by 2 from H to K , and draw line J to 2 .
From J to L is $1 / 4$ of the breast on division of square.
Square out from L to M.
Sweep from 5 to J, finding a center at X just below B, also sweep up from 6.
From F to 2 is $1 / 3$ of the breast on division of square, and $\tau$ inch.

Draw straight line from :o to 2 (line F) and place the $11 / 4$ yard stick along this line, with the figures denoting the back scye depth resting on line B. Make a mark at end of stick, as at 14 . From 14 to 16 is $21 / 2$ inches. Draw line 10 to 16 .

From C to 1 is $1 / 2$ inch less than from F to 2.
Form the side seam of back as per diagram.
Apply the back waist measure from C to I and 3 to X , adding $11 / 4$ inches (the same as to the blade measure).

Apply the over-waist measure from C to 1 and $X$ to 4 .
Go back from X to 2 about 2 inches, according to the degree of shaping in to the waist as may be required. (See notes I and 2 to explanation of Diagram 1.)

Square down from 4 and $X$ (line C) to 3 and $X$ (line D).
From X to 2 (line D) is 3 inches. (See note.)
Form the side seam of forepart, from 10 to I , at bottom, which is in line with 16. (See note.)

Draw curved line from 4 (line B) to 4 (line C), and for good form continue on to 4 (line D).

From 4 to 5 (lines C and D) is $23 / 4$ inches, and from 5 to 6 is 2 inches.
The button line is 3 inches back from front edge.
Mark the front and bottom of arm scye as in diagram, beginning $1 / 4$ inch above S, touching at R, crossing the breast line $1 / 2$ inch forward of 2 , to $3 / 4$ inch below line B and up to io.

Now apply the arm scye measure to get the height at $P$, by first getting the make up size of the scye as drafted (allowing for seams) from $R$ past 10 , and $G$ to 12 . Place the tape (with the figures denoting the size thus far obtained) at $R$, and make a mark at P for full size required (as taken over the vest for under-coat), adding $11 / 2$ inches for extra size.

Cut out the back, leaving about I inch at top, and form the top shoulder of forepart and neck gourge in the same manner as explained for Diagram i, except that you add 1 inch to the center shoulder measure.

From O to P is $1 / 4$ inch less than from O to 12 .
Take out a V at M, $1 / 4$ by 2 inches, and a fish under the arm to pocket mouth $1 / 2$ inch wide at waist line.

Y is $3 / 4$ inch below line F .
For Sleeve, see Diagram x and explanation, making the same I inch larger at the hand and elbow than for under coat. (See Table of Widths.)

For Collar, see Diagram xviI.

For Whole Back, apply all width measures from the straight line, A F (omitting the suppression at C), and on completion of draft cut a seam off the center back line, A F.

For Corpulent Forms, see Diagram XI and explanation.
For "Size and Location of Pockets," see Contents.
For heavy-weight goods draft one size larger throughout.

NOTE.
The space from X to 2 (line D ), viz., 3 inches, is for proportionate forms having seat measures 5 inches greater than waist, as taken for an under coat, as waist 32 , seat 37 . (For an overcoat these should be increased to waist $34^{\mathrm{T} / 2}$, and seat 40 , to give proper seat room.) The space from X to 2 (line D) is therefore established as 3 inches for forms having a difference of $51 / 2$ inches between waist and seat measures as taken for an overcoat.

For each inch of difference more or less than as above, increase or decrease the distance from X to 2 (line D) $1 / 4$ of an inch, adding to or taking from the forepart at 16 the same amount.

For Waist 35, and Seat $40^{1 / 2}$ (difference $5^{1 / 2}$ inches), from X to 2 will be 3 inches.
" " 37 , " $4^{1 T / 2}$ " $4^{1 / 2}$ " from X to 2 " $23 / 4$ inches.
" " 40 , " $421 / 2$ " $21 / 2$ " from X to 2 " 2 inches.

The full size of seat measure is not to be applied to the draft otherwise than as above


## EXPLANATION OF DIAGRAM XIV.

The Double-Breasted Over Sack.

From light-weight material, for Regular Form, 5 feet 8 inches.
Draft the back and forepart in the same manner as in explanation of Diagram XIII, except the portion of forepart which is forward of 5 on lines $\mathrm{B}, \mathrm{C}$ and D .

From 5 to 6 is 3 inches, which is obtained as follows: It is desired in this case that the buttons shall be 5 inches apart laterally when the coat is buttoned. The line extending down from M is at the center in front. Therefore go back from this center line $1 / 2$ of 5 inches, and forward $1 / 2$ of 5 , and $3 / 4$ inch to front of coat. (For buttons to be placed 4 inches apart, go back from center line 2 inches and forward $23 / 4$ inches.)

In this diagram the fish under arms is omitted, and to compensate for the two seams thus omitted, reduce the forepart at side seam $1 / 2$ inch at line $B$ to nothing at line C, as in diagram. This will give a less shapely appearance at back waist than as in Diagram xim.

For close or medium-shaped backs, cut for center back on the inner line $\mathrm{A}, \mathrm{B}$, $\mathrm{C}, \mathrm{D}$ and F .

Locate the lower button hole as per style, and sweep from there, using M as a center, to the button line for position of the lower button. Space up for remaining holes and buttons. Outline lapel as per prevailing style.

For Full Back Box Coat go out from F to $\mathrm{Z} \mathrm{I} \mathrm{I/4} \mathrm{inches}$, line extending from $1 / 4$ inch forward of $A$ to $Z$.


## EXPLANATION OF DIAGRAM XVI.

Shawl-Collar D. B. Over Sack.

In this diagram is shown the upper part of a Double-Breasted Overcoat, with the Shawl Collar. The overcoat is fully explained for Diagrams xirl and xiv. In this the line of neck gourge is extended to N , and the collar is cut quite convex on the leaf edge, and concave on the sew-on edge, to give sufficient spring and allow the collar to lay smoothly around the neck. Top collar and facing are cut in one piece.

The Surtout Overcoat.
Draft in same manner as for a Double-Breast Frock Coat. except that you increase the lengths and depths above the breast line, and all of the width measures in the same proportion as for a sack overcoat, when made from light or heavy weight goods. The short measures across the side-body must also be increased the same as blade measure. Make the lapel about $1 / 2$ inch wider throughout, and set the button line back $1 / 2$ inch.


Diagram XVII.

## EXPLANATION OF DIAGRAM XVII

The Paddock Overcoat.

In this diagram is represented the upper part of the single-breasted "Paddock." It is made with whole back, close fitting at the waist, with plaits in the side seams.

It is drafted from the foundation line A F, otherwise in the same manner as in explanation of Diagram xiri, except that the $1 / 2$ width of back from C to I should be about $1 / 4$ of the size of waist taken over the vest on the division of square; $1 / 4$ of an inch wider from $D$ to 1 , and $1 / 2$ inch from $F$ to 1 . The quantity lying between X and 2 on line C is taken out at the fish under arm. All other meas. urements are applied as heretofore instructed.

Upon completion of the draft cut off a seam ( $1 / 4 \mathrm{inch}$ ) from center back line,
An extra piece for an under back skirt is to be cut on the crease edge of goods from the broken line, across between C and D to bottom, with I $1 / 4$ inch plaits. The plait at left side seam of upper back skirt is joined to that of the left forepart. The plait at right side of under back skirt is joined to that of the right forepart.


## EXPLANATION OF DIAGRAM XVIII.

## Colifars.

The two extremes at which collars are cut are represented by Figures 4 and 5, Figure 4 the standing, and Figure 5 the flat.

Figure 4 is for the clerical or military collar, and is cut sufficiently convex on the sew-on edge and concave on the other to allow it to stand off from the neck in an upright position. Figure 5 is as used mostly for a child's collar. It is cut extremely concave on the sew-on edge and convex on the other, so as to allow it to fall with ease around the neck. There is no leaf to the collar in Figure 4 nor any stand to that in Figure 5, and it would be as difficult to make the first fall as to make the latter to stand.

From these extremes this principle is deduced, viz: that the more concave a collar is cut on the sew-on edge and the more convex on the outer edge, the greater will be the spring of the collar and the ease with which it will fall around the neck. On the contrary, the more convex it is cut on the sew-on edge and the more concave on the outer edge, the less will be the spring and the closer will the outer edge hug the neck.

Figures 1,2 and 3 are the intermediate shapes and the ones most generally required. Each are with both the stand and the leaf, and are to stand or fall at will. In these there is a combination of the principles embraced in the two extremes, the stand being that portion lying below the crease edge (which is represented by the broken lines) and the leaf by the portion above.

The degree of concavity or convexity of the sew-on edge, or of the concavity or convexity of the outer edge in stand or fall collars is governed by the height or depth at which the coat is intended to button, and these two extremes are represented by Figures 2 and 3 .

Figure 2 is for low roll coats which do not require any spring. It is convex on the sew-on edge and concave on the outer,

Figure 3 is for coats which button to the neck, and is cut directly the opposite of Figure 2, being concave on the sew-on edge and convex on the outer. The crease line in Figure 3 extends to the front end of collar, while in Figure 2 it leaves the sew-on edge at the center.

It will be seen that a collar cut as in Figure 2 would not allow the coat to button to the neck, by reason of the lack of spring or shortness of the outer edge, except by raising the leaf.

It will also be seen that a collar cut as in Figure 3 would not lay smoothly around the neck on a low roll coat by reason of an excess of spring or length of outer edge.

Between these two extremes comes the shape which is adapted to the greatest number of requirements, and to most coats in general use. It is cut slightly convex on both edges, so that the crease edge may stand sufficiently from the neck for comfort of the wearer, and at the same time give enough of spring or length to the outer edge to allow it to lie smoothly around the neck when the coat is buttoned at the first or top button, as in Diagram I.

This shape must also be used for all coats which are termed soft rolls, i. e., to roll either short or long, for the reason that to button short roll, sufficient length of the outer edge is a necessity. When the coat is thrown back at the front (low roll) the outer edge must necessarily lie loosely around the neck.

Therefore for coats with short and soft rolls, cut collar as in Figure i.
For medium rolls, between Figures 1 and 2.
For long rolls, as in Figure 2.
For coats buttoning to the neck, as in Figure 3 (if for stand and leaf collar).
For coats buttoning to the neck with stand only, as in Figure 4, and with leaf only, as in Figure 5.
Collars for ulsters should be concave on the sew-on edge and convex on the outer, for reason that being usually cut much wider in the leaf than other collars, they require sufficient spring, or length of outer edge, to allow the collar to lie easily over the shoulder, and to button to the neck when desired.

In order that the ends of the collar may meet close in front when turned down, cut the collar about an inch longer than the front notch, and in securing collar to the coat leave the ends loose or open beyond the notch.

For shawl collars the top collar and facing must be cut whole in one piece, and care must be exercised in giving a sufficient amount of spring to the outer edge of the top collar to permit it to cover the under collar properly.

Make the lengths of all collars on the sew-on edge the same as neck gourge A, O, M.
When bound, reduce length and width of leaf each one quarter inch.


## EXPLANATION OF DIAGRAM XIX.

The Inverness.
A simple way of producing this garment is to take an overcoat pattern of the size required and from it make the changes, as shown in diagram, the broken lines representing the overcoat pattern, and the solid lines the inverness. If you have not the pattern for overcoat, first draft one of size required, as in explanation of Diagram xiri or XIV.

Then draw straight line on separate paper, as from A to H , and place the back of overcoat on this line, touching at top and bottom.

From A to H is the length required, plus $1 / 2 \mathrm{inch}$.
Mark lightly around shoulder and side seam, A, O, I 2, Io to G, and remove back
Place the forepart of overcoat pattern with the top of side seam touching the back at 10 , and the bottom about $11 / 2$ inches furward of G .

Mark around edge of forepart and remove the pattern.
From I to L is $\mathrm{I}^{1} / 2$ inches.
Form side seam from O through io to L , as in diagram.
From P to J is $11 / 2$ inches.
From J to D is the same as the back has been reduced at C .
From breast linc to E is the same as from breast line to 12 .
Draw line D to E , keeping $1 / 2$ inch back of the front of scye.
The buttons, fly and pockets (except breast pocket) are the same as for over sack. Make breast pocket as illustrated.

Cut out back and forepart, and proceed to form the cape by placing both in the position as drafted, and mark for side seam of cape from O along the shoulder seam to D , and by a graceful curve through K , which is $1 / 2$ inch below B .

Form the front from O to within $1 / 2$ inch of button line.
Apply the top width of back, A to O above, from shoulder point O , and measure for length of cape to $F$.

Sweep from $F$, using $O$ as a center.
Place separate paper underneath, and by tracer mark through on outline of cape.
The length of cape is taken, as herein applied. from socket bone down in front of the arm to length required, which usually is about an inch above end of sleeve.


Diagram XX.

## EXPLANATION OF DIAGRAM XX.

The Inverness, with Sleeves.
Proceed as in explanation of Diagram xix, with the following exceptions:
E is $1 / 6$ of the breast on the division of square and I inch above the breast line. From E to N is i inch.
That portion of the back which has been taken off above the shoulder at $\mathrm{N}, \mathrm{E}$, is added to the top shoulder of forepart above J.

For the sleeve, measure top scye R to P , and I 2 to G , allowing for two seams, and the bottom scye, separately, from R to G, at the increased width of back, and draft the sleeve as heretofore instructed.

For sleeve, see Diagram x.


Diagram XXI.

## EXPLANATION OF DIAGRAM XXI.

## Three-Quarter Shoulder Cape.

To draft from a coat pattern lay the back and forepart together in position, as shown by the broken lines, and draw straight line from G to C . Then mark neck gourge G to L, and center of front L, J, P. ( J is $23 / 4$ inches forward of the half breast H.)

From G to X is $1 / 6$ of breast on the division of square, and from X to A is i inch.
From G to C is length of cape, plus $1 / 2 \mathrm{inch}$.
Sweep by A from C to P, as per broken line
Add 3 inches N to O , and outline bottom of cape $\mathrm{C}, \mathrm{O}, \mathrm{P}$.
If it is desired to button at front, add I inch for button stand.
To draft without coat pattern, take the following measures, or use the proportionate measures for size required, as per table.

Length, G to C, short blade, front scye depth and breast as for under coat. If to be worn over under coat, all divisions of the breast will be for two sizes larger than the breast as taken, as for a 36 use the divisions of 38 .

Square lines A, B, C.
From A to B is the front scye depth, plus $1 / 2$ inch.
Sweep from A to F by B.
From A to X is I inch, and from X to G is $1 / 6$ breast on the division of square.
From G to F is $1 / 6$ of the breast (on the division) and $\mathrm{I}_{1 / 2}$ inches.
Draw line B to F.
Square both ways from line B, F, at B, towards J and K.
From B to K is the blade measure, plus I $1 / 4$ inches.
From K to H is one-half of 2 inches more than breast measure.
From H to J is $23 / 4$ inches. Sweep from J to A, finding center at X, near K.
From B to R is $81 / 2$ inches.
From R to $S$ is $1 / 4$ the waist (and $I^{1 / 4}$ inches if worn over the overcoat). From S to T is $23 / 4 \mathrm{inches}$.

Draw curved line from A to L. J, T, towards P.
From A to L is $1 / 4$ of breast on the division of square.
Form neck gourge from G, dropping gradually to L.
Add I inch to front line, L, J, T, P, for button stand, if required to button.

## NOTE.

If cape is to be worn over the under coat add but $1 / 2$ inch to blade measure, nothing to the front scye depth, and use the divisions of breast according to measure as taken for under coat. From K to H will be $1 / 2$ breast, and R to $\mathrm{S} 1 / 4$ waist, as taken for under coat.


## DIAGRAM XXII.

Represents a shoulder cape with less drapery than the $3 / 4$ cape in preceding diagram. It is produced by first drafting cape in either manner, as explained for Diagram xxi.

Then draw line from D to O ( O is midway between $\mathrm{C}, \mathrm{P}$ ).
From D to B is $1 / 3$ of breast on the division of square.
Cut through this line from D to O , and using B as a center, allow the back at O to overlap the forepart until the V at shoulder is open about 2 inches, as from D to A . Paste the two parts together in this position, and add a seam to each edge of the V .


Diagram XXIII.

## EXPLANATION OF DIAGRAM XXIII.

Cape For Overcoat, With Full Shoulder Seams.

The method of drafting capes for goods with a decided figure, such as stripes and plaids, so that the figure of goods in cape may conform to that of the overcoat front and back, is illustrated in this diagram.

The overcoat is drafted as heretofore explained for Diagrams xiri and xiv.
To draft the cape, first lay the back and forepart of overcoat together as cut, and draw straight line on foundation line A to F , which forms the center of back of cape, and in cutting is laid even with the crease edge of goods.

From A to B is the length desired, plus $1 / 2$ inch.
C is $1 / 2$ inch beyond I.
Sweep by i inch forward of C, from B to D, and form side seam from C, past 12 to sweep line B, D, as illustrated.

To draft the front, lay back and forepart together as before.
Make a mark from the front shoulder point towards E .
Extend line of front scye from O towards F.
Go forward from $\mathrm{P}_{\mathrm{I}} \mathrm{I} / 2$ inches, and mark from O to E .
From O to F is I inch more than from O to E .
Get the length of back from C to D , and apply the same from O to E , and from F to H , add $1 / 2$ inch for seams at E and F .

Sweep by O from H to K.
Form gourge and front of cape as illustrated:
Place the two side seams together at D and H , and reduce bottom of cape from sweep to fair line, as illustrated.

If it is desired that the cape button in front, the center of front line at 5 (Diagram xiir) will be the button line for cape, to which add I inch for button stand

If additional drapery is desired, increase the width of the forepart from K to H at H , terminating at nothing at F .


## EXPLANATION OF DIAGRAM XXIV.

Hood.
This diagram represents the upper part (from seat line) of a single-breasted flyfront ulster, in broken lines, with the hood in solid lines.

It is drafted as follows:
Place forepart and back of the overcoat together, as represented in the diagram, the shoulder seams touching each other at $\mathrm{O}, \mathrm{H}$.

Draw foundation line (perpendicular from A).
From A to B is the back scye depth.
From B to D is three-fourths of back scye depth.
From C to D is one-half of back scye depth.
Square across at A, B and C.
From A to E is $1 / 3$ of the breast (overcoat) on the division of square.
Square up at E.
Measure neck gourge (without any allowances) A, O, M, and apply the same from A past $O$ until the figures on tape denoting size of neck gourge touch line extending upwards from E, as at F.

Mark line A, O, F, and from F through scye at breast line, until it intersects at line extending from C , as at G (observe that the line $\mathrm{F}, \mathrm{G}$ is slightly curved). Draw straight line D to G.

Add one inch in cutting (as per broken line F to G) for a hem, through which is to be inserted a drawing tape or ribbon.

Lay the pattern with line D, G, on the crease edge of goods to avoid seam.
Sew on a $1 / 2$ inch band to neck of hood, by which the hood is fastened to the coat with holes and buttons, the line A, O, F, of hood resting on the collar seam of coat. Finish with a silk knot or bow at G.

If hood is to be worn with coat buttoned to neck, continue the line, $\mathrm{G}, \mathrm{F}$, as per broken line, to M , and change the line, $\mathrm{A}, \mathrm{O}, \mathrm{F}$, to conform with the neck gourge, A , O, M.

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## EXPLANATION OF DIAGRAM XXV.

The Priest's Cassock.

This diagram represents what is known as the four-seam cassock, now most in use by the clergy. Those of the High Church party require their choirs to be clad likewise.

An examination of the diagram will show that it is produced with slight variations, but upon the same principle as taught in this work, and as fully explained for Diagrams VI and XiII, being a sort of combination of the two. The measure is taken as for a* clerical frock coat, the length extending to heel, and it is made to button to neck with standing collar, close fitting at the back waist, and with large, full center back and side blind plaits, as illustrated.

To any one familiar with the system herein taught, the diagram will furnish all of the information necessary to produce the garment, with a few additional suggestions, viz.:

Go in at natural waist from foundation line $11 / 2$ inches.
From E to H is $1 / 3$ breast on the division, and 2 inches.
Draw line io to H .
From io to 14 is always 45 inches less the back scye depth.
Square across from 14 to 16
From 14 to 18 is always 9 inches, and on to 16 is 14 inches.
Make the $1 / 2$ back width at $\mathrm{C},{ }_{16}^{3}$ of waist without allowance for seams
Form center back seam, A, B, C, D, through 16 to F , and add 5 inches for plait to back skirt.

Form the side seams of back and forepart as shown, and add 4 inches to each for plait.

From 3 (seat line) to J is 24 inches, and from J to K is 5 inches.
The buttons are 2 inches apart, and holes to every other button below the waist. Small standing collar.

There are usually no pockets in a cassock, but two openings are left in the side seams, and through these the hand may get to the side pockets. Some are made with a combination of opening and side pockets in the plaits, and others with an opening for pockets straight down on the forepart, as illustrated.

The cassock is usually lined to about I inch below the waist, the skirts being left free.

For a three-seam cassock omit the fish under arms, take off $1 / 2$ inch from forepart at blade and carry the side seam of forepart to X at the natural waist.


Diagram XXVI.

## EXPLANATION OF DIAGRAM XXVI.

Vests are drafted upon the same principle as coats. In this diagram the vest is laid upon the outlines of a sack coat. (For draft, separate from the coat pattern. See page 72.)

The coat pattern being drafted, the work of drafting the vest may be shortened by laying forepart and back together (and side-body of a body-coat) as in the diagram, first having drawn a straight line across the paper as line B, upon which place the coat draft.

Make a mark at C , and mark around the edge of coat from A to $\mathrm{C}, \mathrm{A}$ to $\mathrm{O}, \mathrm{O}$ to I2, $10, \mathrm{P}$ and O .

Make a cross-mark at O (front shoulder point).
Turn up the paper and mark underneath along the button line (if a singlebreasted coat of the type of Diagram I or IV) as from 5 to 9 .

For all other styles of coat (to obtain the front line of a single-breasted vest) go forward $2 \frac{1}{4}$ inches from 8 to 9 and from 4 to 5 , except for corpulent forms, when the size at breast line will be increased from 4 to 5 , as shown by the button line of Diagram xir, which strikes the sweep line (extending up from 5) just below M.

Remove the coat, mark down from 5 to 9 the same distance as from B to C, and mark across from C to 9

Go up from O to J, the same us A to O. of back.
Place end of tape at J , and by pivot O sweep to K (for height of opening, plus 2 inches), to V (hip length, plus I inch), and to T (front length, plus I inch).

Go back from 9 to 11 one-fourth of the waist, plus I inch.
From B to D is $1 / 4$ of the breast, plus i inch.
Outline side seam of forepart from D to iI and V.
Draw line from V to T , and finish at bottom in front, as in diagram.
From O to 16 is I inch, except for vests with stand and leaf collars.
Outline from J past 16 to 5 .
Draw an upward curved line from $O$ to $P$.
From O of back to E is $1 / 4$ of the breast.
From O of front to F is $1 / 4$ inch less than from O to E .
Mark arm hole from F, going forward of arm scye of coat $1 / 2$ inch, and $1 / 2$ inch below, up to E.

From C to 6 is $1 / 4$ of the waist, plus $I^{1 / 2}$ inches.
From D past 6 to W is the same as from D past II to V, plus $1 / 4$ inch.
Outline side seam of back from D to 6 and W.
Round out the center back seam $1 / 4$ inch at B, mark pockets, and space for buttons.

The collar is flat, i. $e$, without stand. It is cut the same shape as the vest on the sew-on edge. Being without stand and crease, the front shoulder is advanced I inch from $O$ to 16 . For collar with stand, crease and leaf, the front shoulder point will remain at $O$.

To draft the vest independent of the coat pattern, mark foundation line $\mathrm{A}, \mathrm{N}$.
Apply back scye depth A to B, and length to natural waist A to C.
Square across at A and C .
Go in at C $1 / 2$ inch, and mark the center back seam as per broken line in diagram, from which all width measures must be applied.

From A to $I$ is $1 / 6$ of the breast of the division of square.
From I (line A) to O is $5 / \mathrm{s}$ inch.
From B to 1 is $1 / 3$ of the breast on the division of square, and $13 / 4$ inches.
From B to D is $1 / 4$ of the breast, and I inch.
From B to 2 is the blade measure, plus $1 / 2$ inch.
From 2 to 3 is $1 / 6$ of the breast on the division of square, plus $1 / 2$ inch.
From B to 4 is $1 / 2$ of the breast.
From 4 to 5 is $2 \frac{1}{4}$ inches.*
Square up from line B at 1,2 and 3 , and down at 2 .
From I on line B to 12 is $1 / 6$ of the breast on the division of square, and I $3 / 4$ inches.

Draw line from $O$ to 12 .
From $O$ to $E$ is $1 / 4$ of the breast on the division of square.
From 2 to front of scye is $1 \frac{1}{2}$ inches.
From D to bottom of scye is I inch.
Apply the front scye depth from 2 to H .
Sweep from H to J, using 2 as a center.
From 7 (line C) to X is $1 / 4$ of the waist, and $1 / 2$ inch.
From $X$ to 8 is $1 / 2$ of the waist.
From 8 to 9 is $21 / 4$ inches.
From 9 to II is $1 / 4$ the waist, plus I inch.
From C to 6 is $1 / 4$ of the waist, plus $\mathrm{I} 1 / 2$ inches.
Apply the width of back (A to $O$ ) from the sweep line, $H, J$, to get point $O$ on line extending up from breast line at 3 , and draw a straight line from $O$ to $3^{1 / 2}$ inches below A .

Apply width of back shoulder $O$ to $E$, along this last line, and mark the front shoulder O to F , dropping at F I inch.

[^1]```
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Outline arm hole F to E .
Place end of tape at $J$, and using $O$ as a center, sweep to $K$ for the height of opening, adding 2 inches; to T for front length, adding I inch, and to V , adding i inch.

Outline side seam of forepart from D to is, and sweep line V, as in diagram and the side seam of back from $D$ to 6 and $W$.

From D to $W$ is $1 / 4$ inch more than from $D$ to V.
From B to 13 is $1 \frac{1}{4}$ inches less than from $D$ to W.
Round out center back seam from A to C $1 / 4$ inch at $B$, and spring out $1 / 4$ inch from $C$ to 13 .

Go out from $\mathrm{O}_{\mathrm{I}}$ inch to 16 , and outline front and remainder of vest, as in diagram.

C'ut out the pattern, leaving that portion from $O$ to $J$ for the present attached to the forepart.

For a flat collar, place the forepart on a separate piece of paper and mark along the edge from J to 16 and 5 , then remove the forepart, shape the free edge of collar as in diagram, or to style, and cut off the projection on forepart above O, i6.

The collar is represented as a flat collar, i. $e$, without stand. For this reason the front shoulder is advanced from O to 16 , I inch.

For a vest with a crease collar (stand and leaf) the front shoulder point will remain at O .

For no-collar vests leave the projection O, 16 to J , attached to forepart, and mark for front line from 16 to 5 , as per broken line in diagram.


Diagram XXVII.


Diagram XXVIII.

## EXPLANATION OF DIAGRAM XXVII.

This diagram illustrates the manner of cutting vests for corpulent forms. It is drafted in same mannner as Diagram xxvi. A V is taken out at bottom of lower pocket welt, and the same amount and two seams are added below V, as in diagram.

It also represents a rolling collar with stand and leaf.

## EXPLANATION OF DIAGRAM XXVIII.

## The Cassock Vest.

This diagram illustrates one of several styles worn by the clergy. It is closed at the front and opens at right side and shoulder. It is drafted same as Diagram xxvir, except that to locate point $M$ apply the measures as taken on client (over vest) for length of collar and slope of neck gourge. When cutting under conditions where these two measures are not obtainable, refer to Diagram I, and apply the sweep line from 5, line B , to J , and the line L to M, dropping the front of gourge about I inch below the intersection of the two lines.

Cut out the forepart in the usual manner, place it on separate piece of paper and mark along the edge of pattern from O to $1_{3}, \mathrm{O}$ to F , to bottom of scye, along side seam to V, along bottom to 12 . Remove the forepart and mark from 12 to 13 , as in diagram. This piece is cut from the same material as the vest, for the right side only, and is attached to the back of the vest, and upon which the buttons are placed. The opening at right shoulder seam will extend across the collar, but that part of the collar which is attached to the forepart should be made about $1 / 2$ inch longer than that which is attached to the back, the one to overlap the other at shoulder seam. Small stand collar, opening at shoulder seam only. The right forepart is cut off from A to B. It would add somewhat to convenience in buttoning at shoulder to cut off I inch from top of shoulder on the button side of forepart, and placing the buttons the same amount down.


## EXPLANATION OF DIAGRAM XXIX.

The Double-Breasted Vest.

Proceed in the same manner as in explanation of Diagram xxvir, except that the line from 5 to 9 is $13 / 4$ inches forward of the $1 / 2$ breast and waist 4 and 8 , and is at the center of front.

From 9 to 11 is $1 / 4$ of the waist, and $1 / 4$ inch.
To get front line, $10,14,16$, first determine how far apart laterally the buttons are to be placed. In the diagram they are $21 / 2$ inches at the lower button, and 3 at the top. Therefore go back $1 / 2$ of each for button line, and forward the same amount, plus $3 / 4$ inch.

Shape lapel as in diagram, or the prevailing style.
The collar, in this instance, is with stand and leaf, therefore the front shoulder point is at O .

It may be a flat collar, if desired, in which case advance shoulder point $I$ inch forward of O , as in diagram xxvir. For stitched edges and pointing lapels, the style as illustrated is preferable, as it admits of a closer finish at the joining of collar and lapel.


Diagram XXX.


Diagram XXXI.

## EXPLANATION OF DIAGRAMS XXX AND XXXI

These represent two styles of clerical vests with standing collars, the first buttoning to neck, and the other at any desired height of opening. They are drafted as already explained for Diagram xxvir.

For vests of this class apply the neck and slope of neck gourge measures. (See explanation of Diagram xxviir.)

## BOUND EDGES.

All of the allowances in this work for button stands (as from 5 to 6 , lines B and C, Diagrams I, IV, etc., throughout), are for stitched edges. When bound, reduce the same $1 / 4$ inch. The same also applies to vests.


Diagram XXXII.

## GORDON'S WORK ON CUTTING.

## EXPLANATION OF DIAGRAM XXXII.

## A Vest System by Divisions and the Application of the Front and Back Scye Depths.

This is a simple method for drafting any style of vest, and has been used by the author of this work with very satisfactory results when producing proportionate blocks, and for custom work as well. I would as soon use the one as the other, except that in this you will have the average slope of top shoulder, which must at times be changed to a more sloping shoulder in custom cutting. If cutting a coat and vest, I would draft the vest from the coat pattern. For a vest only, this system is perhaps more simple and requires less time to produce than by the former.

## TO DRAFT THE FRONT.

Draw perpendicular line A to F (at edge of paper nearest you, as the back is drafted separately. They are placed together in the diagram to show their relationship).

From A to B is $\mathrm{I}-24$ of breast on division of square.
From A to C is $\frac{1}{3}$ breast on division.
From A to D is the front scye depth less $\frac{1}{2}$ inch.
From B to G is $\frac{1}{6}$ breast on division.
Square out at B, G and D.
From D to E is 2 inches.
From D to H is 2 inches. From H to I is $\frac{1}{3}$ of breast on division, and from I to J is 3 inches.
From D to K is $\frac{1}{6}$ breast on division and I inch.
Square up at I and down at J.
From L to M is $\frac{1}{8}$ breast on division less $\frac{1}{2}$ inch.
N is I inch forward of M for no-collar vest, and for vests with flat collars without stand. When cutting for collar with stand and leaf the front line will run from from M to P , instead of, as in Diagram, from N to P .

Draw upward curved line from M to C .
From M to U is $\frac{1}{4}$ breast on division.
Place end of tape at $O$, and using M as a center, sweep to height of opening, adding 2 inches, then to side length S, adding I inch, and to T, adding I inch.

For proportionate forms (having a difference of 4 inches between breast and waist), draw a slightly outward curved line from J, touching the line falling from J at V . For each I inch of difference between breast and waist less than 4 inches, increase the width of forepart opposite $W \frac{1}{4}$ of an inch.

From W to R is $\frac{1}{4}$ waist and I inch.
Outline front, bottom and side, and armhole U to E. (Observe that the side seam falls from D, not from E.)

Cut paper from D to $\mathrm{R}, \mathrm{S}, \mathrm{T}$ and from U to K and E , and proceed

## TO DRAFT THE BACK

Square lines $\mathrm{I}, \mathrm{I} 2$ and Ir .
Apply length of side seam of forepart from $I_{2}$ to $I_{3}$.
From 13 to 7 is 2 inches. From 7 to 1 is the back scye depth less $\frac{1}{2}$ inch. From 1 to 4 is $\frac{1}{6}$ breast on division.

Square out at 1,4 and 7 .
From 1 to 2 is $\frac{1}{6}$ breast on division.
From 4 to 5 is $\frac{1}{3}$ breast on division and $I$ inch.
From 7 to D is $\frac{1}{4}$ breast and I inch.
From 2 to 3 is 8 inch. Draw line 3 to 5 .
From center back line I to 10 going out $\frac{1}{4}$ inch at 7 and in $\frac{1}{2}$ inch at 8 . From 8 to 9 is $\frac{1}{4}$ waist plus $\mathrm{I}_{\frac{1}{2}}$ inches.

From 12 to 10 is $\mathrm{I}_{\frac{1}{4}}$ inches.
From 3 to 6 is $\frac{1}{4}$ breast on division and $\frac{1}{4}$ inch.
Outline as per diagram, and cut out back.
For double-breasted vest establish a center of front line which will be $\frac{1}{2}$ inch inside of J, P, W, V, from which go back half the space you desire the buttons to be placed apart, and forward the same amount plus $\frac{3}{4}$ inch.


## EXPLANATION OF DIAGRAM XXXIII.

The following measures are used in this diagram:

| Outside Seam, | 42. | Waist, | 3I. | Knee, 19. |
| :--- | :--- | :--- | :--- | :--- |
| Inside Seam, | 32. | Seat, | 37. | Bottom, 18. | To Draft the Forfpart "A."

Draw straight line as from A to D.
From A to D is the outside seam.
From D to B is the inseam.
C is $21 / 2$ inches less than half the distance from B to D.
Square out at A, B, C and D.
From B to 7 is $2 / 3$ of the seat on the division of square, less $1 / 4 \mathrm{inch}$.
From B to 4 is $1 / 2$ the seat on the division of square.
From 4 to 5 is $\frac{1}{82}$ of the seat on the division of square.
From 4 to 6 is $1 / 6$ of the seat on the division of square, less $1 / 4 \mathrm{inch}$.
E is $1 / 2$ the distance from B to 6 .
From D to F is the same as B to E .
Draw center line $\mathrm{F}, \mathrm{E}$, to 2.
Square up from 4 to 3 , and draw line 3 to 5 .
X is $1 / 5$ of the seat on the division of square above 5 .
From 3 to I is $1 / 4$ of the waist.
Draw line I to 3 , and for forms of this proportion drop $1 / 2$ inch at 3 , below square line.

Form curved lines 3 to 7 , and 3 to 6 .
From 8 to 10 is $1 / 2$ of the knee measure, divided equally on each side from 9 .
From II to 12 is $1 / 2$ of the size of bottom, less 3 inches, divided equally on each side from F .

Outline outside seam I, B, 8 to 11 , and inseam from 6 and 7 to 10 and 12 .
Hollow up at F $1 / 2$ inch, mark for pockets, and cut out the forepart, making nicks at $\mathrm{B}, 8$ and io.

To Draft the Back "B."
Place the forepart on paper or goods and extend the lines out at bottom and knee, and the center line down at F and up towards J.

Sweep by B from $1 / 2$ inch below I towards G.
Sweep from 4 past 7 towards L . finding a pivot near inseam at line of knee.
From 4 to L is $1 / 3$ of the seat on the division of sqaure. L is also $1 / 2$ inch below sweep line out from 4 .

From E to J is $2 / 3$ the seat on division of square.
From J to K is $\frac{1}{12}$ the seat on division of square.
Draw straight line K to X , and form back seam by hollowing slightly from K to 13 , rounding out to L , as in diagram.

Apply the measure for bottom, il to 12 , and 16 to 17 , adding I inch for 4 seams.
Apply the knee measure, 8 to Io, and 14 to 15 , adding I inch for seams.
Apply $1 / 2$ the seat measure across forepart from X , and $\mathrm{I}_{3}$ to H , adding 2 inches. ( $1 / 2$ of $37=181 / 2+2=20^{1 / 2}$.)

Apply $1 / 2$ waist measure 3 to I , and K to G, adding 2 inches for seams, and a $1 / 2$ inch $V$ out of the back. ( $1 / 2$ of $31=151 / 2+2=17^{1 / 2}$.)

Outline back as per diagram, cut out the pattern, making notches at 14,15 , and $1 / 2$ inch below B.


Diagram ${ }_{\jmath}^{\prime}$ XXXIV.

## EXPLANATION OF DIAGRAM XXXIV.

In this diagram three features are introduced which are not apparent in the preceding diagram, viz::
A. Location of center of waist in front for corpulent forms.
B. Spring bottoms.
C. Crooked backs.

## Corpulent Forms.

A. The center of waist in front must never be located back of the line extending from 4 to 3 , but for corpulent forms it must be advanced according to the degree of corpulency.

To locate this point go forward from $2,1 / s$ of the waist on the division of square, less $3 / 8$ inch in all cases, except when on small waists, this division would bring the point back of 3, when it will be at 3. Having located this point in this manner, go back $1 / 4$ of the waist to I .

Spring Bottoms.
B. Spring bottoms are usually applied to trousers which are cut small through the thigh and leg, as in the diagram, which is drafted from the following measures:

| Waist seam to thigh, 13. | Waist, | 38. | Knee, | 17. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Outside seam, | - | 42. | Seat, | 40. | Bottom, | 20. |
| Inside seam, | - | 32. | Thigh, | 23. |  |  |

The width of bottom of forepart is lessened, and that of the back is increased, as is hereafter shown.

## Crooked Backs.

C. In Diagram xxxiir the center of the back at waist is carried back from J to K , while in this diagram it is kept at J . The former represents what we will term straight backs, and the center of back seam must thus be located for forms having a flat seat. The latter represents the crooked back, and is applicable to such forms as have a full or prominent seat, also for riding breeches.

The fronts are in broken lines and the backs in solid lines,

## To Draft the Fronts.

Draw a straight line as from A to E.
From A to C is the depth for thigh measure, and on to E is the outside seam.
From E to B is the inside seam.
D is $21 / 2$ inches less than $1 / 2$ the distance from B to E .
Square out at A, B, C, D and E.
From B to 4 is $1 / 2$ the seat measure on the division, and to 7 is $2 / 3$ of the seat on the division, less $1 / 4 \mathrm{inch}$.

From 4 to 5 is $\frac{1}{3,2}$ of the seat on the division, and from 4 to 6 is $1 / 8$ of seat on the division, less $1 / 4$ inch.

G is $1 / 2$ the distance from B to 6 .
From E to F is the same as from B to G .
Draw center line from F , through G to 2 .
Square up from 4 to 3 , and draw line 3 to 5 .
X is $\mathrm{I} / 8$ of the seat on the division above 5 .
Go forward from 2 to center of front, which is $1 / 8$ of the waist on the division, less $3 / 8$ inch. (Except when on small waists, this division would bring the center of front back of 3 , when it must remain at 3.)

Having thus located this point, go back $1 / 4$ of the waist to I.
Draw line from I to front, raising as much above 3 as the center front is thrown forward of 3. (See page in for corpulent forms.)

Form the curved lines from center front to X and 7 , and center front to 6 .
From 8 to 10 is $1 / 2$ the size at knee, divided equally on each side from 9 .
Deduct about 5 inches from the size of bottoms, and divide $1 / 2$ of the remainder equally on each side from F .

Outline outside seam $\mathrm{I}, \mathrm{B}, 8,1 \mathrm{I}$, and inseam 6 and 7 to 10 and 12 .
Round out at bottom I inch below F, mark for pockets, and cut out the forepart, making notches at $\mathrm{B}, 8$ and io.

## To Draft the Backs

Place the fronts on paper or goods and extend lines out at thigh, knee and bottom, and the center line down at F and up towards J.

Sweep by B from $1 / 2$ inch below I towards H.
Sweep from 4 past 7 towards L, finding a center near inseam at line of knee.

From 4 to $L$ is $1 / s$ of the seat on the division. $L$ is also $1 / 2$ inch below sweep line out from 4.

From G to J is $2 / 3$ of the seat on the division.
Draw straight line from J to X , and form the back seam by hollowing slightly from $J$ to $I_{3}$, rounding out to $L$, as in diagram.

Apply the measure for bottom, in to 12 and 16 to 17 . adding I inch for seams.
Apply the knee measure, 8 to 10 and 14 to 15 , adding i inch.
Apply thigh measure, 18 to 19 and 20 to 2 I, adding i inch. (See page II, closefitting legs.)

Apply $1 / 2$ of seat measure across the front from X , and from 13 to K adding 2 inches. $\quad(1 / 2$ of $40=20+2=22$.)

Apply $1 / 2$ the waist measure from center front to I , and J to H , adding I inch for seams.
(If a V is required at waist, add for the amount taken out by the V , and for two additional seams.)

Outline as per diagram, cut out the backs, making notches at 14 and 15 , and $1 / 2$ inch below B .


## EXPLANATION OF DIAGRAM XXXV.

This diagram illustrates the broad falls, and is drafted in the same manner as heretofore described, except that the width of the waistband is added to the backs, as in Figure B, and an extra piece is required for the fronts, which constitutes the bearers, and includes the remaining part of the waistband, as in Figure A. To produce the bearers, lay the pattern of the forepart on the paper or goods, and marking around as represented by the solid lines, add enough to make up for waistband and for buttoning at the front ( $\mathrm{I} / 2 \mathrm{inch}$ ).

The opening at sides is usually from 7 to 8 inches, and in front 4 to 5 inches.
Pockets are usually inserted in the fall bearer, as shown in the diagram, but may be placed at the side seams, if so desired.

## Trousers for Bow Legs.

Draw center line from E (Diagram xxxiil) to a point $11 / 2$ to 2 inches forward of F towards 12. In all cases square across from the center line 2, E, 9, F, but divide the width of foreparts and backs, using the second center line as the base.

## General Remarks on Trousers.

From B to 14 of backs (Diagrams xxxiri and xxxiv) is $1 / 2$ inch less than from $B$ to 8 of fronts. So also is from 15 to $L \frac{1}{2}$ inch less than from 10 to $7 . B$ and $L$ of backs must be stretched up before seaming to equal B to $8, \&$ to to 7 of fronts: This stretching of the back seams, and a good shrinking at back of thigh, will tend to obviate superfluous goods at that point.

For trousers with fly fronts, the fly should be cut as shown in Figure C, Diagram xxxv, hollowed about $3 / 6$ inch from I to 4 more than the fronts. From 7 to 1 is I inch. It should be cut about 2 inches in width opposite 4 , and about $3^{1 / 2}$ inches 3 to 5. On left side the inside strap is cut off, as per broken line at 6 .

The waistband should be cut 2 inches wide at front, and $I^{1} / 2$ inches at back. Slightly convex on the sew-on edge towards front, and concave towards the back. (See Diagram xxxiri.) From 2 to 5 is half the size of waist. Add 1 inch 5 to 6 , and 2 inches 2 to I .

Cut pocket facings and bearers at least $11 / 2$ inches longer than the opening desired.

The back straps are cut to make up about $51 / 2$ inches in length, $3 / 4$ inch wide at buckle end, and $13 / 4$ inches at the other, as in Figure B, Diagram xxxy. If trousers are to be made larger at seat to suit customer, do not change manner of taking measure, but make memorandum "cut I inch large," more or less, as required.


## EXPLANATION OF DIAGRAM XXXVI.

## Knee Pants.

In this diagram we have a combination of "knee" and "riding" pants. The "knee" pants extend from A to E, and are drafted from the following measures, viz.: waist to thigh $13 \frac{1}{2}$ inches, to knee 24 . outside seam $26 \frac{1}{2}$, full length as for trousers 42 . Inseam as for trousers $3^{2}$, waist 3 I , seat 37 , thigh 22 , knee ${ }^{15}$, bottom 14.

To draft the fronts (Figure A), proceed as in explanation of Diagram xxxiri, except than the bottom is rounded about $\frac{1}{2}$ inch and made half the full size, divided equally on each side from F . There are usually three holes and buttons at the knee, the side seam being left open and a facing cut on from bottom to $x$ inch above the third button.

The backs are drafted as already explained for Diagram xxxirf, except that they are crooked, i.c., the center of back waist is at J as in Figure B. The bottoms are hollowed $\frac{1}{2}$ inch, and a facing cut on side seam same as to fronts.

Waistbands are usually cut on, but may be cut separate if so desired. Cut turn up at the bottoms.

## Riding Breeches.

These are but a continuation of the knee pants made to trace the shape of the leg and to button close at ankle. They are drafted from the following measures, viz: From waistband to thigh $13 \frac{1}{2}$, to knee 24 , to calf 30 , to ankle $38 \frac{1}{2}$, full measure as for trousers $4^{2}$, inseam as for trousers 32 , waist 31 , seat 37, thigh 22 , knee ${ }_{15}$, calf ${ }_{13}$, bottom 9 . The full length of outside and inside leg seams are taken as above as the best manner of getting the rise from A to B. When this is determined they have no further application.

For Riding Breeches the side seam is usually left open from calf line down, and a facing is cut on front and back side seam the length of the opening. The opening is closed with holes and buttons, the buttons being continued up above the knee as illustrated.

A band to finish, about an inch in width, is sewed across the bottom, finished with hole and button at side seam. This button should be the first of the series of buttons above, all being placed at equal distances apart.

## The Leggings

As shown in Figure C are sometimes worn with Riding Breeches. They have but one seam at the back, opening at the outside and closing with holes and buttons.

To draft, proceed as follows:
Fold paper, the crease edge of which will correspond with the line from I to 4 .
From I to 4 is the length.
Square across from 1 and 4 .
The width of the breeches being 15 at the knee, the leggings should be $\frac{1}{2}$ inch larger at that point, therefore from 1 to 2 is $5 \frac{1}{2}$ inches, or whatever size may be required as per measure taken; in this instance it is $\frac{1}{2}$ of $15 \frac{1}{2}$ inches and allowance for two seams.

From 4 to 3 is same as from 1 to 2 .
Form back seam 2 to 3 , shaping in below calf as in diagram.
From I to A is the same as the size of knee of forepart from 9 to 8 . From 4 to $B$ is same as I to A .

Hollow forepart $\frac{1}{2}$ inch above 4 .
Cut out pattern on the double; open out and cut singly on line A, B; add $\mathrm{I} \frac{1}{2}$ inches to the back for button stand, and round the bottom corners at side opening as illustrated.

For attaching the legging to the breeches, put a button at 6 and a button on back of breeches opposite, or a small leather strap may be attached inside the legging at *, with a button hole at the end, so placed that the hole will be opposite one of the buttons on the breeches.

A heel strap is attached to the legging at $B$, joining on the outside with a buckle.


Diagram XXXVII.

## EXPLANATION OF DIAGRAM XXXVII

## Knee Breeches.

These are drafted from the following measures, viz:
From A to $\mathrm{C} 23^{1 / 2}$ inches, to $\mathrm{D} 27^{1 / 2}$, outside length as for trousers $41^{1 / 2}$, inside length as for trousers 32 , waist 31 , seat 37 , knee 22 , bottom $121 / 2$.

They are drafted in the same manner as explained for knee pants, except that the bottom of foreparts, from 2 to 4 , is made half the size of bottom, plus 1 inch, to allow for a $1 / 2$ inch V (and seams) to be taken out at the bottom, as illustrated.

The bottoms are finished with a band, to make up about I inch in width, to close at the outside with hole and button.

## EXPLANATION OF TABLES.

The following tables of lengths and widths, pp. 95, 97, 98, 99, will be found to be of great value to the student, and the more advanced cutter as well.

They are the result of many years' study of the proportions of the human form, and of practical experience in their application.

They may be relied upon as being such as, when correctly applied, will enable him to produce perfectly-proportioned garments for all ages and sizes. They are also the basis from which are established the changes required to be made for all forms other than proportionate.

They may be used by those who are engaged in any branch of cutting, or in the production of clothing or patterns for children, youths or men. In this work, however, reference will only be made to their use by students and cutters in the earlier stage of their experience. A thorough comprehension of the principles involved will the better qualify the advanced cutter for the duties connected with pattern cutting for the wholesale trade.

The student desires to know what are the proportionate measures for a sack coat, we will say, of 40 breast measure.

He will refer first to the "Table of Lengths," and follow along the top line of figures until he comes to the column headed 40 .

Directly under 40 is 6 feet, which denotes that a proportionate form of 40 breast should be 6 feet in height. In which case the next figure underneath will denote the back scye depth 9 , the next to the natural waist 18 , the next to the seat line 26. He will establish the length as much below the bottom of seat (which is given in the next row as 29) as the prevailing style may require, say to $301 / 2$ inches.

Following down the column he will find that the front scye depth is $13^{1 / 2}$, the center shoulder I8 $1 / 4$, sleeve $33^{1 / 2}$.

Referring to the "Table of Widths," to the column under 40 breast, he will find that the arm scye is $171 / 4$, the $1 / 2$ back width $75 / 8$, blade 12 , waist 37 , back waist (or waist suppression) 9 , seat $4^{2}$, etc.

In this manner the measures may be ascertained by which he can draft for a proportionate form any style or size of garment-coats, vest or trousers.

The custom cutter is sometimes required to cut from a few simple measures sent to him from a distance, and generally the most important are omitted, or if given are wholly unreliable. Without a knowledge of proportions he would have to plead inability to meet such requirements. He must have the form to measure, otherwise he is helpless.
TABLE OF LENGTHS，PROPORTIONATE TO HEIGHT

| Breast． | 21 | $21{ }_{4}^{3}$ | $22 \frac{1}{2}$ | $23 \frac{1}{4}$ | 24 | $24_{4}^{3}{ }^{\text {a }}$ | 2511 | $26 \frac{1}{4}$ | 27 | $27 \frac{1}{4}$ | $28 \frac{1}{2}$ | $29^{\frac{1}{4}}$ | 39 | $30{ }^{\text {星 }}$ | Over Vèst． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age．． | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |  |  |
| Height．．．．．．Inches | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | ¢5 | 57. | 59 | 61 |  |  |
| －Back Scye Depths．．． | $4 \frac{8}{8}$ | $4 \frac{5}{8}$ | $4 \frac{7}{8}$ | $5 \frac{1}{8}$ | $5 \frac{8}{8}$ | 5 ${ }^{5}$ | 5 t | $6 \frac{1}{8}$ | $6 \frac{3}{8}$ | 6咅 | $6 \frac{7}{8}$ | $7 \frac{1}{8}$ | $7 \frac{3}{8}$ | $7 \frac{5}{8}$ | From Collar：Seam． |  |
| To Natural Waist． | $8{ }^{3}$ | $9 \frac{1}{4}$ | 93 | $10 \frac{1}{4}$ | $10 \frac{3}{4}$ | $11^{\frac{1}{4}}$ | $11 *$ | $12 \frac{1}{4}$ | $12 \frac{3}{4}$ | $13 \frac{1}{4}$ | $13 \frac{3}{4}$ | $14 \frac{1}{4}$ | $14{ }^{3}$ | $0^{151}$ | － | ＂ |
| To Seat Line ．．． | $12 \frac{3}{8}$ | 131 | 137 | $14 \frac{1}{2}$ 。 | $15 \frac{1}{4}$ | 16 | 163 ${ }^{3}$ | 178 | $18 \frac{1}{8}$ | $18 \frac{3}{4}$ | 1938 | 20 | $20_{5}^{5}$ | $21^{\frac{1}{4}}$ | ＂ | ＂＂ |
| To Center of Body＊ | 131 ${ }^{\frac{1}{8}}$ | 138 | 145 | $15 \frac{8}{8}$ | 161 | $16 \frac{7}{8}$ | －175 | 188 | 1919 | 197 | 308 | $21 \frac{8}{8}$ | 22. | 22 \％ |  | ＂ |
| To Fork． | 148 | $15 \frac{5}{5}$ | $16 \frac{1}{8}$ | 16 ${ }_{5}^{5}$ | 175 | 183 | 191. | 197 | $20 \frac{5}{8}$ | 218 | 221 $\frac{1}{8}$ | 227 | 23 s | $24 \frac{8}{8}$ | ＂ | ＂＂ |
| To Bottom of Seat | 15 | $15 \frac{3}{4}$ | $16{ }^{1}$ | $17 \frac{1}{4}$ | 18 | 183 | 19\％ | $20 \frac{1}{2}$ | $21 \frac{1}{4}$ | 22 | 22.4 | 231 | 2－1 | 25 | ＂ | ＂．＂ |
| To Centeŕ Thigh | 171 | 1812 | 191 | $20 \frac{1}{2}$ | 211 | 221 | 235 | $24 \frac{1}{2}$ | 251 | $26 \frac{1}{2}$ | 271 | $28 \frac{1}{2}$ | 291 | 301 | －＂ | ＂＂ |
| To Top of Knee | $20{ }^{3}$ | 217 | $23 \frac{1}{4}$ | $24 \frac{8}{8}$ | $25 \frac{1}{2}$ | $26 \frac{5}{8}$ | $27 \frac{18}{4}$ | 287 | ． 30 | $31 \frac{1}{9}$ | 521 | 338 | $34 \frac{1}{2}$ | 355 | ＂ | ＂＂ |
| To Bottom of Knee | 217 | $23 \frac{1}{8}$ | $24 \frac{8}{8}$ | $25 \frac{5}{8}$ | $26{ }^{\text {年 }}$ | $28 \frac{1}{8}$ | 298 | 308 | 317 | 3318 | 34 喏 | 355 | 36 x． | $38 \frac{1}{8}$ | ．＂ | ＂＂ |
| Tro Center of Calf． | $24 \frac{1}{2}$ | 26 | $27 \frac{1}{4}$ | $28 \frac{1}{2}$ | 30 | $31 \frac{1}{4}$ | $32{ }^{3}$ | 34 | 351 | 37 | $38 \frac{1}{4}$ | 391 | 41 | $42 \frac{3}{8}$ | ＂ | ＂＂ |
| To Bottom of Calf | $26 \frac{1}{4}$ | $27 \frac{3}{4}$ | $29 \frac{1}{4}$ | 303 | $32+$ | $33{ }^{\text {a }}$ | $35 \frac{1}{4}$ | 36. | $38 \frac{1}{4}$ | ${ }^{393}$ | $41_{4}^{\frac{1}{4}}$ | 423 | $44 \frac{1}{4}$ | 45 | ＂ | ＂＂ |
| To Ankle． |  |  |  |  | $35 \frac{1}{4}$ | 37 | $38{ }^{*}$ | $40 \frac{1}{2}$ | $42 \frac{1}{4}$ | 44 | $45 \frac{3}{4}$ | 471 | 491 | \％${ }^{3}$ | ＂ | ＂＂ |
| To Sole of Foot | $30 \frac{5}{8}$ | $32 \frac{3}{8}$ ． | $34 \frac{1}{8}$ | 35尔 | 375 | 393 | $41 \frac{1}{6}$ ． | 42 z | 445 | ${ }^{468}$ | 481 | 49궁 | 515 | $33 \frac{3}{8}$ | ＂ | ＂＂ |
| Front Scye Depths．．． | 81 | 88 | 85 | 85 | 9 | $9_{4}^{1}$ ． | 912 | $9{ }^{3}$ | 97 | 10108 | 103 | 105 | 10. | 11 | Over the Coat． |  |
| Center Shoulder． | $10 \frac{3}{4}$ | 111 $\frac{1}{8}$ | 11宕 | $11_{4}^{8}$ | 121 | 121． | $12{ }^{3}$ | $13 \frac{1}{8}$ | 131 | $13 \frac{3}{4}$ | 14 | $14 \frac{8}{8 .}$ | $14{ }^{3}$ | 15 | ＂＂＂ |  |
| Sleeve | 17 | 18 | 19 | 193 | $20 \frac{1}{2}$ | $21 \frac{1}{4}$ | 22 | $22^{\frac{8}{4}}$ | 231 | $24 \frac{1}{2}$ | $25 \frac{1}{3}$ | 261 | $27 \frac{1}{4}$ | $28 \frac{1}{4}$ |  |  |

Extensive businesses are being conducted which are exclusively confined to the making of custom clothing where the measures are sent in by the buyers or by selling agents of but very little and often of no experience in taking measures. Experience has demonstrated that a business of this character can be carried on with a smaller percentage of misfits, and at less cost for alterations, than under the conditions which usually govern in custom cutting.

The tables furnish the data by which the cutter can meet such requirements upon his ability, in a manner the most satisfactory to all the parties concerned, the height, breast, waist and seat measures being given, also sleeve length and inseam, and any noticeable peculiarities of the form pointed out.

They will also furnish a basis from which he can grade proportionate sets of blocks to be used in custom cutting, which he will find to be of great service, and a daily necessity.

It must be clearly understood that the lengths and widths, as laid down in the tables, are for proportiouate forms, by which is meant that the form has developed in height and width proportionately.

Disproportionate forms are those where the development in height is greater or less than in width, as for example, 40 breast and 5 feet 7 inches in height. Such a one is 5 inches under the height for a proportionate 40 breast. A form of 35 breast and 6 feet in height illustrates the other extreme, being 5 inches over the height for a proportionate 35 breast.

The measures given in the tables are for the sizes, lengths and widths made up, therefore allowance must be made in drafting for seams and ease, as heretofore instructed.

To determine what changes shall be made to meet the requirements of disproportionate forms, see Contents, "Disproportionate Forms."

A glance at the left hand marginal column will suggest other uses to which the tables are applicable, which is not necessary to further allude to now.

GORDON'S WORK ON CUTTING.


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| $\underset{Z}{Z}$ | $\stackrel{\sim}{\sim}$ | 9 | $\stackrel{\text { ¢ }}{\sim}$ | $\stackrel{\text { col/ }}{\sim}$ | 20 | $\cos _{\infty}^{\infty} \mid \infty$ | $\begin{aligned} & \text { rox } \\ & \text { of } \end{aligned}$ | $\bullet$ | $\stackrel{\infty}{9}$ | $\stackrel{-161}{\square}$ | $\stackrel{\text { cod }}{\text { c }}$ | $\underset{\sim}{-1+1}$ | ． | $\stackrel{\text { H }}{\text {－}}$ | $\sigma$ |
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| ${ }_{F}$ | $\begin{aligned} & \text { Ho } \\ & \text { ì } \end{aligned}$ | 20 | $\underset{-1}{x-1 \infty}$ | $\underset{-}{-\infty}$ | $\stackrel{15}{7}$ | $\mathrm{L}^{-1+}$ | $\stackrel{\circ}{\circ}$ | 20 | － | $\pm$ | 9 | $\sigma$ | 40 | \％ | 안） |
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|  | $\propto$ |  | $\stackrel{\sim}{\sim}$ | $\stackrel{\sim}{\sim}$ | ＋ | $\stackrel{\square}{7}$ | $\stackrel{*}{*}$ | 3 | 8 | $\stackrel{\text { \％}}{ }$ | $\stackrel{\text { ¢ }}{-}$ | $\pm$ | \％ | $\stackrel{\square}{-1}$ | ลิี |
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|  | $\cdots$ | $\stackrel{\square}{\square}$ | 13 | $\stackrel{\text { gr }}{\sim}$ | 4 | \％${ }^{\text {\％}}$ | \％ | － | ¢ | $\stackrel{\text { ® }}{\sim}$ | $\stackrel{\text { 劳 }}{ }$ | $\stackrel{\text { ® }}{=}$ | 언 | $\stackrel{9}{9}$ | ${ }^{60}$ |
| $\stackrel{\leftrightarrow}{\leftrightarrows}$ | $\begin{aligned} & \text { 䔍 } \\ & \stackrel{y y}{\mid c} \end{aligned}$ | $\begin{aligned} & 90 \\ & 40 \\ & 40 \end{aligned}$ |  | $\begin{aligned} & \dot{8} \\ & \text { B } \\ & 0 \\ & \vdots \\ & \vdots \end{aligned}$ |  | $\underset{\sim}{\underset{\sim}{\dddot{n}}}$ | $\begin{aligned} & \frac{x_{n}^{*}}{E} \\ & = \end{aligned}$ |  | $\stackrel{\stackrel{\rightharpoonup}{0}}{\substack{0}}$ |  | $\dot{\sharp}$ | 纴 | 荘 |  |  |

## DISPROPORTIONATE FORMS.

Under this head is classed all such as, first, where the height is greater or less than the standard of height for any given breast, as given in the Table of Lengt11s, and second, where the widths at blade, waist or seat are greater or less than as given in the Table of Widths appropriate to any given breast. These may be called Longs, Stouts, Short-Stouts and Fats, Erect and Stooping.

For example, a form of 40 breast and waist 5 feet 7 inches in height, being 5 inches under the height for a proportionate form (see Table of Lengths), and 3 inches larger at the waist (see Table of Widths) would be classed as a Short-Stout.

One 35 breast and 6 feet in height, would be classed as a Long, being 5 inches over the height appropriate for a 35 breast of proportionate or regular form.

To disproportionate forms is also added all those who differ materially in any respect, whether of posture (or carriage) or slope of shoulder, from the standard for proportionate forms.

In custom cutting the measurement of the form will indicate what are the lengths and widths of the form, and of the parts thereof, to be fitted. This article is intended only to illustrate what is meant by a disproportionate form in contradistinction to a regular form as given in the tables.

The method of procedure, when the cutter is called upon to cut from a few simple measures which may be sent to him from a distance, will be pointed out under head of "Block Fatterns, and How to Use Them."

## BLOCK PATTERNS.

The use of block patterns was at first thought to be confined to such houses as dealt exclusively in the manufacture of ready-made garments. The advantages to be derived from an intelligent use of well-graded and proportioned block patterns to one who is engaged wholly in custom cutting, are fast becoming appreciated. In fact, such are the demands which are frequently made upon very many as regards the quantity of work which must be gotten through with, that they are almost an indispensable necessity.

It has often been observed that the same garment will fit very many persons equally as well as the one for whom it was originally intended. This observation is greatly strengthened when one has had an experience in the use of good block patterns. By a good block is meant one which is graceful in its outlines, correct in its proportions, and which, in its lengths and widths, is adapted to the largest average of forms and shapes of any given size Now, as a large proportion come within the range of what are termed proportionate shapes, it is only a waste of effort and time to draft a pattern for each one separately, as he presents himself to the cutter.

The student has now acquired a knowledge of the proportions of a proportionate garment, and is experienced in measuring the forms to be fitted. Hence a comparison of the measures taken with those established for the average or proportionate figure, will at once reveal wherein the two differ, and indicate what changes, if any, are necessary to be made. These changes are often but slight, and thus by the use of the block much time is saved, and mistakes, which often creep in when making a hurried draft, are avoided. In the few exceptional cases where the changes to be made are radical, I would advise a special draft.

Sets of regulars will be sufficient to meet the requirements of a custom tailoring business. Grades should be made for the principal styles, such as Sacks, Cutaways, Frocks, Dress Coats, Fall and Winter Overcoats, etc. (one set of sleeves, backs and side bodies being sufficient for the several styles of fronts). Also make grades for vests and for trousers.


Diagram XXXVIII.

## HOW TO PRODUCE BLOCK PATTERNS.

## a. For Custom Work.

Select from the tables of Lengths and Widths the proportionate measures for a 36 breast sack coat, viz.:
$81 / 2,17,24 \frac{1}{2}, 291 / 2,7,201 / 2,311 / 2,11,123 / 8,167 / 8,151 / 2,73 / 4,36,32,37$.
Also for a 40 breast, which are as follows:

$$
9, \quad \mathrm{I} 8,253 / 4,3 \mathrm{I}^{1 / 2}, 75 / 5,22,331 / 2,12,13{ }^{1 / 2}, 181 / 4,171 / 4,9,40,37,42 .
$$

Draft a separate pattern for each coat as instructed in the preceding explanations for sack coats, exercising care that they are accurately drafted, and that the outlines are in conformity with the prevailing styles.

Take separate paper of good quality and outline the two drafts upon it, breast line on breast line, and blade line on blade line, as shown in Diagram xxxvin, also sleeves and collar.

Make cross-lines, as represented by the references "A," and space off as shown, first by making a light mark at each cross-line half way between the outlines of each pattern, also the same distance inside of the 36 and outside the 40 , then subdividing these spaces equally. These divisions will give you the outlines, location of pockets and buttons for each size from 34 to 42 breast.

Mark the sizes at each cross-line as shown.
Having thus completed the grade, take off the patterns by beginning with the largest size required. Lay grade on separate sheet and prick through at each crossline marked 42. Remove the grade, and outline carefully from prick to prick for the $4^{2}$, and cut out the pattern. Then prick off the $4^{1}$, using the 42 already cut as a guide for marking the outlines from prick mark to prick mark of the 41 , and proceed in this manner until all the sizes required are taken off and the set is completed.

The grade may be enlarged by drafting a 32 or a 44 , and adding to the grade, which, when spaced, will give sizes from 30 to 46 .

For any style of coat proceed in the same manner.
There are other methods of grading, as from one pattern, but for present purv poses this method will, we think, be the more readily comprehended by the student.

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Diagram_XXXIX.
b. For Stock Work and for Country Orders.

Proceed in the same manner as for custom work, except that the arm scyes are to be deepened $1 / 2$ inch, for the reason that they must be of sufficient depth to be adapted not only to men of the proportionate depth of scye, but to the extra sloping shoulders as well. To increase the depth of scye and maintain the same characteristics of shape and slope as in the blocks for custom work, make these additions to the measures as given in the tables, viz., to front and back scye depths $1 / 2 \mathrm{inch}$, to center shoulder $7 /$ inch, and to arm scye I inch. See Diagram XL, Figure I. The following will illustrate, the first being the measures for a set of blocks for custom work, and the second those for stock work and country orders:

$$
\begin{aligned}
& 9,18,25 \frac{1}{4}, 31^{1 / 2}, 75 / 5,22,331 / 2,12,13^{1 / 2}, 181 / 4,171 / 4,9,40,37,42 . \\
& 9^{1 / 2}, 18,253 / 4,31 \frac{1}{2}, 75 / 3,22,33^{1 / 2}, 12,14,19^{1 / 3}, 181 / 4,9,40,37,42 .
\end{aligned}
$$

In custom work you have customer to measure, for this reason the blocks are cut for proportionate depth of scye, which can be lessened or increased as each case may demand.

One set of blocks can be made to answer for both custom work and stock (or country orders) by adding to the top of back, front shoulder and neck gourge, and taking off at the bottom, each $1 / 2$ inch, as shown in Diagram XL, Figure 1. This will produce the same result. The top sleeve must, however, be increased 1 inch from R to D, and the top round raised $1 / 3$ inch.


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## HOW TO USE BLOCK PATTERNS.

a. For Custom Work.

The value of block patterns is greatly diminished from the fact that too often persons wholly inexperienced in proportions, and in the method by which they are produced, are entrusted with their manipulation. If the patterns are good, and the form to be fitted comes within the range of a proportionate figure, they will experience but little difficulty.

But, in changing a proportionate pattern to the requirements of a disproportionate form, it is of the first importance that the cutter shall know what are the several lengths and widths of the pattern he is using, how the pattern is produced, and also what are the lengths and widths of the parts of the form to be fittted.

If you have carefully followed the instructions in the order herein given, you have the means of determining the first important matter just alluded to, and of producing sets of proportionate blocks. The disproportions in the form of the person for whom you may be required to produce a pattern can only be definitely ascertained by a system of measurements not at great divergency from that herein taught.

For example, you are called upon to produce a frock coat, and the measures taken of customer are as follows:

$$
81 / 2,16,181 / 2,36,7,311 / 2,111 / 4,12,16 \% / 5,151 / 2,8,36,33,38 .
$$

Knowing what the measurements are from which the 36 block is produced (and for convenience you have previously marked the same on each block at appropriate points), a comparison of the two will show that the length of waist is to be $1 / 4 \mathrm{inch}$ longer, the blade is to be increased $1 / 4$ inch, the front scye depth shortened $1 / 4 \mathrm{inch}$, the back waist increased $1 / 4 \mathrm{inch}$, and the full size of waist I inch. These changes are illustrated in Diagram XL, Figure 2, the dotted lines representing the block, and the solid lines the pattern as changed to meet the requirements of customer. By moving the scye forward $1 / 4$ inch to get the increased measurement of blade, you have increased the waist suppression the same amount, and to the measure of customer at that point. To maintain the size at breast always mark first along front edge and side seam before making changes in blade, and in changing the position of scye always move the pattern forward or back upon the breast line Remember that any change made in size of blade has increased or decreased the full size of arm scye and back waist suppression, and as in this case the scye of customer is to be same as block, $1 / 4$ inch must be taken off at P. In moving the block up or down when making changes in the lengths, always move on the blade line H, 2, 3 (of Diagram I) or H,2,5 of Diagram IV. Having established the points for the changes to be made at shoulder, place the front and back shoulder points of the block at the new points thus obtained, and mark from $O$ to $P$.

The neck gourge is raised or lowered in the same degree that the front scye depth is increased or decreased. Whenever the length to natural waist is materially increased or decreased, apply the waist measure of customer at proper position on pattern. The amount of difference between waist and seat of block being the same as that of customer, viz, 5 inches, there will be no change in the spring line of skirt. Add to the width of under sleeve at top of under arm seam the same as is added to blade, and decrease the upper sleeve head from R to D the same as you have changed the size of the top scye. The length of front skirt must be adjusted to the length of back skirt, and the waist seam of skirt to the size of forepart and side-body, as from W to V and V to T .

Measure neck gourge $\mathrm{A}, \mathrm{O}, \mathrm{M}$, and make seam edge of collar the same length, without allowances.

All changes in waist suppression are to be made by adding to, or taking from, the space between 3 and 4 on upper waist line, as the measure taken for back waist will determine.

The relation of the front shoulder point (O) with the blade (2) as regards its position forward from line 2, H, must not be changed from that of the block, except for those who carry the head quite forward, or the reverse, quite erect. For the former it may be advanced from $1 / 4$ to $1 / 2$ inch, and for the latter it may be placed the same degree back, according to the degree of difference from the normal form. For the former the front scye depth measure will be shorter and the back scye depth longer than for the nurmal form, and for the latter the front depth measure will be longer and the back depth shorter.

Always locate the position of the arm scye first as per measure taken, point O following in the same relation, before making the required changes at top shoulder, full size of scye at P and neck gourge.

## b. For Country Orders.

When cutting from measures taken by inexperienced parties, it is requisite that you have correct height, breast, waist and seat measures, sleeve length, inseam and outside seam for trousers

Never be mislead by any short measures, or attempted description of form which may come from such a source, but adhere to the proportionate block, adjusting the lengths of waist and skirt, sleeve, size of waist, etc., to the measure sent.

When, after suitable instructions, the measures and descriptions (particularly the descriptions) can be relied upon, such as head extra forward, blades extra full, back waist extra full, or the reverse, shoulders high, regular or extra sloping, you can then venture to make the necessary changes, but otherwise adhere to the general principle
that a well-proportioned garment with sufficient scye depth for an extra sloping shoulder, is the one that is best adapted for work of this character.

## For Short-Stouts.

In establishing the lengths for forms where the height is not in proportion to the breast measure (as for a figure 5 feet 7 inches and 40 breast), the lengths to the natural waist, seat line, sleeve, etc., will be shortened to the lengths given in the column for 67 inches in height.

The lengths for back scye depth, front scye depth and center shoulder will remain the same as in the column of 40 breast, provided that the pitch or slope of the top shoulder is to be the same as for a normal or proportionate figure. As a general rule, however, when the figure is very much under the height proportionate to the breast measure, the shoulders will also be less sloping, and in such cases the back and front scye depths should be lessened from $1 / 4$ to $1 / 2$ an inch, and the center shoulder half as much more. Do not make this change, however, unless satisfied that customer has high, square shoulders.

All widths at the breast line will be the same as for regulars.
The widths at waist line will be increased according to the measure.
The back waist measure will also be increased to the proportion given in table for the size of waist used. For example, a 40 breast and 39 waist will carry a back waist of $9^{1 / 2}$, as against 9 , for a 37 waist, and a 41 waist will carry a back waist of ıо; . (See Table of Widths.)


#### Abstract

\section*{For Longs.}

In establishing the lengths of "Longs," where the height is greater than the proportion of height to breast measure (as for a figure 72 inches in height and 36 breast), the lengths to the natural waist, seat line, etc, must be increased to the lengths given in the column for 72 inches in height. The lengths for back and front scye depths will remain the same as in the column for 36 breast, provided that the pitch or slope of the top shoulder is to be the same as for a normal or proportionate figure. It is quite common, however, in cases of this kind, that the slope of shoulder is greater than for a proportionate figure, when the lengths of back and front scye depths must be increased from $1 / 4$ to $1 / 2$ an inch, and the center shoulder half as much more. Do not make this change, however, unless satisfied that customer has extra sloping shoulders.

All widths at the breast line will be the same as for regulars. The back waist suppression and size of waist will be made to conform to the measure of waist furnished.


## TRYING ON.

Avoid it as much as possible. It belongs to the old, and has but little to do with the new. Any system which makes a try on a necessity is unworthy of your consideration. It does not follow that without a try on all changes are avoided. Neither are they avoided by trying on.

Both cutter and customer can better judge of the effect and necessary changes from the finished garment than from a mere baste up.

If you are a progressive cutter, and are careful in taking your measures, and in applying them to the draft, the changes will be few and of no material importance. If you cannot reach such a degree of proficiency after a reasonable amount of application of the principles herein taught, seek some other profession.

Whenever, for sufficient reasons, a try on is desired, in addition to the usual outlets, leave outlets also at front of forepart and full length of coat. Have the round of front worked back over the breast, and that of the skirt at plait edge straightened and worked forward over the hips. Baste in skirt pockets. Have all seams close-basted and pressed. Baste canvas and build the shoulders as may be required. Pad and baste under collar, and baste in both sleeves.

First (before pinning the coat at front to hold it up to the form) adjust the balance or lengths of front and back scye depths and the waist suppression so that the coat will conform to the form of customer and not sag off at the back waist. Then confine coat at front, make a mark in front where the edge of left forepart laps on to the right. adjust lengths of coat and of sleeves, spring of skirt, and any other changes which may be required.

## ALTERATIONS.

It is not our purpose to enter fully upon the difficulties which have too long attended the career of very many, nor to point out the various remedies to be applied. Space will not permit, nor does the occasion justify. You should be so experienced and competent in your calling that but few will be required, and of that degree of proficiency that when, for example, the scye seems tight, coat wrinkles at front of scye, draws over the shoulder and is full at round of side-body, instead of cutting out the scye, taking a slice off the outer shoulder point or round of side-body, you will know at once that the fault is not with the cutting, but it is a bad case of tight dinings, crooked facings, or shoulder canvas - or, more comprehensively, of bad workmanship.

Many a well-cut garment has been killed because, in attempting to remedy apparent faults, the alteration was made from the outside rather than from the inside.

If the garment is to a marked degree different from what it should be at any point, it would be well to remeasure customer and examine your draft. If satisfied then that there has been no mistake on your part, look for tight linings, crooked facings, or other evidences of bad workmanship, and endeavor to know the cause of the difficulty. Never presume that the fault is in the cutting as a matter of course, and at once begin to cut out at one place, and off at another, until first satisfied that there is not some cause for the difficulty for which you are not directly responsible. First examine the inside and the workmanship generally, then you can better determine what the changes shall be.

## GENERAL NOTES AND CAUTIONS.

( I.$)$ All of the allowances for make up and button stands (as from 5 to 6, line B, Diagram iv, viz., $11 / 2$ inches) are for stitched or felled edges. For coats and vests which are to be bound, reduce front edge and leaf of collar $1 / 4 \mathrm{inch}$.
(2.) The line L, M in all the diagrams is merely a basis from which to establish the pitch of neck gourge, which, as a general rule, will be on this line. But for extreme short rolls raise the front of gourge sufficiently above the line at M so as to produce the desired effect to lapel and notch formed by the joining of collar. For long rolls drop the front of gourge about $1 / 2$ inch below the line L, M. This gives a longer collar, brings the notch in better position for a long-roll coat, and necessitates less convexity on the sew-on edge of collar than would otherwise be required.
(3.) The point 12 in all diagrams may be raised to cutter's taste, according as he may desire a higher shoulder seam. What is added at 12 will be taken off at $P$.
(4.) Experience only will give you a knowledge of the nature and peculiarities of the different materials you are called to manipulate. Some are soft and spongy, and work large. Others work up small, particularly the cheaper grades of worsteds, also silk mixtures. For the former class of goods, and for closely-woven goods, as are termed cloths, cut well inside of the chalk marks, and for the latter cut well outside.
(5.) Always work with well-sharpened chalk. Be precise in all matters. Follow the maxim, " Make haste slowly."
(6.) Begin this study at the beginning, not at middle or finish.
(7.) Familiarize yourself, by careful and repeated readings, with the manner of taking the measures, and of their application to the draft.
(8.) Should difficulties arise (as for example, coats run a little full in the blades or in the breast), do not err by reducing the allowance for make up and ease, or by taking off $1 / 4$ or $1 / 2$ inch from your draft at the joining of back and side-body at breast line, but know that you are not taking the measures as instructed, i. $\epsilon$., close, snug measures. In brief, do not depart from the system you are endeavoring to utilize, nor hastily conclude that you can better teach your instructor.
(9.) Place yourself under the instruction of a practical tailor and learn how to make a garment. See to it that your bushelman has the qualifications of a first-class workman.

You may lack experience at the commencement of your career, but do not have about you an inexperienced bushelman. With thoughtfulness, care and patience you can soon acquire a knowledge of, and fill your appropriate place in, an honorable and useful profession.

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[^0]:    * For 38 breast, $3 / 4$ inch; 40 breast, $7 / 8$ inch; 42 breast, r inch. Other sizes in proportion.

[^1]:    * For corpulent forms, the space from 4 to 5 will be increased somewhat. After having located the size of waist in front at 9 , extend front line up until it intersects with the sweep line extending up from 5 , just below M .

