$$
\begin{aligned}
& \text { W. O. Linthicumis } \\
& \text { Divional } \\
& \text { Exact Mansurement } \\
& \text { SYSTEMS. }
\end{aligned}
$$



## DIVISIONAL AND <br> EXACT MEASUREMENT <br> FOR GARMENT CUTTING, <br> BY <br> W. O. Linthicum. <br> (Editor of Linthicum's Journal of F'ashions, ) <br> No. 174 Fifth Avenue, New York,

Containing Forty Diagrams, explanatory of both systems, and accompanied by a measure, with twelve special divisions adapted for Drafting by the Divisional System, and giving explicit directions for Measuring, Drafting, \&c.


NEW YORK:
LAWRENCE \& ALLEN, STATIONERS AND PRINTERS, No. 20 VESEY STREET.



## PREFACE.

THE first print of my System, or treatise on Garment Cutting being exhausted, its popularity in the profession and the continued demand for the work, has impelled me to produce this new and revised edition.

If I were to let this opportunity pass without noticing the very large sale and wide circulation of my first publication, and heartily thanking the very many appreciative patrons in the profession, who have purchased, read and manifested in various ways their approbation of the ideas advanced and teachings inculcated; I would in truth be more callous to fair treatment, and less appreciative and generously disposed than I desire to appear to be. The countless testimonials and flattering words that I have received from artists in the trade, from all over our great country, and a majority of them, coming from masters in the profession, have done more to stimulate me to this undertaking, this second effort in authorship, than the pecuniary reward foreshadowed.

In the preparation of this work I have not found it necessary to alter or change materially any of the rules or teachings set forth in the first volume; only to enlarge the scope, to add to its comprehensiveness. I have, I think, founded my system, or combination of systems on a scientific basis, presenting the methods and principles to be followed, in as clear and practicable a form as possible, shorn of every thing that would perplex or confuse the student of average intelligence. It will be found to be elegantly and accurately illustrated by nearly half an hundred carefully and artistically prepared diagrams. These diagrams are produced with a view to aid in the cutting of every known style of body-coats, surtouts, over-sacks, trousers of every style, ladies' riding habits; in fact every style of garment manufactured by the trade. Though comprehending all this interesting and useful knowledge, the work will not be considered bulky or verbose in any respect.

With these few observations, fully sensible of the responsibility assumed, in scattering far and wide, ideas and teachings which will be closely analyzed and criticised by the learned, and novices in the Art of Cutting,

I respectfully subscribe myself
The Author.


# INTRODUCTORY TO LINTHICUM:S SYSTEMS of CUTTING. 

When undertaking the duties devolving upon an Editor of Fashions, it certainly was not my intention to come before the Tailoring Trade in yet another position, that of an originator and publisher of a system or systems for Drafting. I not only expected, but expressed a determination to confine myself within journalistic limits, and not use its privileges for promulgating any special system, preferring a more general basis for the ideas I might have occasion to ventilate, from time to time.
To me it appeared that a journal's usefulness was greatly restricted by being hampered with set theories that might not admit of extension or bear the contact of antagonistic sentiments; hence the desire on my part, while keeping my journal within its proper boundaries, to have it so far uncontrolled as to leave freedom for active thought and honest expression, regarding all matters coming within its range.

The above reasons appeared all sufficient to deter me from advancing my own peculiar method of Drafting, and only the constantly increasing demand for my mode of Cutting, and the urgent entreaties of many members of the Trade for my system, caused me to view the subject in a different light, and realize that it would not necessarily tû:n my journal into an organ of self-advertisement, if I concluded to publish my system. Most assuredly I could not, without great detriment to other duties, spare time to answer the numerous missives I received, requesting special instruction regarding my method of Drafting, and upon consideration, I deemed that justice to the many seekers of information and myself, required the issuing of the present work on Garment Cutting. Long experience has taught me the value of a simple and correct system for Drafting Garments; and the necessity I felt for such a system, and my
eagerness to take long strides on the road to improvement, spurred me to diligent labor, and after long and most careful testing, I can pronounce the success of the result of my efforts as being beyond even my own sanguine expectations. If I was simply a Tailor by theory, a theoretical system might answer my purpose and serve as a publication, provided the publishing of a system was my only aim.

But I am essentially a practical Tailor, and most zealously have practiced my system, and made it earn its right to claim from others the high encomiums I bestow upon it. What I have stated before, may here bear repetition. By years of experience and study, I have gained a not unenviable reputation as a Cutter ; and it has ever been, and is now, a source of pride with me to justly merit it. Hence, in preparing my systems, I have stinted neither time nor means to bring them to successful completion, and arrive at the point I have reached, as I desire these publications to add too, instead of detracting from, the estimation many have placed on my ability: "What is worth doing at all, is worth doing well," and as merit only can obtain and sustain a position of worth and prominence, it has been my effort to make the merits of my systems so perceptible to the minds of all that experiment with them, that they cannot fail to receive due appreciation. It is
impossible for every one to think alike. If they did, the sameness in life would be unendurable, and competition unknown. In Tailoring, as in every thing else, the opinions and systems are worth most that can best be substantiated by able tests. That the inventor of a practical theory should be biased in its favor is natural. It is the offspring of his brain, over which he has toiled uncomplainingly, to make it prove worthy of him. When it is entrusted to the colder criticism of others, he watches it anxiously, eager that it clearly demonstrates to the discriminate investigator the benefits he so clearly sees, underlying its principles, and over each convert it makes, feels repaid for every weary hour past in its invention.

Every work can be propelled into notice by loud puffing; but it is genuine worth alone, that can command fixed attention. The reason that so many systems float for a time on the market, and then sink to obscurity, is that, as a general thing, they owe their origin to theory only.

Some person thinks he has found the philosopher's stone, and made science reveal its treasured secrets.

He at once hastily illustrates, to his own satisfaction, his ideas, and a system is sent forth to the trade. It appears desirable, and purchasers are numerous; but it don't realize their anticipations, so they begin to alter here, and change there, in the vain
hope of making it satisfactorily supply their requirements. The cause of the defects, and the non-discovery of them by the designer, lies in the fact of his lack of opportunity for testing his system as thoroughly and under as varied circumstances as a practicing Tailor. All the faults that appeared to the inventor's eyes, he provided a theory to rectify; but he could not imagine all the trials it wonld be subjected to, and therefore, don't comprehend its failures. It stands to reason that a Tailor, successfully doing business, producing a system, has facilities for thoroughly testing and perfecting, that only others situated like himself can avail themselves of ; and it is this very point I consider a good foundation for the confidence I have in the systems I now place before the trade. They have past through seasons of trial, and came out victorious. They have been subjected to every possible contingency, but beyond everything I ever tried, have met the wants of my business. With accuracy, I have accomplished my purpose, and embodied my views for general use. Upon my work I have set a value, believing it will repay its cost to the purchaser ten fold. Some persons are never open to conviction, and always dread a turn off from the beaten track.

Bacon says, "that surely every medicine is an innovation, and he that will not apply new remedies must expect new evils, for
time is the great innovator ; and if time, of course, alter things to the worse, and wisdom and counsel shall not alter them to the better, what shall be the end ?"
"Time don't stand still, but contrariwise, moveth so around that a froward retention of custom is a turbulent thing."
"And they that reverence too much old times, are but a scorn to the new."

How far my sentiments agree with the above quotations, I will leave my readers to judge.

In reference to my systems, I have frankly made assertions and given my experience. Those who have not confidence in them, are not compelled to experiment in either. One thing I am sure,

> Both the systems I've made, In the balance can be weighed; And (I say it without vaunting,)
> They neither will be found wanting.
W. O. LINTHICUM.

## Meàsuring.

In order to cut a good Garment, it is es. sentially necessary that a correct measure be obtained ; and my mode of measuring is so very simple, that it is hardly possible to commit an error, if ordinary care be
observed. Take all the measures over a Coat of the usual cloth thickness, except the breast and waist, which must be taken over the Vest. Be particular and see that the Coat is not excessively stuffed with wadding, or the measures obtained will be too large.

It is an excellent plan to make unlined Coats, or long close fitting Jackets with sleeves, from elastic goods of medium weight and keep on hand three or four different sizes to put on customers when they are to be measured.

A trial of the above will result in the measures taken being more uniformly accurate, and the cost of the Garments kept for the purpose of taking them, paid in a few weeks by the saving in alterations. Take as few measures as possible ; and I advise all new beginners to practice measuring many times before attempting to Draft. They will thus acquire ability, and form the habit of taking measures with ease and correctness, thereby showing familiarity with the matter in hand. Hesitancy and awkwardness, where they exist, leave an impression of incompetency on the minds of customers. Always take the measures in the same order, thus avoiding omissions and annoyance to customers, in having to place them in the same position more than once. The above suggestions will not be injurious to some Cutters I have met, who are well advanced in the art of Cutting.

## Directions for Measuring for the Divisional System.

First, have the Coat buttoned on the person to be measured, see that it is well up under the arms, and that the back seam is in the centre of the body; then proceed to take the length of waist, say 19 inches, and full length, 38 inches, starting from the collar seam, or where it is intended to be. Then from the same place, bring the measuring tape down in front of the right arm, under it and up the back to the starting point, drawing the tape moderately tight, and get what is commonly known as the first shoulder measure, say 27 inches. While the inch tape is in position under the arm, draw it with the same degree of tightness across the blade to the centre of the back, say 23 inches, (tax the mind for a moment with this measure, but do not write it down, ) then reverse the tape and start from the centre of the back, and draw it across the blade and under the arm to the front of scye. Before writing down the distance, continue the tape up in front of the shoulder to the original starting point at the back of the neck, and see that it is 23 inches as first taken, and then write down the distance from the centre of the back to the front of the scye, (say $11 \frac{1}{2}$ inches, and the whole length 23 inches.) It is well here to impress the mind of the
student with the importance of this last measure. It is the only one taken that is applied directly to the Draft, as taken on the body. It is very simple and easily taken, and will correctly indicate the position of the customer, whether erect, medium or stooping.

The special measures given above are for the medium sized average form. Should the customer be erect, and his shoulders inclined back, the distance from the centre of the back to the front of the scye, would be less than half of the whole blade measure, say 11 inches, and the full length still be 23 inches, thus diminishing the quantity of cloth on the blade half an inch, and adding that quantity to the length of the shoulder; and should the customer possess a stooping form, the distance from the centre of the back to the front of the scye will be greater than half of the blade measure, say 12 inches, increasing the quantity across the blade half an inch, and decreasing the length of the shoulder. To insure correctness, always take this measure twice, as above directed; first, from the neck down in front of the arm to the centre of back, and remember the quantity; then reverse the tape, and if the distance from the centre of the back to the front of the scye is not half the quantity first taken, scan the customer closely from a side view, and there will be no difficulty in deciding whether or
not his form justifies the variations on the measure.

The length of the sleeve take in the usual way, from the centre of the back, between the shoulders to the elbow, $20 \frac{1}{2}$, inches, and to the waist, 32 inches, the arm being elevated, and the elbow placed in as straight a line as possible with the surface of the back. If it is too far forward, the measure taken will be too long, and if too far back, it will be too short.

By testing the above, it will be found a very easy matter to commit an error of from one to two inches in the length of sleeve, and probably account for the numerous alterations that have to be made in this particular. Next, take the breast and waist measures over the Vest, say 36 breast, and 32 waist. The measures so far taken will read $19,38,27,11 \frac{1}{2}, 23,20 \frac{1}{2}, 32,36,32$. For a Sack Coat, the measures would be precisely the same, except the length, which, for a medium height, would be 30 inches. For a Vest, in addition to the shoulder, blade, breast and waist measures already taken, start from socket-bone, and take a measure for the opening in front, full length, and to the hollow of the waist at the side, just above the hip-bone.

There is no grod reason why a Coat should be cut by one system, and a Vest, for the same customer, by another, entirely different in its application and results.

When the form of a customer varies from the general average (as described above in directions for taking measures), the system here published for cutting Vests will be appreciated, as it produces the exact form indicated by the measures.

## Directions for taking Meassures for Pants.

First, take outside length from top of the hip-bone to the knee, say 24 inches; contimue to within one inch of the floor, say 42 inches. Next, the inside seam, from the crotch to within one inch of the floor, 32 inches. (This measure should be taken with a square or wooden instrument, made for the purpose, with tape attached, and sold by all Trimming houses). Next, the waist measure, 30 inches, and the hip (taken over the largest part) 36 inches, knee 19 , and bottom, 18 inches. The whole measure so taken wiil read $24,42,32,30,36,19$, and 18.

## The Inch Measure with Divisions.

The finely engraved Inch Measure accompanying this work, contains all the Divisions used in Drafting by the Divisional System, and are designated as follows:

Divisions of the shoulder measure by letfers $\mathrm{A}, \mathrm{B} \& \mathrm{H}$, the sizes ranging from 18 to 36. Divisions of the breast measure by letters C, D, E, F \& I, the sizes ranging from 24 to 50 . Division of the waist measure by letter $G$, the sizes ranging from 22 to 50. Divisions of the scye measure by letters J, K \& L, the sizes ranging from 11 to 22.

When Drafting, the above Divisions must be used in the following manner:

Division A, starting from $O$.
Division B , starting from O .
Division C , starting from O .
Division D , starting from O .
Division E, starting from $\mathrm{O}^{1}$.
Division F , starting from $\mathrm{O}^{2}$.
Division G , starting from $\mathrm{O}^{3}$.
Division H , starting from $\mathrm{O}^{4}$.
Division I , starting from $\mathrm{O}^{5}$.
Division J , starting from $\mathrm{O}^{6}$.
Division K, starting from $\mathrm{O}^{6}$.
Division L, starting from $\mathrm{O}^{6}$.
When Drafting, the measure is always placed in a position which presents the figures of the particular division, being used perpendicular to the eye. For example, when $A$ and $B$ are to be used, place the tape along the line A , with O on the tape at $O$ on the Diagram, and mark on divisions $A$ and $B$ the figures corresponding with the shoulder measure, and in using Division D, place $O$ on the tape
at 1 on the diagram, and mark on Division D the figure corresponding to the breast measure, the end of the tape being toward the operator, will present the figures perpendicular to the eye.

## Directions for Prafting Frock or Dress Coats by the Divisional <br> System.

Diagram No. 1 shows the student how to draft a Frock Coat by the measure he

above learned how to take, and which reads as follows: Length of waist, 19 inches; full length, 38 inches; shoulder
measure, 27 inches; blade measure (from the centre of back to the front of scye), $11 \frac{1}{2}$ inches; continued to the back of neck, 23 inches; length of sleeve from the centre of back to the elbow, $20 \frac{1}{2}$ inches; full length, 32 inches ; breast, 36 inches, and waist, 32 inches.

First draw base line A. From O to 1 and 2, mark the figures corresponding with the shoulder measure 27 on Divisions A and $B$ by placing $O$ on the tape at $O$ on the Diagram. And at 3, mark the figures corresponding with the breast measure, 36 on Division C, by placing $O$ on the tape at $O$ on the Diagram.

Draw lines $\mathrm{B}, \mathrm{C}$ and D at right angles with line A .

From 1 to 4 mark the figures corresponding with the breast measure 36 on Division $D$ by placing $O$ on the tape at 1 on the Diagram.

From 2 to 5 mark the figures corresponding with the breast measure 36 on Division E by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 mark the figures corresponding with the breast measure 36 on Division F by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7 mark the figures corresponding with the waist measure 32 on Division G by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Draw line E from 7 through 5 to 8, and line F from 5 to O .

From 2 to 5 apply the blade measure as taken on the body from the centre of back to the front of scye $11 \frac{1}{2}$ inches.

Hold the tape at 5 , and continue the measure up line E to 823 inches, adding three-eighths of an inch as an allowance for seams, padding, etc.

Draw line $G$ from 8 to $O$.
From 8 to 9 mark the figures corresponding with the shoulder measure 27 on Division H by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram.

Draw line I from 9 for the pitch of neck.
From 9 to 10 mark the figures corresponding with the breast measure 36 on Division I by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram. Make the width of the back at top half the distance between 8 and 9 .

Apply the measure 19 inches for length of waist, and form the shoulder and side seam of the back as shown in the Diagram, or to fancy.
Cut the back, and place it in position to form the shoulder by placing line $F$ on the back directly on line $G$, and mark the shoulders and neck gorge, the hollow part of the latter always touching line E at K .

Place the back again in the position from which it was cut, and put the thumb of the left hand on line C , where the back joins
the side-body, and move the top of back forward till the distance between K K along the dotted line is $11 \frac{1}{2}$ inches (the same as taken on the body and applied between 2 and 5 ).

While the back is in this position, form the back part of scye and side seam, curving the latter in a half to three-fourths of an inch at the natural waist, according to the requirements of the customer.

Draw sweep J from the bottom of the side-body, using the front shoulder point at K as the pivot. Apply the waist measure from a iittle above 3 on the back (allowing for what has been taken out between the back and side-body) to 1116 inches, to which add 1 inch for seams and cuts.

Form the front and waist of the forepart, and the line separating the side-body from the forepart. At this point I earnestly advise that no cloth be taken out to give form to the waist, but allow the side-body to join the forepart precisely as it was drafted, and add the necessary spring at the hip, as shown in the Diagram.

It is quite a common occurrence to find customers with very prominent hips-far greater than the average form. When this is the case, I advise taking an additional measure directly over the hip, where the waist seam of the coat will touch when buttoned, and adapt the coat at this point to the measure.

It will be unnecessary to apply the shoulder or breast measure to the draft, as the Divisions on the tape will produce them correctly in all cases.

Before attempting to draft the sleeve or any other part of the garment, the operator should practice this draft until he is perfectly familiar with the Divisions, and can produce it correctly from memory without reference to the above directions.

## Directions for Drafting Sleeve by the 1)ivisional System.

The sleeve is Drafted in the position in which it is to be sewed in the coat, and is Drafted to suit the scye, producing the correct length of back and forearm seam.

First measure the scye carefully, which in the size under consideration is 16 inches. (This should be done before the forepart is cut). Place a piece of paper large enough to form the sleeve under the Draft, and place the back in its original position.

Draw line $H$ from 5 at right angles with line $C$.

From 5 to 12 mark the figures corresponding with the scye measure 16 on Division $J$ by placing $O^{6}$ on the tape at 5 on the Diagram.

From 5 to 13 mark the figures corresponding with the scye measure 16 on Division K by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

From 5 to 14 mark the figures corresponding with the scye measure 16 on Division L by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

Draw a line from 13 to 15 at right angles with line $F$.

From 13 to 15 mark the figures corresponding with the scye measure 16 on Division K by placing $O^{6}$ on the tape at 13 on the Diagram.
The back-arm seam at 14 must always touch line F , and the fore-arm seam terminate at line $\mathbf{C}$ as shown at 12 on the Diagram.

Use lead or hard chalk for forming the slieve, and by a slight pressure the lines of the sleeve will be indicated on the paper placed under the draft.

Apply the length (less the width of back) from 14 to elbow $20 \frac{1}{2}$ inches, and full length 32 inches. Complete the form of the sleeve as shown in the Diagram. The hollow of the under-sleeve at top should not extend below lines F and C .

If the operator prefers to draft the sleeve separate from the body, he can do so by studying Diagram No. 31, which will give an equally good sleeve for the well-proportioned form ; but when a change
is indicated, as shown in Diagrams No. 2 and 3 , it is best that the sleeve be drafted in the position in which it is to be sewed in the coat.
The measures and their applications deal thus far with a well-proportioned form of medium height and size, and to this extent many of the Divisional Systems published are equal to mine; but in most of them the pupil is here left with a few vague directions for lengthening or shortening the back, or changing the location of the shoulder point, \&c., \&c., to conform to equally vague and uncertain measures taken from imaginary starting points in themselves unreliable and impracticable. In preparing this System for publication, it has been my aim to perfect it to such a degree that it will be quite as easy to draft a good garment for an illshaped customer as for one possessing the proportions of a perfect model.
The Cutter's task would be an easy one if all his customers conformed in shape to the measures taken and used in Drafting Diagram No. 1, but unfortunately the great majority of them deviate from it. It is a very common thing to find a man measuring proportionately the same breast, waist, and shoulder as described and illustrated by Diagram No. 1, who will stoop forward and require a longer and wider back, and a shorter and more forward shoulder and
scye, or on account of extra erectness require all these changes reversed to a shorter and narrower back, and longer and more backward shoulder and scye.

The following measures taken as described indicate the three forms mentioned:

First-Form of good proportions-19, 38, $27,11 \frac{1}{2}, 23,20 \frac{1}{2}, 32,36,32$.

Second-Stooping form-19, 38, 27, 12, 23, $20 \frac{1}{2}, 32,36,32$.

Third-Erect form-19, 38, 27, 11, 23, 201 , $32,36,32$.

It will be observed that all the measures are precisely the same except the first half of the blade measure, that portion which is width, and applies from the centre of back to the front of scye.

## Directions for ${ }^{\text {D }}$ rafting Frock-coat

for a Stooping Form by the

## Divisional System.

Measure-19, 38, 27, 12, 23, 20 $\frac{1}{2} 32,36,32$.
First-Draw base line A.
Place O on the tape at O on the Diagram, and mark at 1 and 2 the figures corresponding with the shoulder measure 27 on Divisions $A$ and $B$, and at 3 mark the figures corresponding with the breast measure 36 on Division C. Draw lines B, C, and D at right angles with line A .

From 1 to 4 mark the figures corresponding with the breast measure 36 on Division D by placing $O$ on the tape at 1 on the Diagram. From 2 to 5 mark the figures corresponding with the breast measure 36 on Division E, $\mathrm{b}_{\bar{y}}$ placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram. From 5 to 6 mark the

figures corresponding with the breast measure 36 on Division F , by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram. From 3 to 7 mark the figures corresponding with the waist measure 32 on Division G, by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram. Now apply the first half of the blade measure from 2 to $X$, which is 12 inches (a half inch more than in No. 1) and a half inch greater than the distance given by Division F from 2 to 5.

Dot on line C, half the distance between 5 and $X$, which is a fourth of an inch.

At the top of line A mark in and up a fourth of an inch (or half the difference between 5 and X whatever it may be) as shown from $O$ to $X$, rounding the back seam gently to a point between 1 and 2 on line $A$.

Draw line E from 7 through the dot between 5 and X to 8 , and line F from the dot between 5 and X to X at top of back instead of O as in Diagram No. 1, and continue the blade measure from X to 8,23 inches, adding three-eighihs of an inch as an allowance for seams, wadding, \&c. It will be noticed that half the variations between Division E and the first half of the blade measure at 5 and X is used, which carries line E forward at 8, and the other or remaining half at the top of back, moving the baci- seam forward and raising it a fourth of an inch, thus lengthening the back, and in applying the measure from 2 to X 12 inches, a half inch more of the blade measure is consumed than in Diagram No. 1, which lessens the length of the shoulder at 8 , and moves the shoulder point and scye forward, changes necessary for a stooping figure.

Draw line G from 8 to X (instead of O ) as in Diagram 1. From 8 to 9 mark the figures corresponding with the shoulder measure 27 on Division H , by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram. Draw line J from 9
for the pitch of neck. From 9 to 10 mark the figures corresponding with the breast measure 36 on Division J , by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram. Make the width of the back at top half the distance between 8 and 9 .

Apply the measure for length of waist 19 inches, and form the shoulder and side seam of the back as shown in the Diagram, or to fancy, increasing the width of back at 4 as much as the back has been moved forward at $O$. Cut the back and place it in position to form the shoulder, by placing line F on the back directly on line $G$, and mark the shoulder and neck gorge, the hollow part of the latter always touching line E at K .
Place the back again in the position from which it was cut, and put the thumb of the left hand on line $\mathbf{C}$ where the back joins the sidebody, and move the top of back forward till the distance between K K along the dotted line is 12 inches, the same as taken on the body and applied between 2 and X on line C .

While the back is in this position, form the back part of the scye, and side seam curving the latter in a half to three-fourths of an inch at the natural waist, according to the requirements of the customer.

Draw sweep J from the bottom of the sidebody, using the front shoulder point at K as the pivot.

Apply the waist measure from a little
above 3 on the back to 11, allowing for what has been taken out between the sidebody and back, 16 inches, to which add one inch for seams and cuts. Form the front and waist of the forepart and the line separating the sidebody from the forepart. At this point, I advise that no cloth be taken out to give form to the waist, but allow the sidebody to join the forepart precisely as it was Drafted, and add the necessary spring at the hip as shown in the Diagram.

If the hips of the customer should be larger than the average form, take and apply a measure over the upper part of the hip to insure the coat being large enough at the waist-seam.

It is unnecessary to apply the breast or shoulder measure to the Draft, as the Divisions on the tape will produce them correctly in all cases.

## Directions for Drafting Sleeve for Stooping Form by the

 Divisional System.This sleeve, like in Diagram No. 1, is Drafted in the position in which it is to be sewed in the coat, and is Drafted to fit the scye, producing the correct length of back and forearm seams.

First measure the scye carefuly, say 16 inches, (before the forepart is cut).

Place a piece of paper large enough to form the sleeve under the Draft, and place the back in its original position.

Draw line H from the dot between 5 and X at right angles with line C ,

From the top of line $H$ to 12 , mark the figures corresponding with the scye measure 16 on Division $J$, by placing $\mathrm{O}^{6}$ on the tape at the top of line H on the Diagram. From the top of line H to 13 , mark the figures corresponding with the scye measure 16 on Division K, by placing $\mathrm{O}^{6}$ on the tape at the top of line H on the Diagram. From the top of line H to 14 , mark the figures corresponding with the scye measure 16 on Division L, by placing $\mathrm{O}^{6}$ on the tape at the top of line H on the Diagram.

Draw a line from 13 to 15 at right angles with line F .

From 13 to 15 , mark the figures corresponding with the scye measure 16 on Division K , by placing $\mathrm{O}^{6}$ on the tape at 13 on the Diagram. The back arm seam at 14 must always touch line F , and the forearm seam terminate at line C, as shown at 12 in the Diagram.

Apply the measure for length from 14 (less the width of back) to elbow $20 \frac{1}{2}$ inches, and full length, 32 inches. Complete the form of the sleeve as shown in the Diagram, using lead or hard chalk, and by a slight pressure, the lines of the sleeve will be indented on the paper under the Draft. The
hollow of the under sleeve at top should not extend below lines F and C .

## 

## for an Erect Form by the

Divisional System.

## Diag. 3.

Measure-19, 38, 27, 11, 23, 20 $\frac{1}{2}, 32,36,32$.
First draw base line A.
Place $O$ on the tape at $O$ on the Diagram, and mark at 1 and 2 the figures correspond-

ing with the shoulder measure 27 on Divisions A and B , and at 3 mark the figures corresponding with the breast $\underset{\text { (on Division c.) }}{\text { mesure }} 36$. Draw lines $\mathrm{B}, \mathrm{C}$, and D at right angles with line A .

From 1 to 4 on line B, mark the figures corresponding with the breast measure 36 on Division D, by placing $O$ on the tape at 1 on the Diagram.

From 2 to 5 on line C, mark the figures corresponding with the breast measure 36 on Division E, by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 on line C, mark the figures corresponding with the breast measure 36 on Division F , by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7 on line D, mark the figures corresponding with the waist measure 32 on Division G , by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Now apply the first half of the blade measure from 2 to X , which is 11 inches, (a half inch less than in No. 1) and a half inch less than the distance given by Division F from 2 to 5 .

Dot on line $C$ half the distance between 5 and $X$, which is a fourth of an inch.

At the top of line A mark ont and down one-fourth of an inch (or half the difference between 5 and X whatever it may be) as shown from O to X in the Diagram, curving the back seam gently to a point between 1 and 2 on line A .

Draw line E from 7 through the dot between 5 and X to 8, and line F from the dot between 5 and X on line C to X at the top of back, instead of O as in Diagram No. 1.

And continue the blade measure from X on line $\mathbf{C}$ to 8 , adding three-eighths of an inch as an allowance for seams, padding, \&c. It will be noticed that half the variation between Division E and the first half of the blade measure at 5 and X is used, which moves line E at 8 further back, and the other half at the top of line A moving the seam further back and shortening it a fourth of an inch, thus reducing the length of the back, and in applying the measure between 2 and X 11 inches, a half inch less of the blade measure is consumed than in Diagram No 1, which increases the length of the shoulder at 8, and moves the shoulder point and scye further back. Changes necessary for an erect figure.

Draw line G from 8 to X (instead of O ).
From 8 to 9 mark the figures corresponding with the shoulder measure 27 on Division H , by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram.

Draw line I from 9 for the pitch of neck. From 9 to 10 mark the figures corresponding with the breast measure 36 on Division I, by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram.

Make the width of the back at top, half the distance between 8 and 9 .

Apply the measure for length of waist 19 inches, and form the shoulder and side seams of the back as shown in the Diagram, or to fancy, reducing the width of the back
at 4 as much as the seam has been moved back at O .

Cut the back and place it in position to form the shoulder, by placing line F on the back directly on line G, and mark the shoulder and the neck gorge, the hollow part of the latter always touching line E at K .

Place the back again in the position from which it was cut and put the thumb of the left hand on line $C$ where the back joins the sidebody, and move the top of back forward till the distance between K K , along the dotted line, is 11 inches, the same as taken on the body and applied between 2 and X on line C .

While the back is in this position, form the back part of the scye and side seam ; curve the latter in a half to three-fourths of an inch at the natural waist, according to the requirements of the customer.

Draw sweep J from the bottom of the side-body, using the front shoulder point at K as the pivot.

Apply the waist measure from a little above 3 on the back to 11, allowing what has been taken out between the sidebody and back, 16 inches, to which add one inch for seams and cuts.

Form the front and waist of the forepart and the line separating the sidebody from the forepart. At this point, I advise that no cloth be taken out to give form to the waist, but allow the sidebody to
join the forepart precisely as it was Drafted, and add the necessary spring at the hip as shown in the Diagram.

If the hips of the customer should be larger than the average form, take and apply a measure over the upper part of the hips to insure the coat being large enough at the waist seam.

It is unnecessary to apply the breast or shoulder measure to the Draft, as the divisions on the tape will produce them correctly in all cases.

## Directions for Drafting Sleeve

 for an Efect Form by the Divisional System.This sleeve, like in Diagram No. 1, is Drafted in the position in which it is to be sewed in the coat, and is Drafted to fit the scye, producing the correct length of back and forearm seams.

First measure the scye carefully, say 16 inches, before the forepart is cut.

Place a piece of paper large enough to form the sleeve under the Draft, and place the back in its original position.

Draw line H from the dot between 5 and X at right angles with line C .

From the top of line H to 12, mark the figures corresponding with the scye measure

16 on Division J, by placing $\mathrm{O}^{6}$ on the tape at the top of line H on the Diagram.

From the top of line $H$ to 13 , mark the figures corresponding with the scye measure 16 on Division K, by placing $\mathrm{O}^{6}$ on the tape at the top of line H on the Diagram.

From the top of line $H$ to 14 , mark the figures corresponding with the scye measure 16 on Division L, by placing $\mathrm{O}^{6}$ on the tape at the top of line $H$ on the Diagram.

Draw a line from 13 to 15 at right angles with line F.

From 13 to 15, mark the figures corresponding with the scye measure 16 on Division K, by placing $\mathrm{O}^{6}$ on the tape at 13 on the Diagram. The back arm seam at 14 must always touch line F , and the forearm seam terminate at line C, as shown at 12 on the Diagram.
Apply the measure for length of sleeve from 14 (less the width of back) to elbow, $20 \frac{1}{2}$ inches, and full length, 32 inches.

Complete the form of the sleeve as shown in the Diagram, using lead or hard chalk, and by a slight pressure, the lines of the sleeve will be indented on the paper under the Draft. The hollow of the under sleeve at the top should not extend below lines F and C .

## Directions for Drafting à Body-

 Sack by the Divisional
## System.

As Shown in Diag. No. 4.
Measure-30, 27, 11 $\frac{1}{2}, 23,20 \frac{1}{2}, 32,36,32$.
First draw base line $A$ A.
From $O$ to 1 and 2 mark the figures corresponding with the shoulder measure 27

on Division A and B, by placing $O$ on the tape at $O$ on the Diagram, and at 3 mark the figures corresponding with the breast measure 36 on Division C, by placing $O$ on the tape at $O$ on the Diagram. Draw
lines $B, C$, and $D$ at right angles with line A A.

From 1 to 4 on line B, mark the figures corresponding with the breast measure 36 on Division $D$, by placing $O$ on the tape at 1 on the Diagram.

From 2 to 5 on line C , mark the figures corresponding with the breast measure 36 on Division E, by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 on line C, mark the figures corresponding with the breast measure 36 on Division F , by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7 on line D, mark the figures corresponding with the waist measure 32 on Division $G$, by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Draw line E from 7 through 5 to 8 , and line F from 5 to O .

From 2 to 5 on line C, apply the blade measure as taken on the body from the centre of back to the front of scye $11 \frac{1}{2}$ inches.

Hold the tape at 5 and continue the measure up line E to 8,23 inches, adding threeeighths of an inch as an allowance for seams, padding, \&c.

Draw line G from 8 to O .
From 8 to 9 on line E, mark the figures corresponding with the shoulder measure 27 on Division H , by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram.

Draw line I from 9 for the pitch of the neck.

From 9 to 10 on line I, mark the figures corresponding with the breast measure 36 on Division I, by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram.

Make the width of back at top half the distance between 8 and 9 .

Apply the measure for length of coat 30 inches, and form the back as shown by the solid lines in the Diagram, adding about one inch outside of line A A as shown at 11. Cut the back and place it again in the position from which it was cut, and put the thumb of the left hand on line $\mathbf{C}$ where the back joins the forepart, and move the top forward tili the distance between K K along the dotted line is $11 \frac{1}{2}$ inches, the same as taken on the body and applied between 2 and 5 or line $C$. While the back is in this position, form the back part of the scye and the side seam, curving the latter in at the natural waist about one inch, or to fancy or fashion.

Place the back and forepart together at 16 , and apply the waist measure 16 inches from 17 to 18 , adding 3 inches to half the waist measure, say 19 inches in all.

Place the back in position to form the shoulder by placing line F on the back directly on line G, and mark the shoulder and neck gorge, the hollow part of the latter always touching line E at K .

Draw front breast line from 6 through 18 , and form the lapel and front to taste or fashion. To obtain the length of front, sweep from the bottom of the side seam, using the front shoulder point at K as the pivot, and let the front breast line intersect the sweep at 19.

Diagrams and directions for Drafting body sacks for stooping or erect forms will not be necessary, as it must be plain to the mind of the operator that by following the directions already given for Diagrams 2 and 3, that precisely the same results will be reached as in a frock-coat.

Place the back again in the position from which it was cut and place a piece of paper under the Draft large enough to form the sleeve, and observe the following:

## Directions for 9 (afting Sleeve for

 Body-Sack by the DivisionalSystem.

First, measure the scye carefully, say 16 inches.

Draw line $H$ from 5 at right angles with line C. From 5 to 12, mark the figures corresponding with the scye measure 16 inches on Division $J$, by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

From 5 to 13, mark the figures corresponding with the scye measure 16 on Division K,
by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

From 5 to 14, mark the figures corresponding with the scye measure 16 on Division L, by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

Draw a line from 13 to 15 at right angles with line F.

From 13 to 15 , mark the figures corresponding with the scye measure 16 on Division K , by placing $\mathrm{O}^{6}$ on the tape at 13 on the Diagram.

The back-arm seam at 14 must always touch line F , and the front seam terminate on line C as shown at 12 on the Diagram.

Apply the measure for length of sleeve from 14 (less the width of back) to the elbow, $20 \frac{1}{2}$ inches, and full length 32 inches.

Complete the form of the sleeve as shown in the Diagram, using lead or hard chalk, and by a slight pressure the lines of the sleeve will be indented on the paper under the Draft.

The hollow part of the under sleeve at the top should not extend between lines F and C.

## Directions for Drafting Over-Sack

## by the Divisional System.

Diag. 5.
It is a very common practice among Tailors to take the breast and waist measure over a
coat when measuring for an over-sack or surtout, whether the coat measured over is thick or thin. It is a bad habit, as the measures so obtained are very uncertain. It is far

better to take a neat measure over the vest and make the necessary additions.

The measure already taken $\left(19,38,27,11 \frac{1}{2}\right.$, $23,20 \frac{1}{2}, 32,36,32$ ) should be increased thus : $39,28 \frac{1}{2}, 12,24 \frac{1}{4}, 21,33,38,34$, for an oversack intended to be worn over garments of medium thickness. When the coat is re-
quired loose or to be worn over thick undergarments, add 3 inches to the breast and waist measure, and to the shoulder and blade measures the same proportions.

Draw base line A A.
From $O$ to 1 and 2 mark the figures corresponding with the shoulder measure $28 \frac{1}{2}$ on Divisions $A$ and $B$, by placing $O$ on the tape at O on the Diagram, and at 3 mark the figures corresponding with the breast measure 38 on Divisions C, by placing O on the tape at O on the Diagram. Draw lines $\mathrm{B}, \mathrm{C}$ and D at right angles with line A .

From 1 to 4 on line B mark the figures corresponding with the breast measure 38 on Division D, by placing $O$ on the tape at 1 on the Diagram.

From 2 to 5 on line C mark the figures corresponding with the breast measure 38 on Division E , by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 on line C mark the figures corresponding with the breast measure 38 on Division F , by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7 on line D mark the figures corresponding with the waist measure 34 on Division G , by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Draw line E from 7 through 5 to 8, and line F from 5 to O .

From 2 to 5 on line C, apply blade measure as taken on the body from the centre of back
to the front of scye, 12 inches. Hold the tape at 5 and continue the measure up line E to $8,24 \frac{1}{4}$ inches, adding three-fourths of an inch instead of three-eighths (as directed for body-coats) as an allowance for seams, padding, \&e.

Draw line G from 8 to O .
From 8 to 9 on line E mark the figures corresponding with shoulder measure $28 \frac{1}{2}$ on Division H , by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram.

Draw line I from 9 for the pitch of neck. From 9 to 10 mark the figures corresponding with the breast measure 38 on Division I, by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram.

Make the width of back at the top, half the distance between 8 and 9 .

Apply the measure for length of coat 39 inches, and form the back as shown by the solid lines on the Diagram, adding two inches outside of line A A as shown at 11. Cut the back and place it again in the position from which it was cut, and put the thumb of the left hand on line C where the back and forepart joins together, and move the top of back forward till the distance between K K, along the dotted line, is 12 inches, the same as taken on the body and applied between 2 and 5 on line C. While the back is in this position form the back part of the scye and the side seam, curving the latter in at the natural waist about one inch, and adding one inch to one inch and a half for spring as shown at 12 .

Place the back and forepart together at 16 and apply the waist measure from 17 to 18 , adding three and a half to four inches, say $20 \frac{1}{2}$ to 21 inches in all.

Place the back in position to form the shoulder, by placing line $F$ on the back directly on line G, and mark the shoulder and neck gorge, the hollow part of the latter always touching line E at K.

Cast a short sweep downward from 6 at line C , using 2 on the back as the pivot.

Draw front breast line from the sweep (one and a-half inches below 6) through 18 , and form the lapel and front to taste or fashion.

To obtain the length of the coat in front, draw a sweep from the bottom of the side seam, using the front shoulder point at K as the pivot, and let the front breast line intersect the sweep at 19 .

For stooping or erect forms observe the directions already given for Diagrams 2 and 3, and apply the blade measure in precisely the same manner for body and over-sacks.

## Directions for Drafting Sleeve of

 Over-Sack by the DivisionalSystem.

See Diag. 4.
Place a piece of paper under the Draft large enough to form the sleeve, and measure the scye carefully, say $17 \frac{1}{2}$ inches.

Draw base line H from 5 at right angles with line C .

From 5 to 12 mark the figures corresponding with the scye measure $17 \frac{1}{2}$ on Division $J$, by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

From 5 to 13 mark the figures corresponding with the scye measure $17 \frac{1}{2}$ on Division K, by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

From 5 to 14 mark the figures corresponding with the scye measure $17 \frac{1}{2}$ on Division L, by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

Draw a line from 13 to 15 at right angles with line F .
From 13 to 15 mark the figures corresponding with the scye measure $17 \frac{1}{2}$ on Division K, by placing $\mathrm{O}^{6}$ on the tape at 13 on the Diagram.
The back-arm seam at 14 must always touch line F , and the front seam terminate on line C, as shown at 12 on the Diagram. Aply the measure for length of sleeve from 14 (less the width of back) to the elbow, 21 inches, and the full length, 33 inches.
Complete the form of the sleeve as shown in the Diagram, using lead or hard chalk, and by a slight pressure the lines of the sleeve will be indented on the paper under the Draft. The hollow part of the undersleeve, at the top, should not extend below lines F and C .

Directions for Prafting a Surtout Over-Coat by the Divisional System.
Diag. 6.
The measure, as taken for a frock-coat-19, $38,27,11 \frac{1}{2}, 23,20 \frac{1}{2}, 32,36,32$. The same enlarged for a surtout- $19 \frac{1}{2}, 40,28 \frac{1}{2}, 12,24 \frac{1}{4}, 21$, $33,38,34$. When the coat is desired loose, or is intended to be worn over a very thick

coat, add three inches to the breast and waist measure, and the same proportions to the shoulder and blade measures.

First draw base line A.
From $O$ to 1 and 2 mark the figures cor-
responding with the shoulder measure on $28 \frac{1}{2}$ Divisions $A$ and $B$, by placing $O$ on the tape at $O$ on the Diagram, and at 3 mark the figures corresponding with breast measure 38 on Division C , by placing O on the tape at O on the Diagram.

Draw lines $B, C$, and $D$ at right angles with line A .

From 1 to 4, on line B, mark the figures corresponding with the breast measure 38 on Division $D$, by placing $O$ on the tape at 1 on the Diagram.

From 2 to 5, on line C, mark the figures corresponding with the breast measure 38 on Division E, by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6, on line C, mark the figures corresponding with the breast measure 38 on Division F, by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7, on line D, mark the figures corresponding with the waist measure 34 on Division G, by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Draw line E from 7 through 5 to 8, and line F from 5 to O .

From 2 to 5 , on line C, apply the blade measure as taken on the body from the centre of back to the front of scye, 12 inches.

Hold the tape at 5 and continue the measure up line E to 8, $24 \frac{1}{4}$ inches, adding threeeighths of an inch as an allowance for padding, seams, \&c.

Draw line G from 8 to O .
From 8 to 9 mark the figures corresponding with the shoulder measure $28 \frac{1}{2}$ on Division H , by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram. Draw line I from 9 for the pitch of neck.

From 9 to 10 mark the figures corresponding with the breast measure 38 on Division I, by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram.

Make the width of the back at top, half the distance between 8 and 9 .

Apply the measure for length of waist, $19 \frac{1}{2}$ inches, and form the shoulder and side seam of the back as shown in the Diagram.

Cut the back and place it in position to form the shoulder, by placing line F on the back, directly on line G, and mark the shoulder and neck gorge, the hollow part of the latter always resting on line E at K .

Place the back again in the position from which it was cut, and put the thumb of the left hand on line $C$ where the back joins the side body, and move the top of the back forward till the distance between K K , along the dotted line, is 12 inches, the same as taken on the body and applied between 2 and 5 on line C.

While the back is in this position, form the back part of the scye and the side seam, curving the latter in a half or three-fourths of an inch at the natural waist, according to the form of the customer.

Draw sweep J from the bottom of the side body, using the front shoulder point at K as the pivot.

Apply the waist measure from a little above 3 on the back to 11, allowing for what has been taken out between the back and side body, 17 inches, to which add one inch for seams and cuts, 18 inches in all.

Form the front and waist of the forepart and the line separating the side body from the forepart. At this point, I advise that no cloth be taken out to give form to the waist, but allow the side body to join the forepart precisely as it was Drafted, and add the necessary spring at the hips as shown in the Diagram.

If the hips of the customer should be larger than the average form, take and apply a measure over the upper part of the hip to insure the coat being large enough at the waist seam.

It is unnecessary to apply the breast or shoulder measure to the Draft as the Divisions on the tape will produce them correctly in all cases.

## To Draft sleeve.

Measure the scye carefully and follow the directions already given for Diagram No. 1.

## Directions for Prafting à Waist-

## Coat by the Divisional

System.

## As Shown in Diagram 7.

There is no reason why a coat should be Drafted by one system and a waistcoat by another entirely different. So I have adapted my Divisions for Drafting waistcoats in precisely the same manner, producing the same form to fit the customer as required in the coat.


Draw base line A, and proceed to Draft a waistcoat by the following measure: From the collar seam at the back of neck, for length, 26 inches; from the same starting place to the hollow point of the waist, (just above the hip) $20 \frac{1}{2}$ inches, and the full length
at the hip, 23 inches, the shoulder, blade, breast and waist measure being the same as taken for the coat and applied in Diagram No. 1.

From $O$ to 1 and 2 mark the figures corresponding with the shoulder measure 27 on Divisions $A$ and $B$, by placing $O$ on the tape at $O$ on the Diagram, and at 3 mark the figures corresponding with the breast measure 36 on Division C. Draw lines B, © and D at right angles with line A .

From 1 to 4, on line B, the student may use his judgment in marking for the width of the back. I have a decided preference for a narrow back and shoulder in a waistcoat, and think the point, where lines $B$ and $F$ intersect, will be found ample in all cases.

From 2 to 5 , on line C , mark the figures corresponding with the breast measure 36 on Division E, by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 mark the figures corresponding with the breast measure 36 on Division F, by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7, on line D, mark the figures corresponding with the waist measure 32 on Division G, by placing $\mathrm{O}^{3}$ on the tape at 3 on the diagram.

Draw line E from 7 through 5 to 8, and line F from 5 to O .

Apply the blade measure from 2 to $511 \frac{1}{2}$
inches on line $C$, and continue the measure up line E to 8,23 inches.

Draw line G from 8 to O .
From 8 to 9 mark the figures corresponding with the shoulder measure 27 on Division H , by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram.

Draw line I from 9 for pitch of neck.
From 9 to 10 mark the figures corresponding with the breast measure 36 on Division I, by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram.

Mark the width of the back at top, half the distance between 8 and 9 .

Form a line for the centre of back from 1 (on line A) a fourth of an inch in at 2, and one inch in at the natural waist, as delineated in the Diagram at 13.

Apply the waist-measure from 13 along the dotted line to 11,16 inches, adding two inches, 18 in all, at 12.

Make the width of the back, on line C, about one-fourth of the breast-measure.

Apply the measure for length, (from 8) 26 inches, and from 8 to the hollow part of waist, at $14,20 \frac{1}{2}$ inches, and full length at the hip, 23 inches.

Cut the back and place it in position to form the shoulder, by placing line F on the back directly on line $G$, and mark the armhole, shoulder and neck-gorge, the hollow part of the latter always resting on line E.

Add sufficient for spring over the hip, and complete the form of the front and bottom.

## Directions for ${ }^{\text {9 }}$ (rafting Waistróoat

 for a Stooping Form by the Divisional System.
## As Shown in Diagram 8.

Measure.-26, 20 $\frac{1}{2}, 23,36,32$. Shoulder measure, 27; blade, 12, 23.

Draw base line A.


From O to 1 and 2, mark the figures corresponding with the shoulder-measure on Divisions $A$ and $B$, by placing $O$ on the tape at $O$ on the Diagram, and at 3 mark the figures corresponding with the breast-measure 36 on Division C.

Draw lines $\mathrm{B}, \mathrm{C}$ and D at right angles with line A .

From 1 to 4, on line B, mark the width of back to taste, or at the intersection of lines F and B .

From 2 to 5, mark the figures corresponding with the breast-measure 36 on Division E, by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 , mark the figures corresponding with the breast-measure 36 on Division F, by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7, mark the figures corresponding with the waist-measure 32 on Division G, by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Now apply the blade measure (as taken on the body from the centre of back to the front of scye) $\ddagger 2$ inches from 2 to X , a half inch more than in Diagram 7, and a half inch more than the distance given by Division E from 2 to 5 . Dot on line C half the distance between 5 and X , which is a fourth of an inch, and at the top of line A mark in and $u p$ a fourth, as shown from O to X .

Draw line E from 7 through the Dot to 8, and line F from the Dot to X at the top of back instead of O .

Continue the blade-measure from X up line E to 8, 23 inches. Draw line G from 8 to X instead of $O$.

Form the back from X , touching line A at

1 , in a fourth of an inch at 2 , and one inch in at the natural waist, as shown at 13 on the Diagram.

Apply the measure for size of waist from 13 to 11 and 12 , as directed for Diagram 7. Also apply the measures for length, and complete the remainder of the Draft in the same manner as directed for No. 7.

## Directions for Drafting Waistcoat

## for an Erect Form by the

## Divisional System.

As Shown in Diagram 9.
Measure.-26, 201 $, 23,36,32$. Shoulder measure, 27 ; blade, 11, 23.


Draw base line A.
From O to 1 and 2, mark the figures cor-
responding with the shoulder-measure 27 on Divisions $A$ and $B$, by placing $O$ on the tape at $O$ on the Diagram, and at 3 mark the figures corresponding with the breast-measure 36 on Division C. Draw lines $\mathrm{B}, \mathrm{C}$ and $D$ at right angles with line $A$.

From 1 to 4, on line B, mark the width of back to taste, or at the intersection of lines F and B .

From 2 to 5, on line C, mark the figures corresponding with the breast-measure 36 on Division E, by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6, mark the figures corresponding with the breast measure 36 on Division F, by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7, mark the figures corresponding with the waist-measure 32 on Division G, by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Now apply the blade measure (as taken on the body from the centre of back to the front of scye) 11 inches from 2 to X , a half inch less than in Diagram 7, and a half inch less than the distance given by Division E from 2 to 5 . Dot on line C half the distance between 5 and X , which is a fourth of an inch, and at the top of line A mark out and down a fourth of an inch, as shown from O to X on the Diagram.

Draw line E from 7 through the Dot to 8 , and line F from the Dot to X , instead of O
at the top of back. Continue the blade measure from X up line E to 8,23 inches, and draw line G from 8 to X , at top of back, instead of O .

Form the back from $X$, touching line $A$ at 1 , in a fourth of an inch at 2 , and one inch in. at the natural waist, as shown in the Diagram at 13 . Apply the waist measure from 13 to 11 and 12 , as directed for Diagram 7. Also apply the measures for length, and complete the remainder of the Draft as directed for No. 7.

## Garments for Ladies.

To some tailors it may seem rather irregular to find a System for Cutting Sacks, Riding Habits, etc., for ladies, in a book intended solely for the benefit and use of tailors. But I would not consider my work quite complete if I omitted to notice this branch of our business, which of late years has become more and more closely connected with it.

Time was when Tailors were rarely ever requested to make a garment for lady's wear, and even then few cared to undertake the job, but the superiority of style, fit and workmanship of garments so made were such that it has grown to be a recognized fact that they can never properly be made except by those in the legitimate business. Owing to this, I
have determined to give the result of my own labor in the above line, feeling assured that many of my readers will have occasion, off and on, to put the same to profit.

## Directions for Drafting Lady's Peefing Jacket by the Divisional System.

 As Shown in Diagram 10.Measure $13 \frac{1}{2}, 23 \frac{1}{2}, 26,11,22 \frac{1}{2}, 36,26,58$. The above measures are taken in the

same matter as described for a frock coat, as follows: Length of waist, $13 \frac{1}{2}$; full length, $23 \frac{1}{2}$; shoulder, 26 ; blade, 11, 22 $\frac{1}{2}$;
breast, 36 ; waist, 26 , and over the skirts at the bottom of the Jacket, 58 inches.

Draw base line A A.
From $O$ to 1 and 2 mark the figures corresponding with the shoulder measure 26 on Division A and B by placing O on the tape at $O$ on the Diagram. And at 3 , mark the figures corresponding with the breast measure 36 on Division C.

Draw line $\mathrm{B}, \mathrm{C}$ and D at right angles with line A A. From 1 to 4 on line B mark the figures corresponding with the breast measure 36 on Division D, by placing $O$ on the tape at 1 on the Diagram.

From 2 to 5 on line C mark the figures corresponding with the breast measure 36 on Division E by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 on line C mark the figures corresponding with the breast measure 36 on Division F by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7 on line D mark the figures corresponding with the waist measure 26 on Division $G$ by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Draw line E from 7 through 5 to 8 , and line F from 5 to O .

It will be observed by the operator in applying the blade measure from 2 to 5 , that the distance given by Division E is a half inch greater than the measure
which in this case must be taken from the side body, as shown in the Diagram.

When cutting garments for ladies, always draw line E from 7 through 5, for the pitch of the front shoulder point, and adapt the garment to the measure at the side body, instead of making the changes directed for coats when a variation in the blade measure indicates a stooping or erect form.

Place 11 on the inch tape at 5, and continue the blade measure up line E to 8, adding three-eights of an inch as an allowance for seams, padding, etc.

Draw line $G$ from 8 to O .
From 8 to 9 on line E mark the figures corresponding with the shoulder measure 26 on Division H by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram.

Draw line I from 9 for the pitch of neck.

From 9 to 10 on line I mark the figures corresponding with the breast measure 36 on Division I, by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram.

Draw sweep $J$ for front breast line, using 2 on the back as the pivot. Curve sweep J out a little at 17 to form the front at waist, as shown in the Diagram.

Form the upper part of the back by making the width at top half the distance between 8 and 9 , and less wide at 4 (by a half to three-fourths of an inch)
than the width given by Division D . Apply the measure for length $13 \frac{1}{2}$ inches waist and $23 \frac{1}{2}$ full length.

Measure out from line A at the bottom of the back, three to three and ahalf inches, as shown at 11 on the Diagram.

Note.-All additions or distances given in inches are intended for the middle or 36 size, and in all larger or smaller garments must be increased or diminished accordingly.

Form the back seam from the waist to 11, and the side seam of the back similar to a sack coat. Cut the back and place it in position to form the shoulder by placing line $F$ on the back directly on line $G$, and mark the shonlder and neck gorge, the hollow part of the latter always touching line E. Paste a piece of paper to the forepart large enough to form the part marked 16.

Form the upper part of the side body and scye, and apply the measure for size around the bottom from ' 17 to 16 , including the back 29 inches, and form the side seam from the waist to 16 , as shown by the dotted lines on the Diagram.

Draw a sweep (for the length in front) from the bottom of the side seam to 17 , using the front shoulder point as the pivot. Mark a cut under the arm (tak-
ing out from an inch to an inch and ahalf at the waist). Form the front double or single breasted as desired.

## Directions for Prafting Sleeve

## for Lady's Sack by the

 Divisional System.First measure the scye carefully 15 inches. Draw line $H$ at right angles with line $\mathbf{C}$ (as shown by the dotted lines). Place a piece of paper under the Draft large enough to form the sleeve. From 5 to 12 mark the figures corresponding with the scye measure 15 on Division .J by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

From 5 to 13 and 14 mark the figures corresponding with the scye measure 15 on Divisions K and L by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

Draw a line from 13 to 15 , and place $\mathrm{O}^{6}$ on the tape at 13 , and mark 15 on Division K. Form the sleeve as already directed for a frock coat on Diagram 1, except at 15 , at which point the sleeve must be reduced at least half an inch, as shown in the Diagram. The same amount of fullness and squareness not being desirable in a lady's garment.

## Directions for Prafting Lady's Close-fitting Jacket by the Divisional System.

As Shown on Díagram 11.
Measure $13 \frac{1}{2}, 23 \frac{1}{2}, 26,11,22 \frac{1}{2}, 36,26$, 20 (from the back of neck to the hip).
. sponding with the breast measure 36 on Division $D$ by placing $O$ on the tape at 1 on the Diagram.

From 2 to 5 on line $\mathbf{C}$ mark the figures corresponding with the breast measure 36 on Division E by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 on line C mark the figures corresponding with the breast measure 36 on Division F by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7 mark the figures corresponding with the waist measure 26 on Division $G$ by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Draw line E from 7 through 5 to 8, and line F from 5 to O . It will be observed by the operator, in applying the blade measure from 2 to 5 , that the distance given by Division E is a half inch greater than the measure, which, in this case, must be taken from the side body, as shown in the Diagram.

When cutting garments for ladies, always draw line E from 7 through 5 for the pitch of the front shoulder point, and adapt the garment to the measure at the side body, instead of making the changes directed for coats when a variation in the blade measure indicates a stooping or erect form. Place 11 on the inch tape at 5 , and continue the blade measure up line E to 8, adding three-
eighths of an inch as an allowance for seams, padding, etc.

Draw line $G$ from 8 to $O$.
From 8 to 9 on line E mark the figures corresponding with the shoulder measure 26 on Division H by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram. Draw line I from 9 for pitch of neck.

From 9 to 10 mark the figures corresponding with the breast measure on Division I by placing $O^{5}$ on the tape at 9 on the Diagram.

Draw sweep J for front breast line, using 2 on the back as the pivot. Form the front breast line from sweep $J$ to 21 , as shown on the Diagram. Make the width of the back at top half the distance between 8 and 9 .

Apply the measure $13 \frac{1}{2}$ waist and $23 \frac{1}{2}$ full length. Add three inches outside of line A A, as shown at 11 on the Diagram.

Note.-All additions or distances given in inches are intended for the middle or 36 size, and in all larger or smaller garments must be increased or decreased accordingly.

Make the width of back at the waist one and a-half inches, and the bottom from 11 to 18 , six inches.

Form and cut the back, making the width at 4 a half inch less than given by

Division D. Place back in position to form the shoulder by placing line F on the back directly on $G$, and mark the shoulder and neck gorge, the hollow part of the latter always resting on line E.

Form the line of the side body, lapping it on the back nearly out to 11, as shown by the dotted lines at 19. From 19 to 20 mark ten and a-half inches. Apply the measure twenty inches from 8 to 16 , and draw sweep K from 16 to 17 , using the front shoulder point as the pivot. From 21 around the bottom to 22 mark twenty inches. Form the lapel and front of jacket.

We now have the back, front and bottom of the Jacket, and the remainder must be marked with care.

Apply the waist measure at the smallest part, and ascertain the exact quantity to be dispensed with, and form two cuts, as shown in the Diagram and marked $X$, X , and between 23 and 24 , and between 25 and 26 , take out the surplus cloth to reduce the Jacket to the exact waist measure.

Take out half an inch between K and L (as spring for the skirt), between 16 and 17. Add a little fullness to the skirt at 17 , and have it sewed in to the body.

## Directions for Drafting Sleeve for Lady's Close-fitting Jacket by the Divisional System.

First measure the scye carefully 15 inches. Draw line H at right angles with line C (as shown by the dotted lines). Place a piece of paper under the Draft large enough to form the sleeve.

From 5 to 12 mark the figures corresponding with the scye measure 15 on Division J by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram, and from 5 to 13 and 14 mark the figures corresponding with the scye measure 15 on Divisions $K$ and L, by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

Draw a line from 13 to 15 , at right angles with line F, and mark at 15 the figures corresponding with the scye measure 15 on Division K by placing $\mathrm{O}^{6}$ on the tape at 13 on the Diagram.
Form the sleeve as already directed for a frock coat on Diagram 1, except at 15 , at which point it must be reduced at least half an inch, as shown on the Diagram, the same amount of fullness or squareness not being desirable in ladies' garments.

## Directions for Drafting Piding

 Habit by the DivisionalSystem.

As Shown on Diagram 12.
Measure $15 \frac{1}{2}, 23 \frac{1}{2}, 26,11,22 \frac{1}{2}, 36,26$, 20, 23.

Draw base line A .


From $O$ to 1 and 2, mark the figures corresponding with the shoulder measure 26 on Divisions A and B, by placing O on the tape at O on the Diagram, and at 3 mark the figure corresponding with the breast measure 36 on Division C.

Draw lines $\mathrm{B}, \mathrm{C}$ and D at right angles with line A.

From 1 to 4 on line C mark the figures corresponding with the breast measure 36 on Division $D$ by placing $O$ on the tape at 1 on the Diagram.

From 2 to 5 on line C mark the figures corresponding with the breast measure 36 on Division E by placing $\mathrm{O}^{1}$ on the tape at 2 on the Diagram.

From 5 to 6 mark the figures corresponding with the breast measure 36 on Division F by placing $\mathrm{O}^{2}$ on the tape at 5 on the Diagram.

From 3 to 7 on line D mark the figures corresponding with the waist measure 26 on Division G by placing $\mathrm{O}^{3}$ on the tape at 3 on the Diagram.

Draw line E from 7 through 5 to 8, and line F from 5 to O . It will be observed by the operator, in applying the blade measure from 2 to 5 , that the distance given by Division E is a half inch greater than the measure, which in this case must be taken from the side body, as shown in the Diagram.

When cutting Garments for Ladies, always draw line E from 7 through 5 to pitch the front shoulder point and adapt the size of the blade to the measure by reducing the side-body, instead of making the changes directed for coats, when a variation in the blade measure indicates a stooping or erect form.

Draw sweep $J$ from 6 , using 2 on the
back as the pivot. Place 11 on the inch tape at 5 , and continue the blade measure up line E to $822 \frac{1}{2}$ inches, to which add three-eighths of an inch as an allowance for seams, padding, etc.

Draw line $G$ from 8 to $O$.
From 8 to 9 on line E mark the figures corresponding with the shoulder measure 26 on Division $H$ by placing $\mathrm{O}^{4}$ on the tape at 8 on the Diagram.

Draw line I from 9 for pitch of neck, and from 9 to 10 mark the figures corresponding with the breast measure 36 on Division I by placing $\mathrm{O}^{5}$ on the tape at 9 on the Diagram.

Make the width of back at top half the distance between 8 and 9 , and at the waist one inch.

Form and cut the back, making the width at 4 a half inch less than given by Division D.

Place the back in position to form the shoulder by placing line $F$ on the back directly on line $G$, and mark the shoulder and neck gorge, the hollow part of the latter always touching line E at the front shoulder point.

Form the front waist by curving out a little from sweep $J$, as shown at 16 .

Apply the measure for length at hip 20 inches, and for length of front 23 inches from 8 , and the waist measure from 16 to 17 , and remove the surplus material
by forming two cuts marked X X on the Diagram and between 18 and 19 , and between 19 and 20 reduce the waist to the neat measure.

## T'o Draft Sleeve for Mabit by the Divisional System.

First measure the scye with care 15 inches.

Draw line H from 5 at right angles with line C , as shown by the dotted lines on the Diagram. From 5 to 12 mark the figures corresponding with the scye measure 15 on Division $J$ by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

From 5 to 13 and 14 mark the figures corresponding with the scye measure 15 on Divisions K and L by placing $\mathrm{O}^{6}$ on the tape at 5 on the Diagram.

Draw a line from 13 to 15 at right angles with line F , and mark at 15 the figures corresponding with the scye measure on Division K by placing $\mathrm{O}^{6}$ on the tape at 13 on the Diagram.
Form the sleeve in all respects as directed for frock coat in Diagram 1, except at 15 , at which point it must be reduced at least half an inch, as shown in the Diagram, the same amount of fullness and squareness not being desirable in a lady's garment.

## To Draft Small Skirt.

## Diagram 13.

Draw base line A A.
From $O$ to 1 mark length of the skirt (8 inches).

From 1 to 2 mark one-sixth of the waist measure.

From 2 to 3 mark one-sixth of the waist measure.

Draw the curved line from 1 through 3 to 4. Measure the bottom of the Habit (omitting the back), and adapt the length of the curved line to the measure so taken. Form the balance of the skirt as shown in the Diagram.

## Directions for Drafting Skirt.

## As Shown on Diagram 39.

Draw base line A A along the double edge of the cloth.

From $O$ to 1 mark one-sixth of the breast measure.

Draw line B , and from O to 2 mark one-third of the breast measure, and from 2 to 3 mark one-third of the breast measure.

From 1 to 5 apply the measure for length say 47 inches. Form the front part of the skirt from 2 to 4 , and the back part from 3 to 4 .

Make the width of the skirt from 5 to 4, twenty-five inches. This will make the

whole skirt one hundred inches, or two yards and three-quarters, which is ample for any skirt of medium size.

Line $\mathbf{C}$ at the bottom represents the left side of the skirt full length, and line D where the right side must be shortened.

The front of the waistband or belt is represented by $E$, and the back part by F. Plait the back part of the skirt as shown by the lines in the Diagram.

## Exact Meàsurement System.

Very much has been said and written upon the relative merits of Divisional and Exact Measurement Systems. Both have zealous advocates among the intelligent portion of the trade, and both are valuable. I believe all thinkers on the subject will agree that to the moderately experienced Cutter of average ability, the Divisional System is the best. The number of measures are less, more simple, and easily taken. The Cutter is less liable to commit errors in manipulating them than he is in the Exact Measurement process (which requires greater skill and much practice in measuring), while to an expert the latter system is preferable. I believe the theory correct, and when intelligently practiced, that it overcomes objectionable features in Divisional Systems, and produces better fitting and more comfortable Garments to the wearer. How far a Cutter must be advanced in his profession
before he can safely be deemed an expert, I will not pretend to state, as opinions are sure to differ widely regarding the matter, and my views may not be appreciated. One thing is certain, a great deal depends upon the ambition and application of the Cutter, in the settling of the question individually. I will take the liberty of admonishing my readers to well and carefully practice the taking of measures designed to be directly applied to cloth as taken on the body, for every inaccuracy will appear in the Garment when completed. In publishing the accompanying Exact Measurement System, I believe I am offering to the Trade the best and most practical method of the kind ever invented. It owes its origin entirely to myself, and is simple in principle and application. It has been, and is now being used in my Fifth Avenue Establishment, which has afforded ample opportunity for thoroughly testing its merits, and the result has been most satisfactory. Hence, I offer it to the Trade, feeling confident that it will supply a want long felt, in giving them a method for fitting equally well forms of correct proportions and ill-shaped figures.

## Directions for Meassuring for the New Plumb System.

First, take the full length of waist and skirt, and then length of sleeve, from the centre of the back, in the usual way, over a Coat. The breast 36 and waist 32 over the vest. (Turn to Figure or Diagram No. 40). Remove the Coat, and mark at the side of the neck on the Vest, as shown on the figure at A, the exact location you desire the shoulder point distant from the socket-bone, for width of back. In the medium sizes, two and three-quarter- to three inches. (The distance in sizes ranging from 34 to 45 inches, breast measure, will be from $2 \frac{1}{2}$ to $3 \frac{1}{4}$ inches). See that the seam of the Vest back is in the centre of the body, and the Vest drawn in moderately close at the waist by the strap and buckle. Now place the Plumb line in position, directly in front of the shoulder (as represented on the figure). By drawing the line over the shoulder, and slipping it up and down a few times, the weight attached to the line will draw it to the desired place in front of the arm. Request your customer to remain quiet until the weight is still, then mark the Vest perpendicular with the line at $B$, and at the hollow of waist at C. Cross this latter mark just over the hip in the most hol-
low part of the waist. Lay aside the Plumb line and proceed with the inch tape, to take the following measures very carefully, keeping the customer in as near the same position as possible:

From socket-bone to the mark at the side of the neck $A$, say $2 \frac{1}{2}$ inches. Then place end of the tape at the mark A, and measure down in front of the arm, and with the fingers of the right hand placed under the arm, ascertain the correct depth of scye, say $9 \frac{1}{2}$ inches, and continue the measure to the mark at the hollow of the waist C, say 18 inches.

From the same point, A, draw the measure back of the arm in as straight a line as possible, over the shoulder blade, down to $C$, at waist (represented on the Figure by the dotted line), say $19 \frac{1}{2}$ inches. Place the end of the tape in the centre of the back, opposite the bottom of the scye, and measure forward to the front of the scye (the mark at B), say $11 \frac{1}{2}$ inches. Place the end of the tape in the centre of the back at the hollow part of the waist, and measure forward to the mark at C, say $7 \frac{3}{4}$ inches. The measure as above taken will read $19,38,20 \frac{1}{2}, 32,36,32,2 \frac{1}{2}$, $9 \frac{1}{2}, 18,19 \frac{1}{2}, 11 \frac{1}{2}, 7 \frac{3}{4}$.

## Directions for Drafting BodyCoats by the Measurement system. <br> Diagram 14.

From the measures taken, which read as follows-19, 38, $7 \frac{1}{2}, 20 \frac{1}{2}, 32,36,32,2 \frac{1}{2}, 9 \frac{1}{2}$, $18,19 \frac{1}{2}, 11 \frac{1}{2}, 7 \frac{2}{4}$,

First draw base line A A.


From $O$ to $I$ apply the measure as taken on the body $9 \frac{1}{2}$ inches. From $O$ to 2, 18 inches. From O to O 1 , the breast measure, 36 inches.

From 2 to 5 , at the top of back, $19 \frac{1}{2}$ inches.

From 1 to 6, $11 \frac{1}{2}$ inches. From 2 to 7, $7 \frac{3}{4}$ inches.

Divide the distance between between $O$ and 1 into two equal parts, as shown at 3 , and the distance between O and 3 into two equal parts, as shown at 4.

Use O1 as the pivot, and sweep line E from 2, line $F$ from 1, line $G$ from 3, line H from 4, and a line from O to K for the front shoulder point.

Use 2 as the pivot, and sweep line D through 7, and line B through 5 .

Use 1 as the pivot, and sweep line $\mathbf{C}$ through 6 .

Draw line $L$ (for back seam) through the intersection of lines F and C , three-fourths of an inch outside of line $D$ (to allow for material taken out between the back and side body at the natural waist). Measure in from line L at 8 to $9,2 \frac{1}{2}$ inches (as taken on the body). Square from 8 to 9 with line L, and form the top of back as shown on the Diagram, from 10 to 9 .

Measure for width of back $7 \frac{1}{2}$ inches from line L to 16 . Form the back, keeping the point at 16 one-fourth of an inch above line G.

Draw line $I$ from 1 to 12 at right angles with line A A, and line J from 2 at right angles with line A A. Place the inch measure again on the Draft, starting from
sweep C at 6 , with $11 \frac{1}{2}$, resting at 1 , and mark half the breast measure, 18 inches, at 11 , and add $2 \frac{1}{2}$ inches from 11 to 12 Divide the distance between 1 and 11 on line I in exact equal parts, as shown at 14. Place the measure, starting from sweep D at 7, with $7 \frac{3}{4}$ inches, resting at 2 , and mark at 13 , on line $J$, half the waist measure, 16 inches, adding one inch, forward of 13 , for front of coat.

Divide the distance between 2 and 13 on line $J$ in exact equal parts, as shown at 15 .

Draw a line from 15 through 14 to K, for pitch of the front shoulder point.

Draw a line from $K$ (front shoulder point), with the straight edge resting on line $H$, as shown on the Diagram by the dotted lines from K to 17 .

From 21 to 22, mark one-fourth of the breast measure. Apply the measure for length of waist 19 inches.

Draw a sweep from the bottom of the side-body to the front (to regulate the length of the forepart), using the front shoulder point at K as the pivot.

Complete and cut the back.
Place the thumb of the left hand on line F , where the back joins the sidebody, and move the top of back forward till the distance between K K along the dotted line is $11 \frac{1}{2}$ inches, the same as between 6 and $I$ on line $F$. While the back is in this position, form the back
part of the scye and the side seam, taking out a half to three-fourths of an inch between the back and side-body, at the natural waist, according to the requirements of the customer.

Place 9 on the back at K on the forepart, and form the shoulder, neck gorge, and the remainder of the scye. Complete the front, waist seam, and the side-body, adding the necessary spring at the bottom of side-body, instead of taking out a piece under the arm.

When a square or high shoulder is desired, raise the back at 16 , and the shoulder above line $H$, and add in making an equivalent in wadding. It is desirable that this be done when the shoulders of the customer are inclined to droop. In fact, it is the duty of the cutter to detect and improve all the imperfections of his customers. In this lies the true art of his calling.

## Directions for Mrafting Sleeve by the Measurement System.

First, measure the scye with care, 16 inches, and place a piece of paper under the Draft large enough to form the sleeve.

It will be observed that this sleeve, like that in the Divisional System, is drafted in the position in which it is to
be sewed in the coat, producing the correct length of back and forearm seams.

From 3 to 18 mark half the scye measure, 8 inches, and from 1 to 19 mark one-sixteenth of the scye measure.

Form the top of sleeve, having the part at 16 as much above line $G$ as the back is above line $G$ and the shouider point above line H combined.

Have the sleeve at 20 as far forward of line A A as 19 is forward at 1 , as shown on the Diagram.

Apply the measure for length to the elbow $20 \frac{1}{2}$ inches (less the width of the back), and full length 32 inches. Complete the form of the sleeve, and by using hard chalk or lead, the lines of the sleeve will be indented on the paper un. der the Draft.

## Directions for Drafting Body-

## Sack by the Measurement System.

## Diagram 15.

From the same measure as taken for body coat, which reads as follows: 19, 38, $36,32,7 \frac{1}{2}, 20 \frac{1}{2}, 32, \quad 2 \frac{1}{2}, 9 \frac{1}{2}, 18,19 \frac{1}{2}, 11 \frac{1}{2}$, $7 \frac{3}{4}$; length of sack, $30 \frac{1}{2}$ inches.

Draw base line A A.
From $O$ to 1 , apply the measure as taken on the body, $9 \frac{1}{2}$ inches; from $O$ to

2, 18 inches. and from $O$ to $O 1$, the breast measure, 36 inches.

From 2 to 5, at the top of the back, $19 \frac{1}{2}$ inches; from 1 to $6,11 \frac{1}{2}$ inches.

Divide the distance between $O$ and 1 into two equal parts, as shown at 3 .

Divide the distance between $O$ and 3 into two equal parts as shown at 4.

Use O1 as the pivot, and sweep line G from 3 , line $H$ from 4 , and a line from $O$ to K for the front shoulder point.


Draw line F at right angles with line A A; and line L L, for centre of back, at right angles with line F, from 6 .

Apply the measure $2 \frac{1}{2}$ inches from line L at 8 and 9 .

Square from 8 to 9 with line L , and form the top of back, as shown in the Diagram, from 10 to 9 .

Measure for width of back $7 \frac{1}{2}$ inches from line L to 16 .

Form the back by curving in the centre seam at the waist about half an inch, the width to fancy, and take out about one inch between the back and forepart at the natural waist.

Have the back at 16 a fourth to half an inch above line G.

Draw line $I$ from 1 to 12 at right angles with line A A, and line J, from 2 to 13 , at right angles with line A A.

Place the inch tape again on the Draft, starting from 6 on line L with $11 \frac{1}{2}$ inches, resting at 1 , and mark half the breast measure 18 inches at 11, and add $2 \frac{1}{2}$ inches from 11 to 12 . Divide the distance between 1 and 11 in exact equal parts, as shown at 14 . Place $7 \frac{3}{4}$ inches on the tape at 2 on the Diagram, and measure forward on line $J$ to 13 , half the waist measure, 16 inches, and add one inch for front of coat.

Divide the distance between 2 and 13 on line J, in exact equal parts, as shown at 15 .

Draw a line from 15, through 14 to K , for pitch of the front shoulder point.

Draw a line from $K$ (front shoulder point), with the straight edge resting on
line $H$, as shown on the Diagram by the dotted lines from K to 17 .

From 21 to 22, mark one-fourth of the breast measure for the length of the neck gorge.

Apply the measure for length $30 \frac{1}{2}$ inches, and cut the back.

Place 9 on the back at K on the forepart, and form the shoulder, the neck gorge, and the remainder of the scye.

Use the front shoulder point at K as the pivot, and draw a sweep from the bottom of the side seam forward for the length of front.

Draw the front breast line from 12 one inch forward of 13 (at the waist), to intersect the sweep, and complete the form of the front, double or single breasted, as desired, and delineated on the Diagram.

When a square or high shoulder is desired, raise the back at 16 and the shoulder above line $H$, and add in making an equivalent in wadding. It is desirable that this be done, to some extent, in all cases where the shoulders of the customer are inclined to droop. In fact, it is the duty of the cutter to detect and improve all the imperfections of his customers. In this lies the true art of his calling.

## Directions for Drafting Sleeve for

## Body-Sack by the Meas surement System.

First measure the scye with care 16 inches.

It will be observed that this sleeve, like that in the Divisional System, is drafted in the position in which it is to be sewed in the coat, producing the correct length of back and forearm seam.

From 3 to 18, mark half the scye measure, 8 inches. From 1 to 19, mark one-sixteenth of the scye measure. Form the top of the sleeve, having the part at 16 as much above line $G$ as the back is above line $G$ and the shoulder point above line $H$ combined.

Have the sleeve at 20 as far forward of lint A A as 19 is forward at 1 , as shown on the Diagram.

Apply the measure for length to the elbow, $20 \frac{1}{2}$ inches (less the width of the back), and full length, 32 inches. Complete the form of the sleeve, as shown on the Diagram.

Directions for Drafting Over-Sack by the Meassurement System.

As Shown on Diagram 16.
By the measure already taken, and which reads as follows: $19,38,7 \frac{1}{2}, 20 \frac{1}{2}$,
$32,36,32,2 \frac{1}{2}, 9 \frac{1}{2}, 18,19 \frac{1}{2}, 11 \frac{1}{2}, 7 \frac{3}{4}$, which should be enlarged as follows for an over-sack, intended to be worn over an under coat of medium weight-39, 8, 21, $33,38,34,10 \frac{1}{2}, 18,19 \frac{1}{2}, 12,8 \frac{1}{4}$.

If the oversack is desired loose, or to
the hip, 18 and $19 \frac{1}{2}$, are not increased, as they are balance measures only, and have no reference to size or length.

First draw base line A A.
From $O$ to 1 apply the measure, as enlarged, $10 \frac{1}{2}$ inches.

be worn over a very thick under coat, add three inches to the breast and waist measure, and a proportionate increase to the other measures which are enlarged. It will be observed that the two measures taken from the side of the neck to

From O to 2, 18 inches; and from O to O1, the breast measure, as enlarged, 38 inches.

From 2 to 5, at the top of the back, $19 \frac{1}{2}$ inches.

From 1 to 6, 12 inches (as enlarged).

Divide the distance between $O$ and 1 into two equal parts, as shown at 3 , and the distance between $O$ and 3 into two equal parts, as shown at 4.

Use O1 as the pivot, and sweep line G from 3, line H from 4, and a line from O to K for the front shoulder point.

Draw line F at right angles with line A A to 6 , and line L L at right angles with F for centre back seam, from 6.

Apply the measure, $2 \frac{1}{2}$ inches, for width of back, between $\delta$ and 9 . Square from 8 to 9 at right angles with line L L , and form the top of back, as shown on the Diagram, from 10 to 9 .

Measure for the width of back 8 inches from line L to 16 .

Form the back by curving the centre seam, inside of line $L$, L, a half inch at the natural waist, and adding a little outside of line L L at 25, making the width of the back to fancy, and take out one inch between the back and forepart at the waist. Mark the back at 16 a half to three fourths of an inch above line G.

Draw line I, from 1 to 12 , at right angles with line A A. Place the inch tape again on the Draft, starting from 6 on line L with 12 inches, resting at 1 , and mark half the breast measure (as enlarged), 19 inches, at 11, and add $2 \frac{1}{2}$ inches from 11 to 12 . Divide the dis-
tance between 1 and 11 on line I , in exact equal parts, as shown at 14 .

Place $8 \frac{1}{4}$ inches on the inch tape at 2 on the Diagram, and measure forward on line $J$ to 13 , half the waist measure (as enlarged) 17 inches, and add one inch and a-half for front breast line.

Divide the distance between 2 and 13, on line J, in exact equal parts, as shown at 15 .

Draw a line from 15 , through 14 , to K , for the pitch of front shoulder point.

Draw a line from $K$ (front shoulder point), with the straight edge resting on line $H$, as shown on the Diagram by the dotted lines from K to 17 .

From 21 and 22 mark one-fonrth of the breast measure for the length of neck gorge.

App!y the measure 39 inches for length, and cut the back. Place 9 on the back at K on the forepart, and form the scye, shoulder, and the neck gorge.

Use the front shoulder point at $K$ as the pivot, and sweep a line from the bottom of the side seam forward for the length of front.

Draw the front breast line X X from 12 one inch and a-half forward of 13 (at the waist), to intersect the sweep at 24 , and complete the form of the front double or single breasted, as desired and delineated on the Diagram.

When a square or high shoulder is desired, raise the back at 16 and the shoulder above line $H$, and add an equivalent in wadding when making. It is desirable that this be done, to some extent, on all customers where the shoulders are inclined to droop. In fact, it is the duty of the cutter to detect and improve all the imperfections of his customers. In this lies the true art of his calling.

## Directions for ${ }^{\text {D }}$ Dafting Sleeve for Over-Sack by the Measurement System.

First measure the scye with care 17 inches.
This Sleeve, like all so far described in this work, is drafted in the position in which it is to be sewed in the coat, producing the correct length of back and forearm seams.

From 3 to 18, mark half the scye measure, $8 \frac{1}{2}$ inches.

From 1 to 19, mark one-sixteenth of the scye measure.

Form the top of sleeve, having the part at 16 as much above line $G$ as the back is above line $G$ and the shoulderpoint above line $H$ combined.

Have the sleeve at 20 as far forward of line A A as 19 is forward at 1, as shown on the Diagram.

Complete and cut the sleeve as heretofore directed for body-sack.

## Directions for Drafting $^{\text {Th}}$ Trouser's.

## As Shown on Diagram 17.

By the measure taken as follows:
From the hip to the knee, 24; full

length, 42 ; inside seam, 32 ; waist, 30 ; seat, 36 ; knee, 1912 ; bottom, 18.

From $O$ to 1, apply the measure 24 inches.

From O to 2, 42 inches (full length of trousers).

From 2 to 3, 32 inches (length of inside seam).

Draw lines $\mathrm{B}, \mathrm{C}$ and D , at right angles with line $\mathrm{A} A$.

From 3 to 4 on line B, mark onefourth of the seat measure ; from 4 to 5 , mark one-fourth; and from 5 to 6, mark one-eighth of the seat measure.

Draw line E from 4 to 7 (very carefully), at right angles with line $B$.

From 7 to 8, mark three inches.
From 7 to 9 , mark three inches (in all cases), and from 9 to 10 , one inch, making the width of the bottom seven inches.

Draw line F from 9 through 5 to 11 (to pitch the front waist line).

Reduce the width of the front at 3 about half an inch, and draw a line for the outside seam from 8 to 3 . From 11 to 12 mark one-fourth of the waist measure, and complete the form of the outside seam as shown on the diagram from 12 to 3 . When cutting for small-waisted customers, drop the front, as shown on the diagram, at 11, and raise it when the customer is corpulent.

Form the inside seam, from 6 to 10, according to the prevailing fashion, taking care not to curve it too much. Now comes one of the most important points in trousers cutting. "The dress," upon this as
upon every other subject, there are many conflicting opinions; mine, of course, to me, seems reasonable. The sack which contains the testicles and the penis is suspended in the centre of the body below the abdomen, the latter measuring at least one and a half inches at the root, where it joins to the body, and the former requiring considerable space in width just below the crotch, and it is necessary that provision be made in order to secure a good, clean fit. If trousers, that are intended to fit at all close, be cut without dress and placed on the body, the seam down the front must in consequence be on one side of the penis, which removes it from the centre threefourths of an inch, which causes a tightness on the dress and an unsightly fullness on the undress side. I produce a remedy for this ugiy fault by cutting away the undress side a half to three-fourths of an inch and adding the same quantity to the dress side as represented on the diagram under consideration, or in other words, cutting the front seam three-fourths of an inch from the centre and leaving the dress side, at 6, at least one and a half inches greater than the undress side, thus securing a clean, smooth fit in the crotch, and a remedy for the leg of the dress side twisting at the bottom; complete the draft of the crotch by marking forward and back of 6 a half to three-fourths of an inch, and the same
quantity back and forward of the front line at 11, and complete and cut the front and place in position to draft the back part as shown on diagram 18. Continue lines $\mathrm{B}, \mathrm{C}$, and D .


From 6 to 14, on line B, mark oneeighth of the seat-measure. From 5 to 13, on line F , mark one-third of the seatmeasure.

Draw line G, from 6, through 13 for the
pitch of the back. Apply half the waist measure 15 inches from 11 to 12 , and from 19 to 20 , adding two inches ( 17 in all) for seams, and the cut, which is taken out over the hips to give them form. Apply half the seat-measure 18 inches from 5 to 15 and 5 to 16 , on line B .

Apply the measure to ascertain the size of the bottom 18 inches. Half the increase in the width of the back over the front must be added to each side of the front rat the bottom, for instance: in the present draft the size is 18 inches, the top side or front is already cut seven inches, leaving eleven inches for the back, which is four inches greater than the front; place half of this, or two inches between 10 and 18 , and the balance between 8 and 17 always adding for seams. Apply the measure for the size of knee $19 \frac{1}{2}$ inches and add for seams.

Complete the lines for the back part as delineated on the diagram, dropping the crotch of the back part, as shown at 14 , three-eighths of an inch.
The waist-band may be added or cut separate as shown on the diagrams now being described. All the divisions used in the above directions apply to the seatmeasure.

When the customer has hips larger than the average, it is desirable that a measure be taken over the most prominent part, and applied to the draft. The same meas-
ure should be taken for a very corpulent man when the belly is prominent between the waist and seat-measure.

I have directed that the distance between 7 and 9 , on line D , be, in all cases, three inches; 9 serves as a pivot from which to draw line F , which fixes the front of the trousers at 11, and will range back or forward in proportion to the size of the seat, as fixed between 4 and 5 . In the Diagram for corpulent figures the distance is greater than in the one just under consideration, in consequence of the seatmeasure being larger, and line F being drawn from 9 (which is three inches inside of centre balance line at the bottom) through 5, thus placing the top of the line more forward and providing space for the corpulent or large-bellied man.

## Directions for Drafting Trouser's.

## for à Corpulent figure by

## the following

As Shown on Diagram 19.
Measure 25, 44, 31 $\frac{1}{2}, 44,45,22,19$. Draw base line A, A.

From $O$ to 1 apply the measure 25 inches, and from O to 2, for the full length, 44 inches.

From 2 to 3, the length of inside seam, $31 \frac{1}{2}$ inches. Draw lines B, C and D, at right angles with line $\mathrm{A}, \mathrm{A}$.

From 3 to 4 , mark one-fourth of 45 (the seat-measure.)

From 4 to 5 mark one-fourth of the seatmeasure, and from 5 to 6 , one-eighth of

the seat-measure. Draw line E, from 4 to 7, very carefully, at right angles with line B.

From 7 to 8, mark three inches.

From 7 to 9, mark three inches, and from 9 to 10 , one inch - making the width of the bottom seven inches.

Draw line F from 9, through 5, to 11 (to pitch the front-waist line), and providing belly-room for the corpulant figure. When the customer is very large in front add to line $F$ at 11, a half to one inch, which will be found necessary for extra large men. Reduce the width of the front, at 3, about half an inch, and draw a line from 8 to 3 for the outside seam.

From 11 to 12, mark one-fourth of the waist-measure, and from 12 to 3 form the remainder of the outside seam. When drafting for large men always raise the front, at 11, from half an inch to one inch,

Form the inside seam from 6 to 10 .
Before marking the crotch see remarks on page 49 in reference to the dress.

When completed cut the front and place it in position to draft the back part by extending lines $\mathrm{B}, \mathrm{C}$ and D .

From 6 to 14, on line B, mark oneeighth of the seat-measure, and from 5 to 13 mark one-third of the seat-measure. Draw line $G$, from 6 , through 13 for the pitch of the back.

Apply half the waist-measure twenty-two inches, from 11 to 12 , and from 19 to 20 adding sufficient for the seams and cut, and half the seat-measure twenty-two and onehalf inches from 5 to 15 and 5 to 16 on
line $B$; apply the measure to ascertain the size of the bottom nineteen inches ; half the increase in the width of the back over the front must be added to each side of the front at the bottom, for instance: In the present draft the measure is nineteen inches; the front or top side is already cut seven inches, leaving twelve inches for the back, which is five inches greater than the front; place half of this, or two and a half inches between 10 and 18 , and the balance between 8 and 17, always adding for seams. Apply the measure for the size of the knee and add for seams; complete the remainder of the draft, as directed in the previous diagram, dropping the crotch at 14 about three fourths of an inch, and have the underside stretched up to meet 6 on the front.

Directions for Drafting Riding and Close Fitting Trouser's.

As Shown on Diagram 20.
Measure 24, 42, 32, 30, 36, 17, 17. Draw base line $\mathrm{A}, \mathrm{A}$.

From $O$ to 1, apply the measure 24 inches.

From O to 2, apply the measure for full length, 42 inches (adding one inch to the length in all cases where the trousers are intended for riding exclusively.)

From 2 to 3, thirty-two inches, adding one inch, as directed for the outside seam.

Draw lines B, C, and D, at right angles with line $A, A$.


From 3 to 4, on line B, mark one-fourth of the seat-measure

From 4 to 5, mark one-fourth, and from 5 to 6 one-eighth of the seat-measure.

Draw line E, very carefully, from 4 to 7, at right angles with line $B$.

From 7 to 8, on line D, mark three inches.

From 7 to 9 , mark three inches (in all cases), and from 9 to 10 , one inch-making the width of the bottom seven inches.

Draw line F from 9, through 5 to 11 (to pitch the front-waist line.)

Reduce the width of the front at 3 about half an inch, and draw a line from 8 to 3 for the outside seam.

From 11 to 12, mark one-fourth of the waist-measure and complete the outside seam as shown from 12 to 3 . When drafting for small-waisted customers always drop the front at 11 ; for full-waisted men let the top be square with line $A, A$, and for corpulent figures raise the front as already directed in the diagram for corpulent figures.

Form the inside seam from 6 to 10 .
Before marking the crotch turn to page 49, and observe the remarks in reference to the dress and apply them to this draft.

Cut the front and place it in position to draft the back-part by extending the lines $\mathrm{B}, \mathrm{C}$ and D .

From 6 to 14, on line B, mark one-eighth of the seat-measure, and from 5 to 13 onefourth of the seat-measure, instead of onethird as directed for other trousers, this
pair being intended for use in the saddle, and requiring a more crooked seat to give ease to the wearer when sitting.

Draw line G from 6 through 13 , for the pitch of the back.

Apply half the waist-measure 15 inches from 11 to 12 , and from 19 to 20 adding two inches for seams and the cut over the hip.

Apply half the seat-measure 18 inches from 5 to 15 , and from 5 to 16 on line B.

Apply the measure to ascertain the size of the bottom 17 inches; half the increase in the width of the back over the front must be added to each side of the front at the bottom, for instance: In the present draft the measure is 17 inches; the front is already cut 7 inches, leaving 10 inches for the back, which is 3 inches greater than the front, place one-half of this or one inch and a half between 10 and 18 , and the balance between 8 and 17 , always adding for seams ; apply the measure for the size of knee and add for seams.

Use 4, on line B, as the pivot, and draw sweep $H$ from 6 and form the seat-line and inside seam of the back-part as shown on the diagram.

Draw the outside seam of the back, as shown from 20, throngh 16 to 17 , allowing, just below line $C$ for the swell of the calf. All trousers for riding must be made up with straps at the bottom.

## Directions for Drafting a Skirt for a Frock Coàt.

As Shown on Diagram 21.
Draw base line A.
From $O$ to 1 mark the length of skirt 19 inches ; place the corner of the square at $O$, with the short arm on line $A$, and raise the long arm until 12 on the short arm is one inch from line $A$, as shown at


2 , and the dotted lines; while the square is in this position draw line $B$; place the forepart-lapel and side-body in position, and ascertain the size of the skirt. Drop the top of the skirt (as shown at 3) a fourth or three-eighths, touch line B at 4, and adapt the skirt to the form of the forepart, as shown at 5 ; form the plait
in harmony with the curve of the sidebody as shown in the diagram.

It is desirable that the skirt of a frockcoat hang as close as possible to the thighs, and in order to produce this result the top of the skirt must be cut as directed above with one inch fullness sewed in and carefully pressed out; the plait of the skirt should be cut a half-inch longer than the back skirt and contracted with a stay and the round pressed forward to the prominent part of the hip.

A skirt cut, as above directed, will serve for a body drafted by either the divisional or measurement systems.

## Directions for Drafting a Skirt for Single or Double-Breasted

## Morning Coat.

Diagram 22.
Draw base line A .
From $O$ to 1, mark the length of skirt.
Place the corner of the square at O , with the short arm resting on line A, and raise the long arm until 12 on the short arm is one inch from line $A$, as shown by the dotted lines at 2 . While the square is in this position draw line $B$, and form the top of the skirt by marking in from O to 3 , about one inch, and form the plait; drop line $B$ a seam at 3 ,
and a half to three-fourths of an inch at 4. Place the fore-part and side-body in position, and form the front of skirt in harmony with the front breast line.

The above draft will serve for either of the systems published in this work.

## Cut-àway Coatśs.

As Shown on Diagram 23.
Diagram 23 gives illustrations of three popular styles of cutaway coats, given

more particularly for the benefit and guidance of those who are not advanced in the art of garment cutting.

Letter A shows the fore-part, as cut for a double-breasted frock - coat, while B points out the change or additions necessary for a double-breasted cut-away with the front of skirt attached.

Dotted lines C forms the front and skirt of a single-breasted walking or cut-away coat, and dotted line D delineates the front and skirt of a two-button cut-away with collar, which also serves for the single button cut-away.

## Waist-coàts.

The following six diagrams will give the operator a good idea of the variety of waist-coats in common use at the present time. It is always best (when a doublebreasted or fancy waist-coat is to be drafted) to first form the front or fore-part as shown on diagram 7, and when com-
pleted make the necessary addition or change to produce the garment desired.

Diagram 24 - Shows the fore-part or front of waist-coat as drafted, with the lapel and collar cut separate. When cut in this manner three or four buttons may be used.

Diagram 25 -Gives the front and collar for a military or clerical waist-coat; the front has nine buttons and holes with standing-collar as shown.

Diagram 26--Shows a waist-coat for full-dress. It is cut well down in front, but three buttons being used, and rollingcollar. Care must be taken in drafting this waist-coat so that the length may be the same as the front of the coat. A dressy and desirable finish is produced by sewing on a fine soutasche braid a little back of the edge on dress waist-coats, and

is used at the present time by nearly all the fine houses.

Diagram 27.-A shows the lines of the front or fore-part as originally drafted with the changes or additions for a double breasted waist-coat, with the lapel and fore-part cut in one piece.

Diagram 28-Illustrates a single-breasted

Directions for Forming an Inverness or Cape-Coat by an Over-Sack Patterq.
As Shown on Diagram 30.
By the following measures: length from collar seam down the back, 43 inches; from the same starting point directly over the point of the shoulder to the knuckles,

waist-coat with notched collar and five buttons. This style of waistcoat is adapted to be worn with the cut-away coat.

Diagram 29 - Gives a fancy style of double-breasted waist-coat. In this, as stated in describing the preceding diagrams, the lines of the original pattern are first given, and marked $A$ and $B$, then the desired additions are made.

32 inches; half the neck, $9 \frac{1}{2}$ inches; and around the chest, over the waist-coat, 36 inches.

Select the over-sack pattern, corresponding to the size of the breast-measure, 36 inches, which has been cut by the enlarged measure (as already directed for all overcoats.)

Draw base-line A.
From $O$ to $O$ mark one-third of the
breast-measure. From $O$ to 1 mark onesixth of the breast-measure.

Draw line B from 1 at right angles with line A; place the sack pattern in position with the front-shoulder point at $O$, and
the neck points at $O$ as directed above) so that the top of the side seam and the point on the back which joins it, will both touch sweep C , as shown by the dotted lines on the diagram. Open

the neck point of the back at the other $O$.
Draw sweep C (using 1 on line A as the pivot) to touch the top of the side seam on the fore-part.

Adjust the back and front (keeping
the pattern at the bottom, keeping the points above described on line $\mathbf{C}$, until the distance between $\mathrm{X}, \mathrm{X}$ (aronnd the bottom) is equal to the breast-measure.

From 1 to 2, on line B, mark half the
breast-measure. Draw sweep D, using 1 as the pivot. Form the back, continuing the shoulder seam of the sack pattern, as shown by line F to 5 , on the diagram.

Form curved line E, from 4 to 3 , reducing the width of the shoulder as shown at 4. Bring the curved line fully as far forward in the cape-coat as the arm-hole is forward in the sack pattern.

Form the remainder of the body by the coat pattern, making the centre back seam straight.

Cut the back and front, and place the latter on the paper and prepare to draft the cape.

Form the neck gorge and front of the cape by the pattern, as shown on the diagram.

Draw line $H$ from $O$ for the back part of cape, adding above the shoulder on the fore-part about three-fourths of an inch, as shown at 6. Apply the measure for the length of cape from $O$ to 7 , thirty-two inches less the width of the top of back, and complete the cape.

The front of the cape may be cut to lap and button, as shown on the diagram, or may be cut less full and only meet at the front when the coat is buttoned.

In order to join this coat together correctly, have the parts from O to 4 , on the the fore-part, the notch on the cape and back to join in one seam. Line $H$ on the
cape between the notch and 3 join together, and the remainder of the cape sews in with the side seam below 3 .

G, G represents the shape of collar best adapted to this garment. It admits of the coat buttoning to the throat, as it is almost universally worn.

## Directions for Drafting a Sleeve

## by the Divisional System.

As Shown on Diagram 31.
I advise that the sleeve in all cases be drafted in the fore-part, as already directed.


If, however, the operator prefers to draft it separately from the body, the following diagram will give the lines necessary to a
correct drafting of the sleeve. When the customer stoops forward, or is erect, and the measure taken from the centre of back to the front of scye varies from the distance given by division E , it will be necessary to make precisely the same changes at 5 and the top of back, as I have directed for stooping and erect forms, in order to secure the correct length of the back and fore-arm seam.
Measure the scye carefully, say 16 inches.

Draw base line A.
From O to 2 mark 27 (shoulder measure on division B.) Draw line C at right angles with line A. From 2 to 5 , on line C, mark 36, breast-measure on Division E.
Draw line F from 5 to O .
From 5 to 12, mark the figures corresponding with the scye, measure 16 on division J, by placing $\mathrm{O}^{6}$ on the tape at 5 on the diagram.
From 5 to 13 and 14, mark the figures, corresponding with the scye, measure 16 on divisions K and L , by placing $\mathrm{O}^{6}$ on the tape at 5 on the diagram. Draw a line from 13 to 15 at right angles with line F , and place $\mathrm{O}^{6}$ at 13 , and mark at 15 the scye measure on division K.
Draw line H from 5, at right angles with line C , and complete the remaining part of the sleeve as previously directed.
I will remark here, before leaving this
subject, that many finely cut shoulders are spoiled by the shortness of the top sleeve, which should be raised or increased in length equal to the additions in the draft of the fore-part for producing square shoulders. By observing and practicing the above suggestions, the unsightly dragging about the shoulders caused by a short top will be avoided.

## Directions for Mrafting skirt for

## a Dress-Coat.

## As Shown on Diagram 32.

Draw base line A .
From $O$ to 1 mark the length of skirt 19 inches.

Place the corner of the square at $O$ with the short arm resting on line A , and raise the long arm until 12 on the short arm is one inch from line $A$, as shown by the dotted lines at 2 .

Mark in on line $B$, one inch from $O$, and form the plait-line. Form the top of the skirt by dropping line B a seam, as shown at 3 ; touch the line at 4 and at 5 ; drop the front about one inch.
Place the fore-part and side-body in position, as shown on the diagram.

Line C at the bottom shows the pattern as drafted for a frock-coat, and the dotted lines at 6 the change necessary for a dresscoat, complete the skirt as shown. The
strap at the front of skirt may be added to the fore-part if desired.

The proper lapel and collar is also given

in this diagram, the latter with a notch in front, which may be omitted or used at pleasure.

## Double-breàsted Uniform.

## As Shown on Diagram 33.

The body of a coat designed for a uniform is cut similar in every way to that
of a double-breasted frock, with the exception that the front-shoulder point should be more straight. This coat being worn buttoned, at all times, requires to be cut close at the neck to prevent the unsightly looseness which would be the result if the shoulder be cut too crooked.

Line $\mathcal{S}$, at the shoulder point and top of the fore-part, represent the pattern as cut for the ordinary double-breasted frockcoat, and the dotted lines 5 , the changes desirable for a uniform coat. To draft skirt for a military coat, first draw baseline $A$. From $O$ to 1 mark the length of skirt.

Place the corner of the square at $O$, with the short arm resting on line A , and raise the long arm until 12 on the short arm is one and a half inches from line $A$, as shown ly the dotted lines at 2. While the square is in this position draw line $B$; place the fore-part, side-body, and lapel in position to ascertain the size (allowing one and a half inches for fullness, which, in making, must be sewed in over the hip and pressed out.) Form the top of the skirt starting on line B at 3 , dropping three-eighths to half an inch at 4 and ending at $O$. Form the plait similar to a frock-coat skirt, adding side edges, as shown at 6 .

Uniforms for officers in the regular service are constantly undergoing some change.

It is therefore necessary that tailors receiving orders for this class of work be supplied with the latest publication on the subject from the War Department, entitled

"Uniform and Dress of the Army of the United States," which can be obtained by addressing the Adjutant-General, U. S. Army, War Department, Washington, D. C.

## Single-Breassted Uniform.

As Shown on Diagram 34.
This garment, like that described on Diagram 33 is cut similar to a double-
breasted frock coat, except at the front shoulder point, which should be more straight for the reasons already given on the preceding Diagram.


To draft skirt, first draw base line A.
From O to 1, mark the length of skirt. Place the corner of the square at $O$ with the short arm resting on line $A$, and raise the long arm till 12 on the short arm is one and a-half inches from line $A$, as shown by the dotted lines at 2. While the square is in this position, draw line
B. Place the fore-part and side-body in
position to ascertain the size (allowing one and a-half inches for fullness, which in making must be sewed in over the hip and carefully pressed out).

Form the top of the skirt by starting on line B at 3, dropping three-eighths to half an inch at 4 and ending at $O$. Form the plait into side edges, as shown at 6 . For fuller details, see the United States Army Regulations on the subject.

Vindress for Officers for Fhtigues, Marches, dé., dé.

As Shown on Diagram 35.
A single-breasted sack coat, cut straight in front, with five buttons closing to the

neck, as shown by the Draft. The back is cut in one piece, and the sides slashed,
as represented at C. The sleeve is finished with a cuff three inches deep, and three buttons. For fuller directions see United States Army Regulations on the subject.

## Livery Over-Coat.

As Shown on Diagram 36.
The body of this coat is drafted in every way similar to a surtout overcoat.


It is therefore superfluous to give the full draft. The skirt is also drafted like the
frock or surtout coat. The lapel is cut quite straight and wide, with six buttons and holes, and worked so as to button to the throat. The collar B B is also worked so as to admit of the lapel buttoning to the top. Large. flaps at the hip five inches wide and abont twelve inches long (according to the size of waist), with three buttons at the points of each flap, the flap covering half of the buttons. Side edges in the plait, with two buttons, as shown at 6 . The sleeves are finished with a cuff five inches deep, with three buttons across the top of each cuff.

## Livery Body-Coat.

As Shown on Diagram 37.
The body and skirt of this coat is drafted in every way like a frock coat. The front has six buttons, and, as a rule, is worn buttoned to the neck. It may, however, be worn with the top button open, and the lapel turned back, as shown by the collar B B.

A flap four and a-half inches deep, and about eleven inches long at the hip, with three buttons, partially covered by the flaps and side edges, with two buttons, as shown at 6 . The cuff may be made with a strap and three buttons, as represented on the Diagram, or with a cuff loose at top, and the buttons placed as
represented on the overcoat, as shown on the previous Diagram. A button may be

placed on the front of the collar, as represented on the Diagram, or omitted at pleasure.

Directions for Mrafting Lady's Uister by thirds and fourths of the Breast Meas sure

As Silown on Diag. 38.
Length, 53 inches; sleere, 7, 18, 29 ; breast, 36 ; neck, 16.

Draw base line A A.
From $O$ to 1, mark one-eighth of the
breast measure. From O to 2, mark onefourth of the breast measure.

Draw line B and C at right angles with line A A.


From 2 to 3 mark two-thirds of the breast measure. From 3 to 4 mark one-
eighth of the breast measure ; and from 4 to 5 one-eighth.

Draw line $D \mathrm{D}$, for front breast line, at right angles with line C , and line E
sure, and from 6 to 7 one-sixth of the breast measure.

Draw a line forward from 6 at right angles with line E , for pitch of neck.

Draw line F from 7 to 1 .
From $O$ to 9 mark one-eighth of the breast measure, and draw line $G$ from 3 to 9 . Form the top of back, as shown from 8 to 9 and 9 to 11 , raising the back one-fourth or three-eighths of an inch above line $G$ at 11 .

Apply the measure for the width of back from 1 seven inches. Use $O$ at the top of back as the pivot, and draw a sweep from the bottom of back, as shown from O to 13 . From line D D at 12, mark one-third of the breast measure (6 inches) to 13 . Form the back from 11 through J J to 13, as represented on the Diagram.

Use the top of the side-body as a pivot, and draw a sweep from 13 to 14 for length of the side seam of the side piece.

Mark from line A A at 15 one-third of the breast measure ( 6 inches) from 15 to 14.

Form the side seam from the top of side body through K K to 14 , and the front seam of the side body from a little forward of 3 , through L L , to 13 .

Form the side seam of the front or forepart from the same place through

X X X to 16. Measure the lines L L and X X X, and make their lengths equal.

Have line X X X touch line A A at 16. This will give ample width at the bottom.

Form the remainder of the scye, shoulder, neck gorge, and front of garment.

This coat is usually worn buttoned to the throat, and the collar is therefore cut straight. A belt two and a-half inches in width is worn around the waist, the length being adapted to the fancy of the wearer.

A Hood made to button under the collar is a desirable appendage for stormy weather or traveling purposes.

To Draft Sleeve.-First measure the scye 16 inches. Draw line $H$ at right angles with line $\mathbf{C}$, as represented by the dotted lines.

From 3 to 10 mark half the scye measure 8 inches.

Draw line I from 10 to line B for the back seam of the sleeve, and form the sleeve as represented by the dotted lines.

Table Showing the Relative or Proportionate Shoulder for

## all Breast Meassures.

The student will do well to commit the following Table of relative or proportionate shoulder for all breast measures to
memory, and be able to recall any of them when measuring his customers. He

for a form of good proportions, measuring 36 breast, 32 waist, 27 shoulder, and $11 \frac{1}{2} 23$ blade, and Drafted by the Measure as enlarged, 38 breast, 34 waist, $28 \frac{1}{2}$ shoulder, and $1224 \frac{1}{2}$ blade.

Diagram 6 on page 25 -Is a Draft for a Surtout Overcoat by the Divisional System, for a form of good proportions, measuring 36 breast, 32 waist, 27 shoulder, and $11 \frac{1}{2} 23$ blade, and Drafted by 38 breast, 34 waist, $28 \frac{1}{2}$ shoulder, and $1224 \frac{1}{4}$ blade.

Diagram 7 on page 27 -Is a Draft for a Waist-coat by the Divisional System for a form of good proportions, measuring 36 breast, 32 waist, 27 shoulder, and $11 \frac{1}{2}$ 23 blade.

Diagram 8 on page 29 -Is a Draft for a Waist-coat by the Divisional System for a moderately stooping form, measuring 36 breast, 32 waist, 27 shoulder, and 1223 blade.

Diagram 9 on page 30 -Is a Draft for a Waist-coat by the Divisional System for a moderately erect form, measuring 36 breast, 32 waist, 27 shoulder, and 1123 blade.

Diagram 10 on page 31 -Is a Draft for a Lady's Reefing Jacket by the Divisional System, for a form measuring 36 breast, 26 waist, 26 shoulder, and $1122 \frac{1}{2}$ blade.

Diagram 11 on page 34 -Is a Draft for
a Lady's Close-fitting Jacket by the Divisional System for a form measuring 36 breast, 26 waist, 26 shoulder, and $1122 \frac{1}{2}$ blade.

Diagram 12 on page 35 -Is a Draft for Riding Habit by the Divisional System, for a form measuring 36 breast, 26 waist, 26 shoulder, and $1122 \frac{1}{2}$ blade.

Diagram 13 on page 35 -Is a Draft for a Small Skirt belonging to the Riding Habit, and Drafted by thirds and fourths of the waist measure 26 .

Diagram 14 on page 41 -Is a Draft for a Body-coat by the new Plumb or Exact Measurement System, for a form of good proportions, measuring 36 breast and 32 waist.

Diagram 15 on page 44 -Is a Draft of a Body-sack by the new Plumb or Exact Measurement System for a form of good proportions, measuring 36 breast and 32 waist.

Diagram 16 on page 46 -Is a Draft for an Over-sack by the new Plumb or Exact Measurement System, for a form of good proportions, measuring 36 breast and 32 waist (over the waistcoat), and enlarged to 38 breast and 34 waist.

Diagram 17 on page 48-Is a Draft for Front of Trousers, drawn by 36 hip and 30 waist measure.

Diagram 18 on page 60 -Is a complete

Draft for Trousers, drawn by 36 hip and 30 waist measure.

Diagram 19 on page 51 --Is a full Draft of Trousers for a corpulent man, measuring 45 seat and 44 waist measure.

Diagram 20 on page 53 -Is a complete Draft of Riding and Close-fitting Trousers, drawn by 36 hip and 30 waist measure.

Diagram 21 on page 54 - Is a Draft for a Frock Coat Skirt, adapted to either of the Systems in this work.

Diagram 22 on page 54 -Is a Draft for a Morning or Cut-away Skirt, adapted to either of the Systems in this work.

Diagram 23 on page 55 -Is a Draft for three styles of Cut-away Coats. Doublebreasted, single-breasted, and two-button Cut-away.

Diagram 24 on page 56 -Is a Doublebreasted Waist-coat, with lapel and collar cut separate.

Diagram 25 on page 56-Is a Military or Clerical Waist-coat with standing collar.

Diagram 26 on page 56 -Is a Full-dress Waist-coat with rolling collar.

Diagran 27 on page 57 -Is a Doublebreasted Waist-coat with lapel cut on.

Diagram 28 on page $57-$-Is a singlebreasted Waist-coat with notched collar.

Diagram 29 on page 57 -Is a Fancy Double-breasted Waist-coat.

Diagram 30 on page 58 -Is a Draft for an Inverness or Cape Coat, formed from an Over-sack pattern.

Diagram 31 on page 59 -Shows how to Draft a Sleeve by the Divisional System, separate from the fore-part. See remarks in connection with the Diagram.

Diagram 32 on page 61 -Is a Draft for a Dress Coat Skirt, Lapel and Collar.

Diagram 33 on page 62 - Is a Draft for a double-breasted Uniform Coat.

Diagram 34 on page 62 -is a draft for a Single-breasted Uniform Coat.

Diagram 35 on page 63 -Is a Draft for a Blouse or Undress Uniform.

Diagram 36 on page 63 -Is a Draft for a Livery Driving Coat.

Diagram 37 on page 64 -Is a Draft for a Single-breasted Livery Coat.

Diagram 38 on page 65 -Is a Draft for a Lady's Ulster, by thirds and fourths of the breast measure.

Diagram 39 on page 39 -Is a Draft for Skirt of Riding Habit.

Diagram 40 on page 67 -Is a profile view of figure showing how the measures are taken for the new Plumb or Exact Measurement System.

