

02-480

The Cutter's Practical Guide
to
Cutting and Making
SHIRTS, UNDERGARMENTS,
COLLARS, CUFFS, APRONS,
and
SPECIALITE CLOTHING FOR VARIOUS OCCUPATIONS.

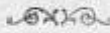
By
W. D. F. VINCENT,
Editor of The "Tailor and Cutter"
And Author of numerous Works on the Art and Science of Tailoring.

ND

LONDON:
Published by The John Williamson Company Limited,
42, Gerrard Street, Shaftesbury Avenue, W.



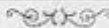
SHIRTS, UNDERGARMENTS,
Collar and Cuffs



LONDON :

PRINTED BY THE JOHN WILLIAMSON COMPANY LIMITED,

42, GERRARD STREET, SHAFTESBURY AVENUE, W.



INDEX OF CONTENTS.

	Page		Page		Page
Introduction	1	The front	13	Various styles of collars and cuffs	23
Classical reference	1	Hints on making	13	Pants or drawers	24
Abuse and ridicule	1	The athletic shirt	14	Pyjama jackets	25
Taking the measures	2	Gent's night shirt	15	The system	25
Illustrations of measuring.....	3	The system	15	Hints on making	25
The sac shirt	4	Hints on Making	16	Pyjama trousers	26
Making ditto	5	Flannel under vest	16	Ditto, with feet	26
Yoked and fronted shirts	5	The system	16	Dressing gowns	27
The system for ditto	6	The working-man's shirt	17	Smoking jackets	28
Hints on making	6	The yoked back	17	Football shirts	29
Variations	7	The straight front	17	Gent's bath robe	30
Fronted shirts	7	The sleeve	17	The shirt waist	32
Open behind	8	Cutting shirts for disproportionate		Jockey blouse	33
Dress shirts	8	figures	18	Workman's shirt	34
Short fronted shirts	8	Erect	18	Painter's jacket	35
Soft fronted shirts	8	Stooping	18	Hairdresser's jacket	36
Tucked fronts	8	Long and short necks	18	Engineers' combinations	37
Elaborately finished fronts	8	Hump back	18	Engineers' overalls	38
Direct measure system	9	Corpulency	19	Aprons	39
Shirts from lounge patterns	10	The system	19	Plasterer's apron	39
The sac back	10	The front	19	Steward's or carpenter's apron	39
The yoke back	10	Corpulency on breast measure system ..	19	Butcher's apron	39
The sleeve	11	Fronts	20	Hairdresser's apron	39
Night shirts	11	Special styles of fronts	21	Barman's apron	39
The back	11	Small front	21	Grocer's apron	39
Forepart	11	The waiter's front	21	Painter's apron	39
Coat Shirts	12	Reversible fronts	21	Pawnbroker's apron	40
The back	12	Insertion fronts	22	Butler's apron	40
				Conclusion.....	40

VINGENT'S CARD OF RELATIVE PROPORTIONS FOR MALES.

<i>Chest.</i>	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
<i>Waist.</i>	23	24	25½	27	28	29½	29	32	34	37	39½	42	46	50	54
<i>Seat.</i>	23	24½	26½	28½	31	33	35	37	39	41	43	45	47	49	51
<i>Scye Depth.</i>	5½	6	6¾	7¼	7¾	8¼	8¾	9	9¾	9¾	10½	10½	10¾	11	11¼
<i>Natural Waist.</i>	10	12	13½	14¾	16	16½	17	17¼	17½	17¾	17¾	18	18¼	18½	
<i>Full Length Loungé.</i>	17	20	22½	24	26	27½	28½	29	29½	30	30½	31	31½	32	32
<i>Full Length Frock & Dress.</i>						37	37½	38	38½	39	39	39½	39½	40	40
<i>X Back.</i>	4¾	4¾	5½	5½	6	6½	6¾	7¼	7½	8	8¾	8¾	9	9¼	9½
<i>Elbow.</i>	10	12	14	16	18	19	20	21	21½	22½	23	23½	24	24	24
<i>Cuff.</i>	15½	19½	22½	25¼	27½	29½	30¾	32	33	33½	33½	34	34	34	34
<i>X Chest.</i>	4¾	5¼	5¾	6¼	6¾	7¼	7½	8	8½	9	9½	10	10½	11	11½
<i>Front Shoulder.</i>	6¾	9¼	10	10½	11	11½	12	12½	13	13½	14	14½	15¼	16	16¾
<i>Over Shoulder.</i>	11½	12¾	13½	14¾	14¾	15½	16¼	17	17¾	18½	19¼	20	21	22	23
<i>Vest Length.</i>	16¼	17¾	19	20¼	21¾	23	24	25	25½	26	26½	27	27½	28	29
<i>Side Trousers.</i>	22½	27½	32½	36½	38½	40	42	43½	44	45	45½	46	46½	47	47½
<i>Leg.</i>	15½	19½	23¼	26½	28	29½	30½	31½	32	33	33½	34	33½	33	32½
<i>Knee.</i>	10½	11¼	12	13	14	15½	16½	17½	18	19	20	21	21½	22	22½
<i>Bottom.</i>	10	10¾	11½	12½	13½	14	15½	16½	17½	18¼	19	20	20½	21	21½
<i>Tight Knee.</i>	6¾	9½	10¼	11	12	12½	13½	14½	15½	16	16¾	16¾	17½	17½	18
<i>Small.</i>	8	8¾	9½	10¼	10¾	11¼	11¾	12¾	13¼	13¾	14¼	14¾	15¼	15¾	16¼
<i>Cuffs.</i>	8½	9¼	10	11	12	13	14	15	15½	16	16½	17	17¼	17½	18
<i>Neck.</i>	11½	12	12½	13	13½	14	14½	15	15½	16	16½	17	17½	18	18½
<i>Size.</i>	000	1	5	7	11	2	3	4	5	6	7	8	COPYRIGHT		

Breeches Length to Small. = half Leg Length. Knee 2 inches higher. Calf 3 inches lower. Waist for Breeches & Trousers 1 inch less than for Coats. Morning Coats 3 inches shorter than Frocks.

The Cutter's Practical Guide

TO CUTTING

Shirts, and Other Undergarments.

The shirt is probably the oldest style of garment worn by civilised men, for in one form or other we find it in the earliest styles of dress of which we have any authentic or detailed account.

The Babylonians, the Egyptians, the Greeks and the Romans all had their tunics or shirts, so that in some form the history of this garment may be traced through the ages of antiquity, until we have totalled up 5,000 or 6,000 years.

It is not merely an ancient garment, it is an universal one, for whilst fashions may come and go as regards outer clothing, and their styles may be adapted to climatic conditions of different countries, yet the shirt, as the garment that is worn next to the skin, is worn by the inhabitants of all lands, and of all social positions. Many of the

CLASSICAL REFERENCES

To garments, and which translators have rendered coat, ought really to have been rendered shirt; but owing to a false sense of propriety, they have preferred to call the garment a coat rather than a shirt.

Take, for instance, the Coat of Nessus, which was sent as a present to Hercules after he had killed Nessus. Hercules wore this next his skin, and it poisoned him, adhering firmly to his skin, so that he died in fearful agony.

The so-called Holy Coat of Treves is really a long, loose-fitting kind of shirt, and is like a modern night-shirt, cut low at the neck, and with loose sleeves.

ABUSED AND RIDICULED.

Like many other ancient institutions, the shirt has come in for its fair share of abuse, for, although the modern man has only been able to modify and adapt the style of shirt worn by his ancestors, yet he has not hesitated to use the shafts of ridicule against it. For instance, the poet has told us in his own beautiful way, of the King's search for happiness, and which his philosopher told him could only be obtained by wearing the shirt of a happy and contented man. The King travelled far and wide, and midst the rich he found not one man happy. He sought midst the humble and the lowly, and, after many failures, he at last found a man who appeared to be, and who professed to be, thoroughly happy and contented.

The King then sought to buy his shirt, but, alas! he had none. Hence the suggestion naturally arises that the wearing of shirts is not consistent with happiness; and we fear they have been the cause of many men using the most emphatic adjectives when the buttons have been missing, or the fit has been uncomfortable.

To return to the philosopher's view for a moment, it is not difficult to see the lesson he tried to teach. The thing was that the happy man was he who limited his wants to the barest necessities, and he evidently considered that the shirt was one of the last luxuries a man would consent to do without.

TO "FIT LIKE A SHIRT"

Has become a proverb for garments that touch nowhere, and doubtless many of the shirts made by seamstresses who go out to work by the day, or the women who attend mothers' meetings, or the grannies who occupy their time in plain needlework with occasional attempts at shirt-making, are of that description, and are often of the most shapeless and comfortless description.

The books that have been published on shirt cutting and making have been very few, and very meagre in their treatment of the subject, so that, whilst there are many able shirt cutters in London and some of the larger Provincial cities, yet, outside of that charmed circle it has not been easy to find able men, and that for the simple reason that accurate scientific instruction was not to be obtained.

In the present work we shall endeavour to supply a sound system for cutting shirts of all kinds, as well as garments of a kindred character, such as would generally be classed as underclothing.

As regards the art of making these garments, we shall supply such hints as will enable our readers to grasp the leading features of high-class garments, and we sincerely hope that when those who study this work put those instructions given into practice, they will show that consideration for the workers as will ensure them being able to earn a living wage.

MEASURING.

Before starting to measure, it is very necessary that accurate particulars should be taken of the garment required, for it is only in this way the wants of the customers can be realised, or the cutter get a proper idea of what he has to measure for.

The measures must necessarily embrace (1) the lengths, (2) the widths.

The first measure to take is the length from the nape of the neck to the waist, as shown on Fig. 1.

The second measure is the full length, and it will be safe to make it a rule never to make this less than twice the length of waist; of course, customers' wishes should be studied, but for a figure 5ft. 8in., the length of the shirt should not be less than 34, a good medium length would be 36. This measure is illustrated on Fig. 2.

The third measure to take is the width of the shoulder, and this is illustrated on Fig. 3, and should be taken from the neck in a line with the ear, across to the shoulder, and decides the width of shoulder given

to the shirt. This is a better measure than the width of back, as most shirts are made up with surplus width in the back.

The fourth measure is continued from the collar-seam at neck down the top of the sleeve to the cuff, and decides the length of the sleeve; this measure is illustrated on Fig. 4.

The fifth measure is the size of neck, and this may generally be ascertained by inquiry of the customer, the shirt being made $\frac{1}{2}$ in. smaller than the collar.

The sixth measure is the chest, which is taken over the vest close up to the armpits, and is illustrated on Fig. 5.

The seventh measure is the waist, which is taken round the waist, in the style illustrated on Fig. 6.

In addition to this, it may be advantageous to ascertain the size of cuff desired.

For the ordinary breast measure system, which we shall first describe, these measures will suffice, but in addition to these it will be found very desirable to take four short direct measures, the same as are taken for coats, and in order to make these quite clear, we have prepared a series of figures to illustrate these. These four direct measures are known as (1) The depth of scye, (2) the front shoulder, (3) the over-shoulder, (4) the across chest.

The first thing to do in taking these measures is to find the depth of scye on the back-seam, which may be done as follows: Stand at the back of the customer, and throw the tape over his shoulders, and bring it back under the arms so that the ends meet in the centre of the back (see Fig. 7). Now see that the tape is quite level, neither sloping up or drooping down in the middle, and then put in a pin or make a chalk-mark.

Now measure down from the nape of neck (the collar seam) to this pin, and so obtain the depth of scye, as shown on Fig. 8.

The front shoulder is taken from the nape of neck, or, in other words, the collar-seam at the centre of back down the front of the shoulder to the bottom of the scye, which may be easily located by putting the finger under the armpit, and measuring to the top of the finger (see Fig. 9).

The over-shoulder is obtained by measuring from the pin in the centre of the back, taking the tape over the shoulder, as Fig. 10, and continuing it down to the bottom of the scye in front, as shown on Fig. 11.

The across-chest measure is taken from the front of scye on the one side to the front of scye on the other, as illustrated on Fig. 12.



1—Collar Seam to Waist.



2—Collar Seam to Bottom.



3—Width of Shoulder.



4—Sleeve Length.



5—Size round Chest.



6—Size round Waist.



7—Getting the Depth of Scye.



8—Depth of Scye.



9—Front Shoulder.



10—Over Shoulder (back.)



11—Over Shoulder (front.)



12—Across Chest.

THE SYSTEM.

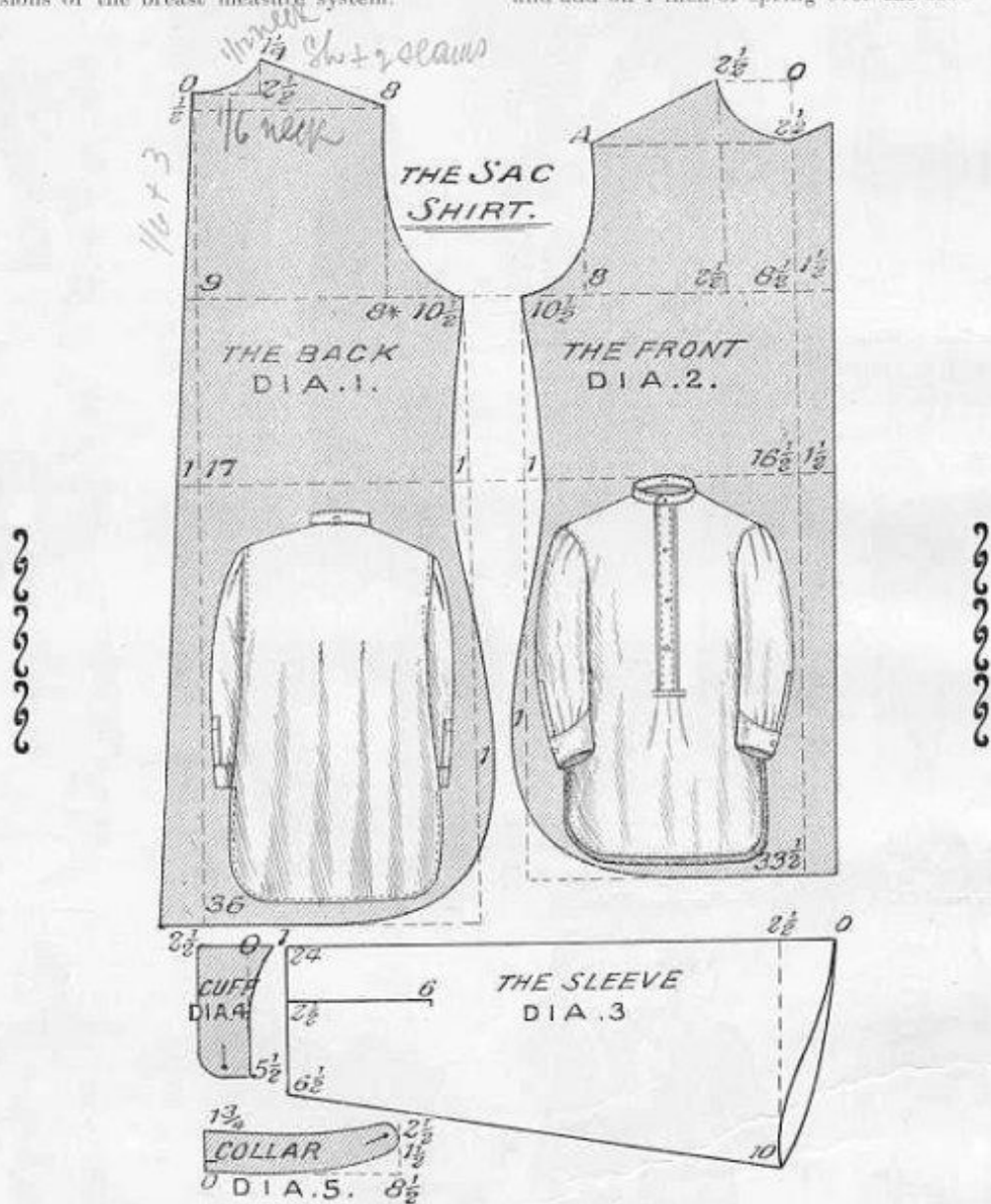
We now proceed to describe the system, and in order to make our first lesson in this direction as simple as possible, we have selected a style of shirt which is very free of complications, and we describe the cutting of this by divisions of the breast measure system.

From these points square lines across at right angles. $2\frac{1}{2}$ to $1\frac{1}{2}$ one-twelfth neck, and curve back neck. $1\frac{1}{2}$ to 8 the width of shoulder, as taken on customer, plus two seams.

Square down from 8 to 8".

9 to $10\frac{1}{2}$ one-fourth breast, plus $1\frac{1}{2}$ to $2\frac{1}{2}$ inches.

Square down from $10\frac{1}{2}$, and hollow on line 17 1 inch, and add on 1 inch of spring over the seat.



THE BACK. DIAGRAM 1.

Draw line O 36 and mark off as follows:
 O to $\frac{1}{2}$, $\frac{1}{2}$ in.
 O to 9, one-sixth breast plus 3 inches.
 O to 17 the natural waist length.
 O to 36 the full length desired plus the seams.
 O to $2\frac{1}{2}$ one-sixth neck.

Mark out from 17 1 inch, and draw line from O through 1.

THE FRONT. DIAGRAM 2.

Draw line O 33 $\frac{1}{2}$.
 O to $2\frac{1}{2}$ one-sixth neck.
 O to $8\frac{1}{2}$ one-sixth breast plus $2\frac{1}{2}$ inches.

O to $16\frac{1}{2}$ natural waist length less $\frac{1}{2}$ in., or by making the distance from $8\frac{1}{2}$ to $16\frac{1}{2}$ the same as 9, 17 of the back.

$16\frac{1}{2}$ to $33\frac{1}{2}$ 2 inches less than 17 to 36 of the back.

Square lines from O, $2\frac{1}{2}$, $8\frac{1}{2}$, $16\frac{1}{2}$, and $33\frac{1}{2}$.

O to $2\frac{1}{2}$ one-sixth of the neck.

$2\frac{1}{2}$ to A the same as $1\frac{1}{2}$ to 8.

$8\frac{1}{2}$ to 8 one-fourth breast less 1 inch.

$8\frac{1}{2}$ to $10\frac{1}{2}$ one-fourth breast plus $1\frac{1}{2}$ to $2\frac{1}{2}$ inches.

Hollow waist 1 inch.

Give 1 inch of spring over the hips.

Add on $1\frac{1}{2}$ to 2 inches for button-stand and front pleats.

THE SLEEVE.

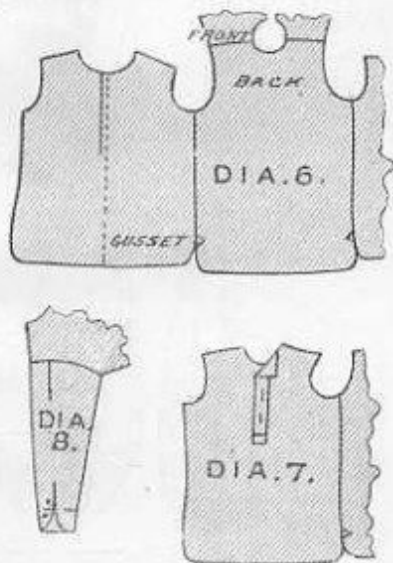
Draw line O 24.

O to $2\frac{1}{2}$, $2\frac{1}{2}$ to $3\frac{1}{2}$ inches.

The smaller quantity for easy-fitting sleeve.

O to 24 the length of sleeve less cuff and shoulder-width, due provision being made for seams.

$2\frac{1}{2}$ to 10 half scye plus 1 to $1\frac{1}{2}$ in.



24 to $6\frac{1}{2}$ one-sixth breast plus $\frac{1}{2}$ in.

Cut as in the underpart, about 2 or $2\frac{1}{2}$ inches from the crease.

THE CUFF. DIAGRAM 4.

Draw lines O $2\frac{1}{2}$, O $5\frac{1}{2}$.

O to $5\frac{1}{2}$ half size of cuff desired, plus 1 inch.

O to $2\frac{1}{2}$ depth of cuff desired, plus $\frac{1}{2}$ in.

Add on point at 1, or shape to taste.

The cuff may be varied considerably, and this is but one style of many.

THE COLLAR.

Draw line O $8\frac{1}{2}$.

O to $8\frac{1}{2}$ half neck plus 1 inch.

$8\frac{1}{2}$ to $1\frac{1}{2}$, $1\frac{1}{2}$ in.

Draft collar $1\frac{1}{2}$ deep at back and 1 inch deep at front.

HINTS ON MAKING.

On the accompanying diagrams we give a few suggestions on making-up. Diagram 6 shows the back joined to the front at the shoulders and the side, about 2 inches from the bottom of the sideseam a gusset is put. The opening is cut down the front about $\frac{1}{2}$ in. to the right of the centre, this is then turned in, and forms the button-stand, whilst the other side is turned in to form a pleat, and the underpart turned over to meet it, the holes being worked in this, as shown on Diagram 7.

On Diagram 8 we show the sleeve made up; the fullness at the top may either be put in the form of pleats or gathers, which also applies to the cuff; the slit of the sleeve should be faced so as to take buttons if necessary.

YOKED AND FRONTED SHIRTS.

DIAGRAMS 8 TO 12. PAGE 6.

The vast majority of shirts are now made up with yokes and inserted front. This plan is now adopted not only for white and coloured linen shirts, but also for flannels, so that this is by far the most popular style of shirt at the present time. These two features do not necessarily go together; the yoked back may be used with the plain forepart (Diagram 2), or the fronted forepart may be used with the sac back (Diagram 1).

O to 17 natural waist length.

O to 36 full length of back plus two seams.

THE YOKE BACK. DIAGRAM 8.

Draw line O 36.

O to $\frac{1}{2}$ half an inch.

O to 3 three inches more or less to taste.

O to 9 one-sixth breast plus 3 inches.

Square lines at right angles to these points.

O to $2\frac{1}{2}$ one-sixth neck.

$2\frac{1}{2}$ to $1\frac{1}{2}$ one-twelfth neck, and curve back neck.

$1\frac{1}{2}$ to 8 the width of shoulder plus two seams ($\frac{1}{2}$ in.).

Square down from 8 to 8^a.

9 to $10\frac{1}{2}$ one-fourth breast plus $1\frac{1}{2}$ to $2\frac{1}{2}$ inches.

Square down from $10\frac{1}{2}$.

Hollow inside this line 1 inch at waist, and add 1 inch of spring over the seat.

Shape bottom of yoke to taste.

In the diagram we have made it pointed in the centre, which is 3 inches down from O.

The depth at the scye is 2 inches.

Let back overlap this at the shallowest part at least $\frac{1}{2}$ in., as per dot and dash line.

THE FOREPART. DIAGRAM 9.

Draw line O $33\frac{1}{2}$.

O to $2\frac{1}{2}$ * one-sixth neck.

O to $8\frac{1}{2}$ one-sixth breast plus $2\frac{1}{2}$ inches.

$8\frac{1}{2}$ to $16\frac{1}{2}$ the same as the back from 9 to 17.

$8\frac{1}{2}$ to $33\frac{1}{2}$ about 2 inches less than 9, 36 of the back.

$8\frac{1}{2}$ to $2\frac{1}{2}$, and 0 to $2\frac{1}{2}$, each one-sixth of the neck.

Square across from $2\frac{1}{2}$ to A, and make $2\frac{1}{2}$ to A the same width as $1\frac{1}{2}$ to 8 of the back.

$8\frac{1}{2}$ to 8 one-fourth breast less 1 inch.

$8\frac{1}{2}$ to $10\frac{1}{2}$ one-fourth breast plus $1\frac{1}{2}$ to $2\frac{1}{2}$ inches.

Square down from $10\frac{1}{2}$.

Hollow sideseam at waist 1 inch, and give about 1 inch of spring over the hips.

THE FRONT.

The shape of the front varies considerably, but the more general size is that indicated on this diagram.

The depth extends to within 1 or $1\frac{1}{2}$ in. of waist line, $16\frac{1}{2}$.

The width of the front at the bottom is $3\frac{1}{2}$ inches, including the $\frac{3}{4}$ in. button-stand added beyond the centre line.

The width across the widest part of the breast just below the depth of scye line is 5 inches, including the $\frac{3}{4}$ in. button-stand.

From this point it is continued up to the shoulder-seam, where it is made 1 inch wide.

To provide for seams where the front is joined at the breast, allow $\frac{3}{4}$ in. at both side and bottom.

From B downwards allow 2 inches for pleat at bottom of the front.

The sleeve, cuff, and collar are as described on Diagrams 3, 4 and 5, though in the illustration we show a plain round cuff; that, however, is a variation easily introduced.

HINTS ON MAKING.

The yoke is intended to be double.

The extra width of the back is either gathered or pleated in to the yoke just above the blades on either side of the point, leaving about $1\frac{1}{2}$ in. plain on either side of the point. This is shown on Diagram 10, as well as the joining of the forepart to the yoke.

On Fig. 11 we illustrate the front sewn to the front down the sides, from which it will be seen there is extra width on the forepart below to be gathered or pleated in. This is generally done by a box-pleat, and the bottom of front is either finished with a strap, or the front is left long enough to overlap the necessary amount.

On the figure on Diagram 9, we illustrate the strapping method, and on Diagram 12 the plain method.

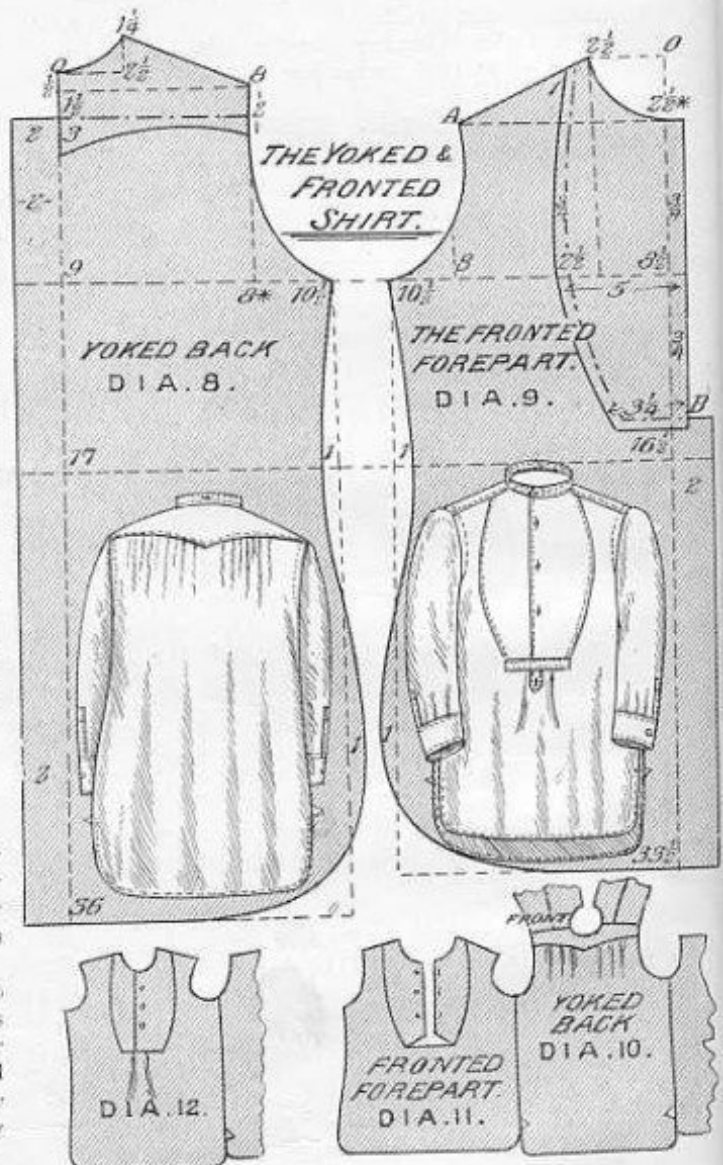
These fronts are either made double, or of more thicknesses.

When working-men's shirts are made up from Oxford shirting in this way, the lining of the front is of unbleached calico.

When flannel shirts are made up in this way, the inner front may either be of the same flannel or a thinner one.

All the seams are turned in and stitched or felled, and are never left raw. This necessitates the provision of rather wider seams than the usual $\frac{1}{4}$ in., so that they ought not to be less than $\frac{3}{8}$ in. or $\frac{1}{2}$ in.

The bottom sideseams are left open about 3 or 4 inches up, and the top of the slit finished with a gusset.



The number of holes put in the fronts is usually three, though for dress shirts this number is sometimes reduced to one.

For white linen or cambric shirts the fronts are made up with four thicknesses, so as to take the starch, and in this case the cuffs follow suit.

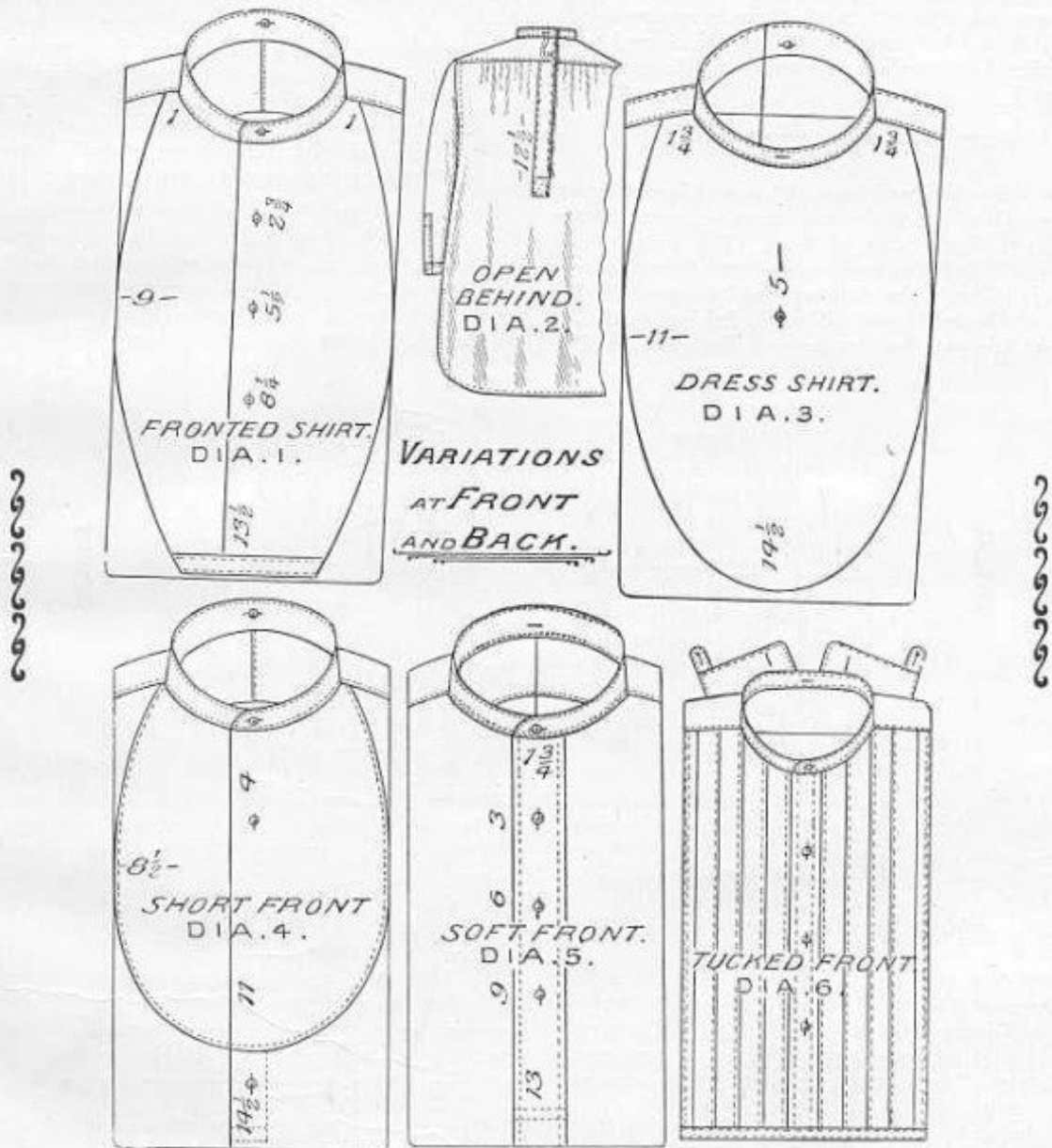
A tab is often put on the bottom of the front to fasten it to the top button of the trousers.

SOME VARIATIONS.

Having described the system, we proceed to give a few particulars respecting the finish of the fronted styles, and in doing so supply the usual dimensions to which these are cut.

or they may be made at the same time as the shirt. Of the making of these we shall deal in a later article; suffice it here to say that the front of the forepart is cut away to the desired shape of the front, and then it is inserted into the opening.

The ordinary front is usually about 9 inches wide



FRONTED SHIRTS. DIAGRAM 1.

White, regatta and other styles of linen shirts are finished with worsted fronts. These fronts are made up with several folds of material, so as to take the starch well. These fronts can be obtained ready-made,

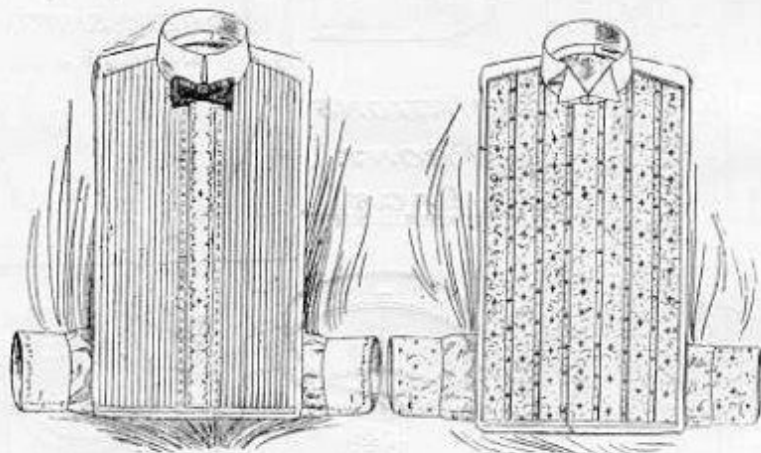
across the breast, and $13\frac{1}{2}$ inches deep from the bottom of the neck, about 1 inch wide at the shoulder, and 5 inches wide at the bottom. Three holes are put in this at $2\frac{1}{4}$, $5\frac{1}{2}$, and $8\frac{1}{4}$ from the neck. Buttonholes are worked in both sides of the front, as it is usual to fasten these with studs.

OPEN BEHIND. DIAGRAM 2.

When shirts are desired to open down the back, provision has to be made by adding $\frac{3}{4}$ to the centre of the back of the yoke on either side. The slit is made about $12\frac{1}{2}$ inches deep, in order to allow of its going over the head easily. The opening is faced and stitched at the bottom; in all other respects this is the same as the open down the front styles which we have already described, though, of course, the front is closed, but may either have a pleat as shown on Diagram 1 or Diagram 3.

DRESS SHIRTS. DIAGRAM 3.

Dress shirts are made up with much larger fronts than those intended for general wear, and on Diagram 3 we illustrate the style of these. The width across the finished front is 11 inches, the depth from the front of neck is $14\frac{1}{2}$, and the width of the shoulder $1\frac{3}{4}$. The bottom of the front may either be finished round, as shown on Diagram 3, or square, as illustrated on Dia-



gram 1. The button-hole in the front is placed 5 inches down, or a little higher than the position usually allotted to the second one. For dress shirts it is usual to only provide one hole, but sometimes two are inserted.

SHORT-FRONTED SHIRTS.

One of the most popular shirts of the present time with business men is the short-fronted shirt, which is shown on Diagram 4. The front of this style is much smaller than the regular style, but is quite large enough for all styles of vests except dress, and there is no doubt they are much more comfortable in wear.

The size of these fronts is $8\frac{1}{2}$ inches wide, 11 inches deep, and a single stud-hole about 4 inches down from the bottom of neck.

The opening down the front is extended to $14\frac{1}{2}$ inches, with a button and hole worked to secure it in position. Shirts of this kind are usually made up with detachable cuffs, but that is a detail which, though practical, is quite distinct from the short front; still, it is a good idea for business men.

SOFT-FRONTED SHIRTS. DIAGRAM 5.

During recent years there has been a style of shirt introduced which has had no front inserted. The opening has been finished with a double pleat about $1\frac{1}{2}$ in. wide, and three holes and buttons at 3 inches apart. These shirts are made up with a collar-band and cuffs to take the starch, though the rest of the shirt is of the soft undressed style, which doubtless adds to comfort.

These are made from white material, cambric and Oxford shirtings, and for those who wear high-buttoning vests or large ties, they are very comfortable, though they lack that dressy appearance which goes with the dressed shirt front, however small it may be.

TUCKED FRONTS. DIAGRAM 6.

The tucked front is not so popular to-day as it was twenty-five years ago; there are, however, some who still wear them, and as they form another variety, we will deal with them. The fronts are made up separately and inserted, but instead of being made up with several thicknesses of material, they depend on the

tucks for their extra thickness, and as these are placed quite close together so that the edge of the one meets the edge of the next one, there is always three thicknesses. The centre of the front is finished with a double pleat furnished with three holes and buttons, and in other ways the same as those we have previously described.

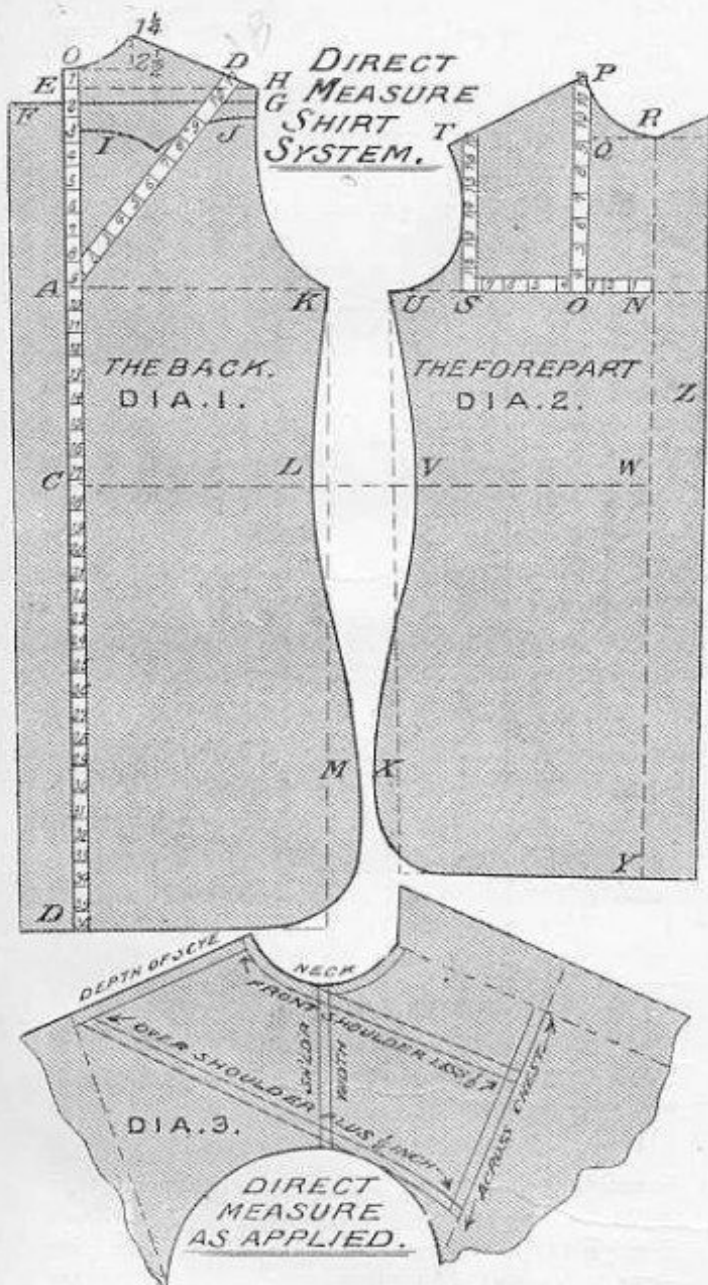
On Diagram 6 we illustrate the cuffs made up detachable, but this is a detail which may go with any style of shirt front. The tucked front would be about $9\frac{1}{2}$ or 10 inches wide, and from 13 inches deep.

ELABORATELY FINISHED FRONTS.

On the accompanying illustration we show two styles of very elaborately-finished fronts. These are decorated with hand embroidery on both the fronts and cuffs, whilst apart from this feature the fronts are finished with very small tucks or box-pleats. Such garments are very costly, and, although beautiful, they have a suggestion of excessive ornamentation about them which appeals more to the man whose powers of money-spending are greater than his refinement.

DIRECT MEASURE SYSTEM.

We now proceed to describe the direct measure system of shirt cutting, the measures necessary being: depth of scye, natural waist, full length, width of shoulders, full length of sleeve, across chest, front shoulder, over shoulder, chest and waist.



THE BACK. DIAGRAM 1.

- Draw line O to D.
- O to E $\frac{1}{2}$ in., or to taste.
- O to A depth of scye.
- O to C natural waist length

- O to D full length plus seams.
- Draw lines at right angles to these points:
- O to $2\frac{1}{2}$ one-sixth neck.
- $2\frac{1}{2}$ to $1\frac{1}{2}$ one-twelfth neck.
- $1\frac{1}{2}$ to H width of shoulder plus seams.
- A to K one-fourth chest plus 2 to $2\frac{1}{2}$ in.
- Square down from K; hollow 1 inch at L, and add 1 inch of round at M.
- Mark outline of yoke at I J to taste.
- Add on 2 inches at F, A, C and D for the back, this quantity being fullled into the yoke.
- Let back overlap yoke about 1 inch, using care when making up to retain balance.

THE FRONT.

- Draw line R Y.
- Locate N at any position convenient, and square across.
- N to O one-sixth neck.
- N to S the across chest measure.
- N to U one-fourth chest plus 2 to $2\frac{1}{2}$ in.
- Square up from O and S.
- O P the front shoulder measure less $\frac{1}{2}$ in., and minus O to $1\frac{1}{2}$ of back neck.
- Measure from A to B of the back, and deduct from the over-shoulder measure.
- Add $\frac{1}{2}$ in. to the remainder, and measure up from S to T.
- Make P T the same width as $1\frac{1}{2}$ H.
- Square down from U and hollow 1 inch at Y, and add on 1 inch at X.
- Make P Q one-sixth of the neck, and shape neck.
- Add on 2 inches at Z all down the front, and complete as draft.
- The sleeve is the same as we have already described, but if the shoulder is made very narrow it will be well to add more round at the top, acting on the give-and-take principle, adding to the sleeve what is taken from the shoulder.

APPLIED DIRECT MEASURES. DIAGRAM 3.

On this diagram we illustrate the way the direct measures are applied. It will be seen that we apply the front shoulder measure in a straight line, but deduct $\frac{1}{2}$ in., which quantity compensates for the difference between the length of a straight line and an angle one. The over-shoulder measure has $\frac{1}{2}$ in. added to it, so as to provide for the looseness which always occurs in front of scye with a garment cut as straight as shirts are. For the rest part the measures are applied as taken. The making-up does not differ from those cut by any other system, so that all we have previously written will apply to these.

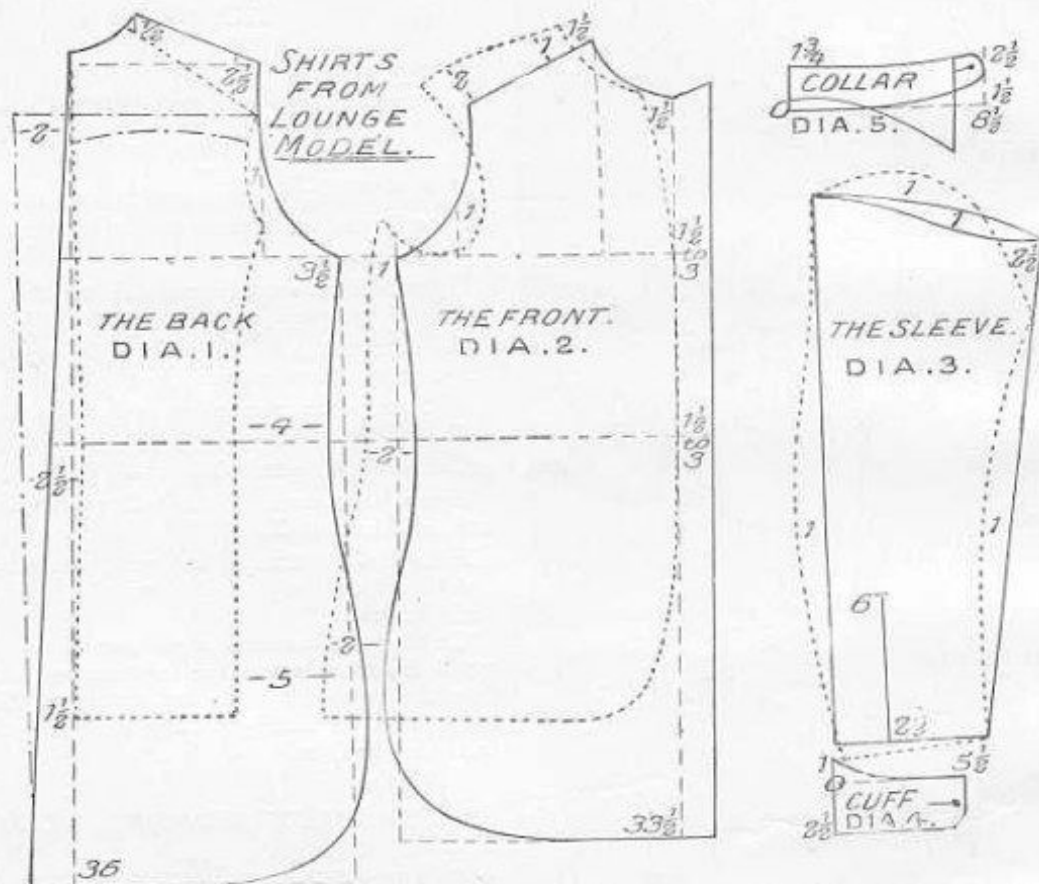
SHIRTS FROM LOUNGE PATTERNS.

The cutting of shirts from lounge-patterns is a much easier operation than is generally supposed, and as it possesses the advantage of retaining the essential feature of fit, we think it is deserving of wider application than is generally accorded it.

THE SAC BACK. DIAGRAM 1.

Backs are cut in two different styles, the sac back and the yoked back; the latter is by far the more popular, but the former is the simpler.

To produce the sac back, lay down the lounge back, and from it mark the following alterations:



From bottom mark out $1\frac{1}{2}$ in., and draw centre of back from back neck through this point. Continue curve of back neck, and add on $\frac{1}{2}$ in. Raise seye end of shoulder $2\frac{1}{2}$ inches. Fill in the back seye 1 inch.

Add on $3\frac{1}{2}$ at top of sidescam, 4 at the waist, and 5 at the bottom, and lower the seye to the depth of seye line.

THE YOKE BACK.

The yoke back is shown on diagram by dot and dash line. The upper part of the yoke is exactly the same as for the sac back, but the lower part is drawn to taste,

and may either be made straight or pointed to fancy, whilst the depth of the yoke is equally a matter upon which no definite rules are necessary; suffice it to say they are seldom more than 3 or less than $1\frac{1}{2}$ in. deep.

The lower part of the back is cut the same as for the sac back at the seye, sides, and bottom; the top is made to overlap the yoke at least $\frac{1}{2}$ in. at the hollowest part.

From the top and bottom of the lounge back mark out 2 inches, and draw straight line from centre of back, as shown by dot and dash line.

THE FRONT. DIAGRAM 2.

From the forepart of the lounge make the following alterations: Add on $1\frac{1}{2}$ at top of front, and draw the

breast line quite straight. Advance neck-point 1 to $1\frac{1}{2}$ in., shorten shoulder at neck-point 1 inch, and at shoulder point 2 inches; fill in the front of seye 1 inch.

Make up length to measure, keeping the front about 2 inches shorter than the back. Add on $1\frac{1}{2}$ to 3 for pleats, etc., in front, and complete as shown.

The opening down the front should be about 14 inches.

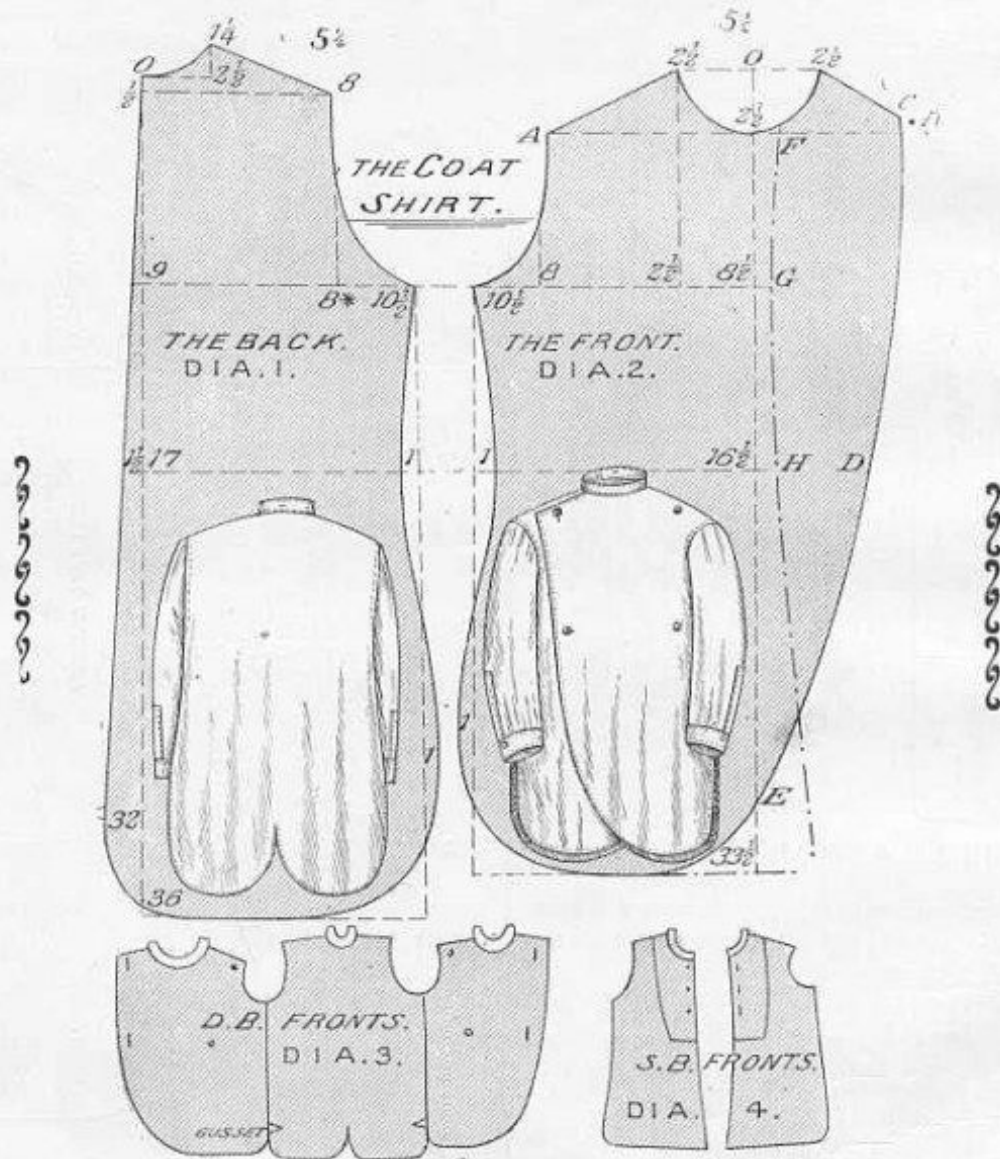
The fronts may either be slit down and made up so that the buttons and holes of the respective sides come exactly on the breast line, or insertion fronts may be put in.

COAT SHIRTS.

Whether we use breast or direct measures, model patterns or systems for the drafting of the outline, there are certain variations of style that are made independently of these. Foremost amongst these must be

wrapped round each leg independently, and in this way effectively protecting the thighs, and preventing rucking up.

For this reason it makes a very effective shirt for riding in, and is equally good for ordinary wear.



placed coat shirts, which, in one or other of the styles, find much favour with certain classes.

It is contended by those who wear coat shirts that they are easier to put on as a coat than by struggling through them over the head.

On these diagrams we illustrate the two principal styles, viz., the D.B. and the S.B. fronts, and there is one feature about these that ought not to be overlooked, namely, the facility with which they can be

THE BACK. DIAGRAM 1.

May either be cut in sac or yoked style, though the former is more in keeping with the coat idea, so we take that style for the system.

Draw line O 36, and mark off as follows:

O to $\frac{1}{2}$, $\frac{1}{2}$ in.

O to 9 one-sixth breast plus 3 inches

O to 17 the natural waist length.

O to 32 the full length, less 4 inches.

O to 36 the full length desired plus the seams.

From these points square lines across at right angles.

O to $2\frac{1}{2}$ one-sixth neck.

$2\frac{1}{2}$ to $1\frac{1}{4}$ one-twelfth neck, and curve back neck.

$1\frac{1}{4}$ to 8 the width of shoulder, as taken on customer, plus two seams.

Square down from 8 to 8 *.

9 to $10\frac{1}{2}$ one-fourth breast, plus $1\frac{1}{2}$ to $2\frac{1}{2}$ inches.

Square down from $10\frac{1}{2}$, and hollow on line 17 1 inch, and add on 1 inch of spring over the seat.

Mark out from 17 $1\frac{1}{2}$ in., and draw line from O through $1\frac{1}{2}$.

Round the bottom of back away from 32 to 36, and complete as Diagram 1.

$8\frac{1}{2}$ to $10\frac{1}{2}$ one-fourth breast, plus $1\frac{1}{2}$ to $2\frac{1}{2}$ inches.

Hollow side at waist 1 inch.

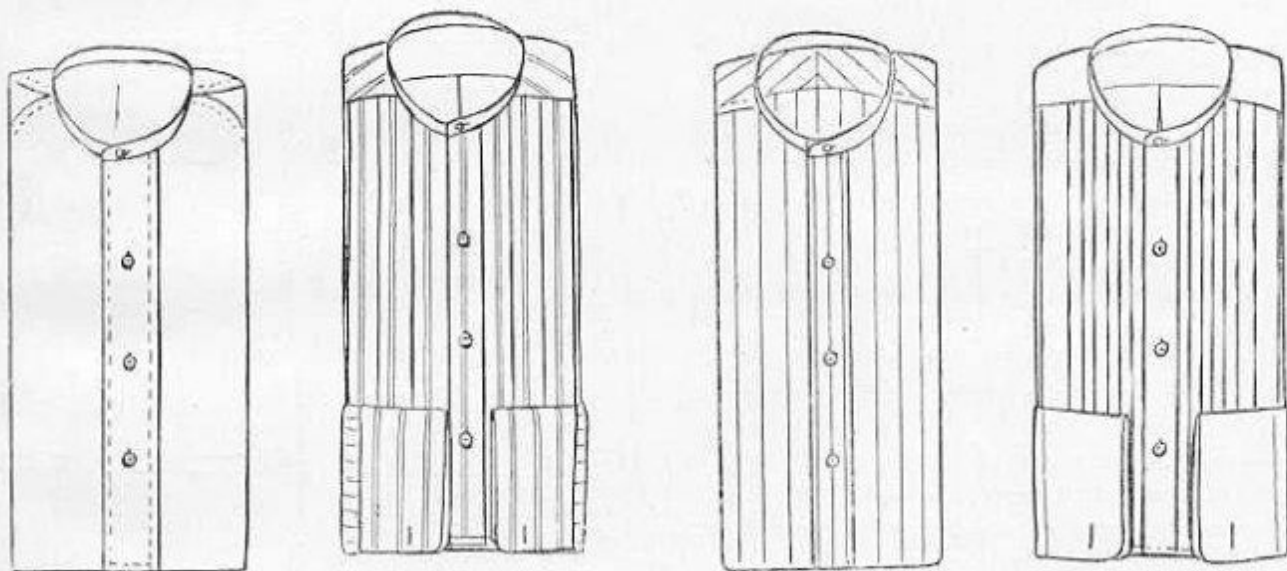
Give 1 inch of spring over the hips.

$2\frac{1}{2}$ to C about 4 inches more or less to taste, and curve front down to D and E as shown.

For S.B. fronts cut as outlined by dot and dash line, F G H E. F G and H being 1 to $1\frac{1}{2}$ in. in front of the breast line, and E about 2 inches beyond it.

HINTS ON MAKING.

Diagram 3 shows how the fronts are made up. The collar-band is made to fasten at the side, and the overlapping fronts are kept in position by buttons or studs and holes placed on the shoulders.



Popular Styles of Soft Fronted Shirts.

THE FRONT. DIAGRAM 2.

Draw line O 33 $\frac{1}{2}$.

O to $2\frac{1}{2}$ one-sixth neck.

O to $8\frac{1}{2}$ one-sixth breast plus $2\frac{1}{2}$ inches.

O to $16\frac{1}{2}$ natural waist length less $\frac{1}{2}$ in., or by making the distance from $8\frac{1}{2}$ to $16\frac{1}{2}$, the same as 9, 17, of the back.

$16\frac{1}{2}$ to $33\frac{1}{2}$ 2 inches less than 17 to 36 of the back.

Square lines from O, $2\frac{1}{2}$, $8\frac{1}{2}$, $16\frac{1}{2}$, and $33\frac{1}{2}$.

O to $2\frac{1}{2}$ one-sixth of the neck on either side.

$2\frac{1}{2}$ to A and $2\frac{1}{2}$ to B the same as $1\frac{1}{4}$ to 8 of the back shoulder.

$8\frac{1}{2}$ to 8 one-fourth breast less 1 inch.

Fronts may be inserted in these shirts if desired, or they may be left plain. Shirts of this kind are more generally used for sporting purposes, when the double thickness of flannel across the chest is an advantage.

On Diagram 4 we show the making-up of the S.B. coat-fronted shirt with fronts inserted as usual. This is really the same as the ordinary shirt, only that it opens all down the front. An extra button and hole is provided below the front to keep it in place, and the extra spring provided is intended to prevent it opening in wear.

They are certainly easier in wear, and are a good deal worn in the States; but in Great Britain they only have a moderate sale, which is probably due to our conservative tastes in matters of dress.

THE ATHLETIC SHIRT.

Every athletic outfitter knows the complaint that is constantly made by athletes of all classes of the ruck-ing-up of the shirt round the waist, and of sometimes bulging out over the top of the trousers.

This is often aggravated when the wearer uses a belt instead of braces, and as this style of dress is adopted by cricketers, golfers, and many others, it is essential that we should know how to provide a shirt that shall be free from this defect.

The best plan that has yet been devised is to finish the shirt with legs at the bottom, but in order to provide for general requirements in ordinary wear, the fly-seam is not sewn, so that the lower parts of the shirt divide themselves into separate halves from A to B.

THE BACK SYSTEM.

Draw line O 27 $\frac{1}{4}$.

O to $\frac{1}{2}$ half an inch.

O to 9 one-sixth breast plus 3 inches.

O to 17 natural waist length.

17 to 27 one-fourth seat plus 1 inch.

27 $\frac{1}{4}$ to 32 one-eighth of the seat.

32 to 37, 5 or 6 inches.

Draw lines at right angles to these points.

O to 2 $\frac{1}{2}$ one-sixth neck.

2 $\frac{1}{2}$ to 1 $\frac{1}{4}$ one-twelfth neck, and curve back neck.

1 $\frac{1}{4}$ to 8 the width of shoulder as taken on customer, plus two seams.

Square down from 8 to 8*.

9 to 10 $\frac{1}{2}$ one-fourth breast plus 1 $\frac{1}{2}$ to 2 $\frac{1}{2}$ inches.

Square down from 10 $\frac{1}{2}$, and hollow on line 17, 1 inch, and add $\frac{3}{8}$ in. to 1 inch over the hips.

Mark out from 17, 1 inch.

Draw line from $\frac{3}{8}$ through 32, and measure out to 4 $\frac{3}{8}$ one-eighth of the seat.

Square down from 32 and allow 2 inches on the inside of the leg, and complete as shown.

THE FOREPART.

Draw line O 31 $\frac{3}{4}$.

O to 2 $\frac{1}{2}$ one-sixth neck.

O to 8 $\frac{1}{2}$ one-sixth breast, plus 2 $\frac{1}{2}$ inches.

8 $\frac{1}{2}$ to 10 $\frac{1}{2}$ the same distance as 9 to 17 of the back.

16 $\frac{1}{2}$ to 26 $\frac{3}{4}$ the same as from 17 to 27 $\frac{1}{4}$ of the back.

26 $\frac{3}{4}$ to 31 $\frac{3}{4}$ the same as from 32 to 37.

Square lines at right angles, as shown.

O to 2 $\frac{1}{2}$ one-sixth neck.

Find the width of the front shoulder.

2 $\frac{1}{2}$ to A the same as from 1 $\frac{1}{4}$ to 8 of the back.

8 $\frac{1}{2}$ to 8 one-fourth breast less 1 inch.

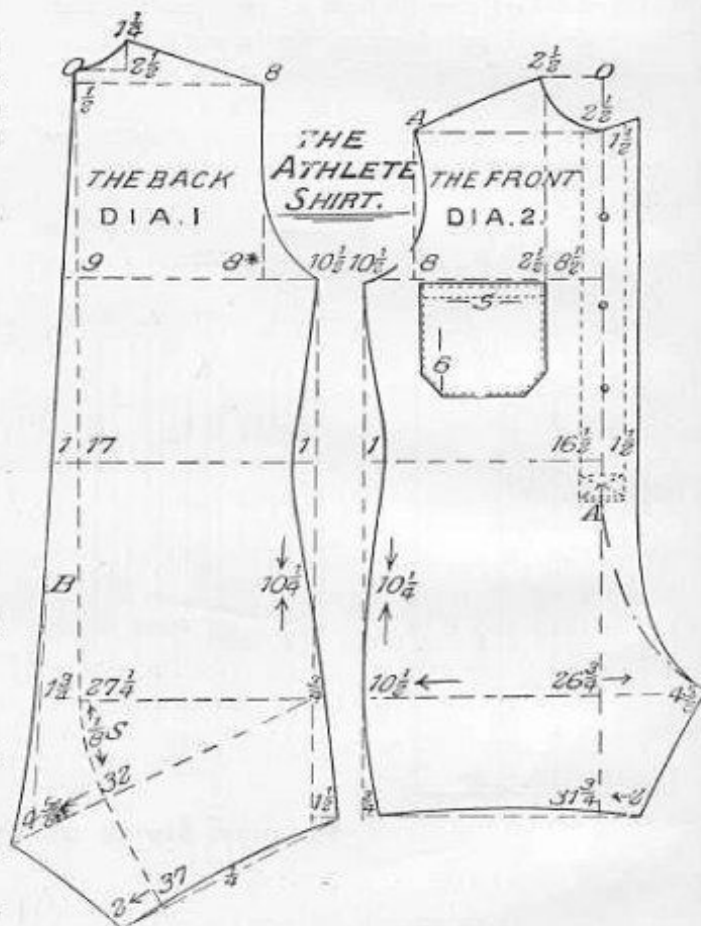
8 $\frac{1}{2}$ to 10 $\frac{1}{2}$ one-fourth breast plus 1 $\frac{1}{2}$ to 2 $\frac{1}{2}$ inches.

Square down from 10 $\frac{1}{2}$, and hollow 1 inch at the waist, and complete sideseam as shown.

26 $\frac{3}{4}$ to 4 $\frac{3}{8}$ one-eighth of the seat.

31 $\frac{3}{4}$ to 2, two inches.

Add on 1 $\frac{1}{2}$ in. for button-stand, and complete as shown.



HINTS ON MAKING.

If it is desired to do without a back-seam, this can be easily arranged by cutting O to 4 $\frac{3}{8}$ on the crease, but in that case the back will have to be opened up to B.

The front being opened all through makes it an easy matter to finish same.

For athletic purposes they are generally finished with an out-breast pocket, and turn-down collar. The sleeves for these are the same as previously described, and the general details of finish of seams, etc., are as usual.

GENTLEMEN'S NIGHT SHIRTS.

Having shown how to produce gentlemen's night shirts by model patterns, we now describe the system for drafting diagram. These may either be made with a yoke across the back, or finished with a sac back. The simpler form is that taken as the basis for Diagram 1, viz., sac back; but as the production of the yokes is very simple, we have indicated these also on the diagrams by the dot and dash lines.

O to 44 the full length desired, plus $\frac{1}{2}$ in. for seams. Draw lines at right angles to these points.

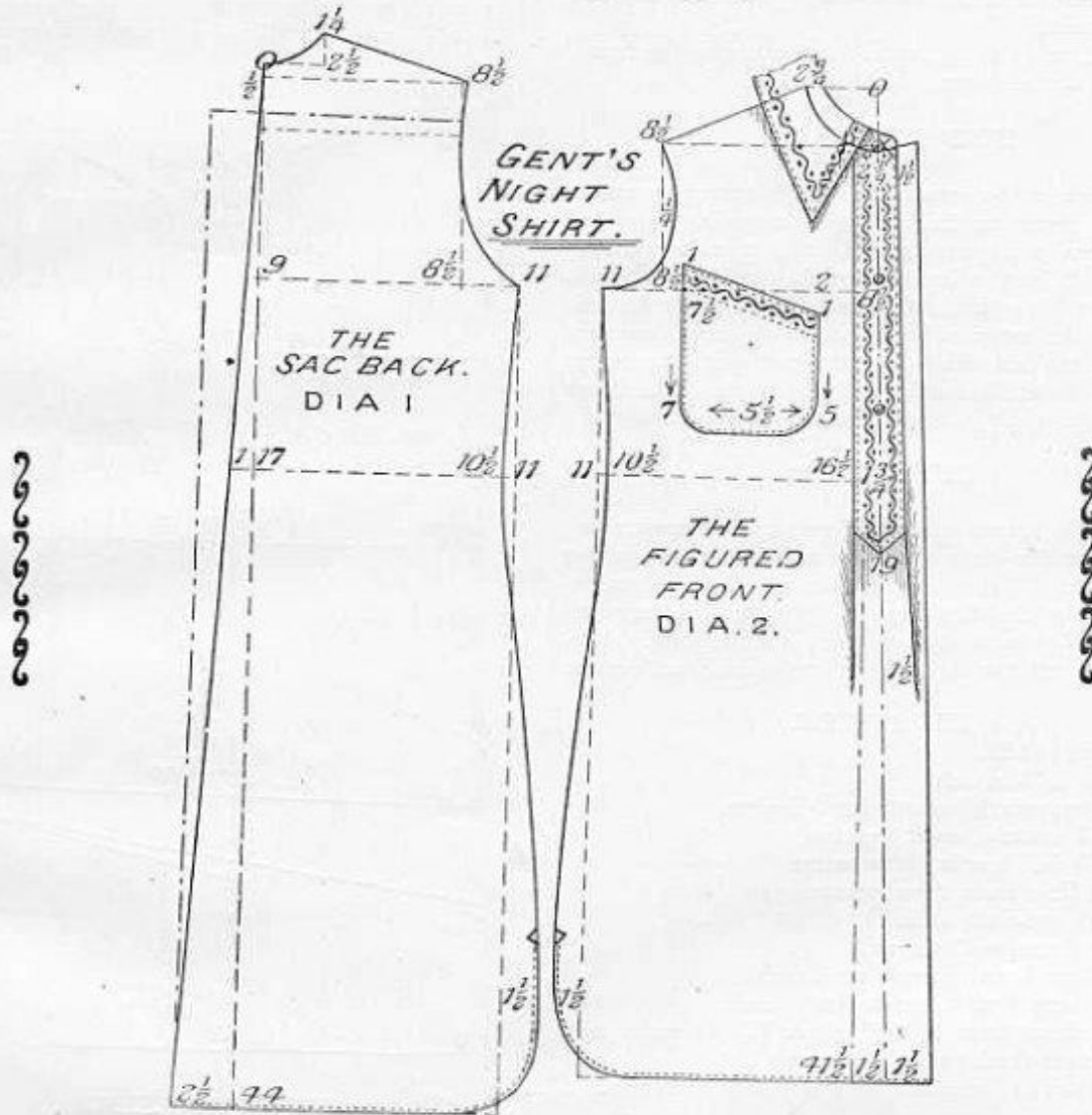
O to $2\frac{1}{2}$ one-sixth of the neck.

O to $1\frac{1}{4}$ one-twelfth of the neck.

$1\frac{1}{4}$ to $8\frac{1}{2}$ the width of the shoulder, as taken on the figure, plus $\frac{1}{2}$ in. for seams.

Square down from $8\frac{1}{2}$; 9 to 11 one-fourth of the breast plus from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches.

Square down from 11; hollow the waist $\frac{1}{2}$ in., and add $1\frac{1}{2}$ in. of spring at the bottom. Mark back from 17



The measures for these garments are very few, and consist merely of the length, size of neck, chest, and length of sleeve. If the customer is very corpulent, then a waist measure may be advisable, but in ordinary circumstances this is not necessary.

THE SYSTEM.

Draw line O 44, and mark off O to $\frac{1}{2}$, $\frac{1}{2}$ in.
O to 9 one-sixth of the breast plus 3 inches.
O to 17 the natural waist length.

1 inch, and draw line from O through 1 to $2\frac{1}{2}$. This gives the centre of back; if a yoke is desired, cut lower portion of the back as per dot and dash line, and the yoke as per dash line.

THE FRONT. DIAGRAM 2.

Draw line down from O to $2\frac{1}{2}$, one-sixth of the neck, plus a $\frac{1}{2}$ in. on either side.
O to $8\frac{1}{2}$ one-sixth of the breast plus $2\frac{1}{2}$ inches.
 $8\frac{1}{2}$ to $16\frac{1}{2}$ the same as from 9 to 17 at the back.

Make the full length about 2 inches less than the back.

Square lines from these points as indicated.

From $2\frac{1}{2}$ to $8\frac{1}{2}$ is the same width as from $1\frac{1}{2}$ to $8\frac{1}{2}$ at the back.

Square down from $8\frac{1}{2}$, and hollow the seye $\frac{1}{2}$ in. in front.

Make the width across the chest as from $8\frac{1}{2}$ of front round to 11, one-fourth of the breast plus $1\frac{1}{2}$ to $2\frac{1}{2}$ inches.

Square down from 11, and hollow waist $\frac{1}{2}$ in., and add $1\frac{1}{2}$ in. of round.

Allow from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches for making up the front, and complete as shown.

HINTS ON MAKING.

The finish of the neck is, to a large extent, a matter of taste. Some are finished in the no-collar style, but more generally they are drafted with a turn-down collar. The opening of the front is usually made to extend a little below the waist, and finished with two holes and buttons. An outside breast-pocket is now generally added on the left side. For the rest part, the seams and edges are finished as for ordinary shirts. The sleeve for the night shirt is, to all intents, the same as for the day shirt.

UNDER VESTS.

Whilst the larger number of gentlemen wear knitted or woven under vests, there are still many who prefer them made of flannel or similar material; we consequently show the adaptation of the system to their production. The usual style of these is a moderately close-fitting sac, cut low at the neck, and with short sleeves.

THE SYSTEM.

- Draw line O 28.
- O to $\frac{1}{2}$, half-an-inch.
- O to 9 one-sixth breast plus 3 inches.
- O to 17 natural waist length.
- O to 28 full length, plus seams.
- Square lines from these points.
- O to $2\frac{1}{2}$ one-sixth neck.
- $2\frac{1}{2}$ to $1\frac{1}{2}$ one-twelfth neck.
- 9 to 8 one-fourth breast less 1 inch.
- 9 to 10 one-fourth breast plus 1 inch.
- Square down from 10 and hollow $\frac{1}{2}$ in. at waist, and add $\frac{1}{2}$ in. over the hips.
- Mark back 17, $\frac{1}{2}$ in., and complete back as shown.

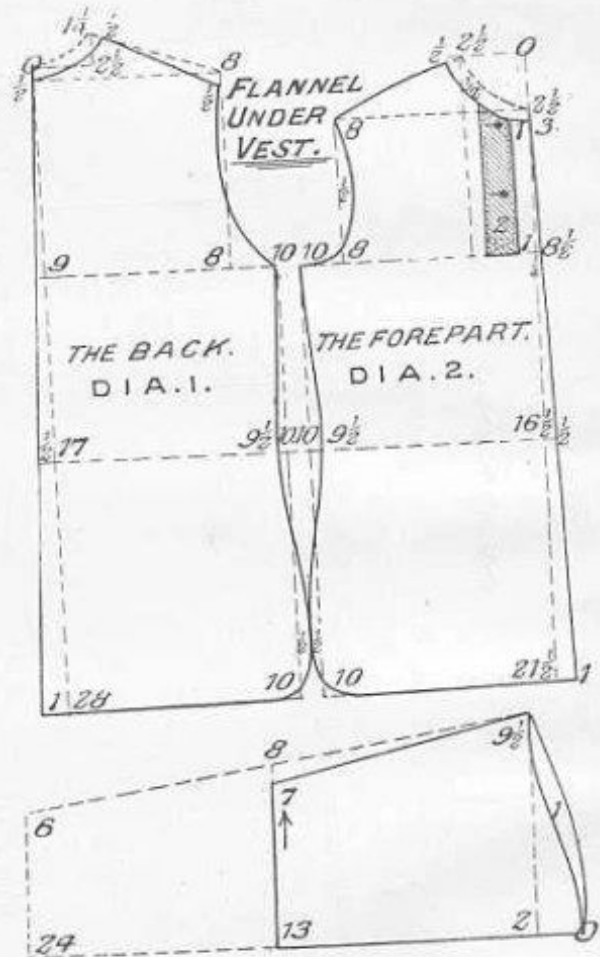
THE FOREPART.

- Draw line O, $21\frac{1}{2}$ (this should be $27\frac{1}{2}$).
- O to $2\frac{1}{2}$ one-sixth neck.
- O to $8\frac{1}{2}$, one-sixth breast, plus $2\frac{1}{2}$ inches.
- $8\frac{1}{2}$ to $16\frac{1}{2}$ the same as from 9 to 17 of back length below $16\frac{1}{2}$, about the same as back.
- Square lines at right angles to these points.
- O to $2\frac{1}{2}$ one-sixth neck.
- $2\frac{1}{2}$ to 8 and $8\frac{1}{2}$ to 8 one-fourth breast, plus 1 inch.

- $8\frac{1}{2}$ to 10 one-fourth breast, plus 1 inch.
- Square down from 10, and hollow $\frac{1}{2}$ in. at waist, and add on $\frac{1}{2}$ in. at the hips.
- Mark forward from $16\frac{1}{2}$ $\frac{1}{2}$ in.
- Lower neck from $\frac{1}{2}$ to 2 inches, and complete as shown.

THE SLEEVE.

- O to 2, 2 inches.
- 2 to $9\frac{1}{2}$ half the seye plus $\frac{1}{2}$ in.
- $9\frac{1}{2}$ to 7 the length desired.
- 13 to 7 half the width of elbow plus a seam.



HINTS ON MAKING.

The underarm-seam of the sleeve goes to the underarm-seam of the body-part.

The opening is placed on the right side, and usually extends to the level of the bottom of seye, or a little lower, a facing being sewn on to take the buttons and holes. The seams are earned in and felled or stitched.

The sideseam is often continued down to the bottom, and the bottom finished straight all round.

The most popular material for these is Welsh flannel.

THE BACK. DIAGRAM 1.

Draw line O 37 to measure.

O to 3 the depth of yoke.

Allow 1 inch overlap and add 2 inches at the centre of back for fulling into yoke.

O to 9, seye depth, to 17 natural waist length.

Square lines at right angles, and draw the sideseam at quarter of chest plus $2\frac{1}{2}$ inches from line O.

O to $2\frac{1}{2}$ one-third of neck, and up to $1\frac{1}{4}$, one-sixth of neck.

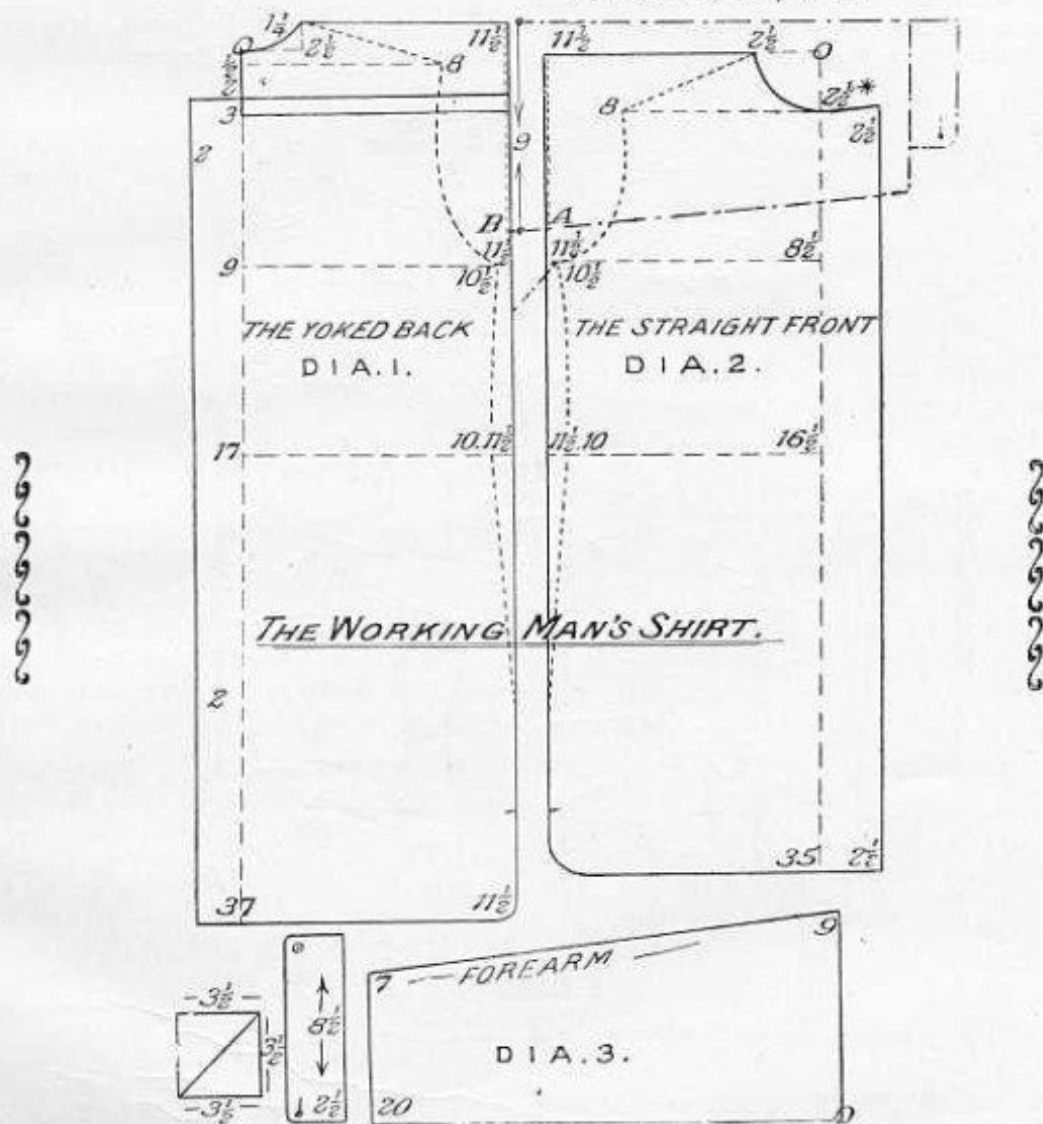
O to $2\frac{1}{2}$ one-third of neck; to $11\frac{1}{2}$ quarter of chest plus $2\frac{1}{2}$ inches.

Locate the bottom of armhole (point A) the same distance from $11\frac{1}{2}$ as B is from the breast line on Diagram 1.

Add $2\frac{1}{2}$ inches down the centre for pleat, etc.

THE SLEEVE. DIAGRAM 3.

Square line O 9 by O 20.



Square shoulder line across to $11\frac{1}{2}$, and then mark down quarter of chest for the armhole

The dotted lines indicate the size of the ordinary shirt as previously described.

THE FOREPART. DIAGRAM 2.

Draw line O 35.

O to $2\frac{1}{2}$ one-third of neck; to $8\frac{1}{2}$ one-eighth of neck plus $2\frac{1}{2}$; to $16\frac{1}{2}$ the same level as the back length 17; and to 35 2 inches shorter than the back length.

O to 20 the length of sleeve minus the width of shoulder.

From 20 to 7 is made about the same width as the circumference of wrist.

It is sewn into the armhole perfectly plain, and a 3-inch gusset is inserted under the arm, which provides ample freedom at that part. The wristband is made $2\frac{1}{2}$ inches wide and 1 in. longer than the measure.

It will be noticed that we do not allow seams to the length, but we provide this by the addition of the cuff.

DISPROPORTION.

We now come to deal with some phases of disproportion, and in describing these we wish to remind our readers that these only apply to the breast measure method, as the direct measure system works out automatically.

STOOPING AND ERECT FIGURES. BACKS.

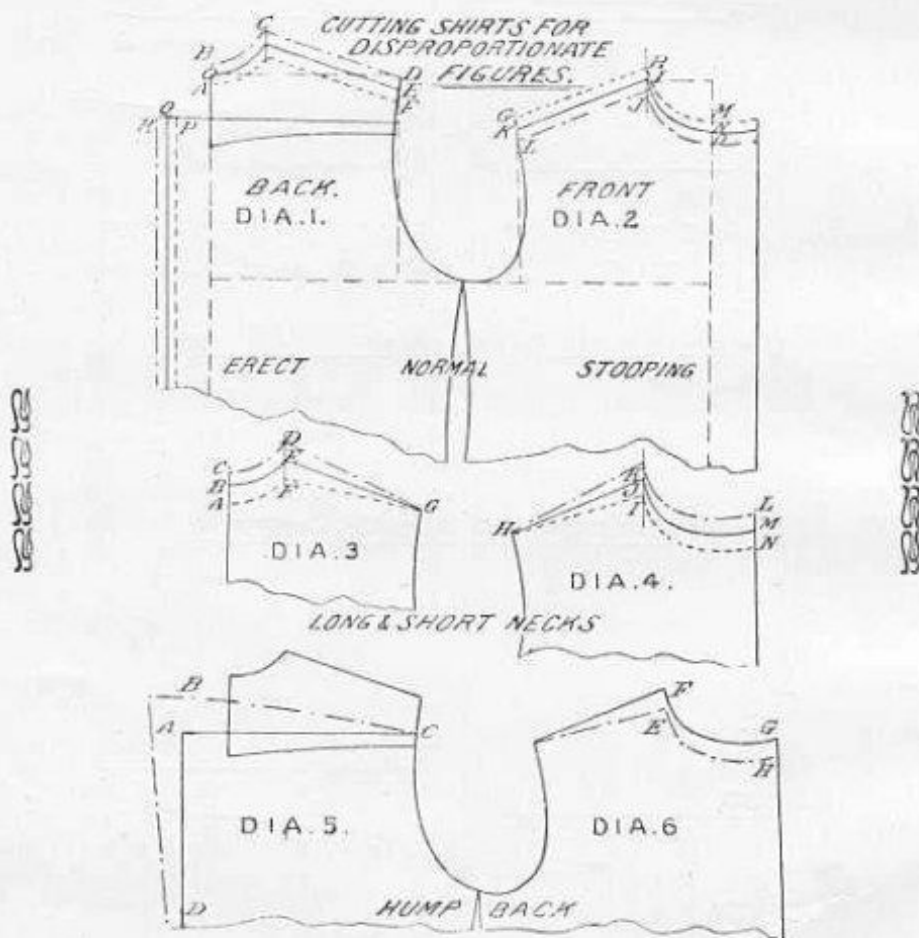
Stooping figures require a longer back balance, and erect figures a shorter back. These alterations are easily made in the yoke, as shown on Diagram 1. In

LONG AND SHORT NECKS.

The alteration to be made in the back and front for long necks is shown by C D G, of Diagram 3, and H K L, of Diagram 4, these alterations being shown by dot and dash line.

For short necks, lower as per dash line, A F G, of Diagram 3, and H I N, of Diagram 4, these alterations being indicated by dash lines.

The neck-point is kept one-sixth of the neck from the centre line as for normal figures.



this, the dot and dash line, B, C, D, is the alteration to make for the stooping figure, whilst the dash line, A, F, shows the variation to make for the erect figure. In like manner the back may be increased as shown by R for the stooping figure, and reduced in width, as shown by P, for the erect figure.

The alterations to the front, Diagram 2, have to be done in the reverse way, the front being shortened as per L, J, O, for the stooping figure, and increased, as G, H, M, for the erect figure. In other respects the shirt is cut as usual.

HUMP-BACKS. DIAGRAMS 5 AND 6.

For extreme cases of disproportion, the provision must be of a local nature: thus for hump-backs add to the top of the back below the yoke, say 1 or 2 inches, according to the size of the hump, at the same time adding on at A. A D may be cut on the crease, and the extra width provided by B is pulled in to the bottom of the yoke.

CORPULENCY.

On this diagram we illustrate the working of the direct measure system for the disproportionate figures. We advocate this method in preference to the breast measure system for this class of figure, because it will generally be found that they are, in addition to being corpulent, erect and square-shouldered.

We have in previous articles described the method of taking measures, so that our readers will only have to refer back to see our method of doing this.

THE SYSTEM.

- Draw line O 36.
- O to $\frac{1}{2}$, half-an-inch.
- O to bottom of yoke $2\frac{1}{2}$ to 3 inches, to taste.
- O to $9\frac{1}{2}$ the depth of scye as taken on customer.
- O to $17\frac{1}{2}$ the natural waist length.
- O to 36 the full length of shirt required plus $\frac{1}{2}$ in. for seams.

- Square lines across from these points.
- O to $2\frac{1}{2}$ one-sixth of the neck.
- $2\frac{1}{2}$ to $1\frac{3}{8}$ is one-twelfth of the neck.
- Curve back neck from O to $1\frac{3}{8}$.
- $1\frac{3}{8}$ to 9 is the width across shoulder, as taken on the customer, plus $\frac{1}{2}$ in. for seams.
- Square down from 9.
- $9\frac{1}{2}$ to $11\frac{1}{2}$ one-fourth of the chest plus 1 to $2\frac{1}{2}$ inches.
- Square down from $11\frac{1}{2}$.
- Having hollowed the waist, add on a little round, say $\frac{1}{2}$ in., for spring over the hips, and complete sideseam as illustrated.
- Add on from 2 to $2\frac{1}{2}$ inches down the centre of the back for felling in the yoke, and complete back as illustrated.

THE FRONT.

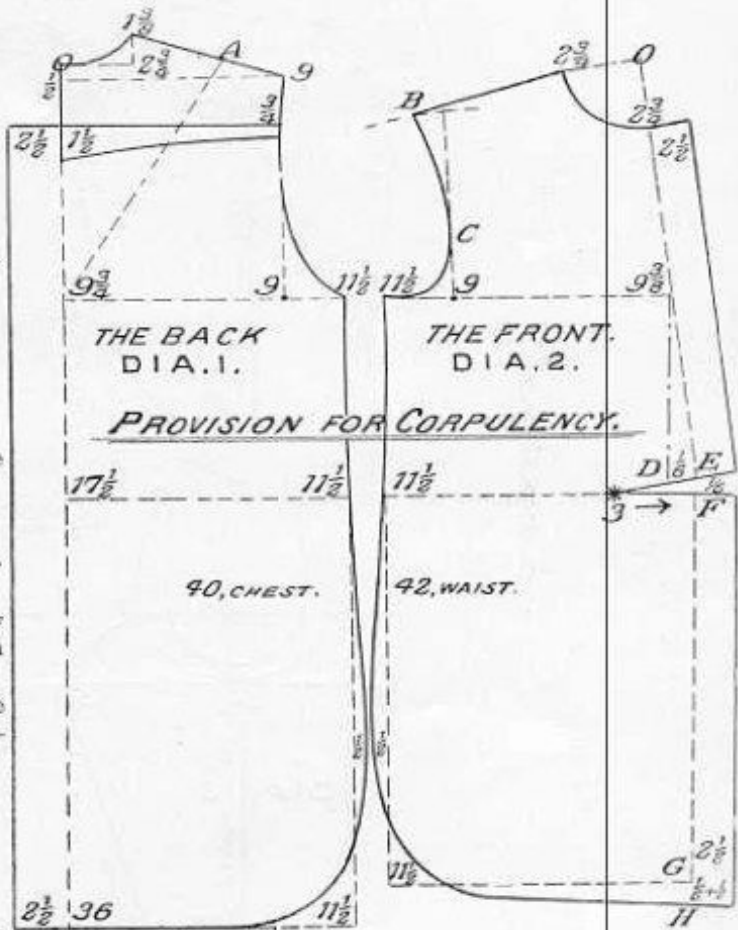
- Draw line $9\frac{3}{8}$, $11\frac{1}{2}$, at right angles to $9\frac{3}{8}$, D.
- $9\frac{3}{8}$ to 9 one-fourth of the chest less 1 inch.
- $9\frac{3}{8}$ to $11\frac{1}{2}$ is one-fourth of the chest plus 1 to $2\frac{1}{2}$ inches.
- Square down from $11\frac{1}{2}$ as shown, adding on $\frac{1}{2}$ in. of round over the hips.
- Make the length of front $1\frac{1}{2}$ to 2 inches shorter than the back.
- From D measure over E to one-sixth of the disproportion.
- The average waist measure would be 4 inches smaller than the chest, such as 40, 36. The waist measure for this pattern is 42, consequently there is 6 inches of disproportion, and from D to E is consequently 1 in. Draw line from E through $9\frac{3}{8}$.
- $9\frac{3}{8}$ to O the front shoulder measure less $\frac{1}{2}$ in., less the width of back neck.

Square across at right angles to O to find point $2\frac{1}{2}$, which is one-sixth of the neck from O.

Measure back from $9\frac{1}{2}$ to A of the back. Deduct this from the over-shoulder measure, and add on $\frac{1}{2}$ in. to the remainder, and measure up from 9 to B by this quantity. $2\frac{1}{2}$ to B same as $1\frac{3}{8}$, to 9 of the back.

Draw line from O through E to bottom. Add on 2 to $2\frac{1}{2}$ inches for making-up the pleat.

The run of bottom may be found either by squaring across from the side, or by squaring from the front line.



THE SLEEVE.

The sleeve is the same as we have described, and our readers will be able to refer back.

BREAST MEASURE SYSTEM.

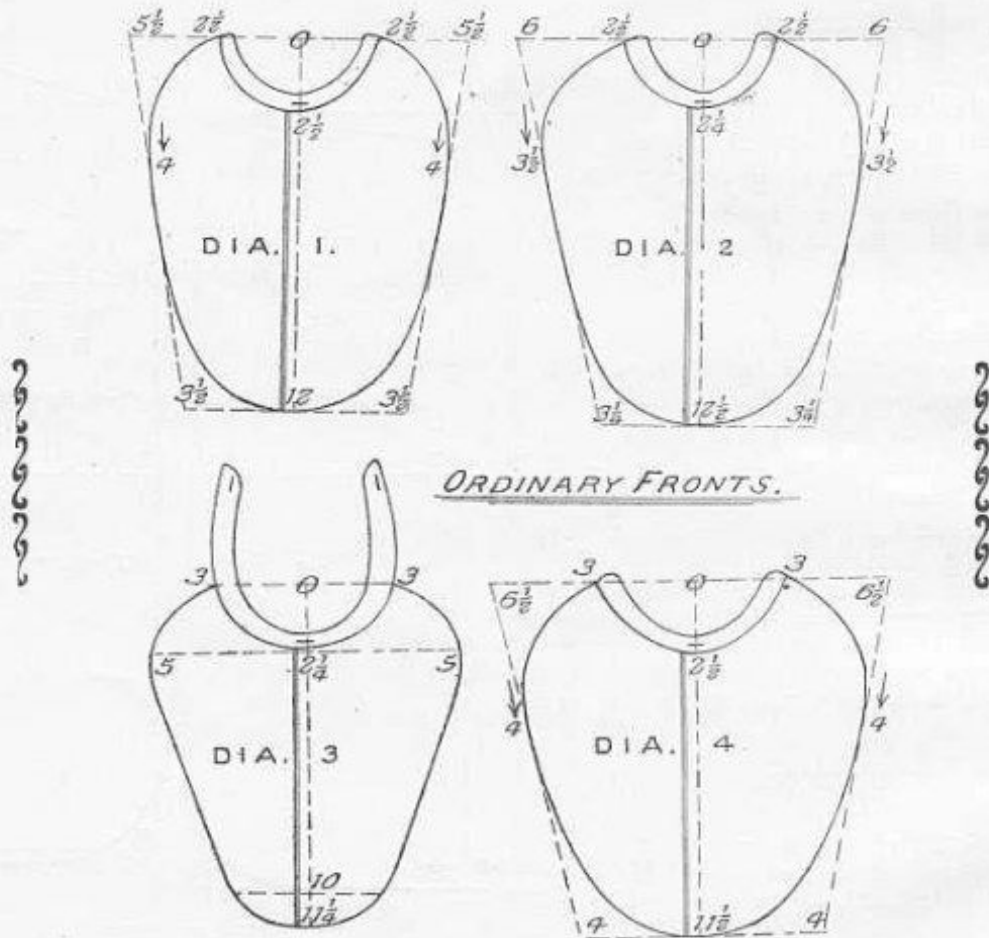
In making provision for corpulency by the breast measure system, the rule will be to add on one-sixth of the disproportion to the front of waist, and fill up the side one-third. Shirts, as a rule, are made easy-fitting at the waist, so that there is generally a fair amount of latitude in this part of the front.

FRONTS.

The large number of styles in which fronts are made renders it necessary for us to devote several articles to them if we are to give anything like an adequate idea of those articles; and as we desire to make this work as complete as possible, we shall give reduced diagrams of the leading varieties made by one of the best shirt-makers at the present time.

close round the neck, and in order to adapt it to different sizes, an elastic loop with button on the end is passed through a hole and fastened over a linen button put on the other end. As a general rule, however, the band extending to the end of the front suffices.

These fronts are usually made up fourfold, the front portion being of fine linen, the back portion a commoner linen or calico, and the two middle pieces of coarser and heavier cotton, almost resembling a canvas.



On Diagrams 1 to 4 we give reduced models of these suitable for a 15 neck. It will be observed they vary in depth and width, as well as shape at the bottom; these are specimens of what may be looked upon as the ordinary or medium style of front.

It will be noticed that the majority are finished with a band at the neck, extending as far as the front; but in Diagram 3 this is continued so that the front is kept

They are made to open down the front with from one to three holes, and a row of stitching about a ¼ in. from the edge. A large number of these fronts are sold, they being worn by nearly every one who wears flannel shirts.

The diagrams are self-explanatory, so that it is not necessary to do more than refer to them as reduced models that are suitable for all medium sizes of neck.

SPECIAL STYLES OF FRONTS.

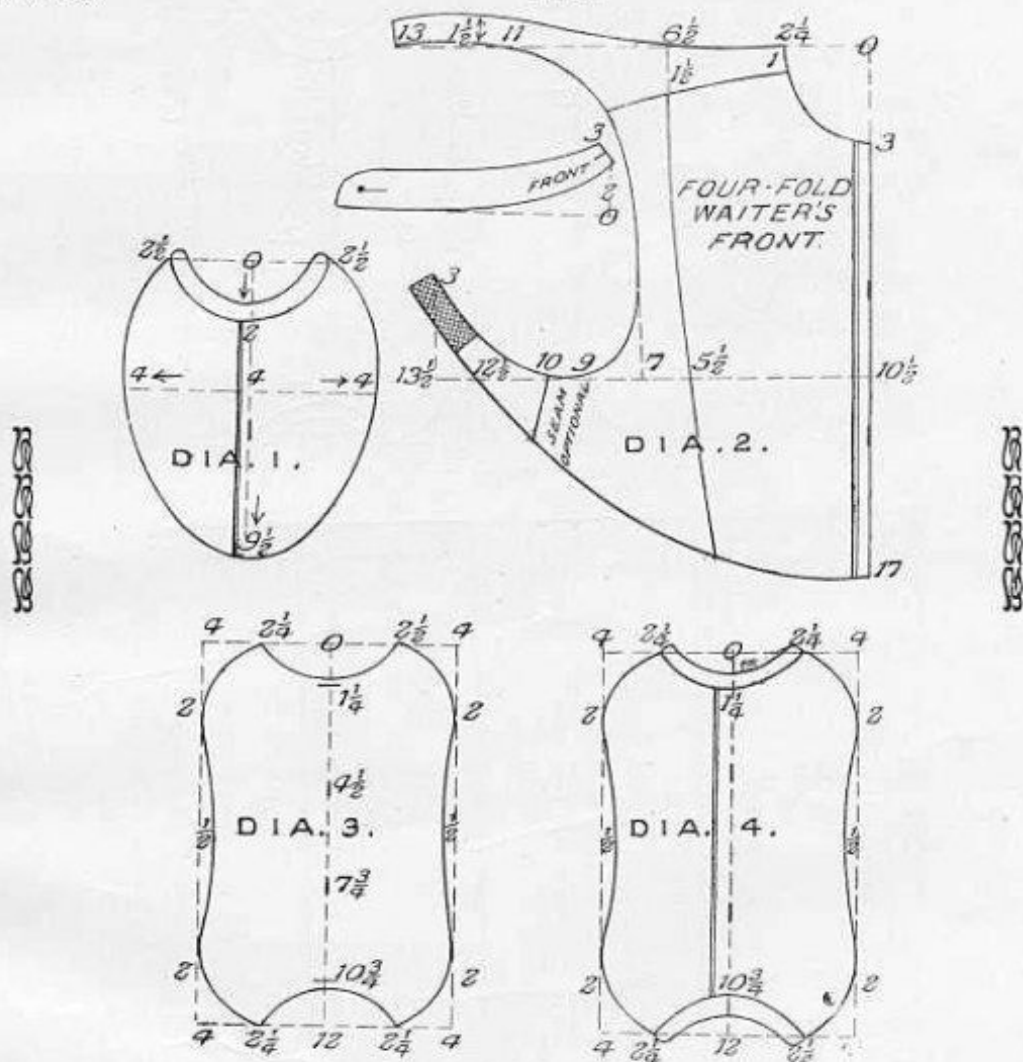
SMALL FRONT. DIAGRAM 1.

This is the front used by boys and business men who wear high-buttoning waistcoats. They are usually finished with a collar-band round to the neck as far as the front goes. One button-hole is placed midway between neck and bottom of front, the latter being made up four-fold, as others.

style of a dress shirt. A collar-band to go all round is fitted to the neck of this, and, of course, it is made to fasten behind; but this is generally arranged with an elastic button, to allow of its being adjusted to any size of neck.

REVERSIBLE FRONTS. DIAGRAMS 3 AND 4

Another style of front is the reversible, which is specially appreciated by those of an economic turn of mind.



THE WAITER'S FRONT. DIAGRAM 2.

This is the opposite extreme of style, and is probably the largest front made, being made large enough to come well below the opening of the dress vest, and is kept in position by armholes, which are made adaptable to the various sizes by a piece of elastic, which is put in at the back of the strap (see shaded part at 3, just above $13\frac{1}{2}$).

The front of this is made fourfold, the same as any other, but the back is only a single ply of calico. The front is usually finished with one hole only, after the

Its general idea is to enable the wearer to turn the ends when desired, and, consequently, everything is designed with that purpose in view. Thus there are two button-holes, etc.

Diagram 3 is finished without neck-band, and this has the advantage of lying flat at the bottom, though those finished with the neck-band, as Diagram 4, keep in their place more firmly round the neck.

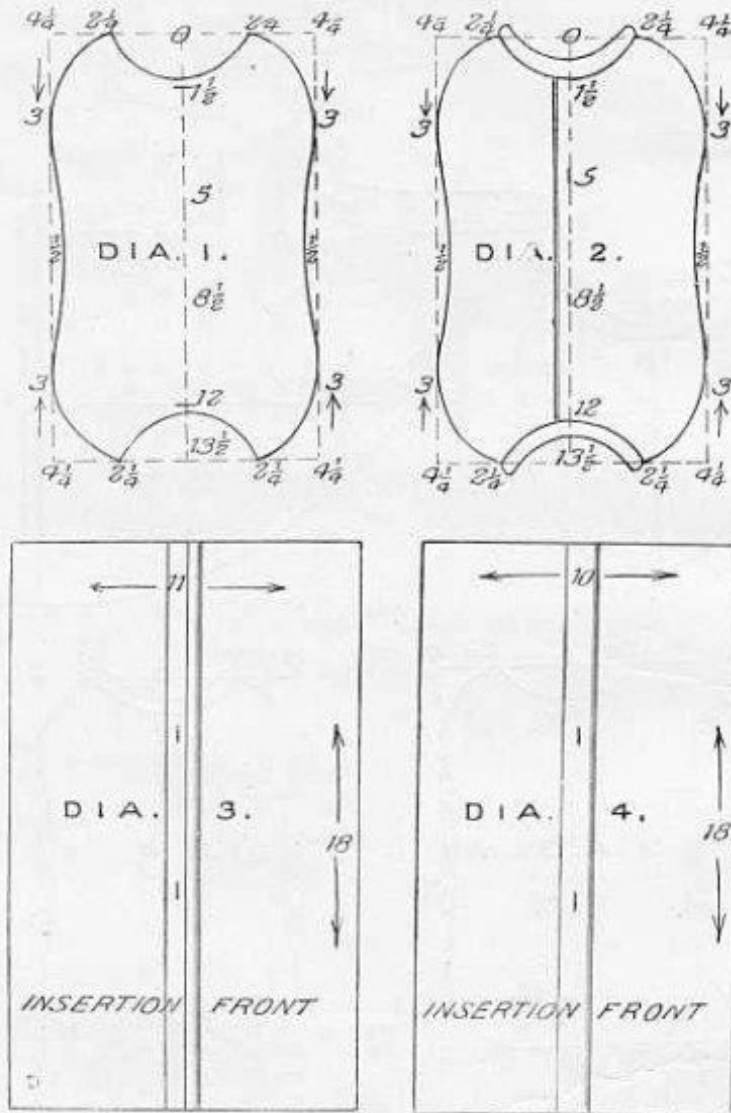
The centre of these fronts may either be made up plain, or with pleats, thus Diagram 3 is plain, and Diagram 4 has a pleat. These fronts are also made up four-fold, and are finished in the usual style.

On Diagrams 1 and 2 we reproduce a rather larger type of front than those already given, and such as are specially adapted to be worn with vests opening rather low. In other details, such as the method of making-up, etc., they are, to all intents and purposes, the same as those we have previously described.

It will be seen they are made up about 18 inches long by 10 or 11 wide. The centre may either be whole or with one or two side-pleats. Two button-holes are usually worked, and they are generally four-fold, the top being linen, the under part calico, and the two inner layers of stouter and coarser calico.

CUTTING

CUTTING



INSERTION FRONTS. DIAS. 3 AND 4.

This is a style of front which differs from all the others, in that it is prepared with the view of being sewn into the body, etc., of a shirt, and in order to make it readily adaptable to any size and style, the top and bottom are left square, it being a simple matter to cut it to the shape desired at either part.

It will be noticed that Diagram 3 is finished with two rows of stitching down the edge; whereas Diagram 4 only has one. These are, however, but two varieties, which may be as numerous as the different styles of shirt fronts worn; these, however, are the two most popular types, and such as are usually stocked by hosiers and shirt-makers.

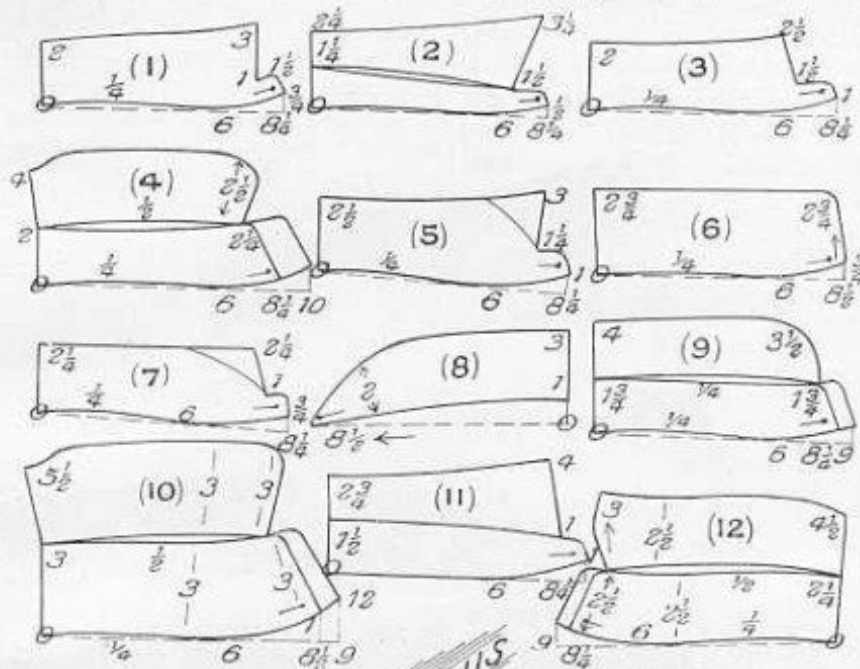
The diagrams on this page give reduced models of some of the most popular styles of collars and cuffs, and will only need to be reproduced by the ordinary inchtape to give a good model.

The variations in size can be easily made by adding to or taking from the back.

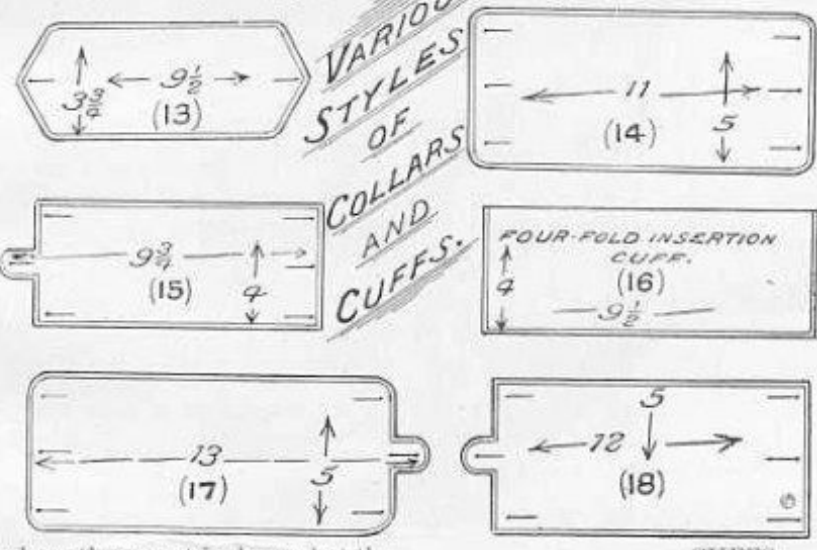
not only differ at the ends, but also in the depth and shape of the fall behind.

Diagrams 5 and 7 are examples of the turnover corner style.

Diagram 8 is a horsey style of collar that is a good deal worn by men of that class.



VARIOUS STYLES OF COLLARS AND CUFFS.



CUFFS.

The styles illustrated are those most in demand at the present time, and are usually made up four-fold, the outer layers being of linen, the inner thicknesses of stouter and coarser material.

Diagrams 1 and 3 are good examples of the stand-up style.

Diagram 2 is the Shakespeare style, or the turn-over pattern, narrow in the front, with pointed ends.

Diagrams 4, 10, 11 and 12 are variations of the stand-and-fall type of collar, which has been so popular during the past few years. It will be noticed that these

On Diagrams 13 to 18 we give examples of various styles of cuffs, all of which explain themselves. These are reproductions of fashionable styles, and will be found in every way reliable.

To enlarge or reduce these is a very simple matter, and as the making-up of them is the same as we have already described for fronts and collars, it is not necessary for us to comment further.

PANTS OR DRAWERS.

Despite the fact that the pants and drawers supplied by hosiers are well-nigh universally worn, there is, nevertheless, a moderate demand for drawers made from cotton and other materials, to be worn with trousers that are unlined. Draw line O, A.

Mark down from O one-fourth of the seat plus 2 or 3 inches. This finds the fork level. Continue from O to A the full length of side, or

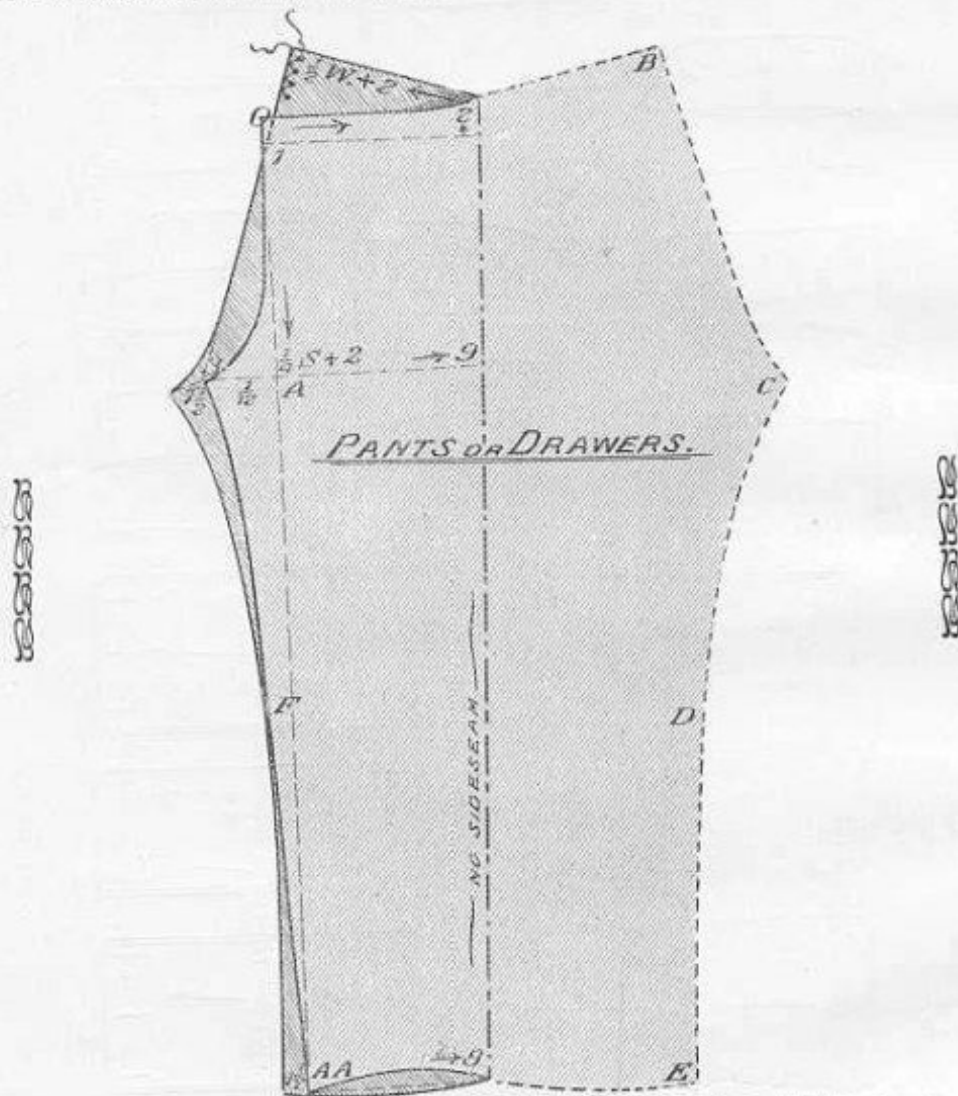
Draw fork leg-seam as illustrated.

There is no sideseam, so that all the measures must be made up at the seat.

Measure up the size of the waist, allowing 2 inches for sewing of the seams. Draw line from I to point 3.

Add on $1\frac{1}{2}$ in. at the fork, and about $1\frac{1}{2}$ in. at the bottom of the leg-seam at A, A. This will then give the pattern complete.

The extra size of the waist can be drawn in if desired.



from A to the fork line may be made to agree with the leg length desired. In the case of drawers they would only extend to just below the knee.

Square lines across to 9 and out to 3, making A to 9 one-fourth of the seat, A to 3 one-twelfth of the seat, and A A to 8, 1 inch less than one-fourth of the seat.

Draw line from 8 through 9 to the top, and from I to this line should not be less than one-fourth of the seat plus 1 inch. If it is more, the extra size may easily be adjusted.

The dotted outline, B C D E, shows the pattern laid out flat.

These drawers are made from calico, swansdown, and, occasionally, from flannel. They are of easier-fitting description than the woven style, and are, consequently, preferred by many.

In making-up, the seams should be treated the same as shirts, namely, turned in and stitched. They are fastened with buttons and holes, and for the rest part the making is a very simple matter.

PYJAMA JACKETS.

The pyjama sleeping suit has taken the place of the night shirt during recent years to a considerable extent. It consists of two separate garments, jacket and trousers. The latter may be cut after the style of the drawers already described, or they may be finished in the way we shall describe in our next chapter.

The style of the pyjama jacket is loose-fitting, buttoning or fastening in some other way up to the throat, and finished with a stand or Prussian collar. A patch-pocket is generally put on the left breast. The fronts and cuffs are either finished plain, or trimmed with cord, as illustrated on Diagram 1.

THE SYSTEM.

O to 3 three inches more or less to taste.

O to 9 the depth of scye as taken on customer, or one-sixth chest plus 3 inches.

O to 17 natural waist length.

O to 28 full length plus $\frac{1}{2}$ in. for seams.

17 to $\frac{7}{4}$ about $\frac{7}{4}$ in.

Draw back line from O $2\frac{3}{4}$.

O to $2\frac{1}{2}$ one-sixth neck.

$2\frac{1}{2}$ to $\frac{7}{4}$, $\frac{7}{4}$ in.

Width of back plus seam is measured off about 2 inches below 3.

9 to 20 half chest plus 2 inches.

20 to 12 across chest measure or one-fourth breast less 1 inch.

Sweep from 12 by front shoulder measure less O $\frac{7}{4}$ of back; or this quantity from 12 to C may be made one-sixth breast plus 4 inches.

Sweep from 20 by $\frac{1}{2}$ in. or $\frac{7}{4}$ in. more than used for first sweep.

Point C is where the segments cross each other.

Sweep from 12 in the direction of B by the over-shoulder measure, less 9 A of the back.

If over-shoulder measure has not been taken, it may be estimated at one-third breast plus 5 inches.

C to B $\frac{1}{2}$ in. less than $\frac{7}{4}$ to $\frac{1}{2}$ of the back.

C to D one-sixth of neck.

D to E one-sixth of neck.

Draw breast line from D to 20, and square down, carefully noting that the total breast is not less than 4 inches over half customer's waist measure.

Make front $\frac{7}{4}$ in. longer than back.

Add on $1\frac{1}{2}$ in. for button-stand.

Place the sideseam about one-fourth breast from back. Let forepart overlap back about $\frac{7}{4}$ in. at waist.

THE SLEEVE.

Draw lines at right angles to O.

O to 5 one-eighth breast plus $\frac{1}{2}$ in.

O to $\frac{7}{4}$, $\frac{7}{4}$ in.

$\frac{7}{4}$ to 9 distance between the two pitches at top. Hindarm pitch is 2 inches below shoulder point. Forearm pitch $\frac{7}{4}$ in. up from 12.

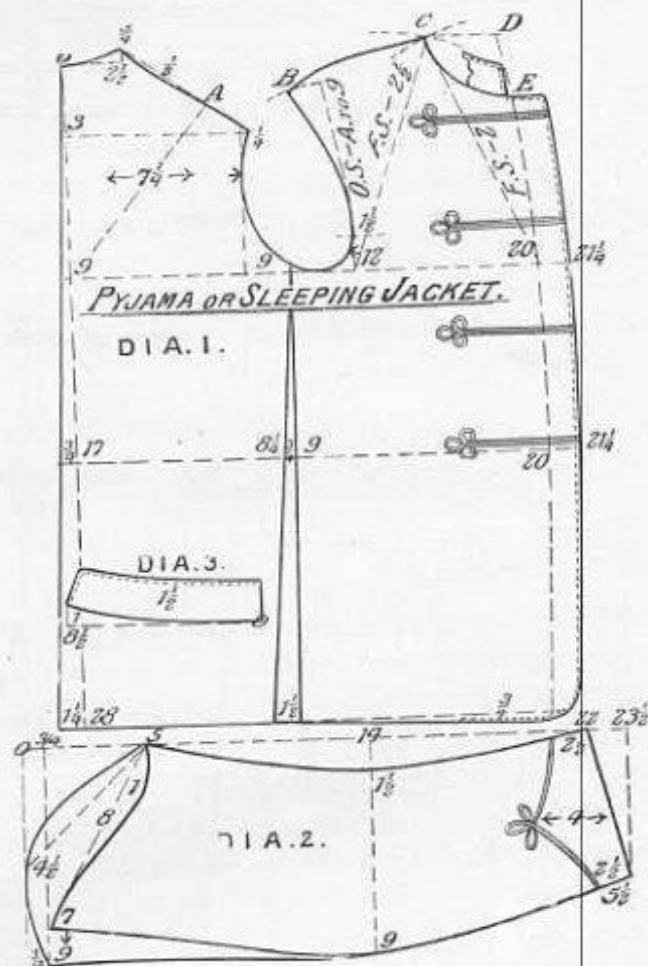
Measure off length of sleeve required to elbow and cuff.

Hollow elbow at forearm 1 to $1\frac{1}{2}$ in.

Make width of elbow and cuff to taste, say cuff one-sixth breast less $\frac{1}{2}$ in.

Elbow one-sixth breast plus $1\frac{1}{2}$ in.

Measure round the bottom of scye between the two pitches, and apply that measure from 5 to 7.



THE COLLAR.

O to $8\frac{1}{2}$ half neck plus $\frac{1}{2}$ to 1.

$8\frac{1}{2}$ to 1, one inch.

Width of collar about $1\frac{1}{2}$ in.

HINTS ON MAKING.

These jackets are made up without lining beyond a narrow facing down the front. The seams and edges are turned in and finished in a way suitable for washing. The edges are generally single-stitched.

PYJAMA TROUSERS.

This garment is intended to be worn in conjunction with the jacket illustrated on our last diagram, and may be made with or without feet.

The measures required are : (1) Waist measure, (2) seat over trousers, (3) length of leg, usually made 1 inch shorter than the trousers measure.

Extra measures may be taken, such as size of knee, bottom and sideseam, but these are not essential.

These may be cut out direct from the material, as follows : Take 3 yards of the material selected, and double with the crease on the left. Then crease again so that the double edge runs down the centre of stuff, and then mark up from C to A, the leg length. Mark out from A to 12, quarter of seat plus $\frac{1}{2}$ in.; at the bottom from O to 42, quarter of seat, minus 1 inch, and draw the main line, O to 42, by which all others are squared.

From 12 to O, quarter seat plus 2 inches, and to $3\frac{1}{2}$, one-twelfth seat plus $\frac{1}{2}$ in.

Shape the topside, hollowing bottoms $\frac{1}{2}$ in.

For the undersides, mark out $1\frac{1}{2}$ at fork, $\frac{1}{2}$ at knee, and $1\frac{1}{2}$ at bottom.

To locate the seat line, measure across from O to D, then continue the tape round towards the centre of back and fix the width at half the waist plus 5 inches. This allows an inch for making up and 4 for gathering. The line is then drawn straight to 12.

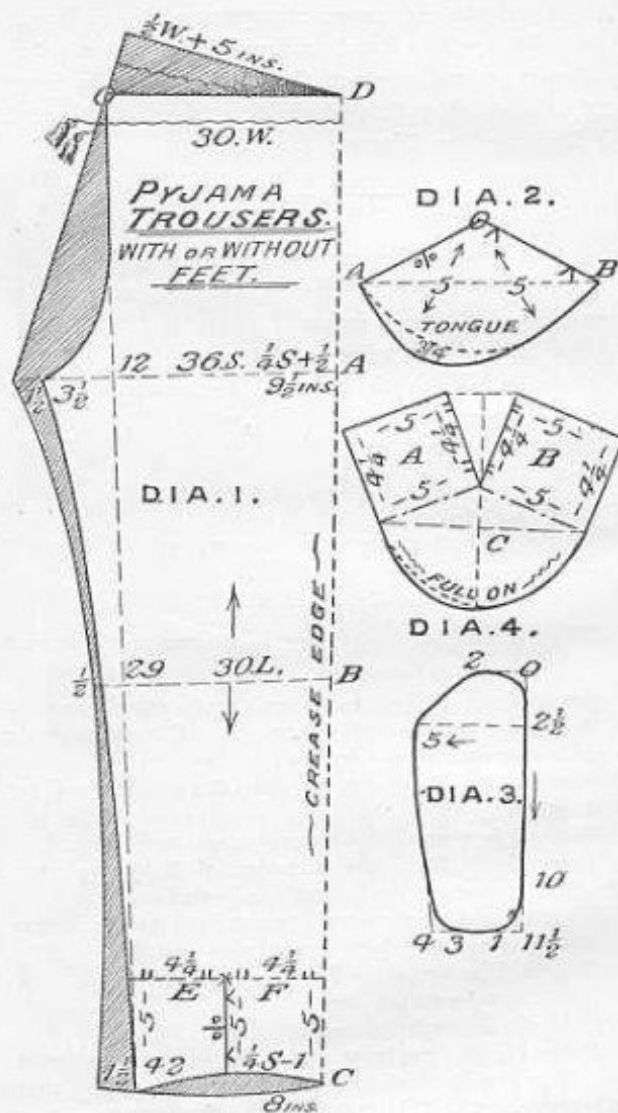
We illustrate on the diagram two methods of making up the bottoms when the feet are required to be sewn at that part.

The first, illustrated by Diagrams 2 and 3, consists of cutting up the centre of topside 5 inches, and inserting the tongue to the part indicated by the balance marks.

Make a pivot at O, and sweep round from A to B, making from O to A and B 5 inches. A to B 10 inches. Add $\frac{1}{2}$ on the left of centre as marked.

Diagram 3 may be produced by inchtape, and the length and width increased according to the requirements of the figure.

The other method consists of cutting off 5 inches from the bottom of foreparts, and then cutting this again into two equal parts, as shown by A and B, Diagram 4. These are then placed above the tongue (which is drafted as Diagram 2), and A B C are cut as one piece.



The V part, marked with double balance marks, is sewn to E and F, which provides the necessary spring over the foot.

The method of sewing the seams, etc., is the same as advocated in the chapter on drawers.

DRESSING GOWNS.

These garments are made from a variety of material, from the simple loose make of woollen cloth to the most elaborate design of silk.

An almost equal variety is noticeable in the way they are finished. The cheaper ones are made up with patch pockets and unlined, whilst the better ones are lined and trimmed in expensive style.

In these latter the collar and cuffs are quilted, and the fronts, edges and pockets are trimmed with fancy cord.

A girdle is generally worn round the waist.

They are cut long and easy-fitting, and are usually finished with a roll collar.

THE SYSTEM.

Draw line O 46.

O to 3 one-third of the depth of scye.

O to 9 the depth of scye.

O to 17 the natural waist length.

O to 46 full length plus seams.

From 17 mark back 1 inch, and draw centre of back from O through 1.

O to $2\frac{1}{2}$ one-twelfth breast less $\frac{1}{2}$ in.

Apply width of back plus seam, about 2 inches below 3, and curve out to shoulder-point.

9 to 9 one-fourth breast.

Square down from 9 to I.

Complete back as shown.

THE FOREPART.

Continue line across from 9, 17, and 46.

9 to 21 half chest plus $2\frac{1}{2}$ to 3 inches.

21 to 13 the across chest measure.

Sweep from point 13 by the front shoulder measure, less O $\frac{2}{3}$ of the back neck.

Add $\frac{1}{2}$ in. to this and sweep from point 21. Where these segments intersect locates the neck-point C.

C to D one-twelfth breast less $\frac{1}{2}$ in.

Draw breast line from D to 21, and square down.

Sweep from point 13 by the over-shoulder measure less 9 A of the back, and so find point B.

C to B a trifle less than width of back shoulder.

Shape scye, sinking it about $\frac{1}{2}$ in. below the line.

Let forepart overlap back 1 to $1\frac{1}{2}$ in., at waist, and draw sideseam as shown.

Make D to E about one-eighth breast.

Allow $2\frac{1}{2}$ to $3\frac{1}{2}$ inches for overlap, and complete as shown.

The sleeve is cut in the same style as for a coat, with a little extra width at elbow and cuff. This was described in the chapter on Pyjama Jackets.

The variations are :

Hollow forearm at elbow 1 inch.

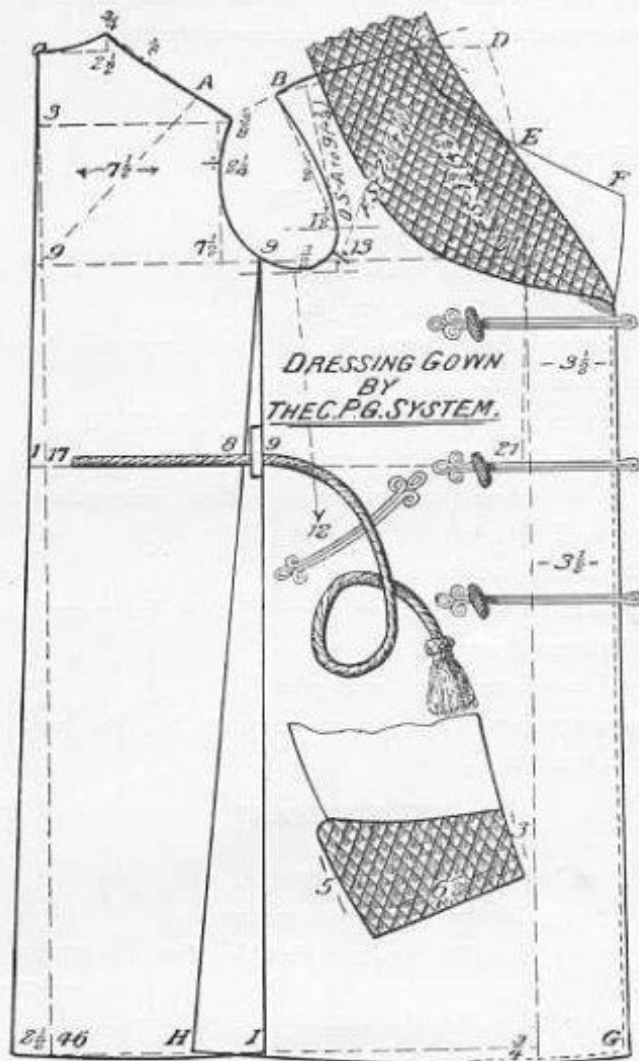
Make width of elbow one-fourth breast less $\frac{1}{2}$ in., and wrist one-sixth breast plus 1 inch.

HINTS ON MAKING.

The making-up is very simple, and is generally on the same lines as a jacket.

Canvas is put through the fronts and collar.

The pockets are stayed with linen.



The fulness of the sleeve is kept on the top of the shoulder, starting about 1 inch from the seam.

The edges are stitched.

Loops are put on the sideseam for the girdle to go through.

When the body is not lined, the seams are often raised.

Very little special manipulation is put into these garments, as they are intended to fit loosely.

They must, however, be finished tastefully.

SMOKING JACKET.

The smoking jacket is a garment of the lounge type, made with whole back. D.B. fronts, wide roll collar, and generally easy fitting. It is made up from various fancy materials, many of which are made expressly for garments of this description. The fronts are frequently trimmed with cord, and the cuffs and collar finished with silk of a different colour of pattern and quilted. Hip pockets are put in with corded mouth, the cord being finished at the ends to match the fronts.

THE SYSTEM.

Draw line O 30.

O to 3 one-third depth of scye.

O to 9 depth of scye.

O to 17 natural waist length.

O to 30 full length plus $\frac{1}{2}$ in.

Mark in from O and 30, $\frac{1}{4}$ in., and draw line for centre of back.

Square lines at right angles to O, 3, 9, 17, 30.

O to $2\frac{1}{2}$ one-twelfth breast less $\frac{1}{2}$ in.

$2\frac{1}{2}$ to $\frac{3}{4}$ three quarters inch, and shape back neck.

Two inches below 3 measure off the width of back plus seam, and curve out to $\frac{3}{4}$.

Shape back shoulder-seam from $\frac{3}{4}$ to $\frac{3}{8}$, hollowing it $\frac{1}{8}$ between $\frac{3}{4}$ and A.

17 to $6\frac{3}{4}$ one-sixth breast plus $\frac{1}{4}$.

Square down from $6\frac{3}{4}$, and continue into the back scye through $7\frac{1}{2}$.

THE FOREPART.

9 to $20\frac{1}{2}$ half chest plus $2\frac{3}{4}$.

$20\frac{1}{2}$ to $12\frac{3}{4}$ the across-chest measure.

Sweep from $12\frac{3}{4}$ by front shoulder, less O 3 of the back.

Add $\frac{3}{4}$ in. to this and sweep from $20\frac{1}{2}$. Where these segments intersect locates neck-point C.

Sweep from $12\frac{3}{4}$ by the over-shoulder measure less $\frac{1}{4}$ A of the back, and so get point B.

C to B a trifle less than width of back shoulder.

Shape scye, sinking it $\frac{1}{4}$ in. or so to provide extra ease.

Take out $\frac{1}{2}$ in. between back and forepart, and allow forepart to overlap back $1\frac{1}{2}$ at bottom.

C to D one-twelfth breast less $\frac{1}{2}$ in.

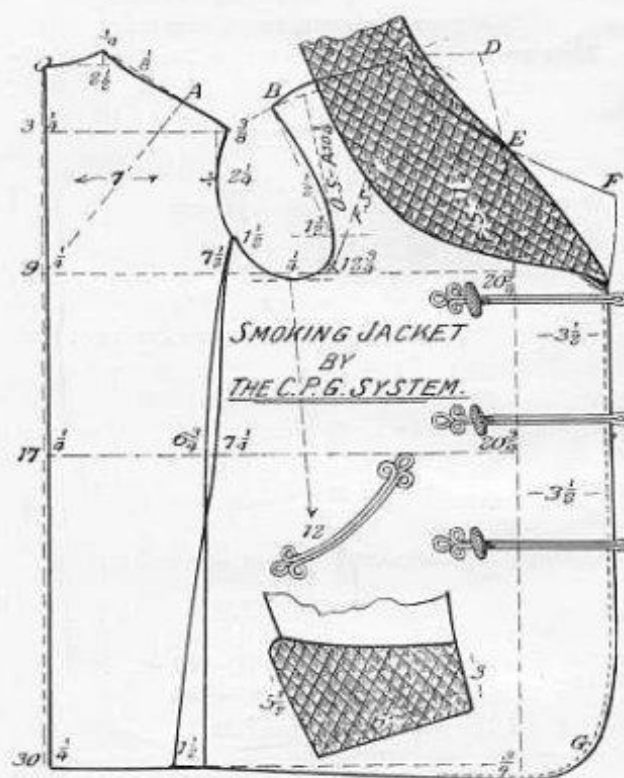
D to E one-twelfth breast plus 1 inch.

Square down from $20\frac{1}{2}$, and complete breast line up to D.

Add 3 to $3\frac{1}{2}$ inches for overlap, and shape turn at F to taste.

Add $\frac{3}{4}$ in. at bottom and complete as per diagram.

The sleeve is cut as for an ordinary jacket, making the elbow about $8\frac{1}{2}$ and cuff about $6\frac{3}{4}$ inches wide.



HINTS ON MAKING.

These garments are generally lined through, and are made up with the one idea of providing comfort. The fronts should be steadied with canvas, but this need not go all through the shoulder as for a lounge. The pocket should be of some thin and soft woollen material.

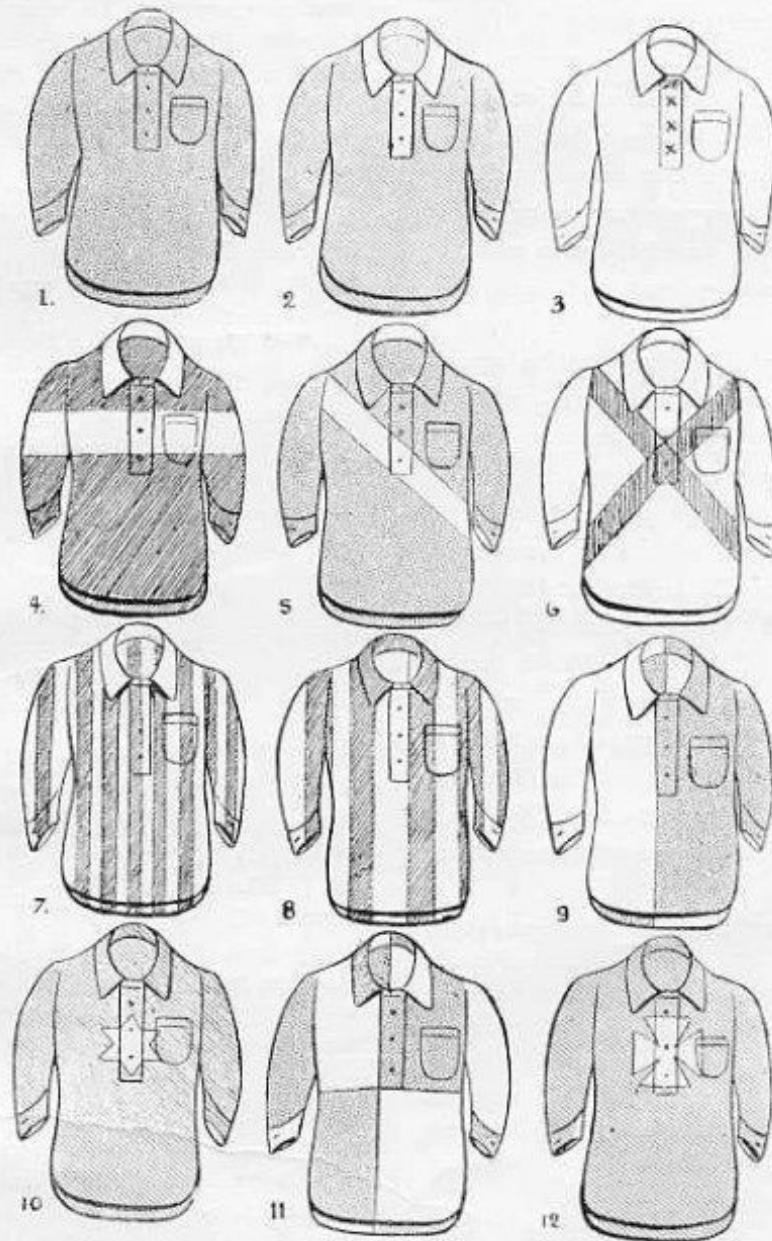
The gauntlet cuff is made up so that the quilted facing forms the turn-up of the cuff. Though these garments require taste in making-up, very little manipulation is necessary, as they are intended to be a comfortable garment for lounging purposes.

FOOTBALL SHIRTS.

Shirts for playing football in form a very important feature in the shirt-maker's business in certain districts. The better ones are made from flannel, but flannelette

clubs should be able to distinguish their own members in the field, consequently each club has its own particular pattern and colour.

In order to illustrate these, we give a dozen examples of how they are made up.



and other cotton materials are often used. It is a good thing to get the order for a club, even though there may be very little profit got from these, inasmuch as the members of the club will often come for other things as well as the shirts. It is very necessary that

Diagram 1 shows the football shirt made up in the plainest style. It is made of a bright colour material, and finished with patch pockets on the left breast, and cuffs finished with wrist-band to button. They are cut fairly full.

Diagram 2 shows a shirt with collar, cuffs, and button-band of a contrasting colour. The best effects are obtained by using the complementary combination, such as blue and orange, green and red, violet and yellow, black and white. Other combinations that go well together are black and yellow, red and white, blue and white, Oxford and Cambridge blue, etc.

Diagram 3 shows a plain shirt of the same style as Diagram 1, but finished with laced front in lieu of buttons, the laces being of a contrasting colour.

Diagram 4 illustrates how a plain stripe of contrasting material is applied in a very striking manner. The collars and cuffs of this shirt are of the same colour as the stripe. The stripe would go across the back to harmonise with the front.

Diagram 5 shows how the stripe may be applied obliquely. In putting on these stripes they are stitched on the top of the material used for the shirt, that is, it is not merely a piece inserted.

Diagram 6 shows the same idea applied to run both ways, the material being put on from the shoulders to the hips, and so forming a St. Andrew's cross.

Diagram 7 illustrates a shirt made from narrow (say 2-inch) striped material. These can be had in various combinations of colours, and those who cater especially for this class of trade have their own colours printed.

Diagram 8 shows the same style of thing, but with wider stripes. These stripes run alternately, but there are others made having three stripes of different colour or pattern.

Diagram 9 is an illustration of the harlequin style, in which the right half of the front, the left half of the back, and the right sleeve are of one colour, and the rest of a contrasting colour. Another application of this idea is shown on

Diagram 11, which is rather more fanciful, inasmuch as the harlequin idea is applied in a more elaborate manner. In these cases the various parts are seamed together as illustrated by the different tints.

Diagrams 11 and 12 illustrate how various designs may be stitched on in contrasting coloured materials. The star on Diagram 10 would be also sewn on the back, which applies equally to the Maltese Cross of Diagram 12.

As our readers will doubtless know, shirts are used for Association football, but jerseys, which are usually woven, are worn for Rugby.

THE BATH ROBE.

The bath robe is a loose wrap made from towelling, blanketing, or some similar material. It is worn when going to and from the bath, and is made loose-fitting all through; the neck may either be finished with a stand collar, or one of the turn-down type. A hood is sometimes sewn in to the neck, and a girdle is used at the waist to bring it close to the figure. The fronts are made up in S.B. style as a rule, but sometimes an overlap is provided sufficient to make it of the D.B. type. The sleeve is cut to fit easily, and of the ordinary coat pattern.

THE SYSTEM.

Draw line O 44.

O to 3 one-third depth of scye.

O to 9 depth of scye.

O to 17 natural waist length.

O to 44 full length plus seams.

Square lines at right angles to O, 3, 9, 17, 44.

O to $2\frac{1}{2}$ one-twelfth breast less $\frac{1}{2}$ in.

$2\frac{1}{2}$ to $\frac{3}{4}$, three-quarters inch.

2 inches below 3 measure off width of back plus $\frac{1}{2}$ in.

9 to 9 one-fourth breast.

Draw shoulder-seam and back scye, and square down to G.

Mark back from 17, $\frac{3}{4}$ to 1 inch, and draw line from centre of back.

THE FOREPART.

9 to 21 half chest plus $2\frac{1}{2}$ to 3 inches.

21 to 13 the across-chest measure.

From 13 sweep by the front shoulder measure less the width of back neck.

Add $\frac{1}{2}$ in. to this, and sweep from 21, and so obtain neck-point, C.

Sweep from 13 by the over-shoulder measure less 9 to A of the back.

Width of front shoulder a trifle less than the back.

Shape scye by sinking it a trifle below the depth of scye line.

Let forepart overlap back at waist 1 inch, and draw line from 9 to H.

C to D one-twelfth breast less $\frac{1}{2}$ in., and D to E a like quantity.

Draw breast line from D to 21, and square down to F.

Add on $1\frac{1}{2}$ in. for button-stand, and complete.

THE SLEEVE. DIAGRAM 2.

Draw lines at right angles to O.

O to $5\frac{1}{4}$ distance from $7\frac{1}{4}$ to 13 of the scye.

O to 1, 1 inch.

THE SHIRT-WAIST.

The shirt-waist is a good deal worn in America, but up to the present it has had a very limited sale in England; but as the taste of the British public changes, it is quite possible these articles may have a future before them in this country also. They are cut in the same manner as a shirt, but shorter, and are drawn in round the waist with a string, and then pouched over, the part below the string being tucked inside the trousers. The front is finished with a pleat, and the neck with a stand collar. An outside pocket is put on the left breast, and the sleeve is of the usual pattern.

THE SYSTEM.

Draw line O, 23.
 O to $\frac{1}{2}$ is half-an-inch.
 O to $2\frac{1}{2}$ depth of yoke desired.
 O to $2\frac{1}{2}$ in. less than above, to allow for seams
 O to 9 the depth of scye.
 O to 17 natural waist length.
 17 to 23 about 6 inches more or less.
 Square lines across at right angles.
 O to $2\frac{1}{2}$ one-sixth of neck.
 $2\frac{1}{2}$ to $1\frac{1}{4}$ half of O $2\frac{1}{2}$.
 $\frac{1}{2}$ to shoulder-point width of back, or say one-fifth breast plus $\frac{1}{2}$ in.
 9 to 8 one-fourth breast less 1 inch.
 9 to $10\frac{1}{2}$ one-fourth breast plus $1\frac{1}{2}$ in.
 Square down from $10\frac{1}{2}$, and add on $\frac{1}{2}$ in. at the waist to 11, and draw line.
 Mark back from 2 two inches, and 23 1 or $1\frac{1}{2}$ in., and draw line for centre of back.
 Complete as shown.

THE FOREPART.

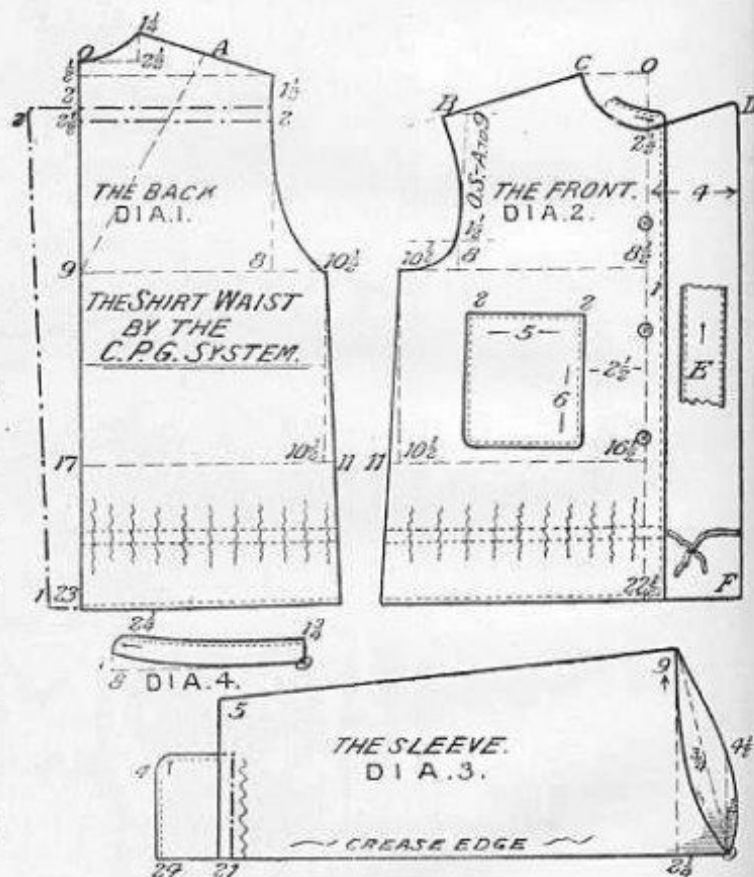
Draw lines at right angles to O.
 O to C and O to $2\frac{1}{2}$ one-sixth of the neck
 O to $8\frac{1}{2}$ the front shoulder measure less $\frac{1}{2}$ in., and less width of back neck.
 $8\frac{1}{2}$ to 8 the across chest measure,
 8 to B the over-shoulder measure plus $\frac{1}{2}$ in. less 9 A of the back.
 $8\frac{1}{2}$ to $10\frac{1}{2}$ one-fourth breast plus $1\frac{1}{2}$ in.
 Square down from $10\frac{1}{2}$, and add on $\frac{1}{2}$ in. at 11.
 Make the length agree with the back.
 For a plain button-through add on 1 inch.
 If it is desired to make up a pleat in front and leave sufficient to turn in, add on 4 inches.
 Complete draft as shown.
 Stitch on a tape about 4 inches below waist, and run in drawing tape through it.

THE SLEEVE.

Draw line O 24.
 O to $2\frac{1}{2}$, $2\frac{1}{2}$ inches.
 $2\frac{1}{2}$ to 9 half size of scye plus $\frac{1}{2}$ to 1 inch.
 O to $4\frac{1}{2}$ half $2\frac{1}{2}$, 9.
 Measure off length to measure.
 Make the width of sleeve at wrist about 1 inch less than one-sixth breast, and shape cuff either easy or close-fitting, according to customer's wishes.

THE COLLAR-BAND. DIAGRAM 4.

Draw line O 8.
 O to 8 half neck plus $\frac{1}{2}$ in.



8 to 1, 1 inch.
 O to $1\frac{3}{4}$ width of band plus $\frac{1}{2}$ in.
 1 to $2\frac{1}{2}$ width of band in front plus $\frac{1}{2}$ in.

HINTS ON MAKING.

The back is gathered in, and the yoke is made double. The front is finished plain, and a patch-pocket is put on the left breast.

The sideseams are stitched to the bottom. In other ways it is made up as an ordinary shirt.

JOCKEY'S BLOUSE.

The jockey's blouse is usually made of silk, the colours of the various parts being adjusted according to the colours of the horse's owner, and for those who feel interested in these, we may note that a very artistic series of post-cards may now be obtained showing the various colours used by the leading horse-owners.

The jacket is invariably cut loose-fitting, extending from 7 to 10 inches below the waist, and in the case of the shorter lengths they are invariably cut longer in the backs. They are worn inside the breeches at waist, the extra length of back being very necessary to prevent their riding up when the wearer is leaning forward as in the act of riding.

$2\frac{1}{2}$ to $\frac{7}{8}$, three-quarters inch.

Measure off the width of back plus two seams in the case of the closer style, or plus 1 inch in the case of the looser style.

Draw shoulder-seam from $\frac{7}{8}$ to $\frac{3}{4}$, as shown.

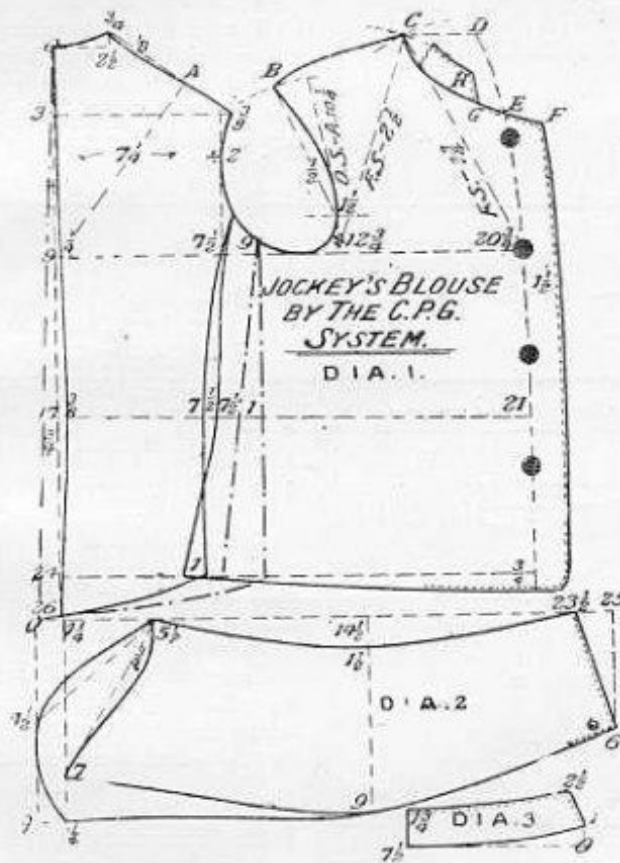
9 to $20\frac{7}{8}$ half chest plus $2\frac{1}{2}$ to 3 inches.

$20\frac{7}{8}$ to $12\frac{3}{4}$ the across chest.

THE SHOULDERS.

Sweep from $12\frac{3}{4}$ by the front shoulder measure less the width of back neck.

Add $\frac{7}{8}$ in. to this and sweep from $20\frac{7}{8}$, and where segments cross locate the neck-point C.



THE SYSTEM. DIAGRAM 1.

Draw line O 26, and mark off as follows:

O to 3 one-third depth of scye.

O to 9 depth of scye.

O to 17 natural waist.

O to 24 full length plus seams.

24 to 26 2 to 3 inches.

From 17 mark back $\frac{3}{4}$ in. to 1 inch, as per dot and dash lines, for a full back, or for a closer fit mark in $\frac{3}{8}$ in.

Draw back-seam from O to 26.

Square lines from O, 3, 9, 24.

O to $2\frac{1}{2}$ one-twelfth breast less $\frac{1}{2}$ in.

C to D one-twelfth breast less $\frac{1}{2}$ in.

D to E about the same, or a trifle lower.

Draw breast line from D through $20\frac{7}{8}$ and 21 to bottom.

Now sweep from $12\frac{3}{4}$ by the over-shoulder measure less $\frac{1}{4}$ to A of the back, and so find B.

C to B a trifle less than width of back shoulder.

Shape scye as diagram.

Put in the seams to taste. The solid line shows the closer style, and the dot and dash line the looser pattern. In the former case the waist is suppressed $\frac{1}{2}$ in., and in the latter it is overlapped 1 inch.

THE SLEEVE. DIAGRAM 2.

Draw lines at right angles to O.

O to $1\frac{1}{4}$ is 1 to $1\frac{1}{4}$ in.

$1\frac{1}{4}$ to $5\frac{1}{2}$ is the distance from point 2, which is the back pitch to $7\frac{1}{2}$ on the depth of scye line.

O to 9 agrees with the size of the scye between the two pitches taken straight across when the shoulder-seams are put in a closing position.

O to $4\frac{1}{2}$ is half O, 9.

Measure off the length to elbow and cuff to measure.

Hollow forearm $1\frac{1}{2}$ to 2 inches, and make the width at elbow 1 or $1\frac{1}{2}$ in. more than one-sixth breast.

Make the cuff one-sixth breast or a trifle less.

Raise the forearm $1\frac{1}{2}$ in.

$5\frac{1}{2}$ to 7 is the same size as the under scye between the two pitches, as from 2 to $12\frac{3}{4}$.

THE COLLAR. DIAGRAM 3.

Draw line O $7\frac{1}{2}$.

O to $7\frac{1}{2}$ half neck.

O to 1 one inch.

As its name implies, it is cut as square as possible; in fact, the whole of the lay is so arranged that all the material is used up in the garment. Indeed, the cutter will not find, at the most, he has a handful of clippings after a day's work.

The material used is generally 28 inches wide, and the various parts of the shirt, as given on the accompanying diagram, show how they can be taken out of the least possible quantity.

The length of material required for a shirt of this kind is $3\frac{1}{2}$ yards, with 1 yard of lining.

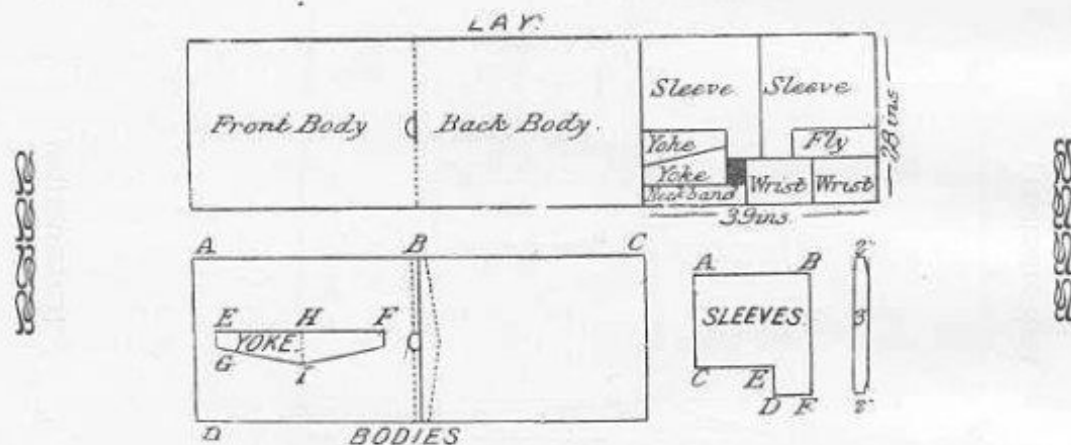
The dimensions of the bodypart are as follows (see diagram herewith):

A to B $31\frac{1}{2}$ inches.

B to C $40\frac{1}{2}$ inches.

A to D 28 inches.

The neck hole is taken out equally each side of the centre, and measures 4 inches wide by $3\frac{1}{2}$ inches deep, out of which are cut the small pieces called vents that are inserted both in the sleeves and skirts, to prevent the seam ripping up.



$7\frac{1}{2}$ to $12\frac{3}{4}$ one and three-quarter inches.

1 to $2\frac{1}{2}$ to taste.

HINTS ON MAKING.

These are invariably made up in the lightest possible style. The fronts are only faced far enough back to make a neat finish for the holes and buttons, etc.

The edges are single-stitched.

The cuff is finished with one hole and button.

The collar is of the stand type.

HOW TO CUT AND MAKE A WORKMAN'S SHIRT

The following description of how to cut and make a workman's shirt is by one who has had considerable experience in this particular branch of the work.

He says, for a working man, the square shirt with the gusset sleeves is perhaps the most popular style sold, cut from a good, grand drill or Harvard shirting, with 18 inches of strong grey calico lining both back and front; it forms a most suitable garment for anyone employed on rough or heavy work.

The yoke is cut 28 inches from E to F, $2\frac{1}{2}$ inches from E to G, and 5 inches from H to I. This is laid across the shirt equally, back and front, as illustrated by the dotted line at B on the body-part diagram.

THE SLEEVE.

The dimensions of the sleeve are as follows:

A to B $19\frac{1}{2}$ inches. A to C 18 inches.

D to F 5 inches. D to E 5 inches.

The wristbands are cut $10\frac{1}{2}$ inches wide by $5\frac{1}{2}$ inches deep, doubled over, and the sleeve from A to C is gathered or pleated into it.

The neck-band should be cut 3 inches wide and 2 inches longer than the size required. Thus, if a 16 neck is ordered, then the band must be cut 18 inches long, and the corners pared off, as illustrated on the diagram.

All that remains now is the fly or opening, which is cut 5 inches wide and $14\frac{1}{2}$ inches long, the button-stand being formed from the body-part.

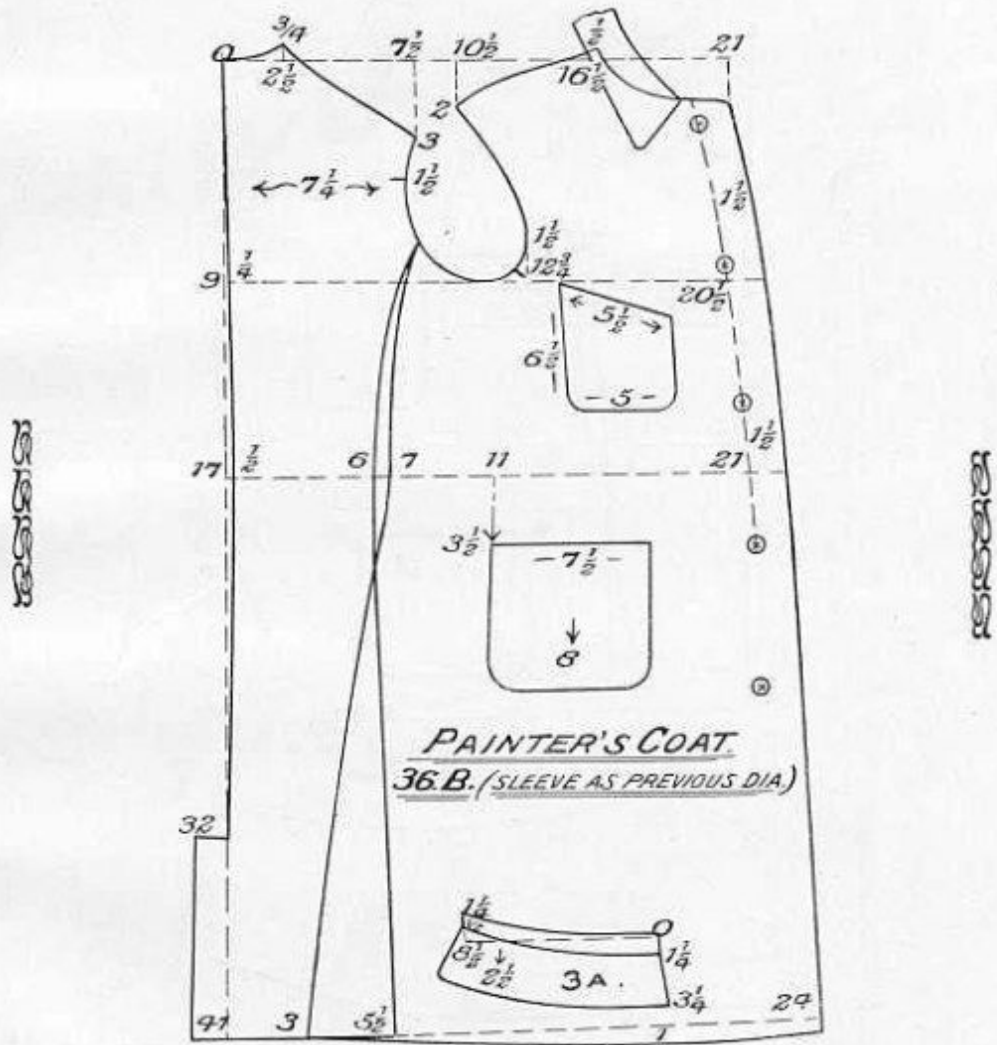
The lining should be cut from 28-inch calico, and is given out to the workman in 1 yard lengths.

PAINTER'S JACKET.

These garments are made long enough to cover the knees, and are generally easy-fitting. They are usually made of unbleached twill, and generally have three patch-pockets. The fronts are S.B. button-through, with five buttons, the neck being finished with a Prus-

The accompanying diagram is a reduced model of one of these garments as made up by a wholesale house which makes a speciality of this class of garment.

If reproduced by the inch-tape it will produce a good fitting garment for the 36-inch breast. Other sizes can be drafted by using a graduated tape agree-



sian collar. The sleeves are finished with a hole and button cuff. A narrow facing is put down the front, and the buttons down the front are sewn on. They are made up so that they can be easily washed.

These jackets are sold wholesale at from 25s. to 30s. per dozen.

ing with the half chest measure. The dimensions are marked clearly on all parts, so that it is not necessary for us to go over them.

The same sleeve diagram as was shown for the cook's jacket will be suitable for this.

HAIRDRESSER'S JACKET.

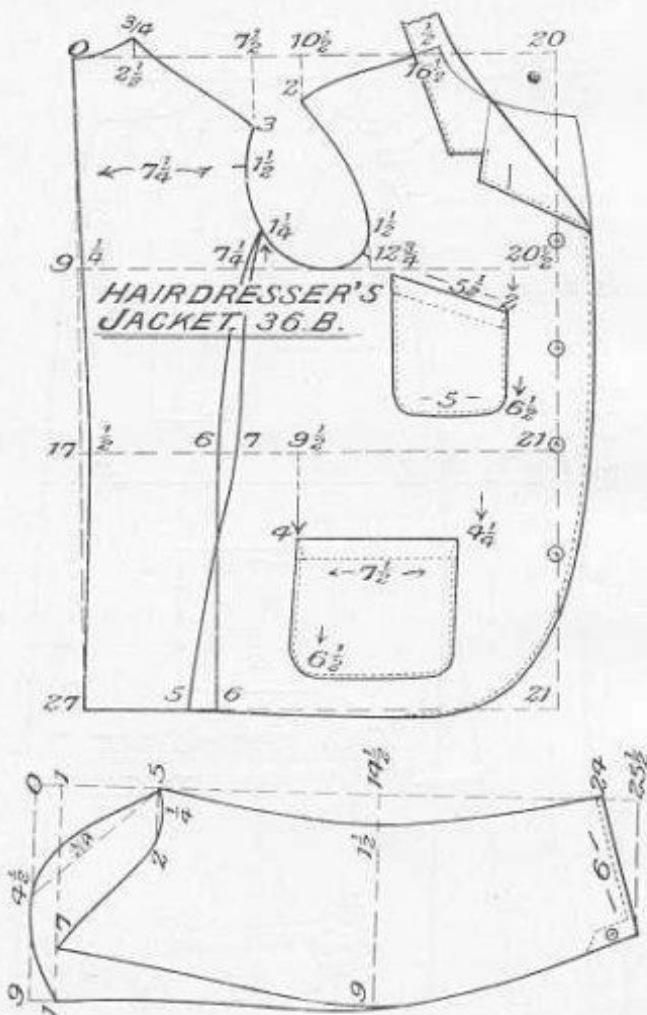
The hairdresser's jacket is usually made by the shirt-maker, for it has more in keeping with the shirt about it than the ordinary tailor-made garment.

The material is usually a plain white calico, and it is finished with three out-patch pockets. A facing of the same calico is put down the front about 1 inch wide

breast; whilst larger or smaller sizes can easily be drafted by using graduated tapes agreeing with the half chest measure.

HINTS ON MAKING.

The making-up of these garments is of the simplest nature; there is no interlining. All the seams are turned in and double-stitched, after the manner of shirts. The edges are stitched, and the turn-up for the bottom of sleeve is stitched through.



at neck-point, and $2\frac{1}{2}$ inches wide at the button-hole. Eyelet-holes are worked in the front for the shanks of the buttons to go through, so as to allow of their being easily taken off when it is sent to the wash.

The accompanying model is the reproduction of a pattern used for these garments by a manufacturer.

All the points are marked in plain figures, which, if reproduced, will give a pattern suitable for the 36

In the sample before us the cuff facings are stitched on and turned back. The tops of the pockets are turned in, and the pocket itself is stitched on with two rows of sewing round the edge.

These garments are supplied wholesale at from 24s. to 36s. per dozen.

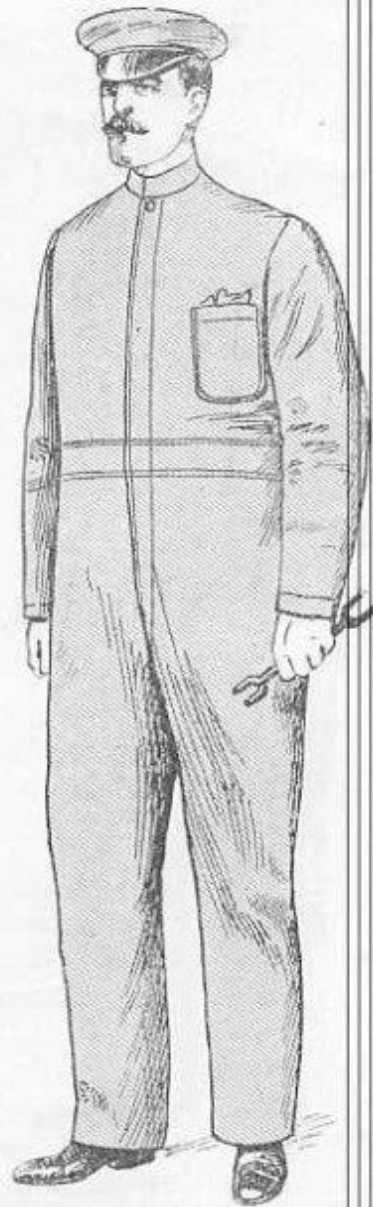
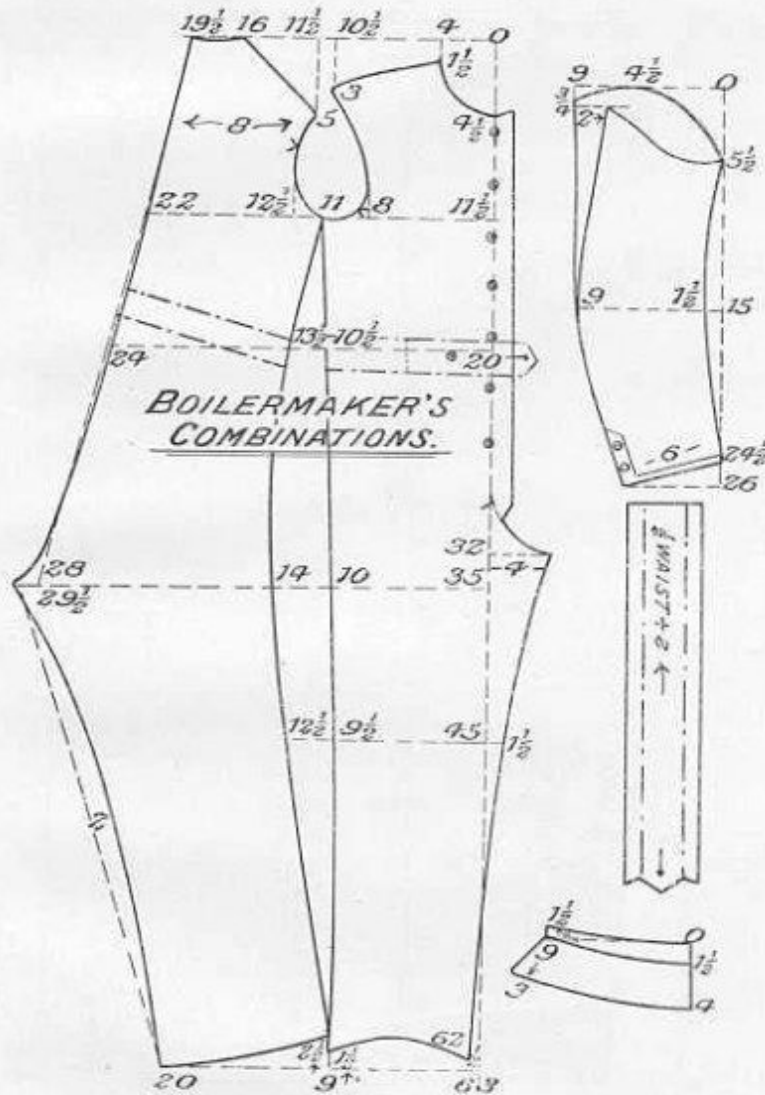
Hairdressers' jackets are usually finished with red or blue collars and cuffs, and the average price for these is 30s. a dozen.

ENGINEERS' COMBINATIONS.

The garment worn by engineers, mechanics, motor cleaners, etc., is a combination of trousers and blouse. It is usually finished either with a Prussian or a stand collar at the neck, front to button through or fasten with a fly; a belt at waist stitched to the bodypart to

These garments are generally made from blue cotton or linen twill, which is known by various names, such as dungaree, bluetto, blue drill, etc.

These combinations are supplied by the wholesale at prices ranging from 45s. to 80s. per dozen, most of whom are prepared to make them to special measures for about 1s. 6d. per garment extra.



within a few inches of the front, and this is fastened with hole and button.

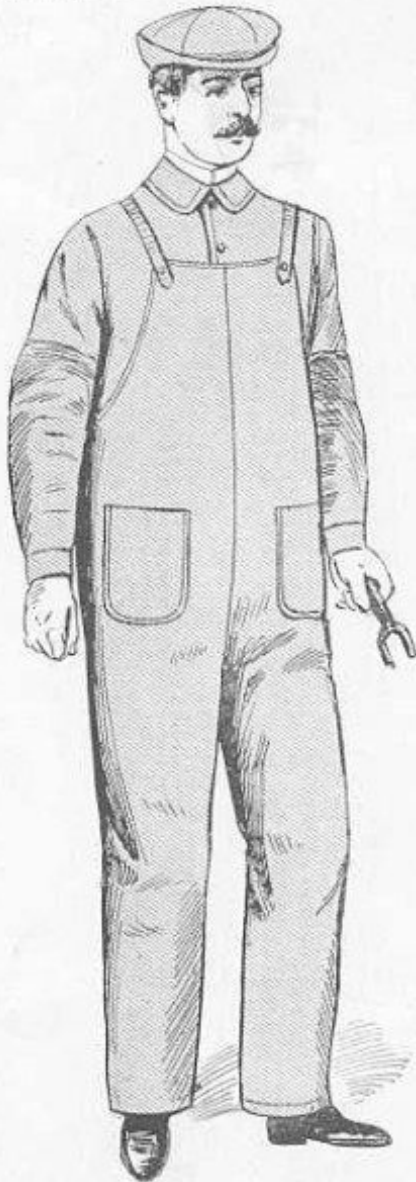
The sleeves are made of the coat-sleeve type, rather close at the wrists, fastening with hole and button. A patch pocket is usually put on the left breast.

The diagram given herewith is the reduced model of one of these as made by a celebrated manufacturer.

If reproduced by the ordinary inch-tape, they will fit a man 36 chest, whilst larger or smaller sizes may be drafted by selecting a tape agreeing with the half-chest measure.

AN ENGINEER'S OVERALL.

Engineers' trousers are usually made of dark blue cotton twill: this is known by various names, such as blunette, dungaree, twill, etc. They are made easy-fitting, and open in the leg, and are often worn over another pair of trousers. The seams are either turned in, or at least raised, so as to make them suitable for



frequent washing. Side pockets are inserted, and the tops are finished with a waist-band of the same material. Buttons are sewn on round the top of these, and a buckle and strap is also attached to the back.

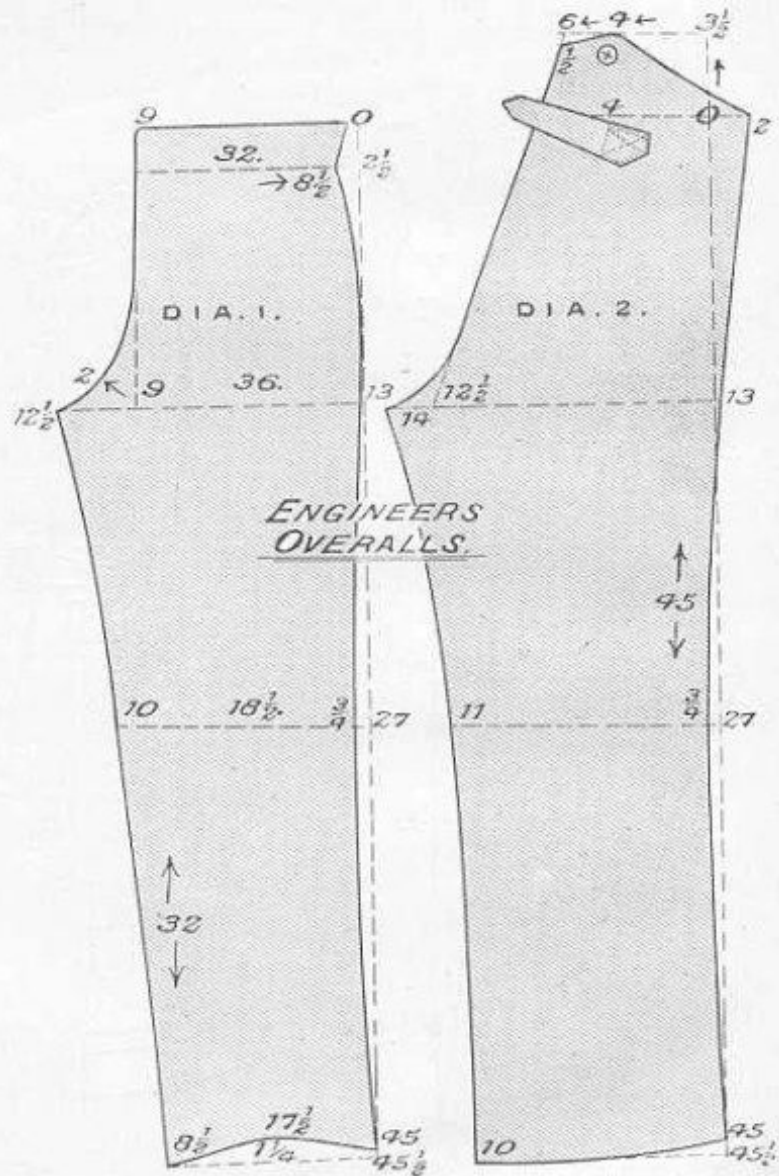
The bottoms are turned up and stitched down all round.

A variation of these is shown on the accompanying figure, in which the topsides are extended 7 or 8 inches higher than usual, so as to form a kind of apron, as well as overall trousers.

Patch pockets are put on each side, and the top of fronts kept in position with straps attached to the corner, and go over the shoulder to the back, similar to braces.

The usual wholesale price for plain trousers is 24s. to 42s. per dozen, whereas the style shown on the figure range from 34s. to 48s. per dozen.

The diagram given on this page is a reduced model



of a 36 seat, as used by one of the largest manufacturers of these garments.

If all the points are marked by the ordinary inch-tape, they will produce a good 36 seat pattern, whilst other sizes are easily obtained by using a graduated tape agreeing with the half seat. Special variations, such as length of leg, size of waist, etc., are made in the usual way, viz., shortening or lengthening the legs at the bottom, and varying the size of waist at the sideseam.

APRONS.

A considerable trade is now done by hosiers and outfitters in aprons, and to the uninitiated it is somewhat surprising the variety that exists. We have made reduced diagrams of a selection of these.

DIAGRAM 1. PLASTERER'S APRON.

Made from unbleached waste twill, drill, or patent yarn; has a bib, and tape to go round the neck; pockets on either side of front, and strings to tie behind. The figures marked denote inches.

The wholesale price of these ranges from 6s. 6d. to 12s. 6d. per dozen.

A smaller size is also made for boys, and usually cost about 4s. 11d. per dozen.

DIAGRAM 2. STEWARD'S OR CARPENTER'S APRON.

This is either made square at the top, as Diagram 3, or with a bib, as Diagram 2. The former are the cheaper, and may be purchased for 5s. 9d. a dozen, or even less. They are merely hemmed top and bottom, and provided with strings.

The usual material is patent yarn; they vary in length and width according to the price, the cheaper ones being 34x31, and the better ones 38x34.

DIAS. 4 AND 5. BUTCHER'S APRON.

This is made in two styles, the one being finished square across the top, and the other with a point and button-hole. The material is either navy serge, striped flesher, striped drill, or white twill.

The dimensions and details shown on Diagrams 3 and 4 will give a good idea of how these are made up.

The white twill ones cost about 10s. 6d. per dozen, the blue serge ones 20s. to 24s., and the striped flesher ones 18s. to 33s.

The lengths range from 37 to 43, and the widths about 36. Those with the point and button-hole are a little more expensive.

DIAGRAM 5. THE HAIRDRESSER'S APRON.

This style of apron is worn by men in many trades, such as bakers, cooks, cheesemongers, waiters, etc. It is finished square across the top, with tapes on either side. The length varies from 36 to 48, and the width from 31 to 40.

Wholesale prices range from 8s. 9d. to 18s. The materials used are linen, drill, satinette, jean, and Croydon, to D.

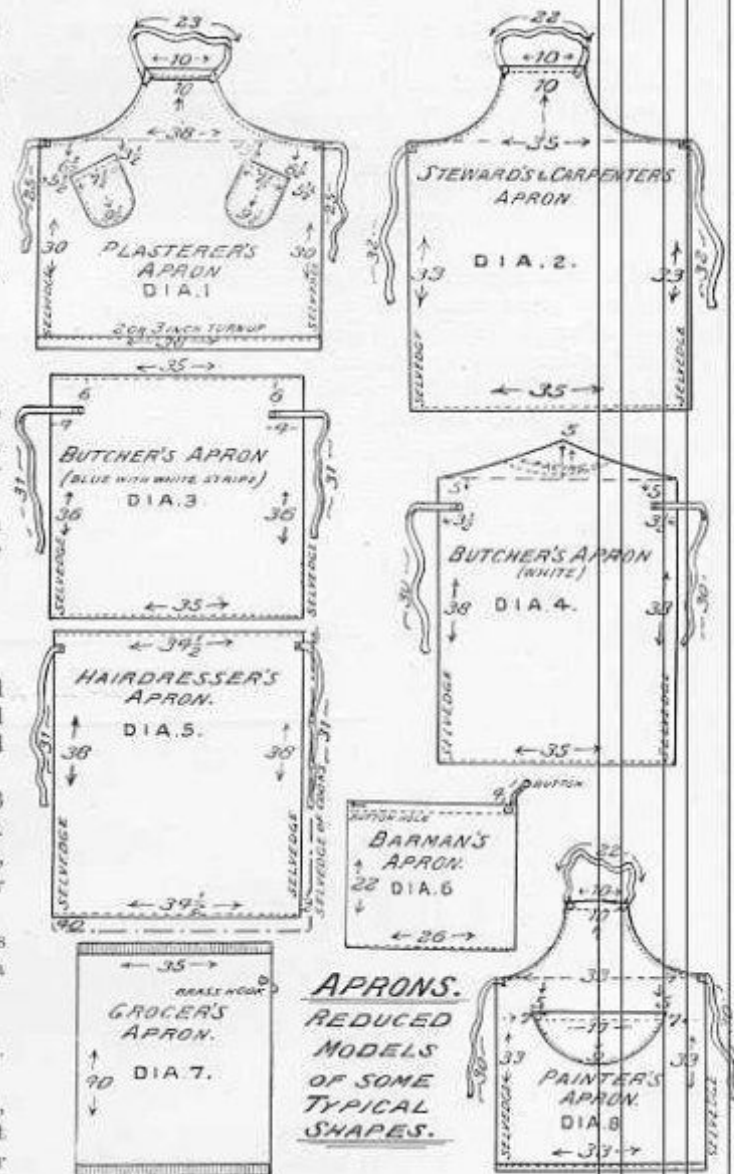
DIAGRAM 6. BARMEN'S APRONS.

These are of similar style, but much shorter, and are generally made to fasten with a button and hole, the button being sewn on to the end of a piece of elas-

tic or tape. The length varies from 20 to 23, and the width 26 or 27. The price of these varies from 4s. 6d. to 10s. 6d., and the material is usually white drill.

DIAGRAM 7. GROCERS' APRONS.

These are made of heavy white Croydon, or linen, and are usually fringed top and bottom. They are fastened at the back by means of a hook. They vary



in width from 35 to 40, and in length from 40 to 55, the more general length being 50. These are supplied wholesale at from 8s. to 20s. per dozen.

DIAGRAM 8. PAINTERS' APRONS.

These are made from duck, drill, dowlas, and twill, and are made with a bib and tape to go round the neck, and tapes to go round the waist and fasten in front. A large pocket is put in front to hold brushes and other tools, similar to that shown.

Fishmongers' Aprons are made of white drill, jean, linen, serge, striped flesher, and white fearnought, which is a heavy woollen material. They are 36 inches wide, and vary in length from 33 to 45. These are sometimes made with a bib. The price varies according to the material.

PAWNBROKERS' APRONS.

The apron worn by bootmakers, pawnbrokers, jewelers, tea-men, and others is made of black linen, canvas, or silesia, and vary in width from 32 to 40, whilst the length also ranges from 40 to 45. They are simply hemmed top and bottom, and are provided with tapes long enough to come round and fasten in the front.

BUTLERS' APRONS.

The aprons worn by butlers, upholsterers, etc., are made of green baize, and are generally made with a bib, after the style of Diagram 2. The width is 36, and the length 40 to 45 inches. The wholesale price of these is 20s. to 27s. per dozen.

Oilskin aprons are used for certain callings, and are supplied in black or yellow. They are invariably made with a bib, and are sometimes made double in the front. The wholesale price of these is from 25s. to 30s. per dozen.

Waiters' aprons are of the plain square pattern, as a rule, though sometimes they are made with a bib. They are made from white twill or Croydon, 35 inches wide, and 35 to 52 inches long.

The styles illustrated by Diagrams 2 and 5 are those usually adopted. The wholesale price is 7s. 6d. to 9s.

Cheesemongers wear aprons of the Diagrams 5 and 8 style, made from white Croydon or drill, width about 35, and length from 38 to 52. Wholesale price from 7s. 6d. to 14s. per dozen.

A good house for aprons is Vince and Co., 25a Woodstreet, E.C. They issue a price list.

CONCLUSION.

We think we have now fairly covered the ground traversed by the shirt cutter, whether he is employed in a private establishment or a factory, and in doing so have aimed at practicability and reliability. We have described how Shirts and similar garments are cut and made in various trades in such a way as should enable even the unexperienced to be able to deal with them successfully. The measurements and details marked on most of the diagrams have been taken from high class specimen garments, and may therefore be relied on. We therefore send it forth with confidence, and trust it may prove useful to all who purchase it.

THE AUTHOR.

