Famous Artists Cartoon Course
Westport, Connecticut

# Clothes and folds



Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

**Gurney Williams** 

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

**Barney Tobey** 



Here is one character cartooned in six different techniques. In each drawing the problem of handling clothes and their wrinkles is solved differently — but each of the treatments is based on solid knowledge of the real thing.

In this lesson, you'll learn how to draw clothes and folds realistically, as done in the adventure style and how to apply these principles to less realistic cartooning. Whatever style you use, your cartooning of clothes will be more convincing if you understand the basic principles of folds

# Clothes and folds

A cartoonist is concerned mostly with the doings of people, and most people wear clothes. Therefore, you must develop the ability to draw clothing of all types. You have learned how to simplify the human form: you must now learn how to simplify the clothes that go around that form. Study the effect that the action of the figures has upon the clothes due to twisting and pulling. A cartoon figure in action will twist, pull, rip and wrinkle the clothing. Remember you are not drawing a fashion plate. You are drawing an ordinary person whose clothes don't always fit him too well.

When drawing clothing on a figure, whether real comic or the adventure type, the most important thing to remember is that you are drawing a *three-dimensional* form. You are not drawing the clothing on a flat surface—the clothing goes around the figure and is in back of it as well as in front of it. The



sleeves and legs of a garment are hollow cylinders. Any pattern drawn on these cylinders must be drawn to suggest the true shape of the garment. As with perspective, you are faced with the problem of transferring a three-dimensional form to a two-dimensional surface without losing the three-dimensional effect. The wrong application of folds and patterns on a comic figure can kill the illusion of depth which you have created by the outline of that figure. Properly drawn clothing and patterns, on the other hand, will give additional depth to your drawing. When clothing the female figure, you will find that the little tension lines that you add around the breasts, hips, etc., will add much to the effect of the figure. It doesn't hurt to suggest the leg under the skirt.

Also, when drawing the female figure, the styles of the times must be kept in mind. Even though you are drawing a comic, it is important that the clothing be up-to-date. Half of your readers are women and if your styles are ten years out of date, they will soon lose interest in your feature. Here again, your

morgue plays a very important part. Keep a good, active file of Women's Clothing and see that it's kept up-to-date at all times. Good sources for this type of material are mail-order catalogues, fashion magazines and even daily newspapers. As with everything else you draw in cartooning, simplify the woman's dress. Don't attempt to make an exact copy of any dress or design you see advertised in a newspaper or a magazine. If it is an original design, you might be sued by the dress manufacturer—you don't want to end up in the jug. The length of skirt is particularly important when drawing the female figure. Skirts have a habit of changing lengths radically from year to year, and a cartoonist who is drawing a daily feature and working several months ahead must develop a knack for foretelling the future.

The following pages will not only be of value to you right now, but will continue to be of value to you during the years to come. Styles may change, but folds never do. Make a habit of referring back to these pages whenever you are working with clothes and need a refresher.

# The laws of folds and their simple diagrams

Here are the geometric diagrams of folds. We show you these, stripped of all nonessentials, so that you may better understand the <u>basic</u> direction and structure of each one. Actually the different types of folds <u>do not</u> repeat themselves <u>exactly</u> — only the principles are repeated. These diagrams are the principles. We hope they will help you to see through the irregularities present in all folds, regardless of the type of fold, and allow you to see the structure.

#### Pipe fold

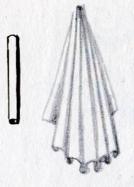
This is not an exact pipe, but a tubular-shaped fold. It must be drawn to have a cylindrical feeling

#### Zigzag fold

One fold is fitted into the next. The folds are usually contrasting in direction, are repetitive and interlock

#### Spiral fold

This fold is usually tubular in structure, but has a feeling of continuity in an ascending or descending manner



#### Diaper fold

This fold is triangular in shape, dropping away in a curving manner from one point to another on a horizontal line. Sometimes this has an angular, rather than a curved change of direction



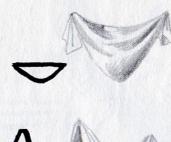
This fold is caused by a sharp change in direction. The emphasis is on the point where the direction changes and the slack areas meet



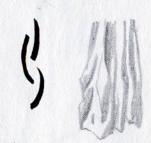
Irregular dropping, creates numerous types of folds in the process. The emphasis is on the **dropping** action rather than on the detail of the individual fold



These folds are characterized only by the horizontal surface on which they are resting





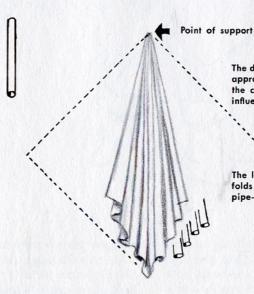




#### Pipe fold

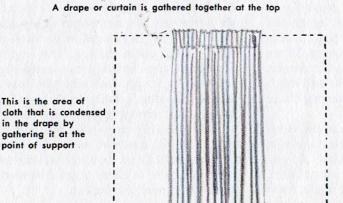
The pipe fold is the simplest form of drape. It usually occurs from one point of suspension or when pulled between two points. Always draw this fold with the understanding that it is the condensing of a large area of cloth into a smaller area. It is usually influenced by gravity and is under no strain, having a more or less smooth, even flow.

Here we illustrate the pipe folds by stretching them between two points. The folds fan out and get larger at the center



The dotted line indicates the approximate fullness of the cloth before gravity influences it

The lower part of the folds shows their round, pipe-like structure



The cloth looks like this

from the end, which ex-

plains the pipe structure

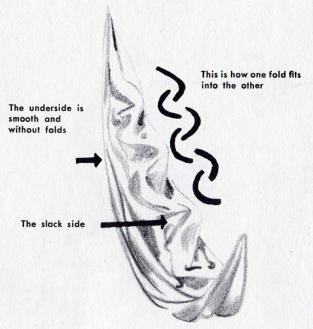
The fullness in this garment is gathered around the waist, which is the point of support. The pipe folds gradually fan out and radiate downward. Folds in a garment will vary in width when the action of the figure changes

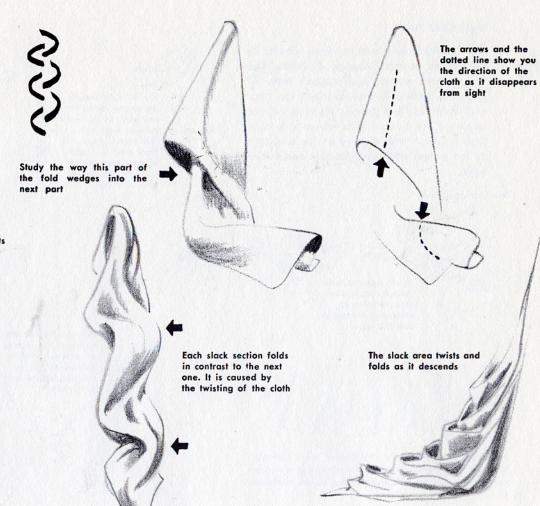
None of the cloth is removed. It is only condensed. Cloth must go somewhere. It has to fold



#### Zigzag fold

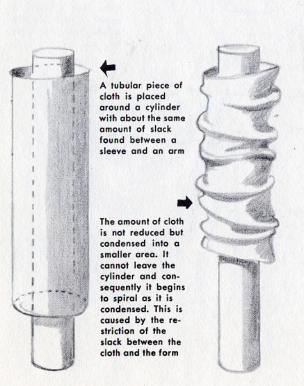
This fold usually occurs when a pipe fold is bent. The zigzag is on the slack side of the bend. This slack buckles in an uneven criss-cross way. It occurs because there is an uneven twisting of the fold that sets up a sharp, interlocking zigzag. These zigzags may not be even. The main thing is to keep the character and direction of the repetition.





#### Spiral fold

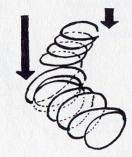
This fold is usually wrapped around a tubular form. It will change direction as the points of support and tension vary from place to place Sleeves and trouser legs present good examples.





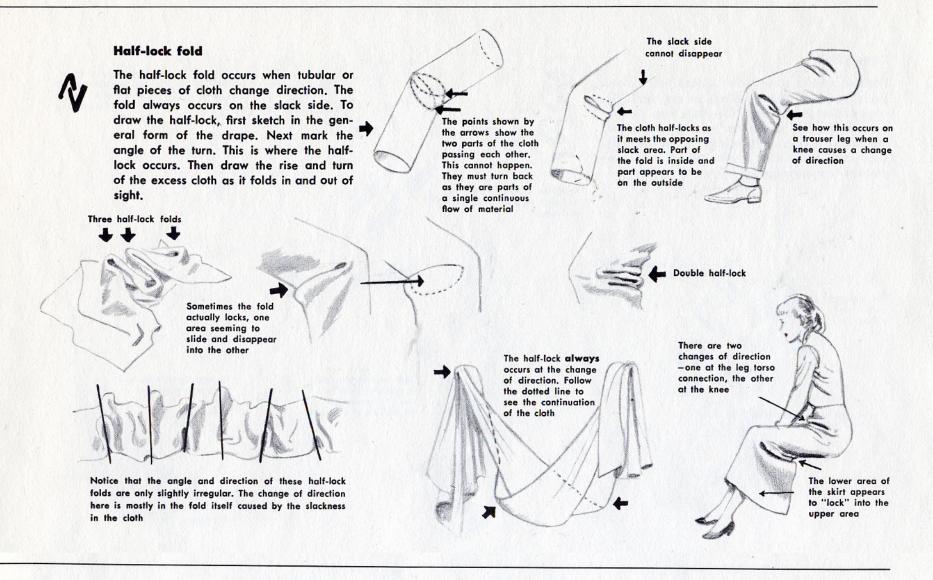


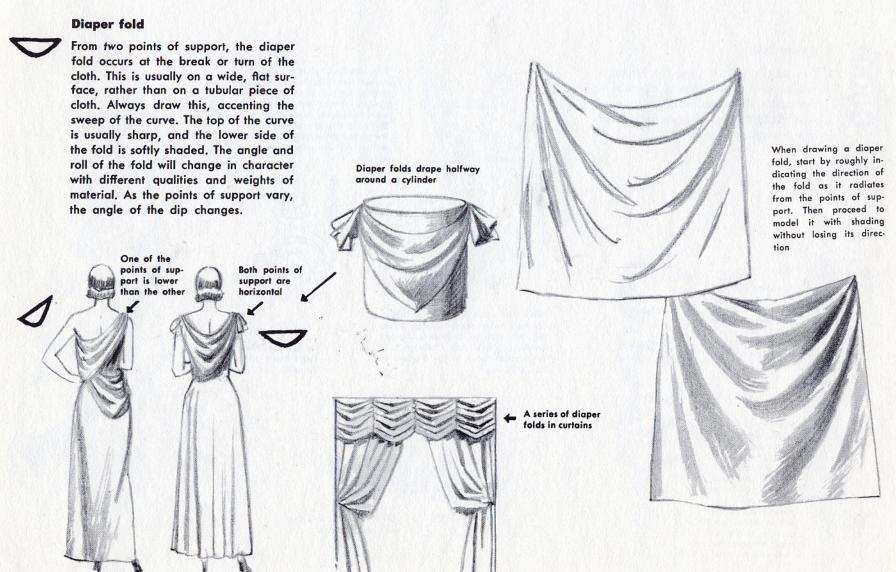
The direction of the spiral is toward the slight tension. If the tension increases, the spiral will tighten. Spiral folds must appear to revolve around a form. Study the diagram and see how the dotted lines follow the spi-ral around the unseen side of

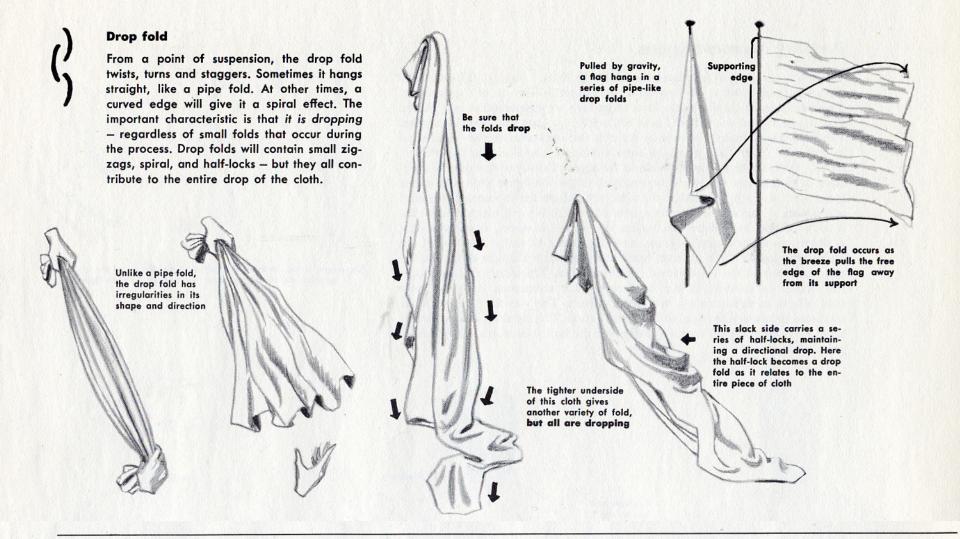


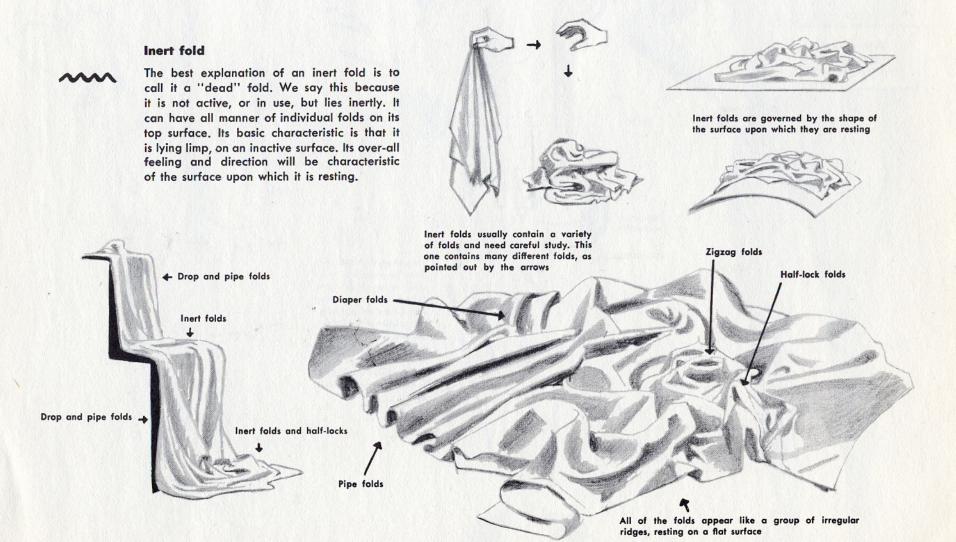
By twisting, cloth can create spiral forms in itself and have no solid form underneath it





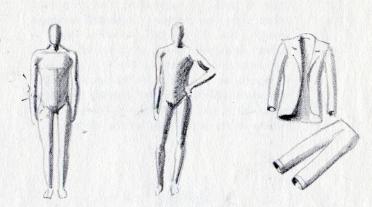




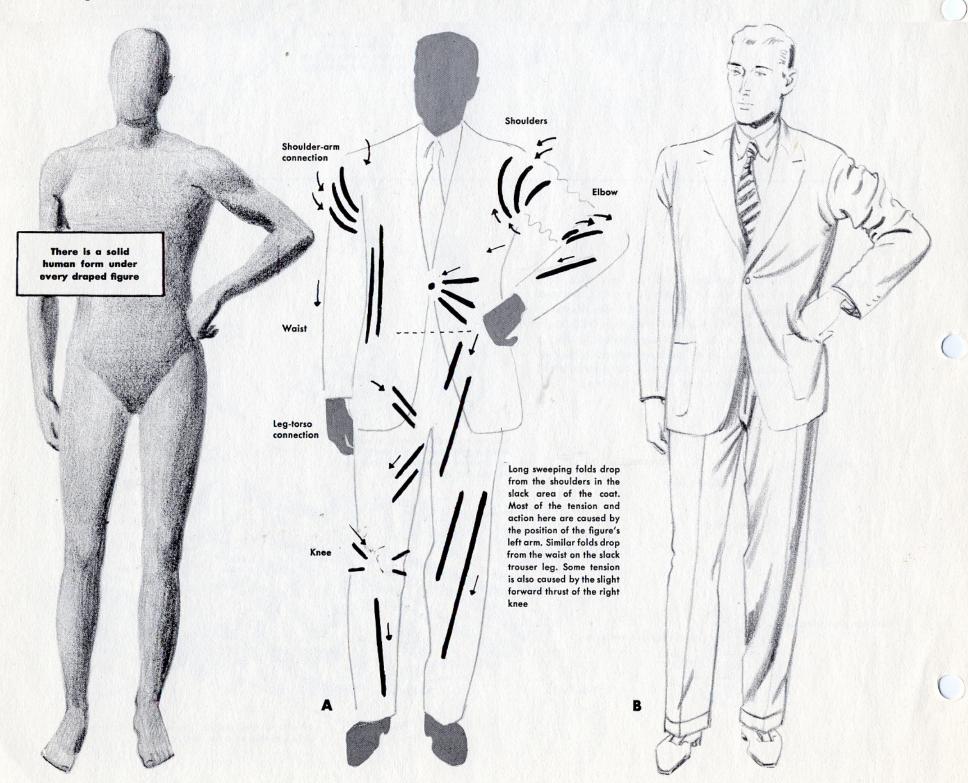


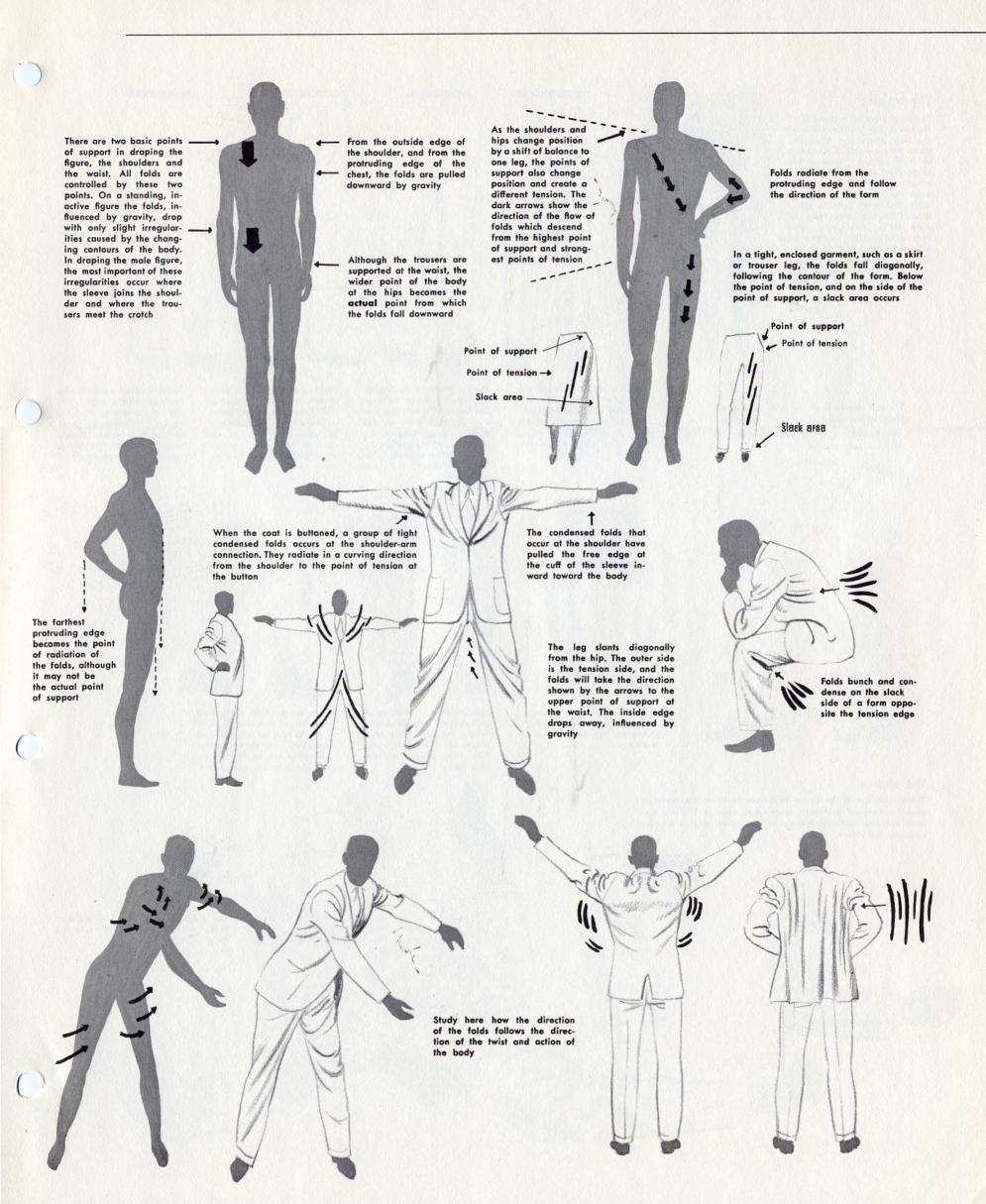
# **Draping the male figure**

The folds in a draped figure are controlled by three factors: 1- The shape of the underlying form, 2- The action of the figure, 3- The cut of the garment. The folds caused chiefly by the laws of gravity are supported at two places: the shoulders and the waist. These folds are of a long and flowing nature. The folds caused mainly by tension occur at various points and are condensed in character. The main points of these folds are: shoulder-arm connection, elbow, waist, leg-torso connection and the knee. A study of the general character of each group of folds is necessary to drape the figure well. A garment is cut to clothe a figure and at the same time allow for its necessary motion and action. A garment is not just a piece of cloth, it is a cylindrical shape that is confined and has definite limitations of volume. A sleeve, a coat or a skirt is shaped to cover a similar form, allowing excess cloth for free use of the underlying form. When an arm, torso or leg bends or changes direction, the cloth slackens on the opposite side of the tension. This cloth obviously does not change in amount; it just condenses. As it condenses, it creates folds that behave in definite ways in different places. The way they behave is determined by gravity, tension, support and action. The captions and arrows on these pages need careful study. They cover the basic causes and directions of garment folds.



The shape of the form — the action of the figure — the cut of the garment are controlling factors in draping the male figure

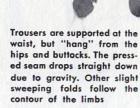




#### The trouser

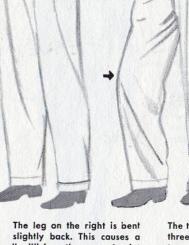
The high place of support is at the waist. The greater width of the hips affects the folds because they become a radiating point of support. You must always think of the form that the trousers are draping or you will have no success in drawing folds. The lower body is cylindrical. Trousers are made to cover the cylinders with sufficient slack to allow freedom of action. The drape of the cloth must go around the form, and also obey the laws of gravity, support, tension and function.





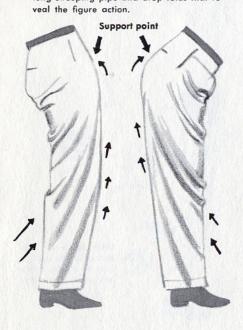


The leg on the left is straight. The other is bent at the knee. The change of direction creates half-lock folds on the under or slack side of the bent leg. Where the leg on the left joins the torso, other tight, half-locks and pipe folds occur



The leg on the right is bent slightly back. This causes a "pull" from the support point at the waist. A long, sweeping pipe fold descends to the calf. The tension causes small spiral folds at the buttacks

The three arrows point to the three important folds, the top ones forming as the leg starts forward, the lower ones starting where the knee changes direction, the other shows a long sweeping fold without tension



These diagrams show the folds pulling up-

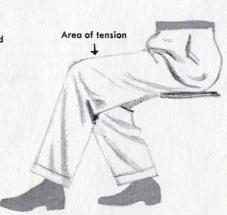
ward to the point of support. This causes

long sweeping pipe and drop folds that re-

Trousers are cut to fit the leg from the waist down with allowance for freedom of motion



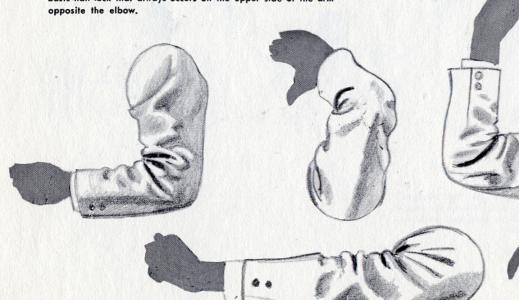
The spiral folds condense at the leg-torso connection and follow the direction and shape of the upper leg. Pipe folds occur from the knee down

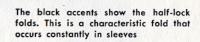


The trouser folds are pulled downward from the top side of the leg by gravity and tension. They can only descend as far as the volume of the garment will allow

#### The sleeve

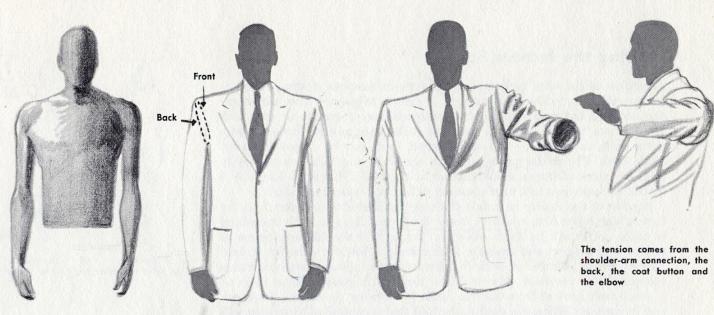
These drawings of the sleeve in various positions are made up almost entirely of half-locks, spirals and zigzags. There is one basic half-lock that always occurs on the upper side of the arm





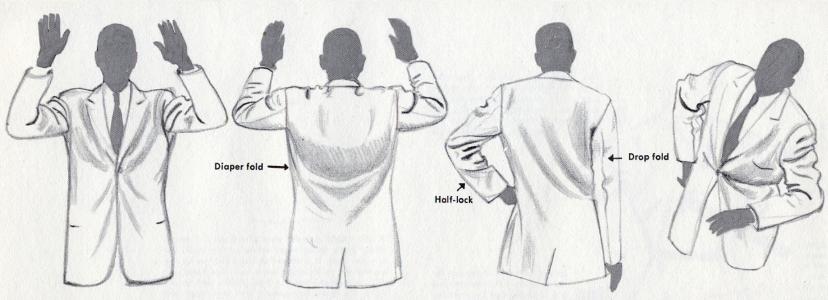
#### The coat

The coat or jacket is supported from the shoulders. Its range of folds is greater than the trousers, first, because of the increased action of the arms, second because it can be buttoned or unbuttoned and third because of the greater variety of garment design. The form and action of the torso and the arms must be understood to draw these folds correctly. The shoulders and arms create most of the folds because of their greater range of motion when compared to the limited range of the torso action.



The coat is supported from the shoulders and descends with few folds. The sleeve sets into the body of the coat on an angle where the arm and shoulder join

When the arm is lifted, a tension occurs on the cylindrical sleeve that condenses the folds at the armpit in spirals and half-locks



The arms raised in a buttoned coat cause folds to descend from the shoulders to the button and from the button outward toward the pockets. With arms raised, spiral folds radiate around the upper arm from the inside to the outside toward the elbow

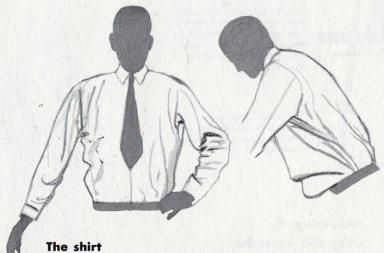
The tightness of the sleeve fitting at the armpit causes the entire coat to raise upward when the arms are lifted. This creates a group of diaper folds which cross from the two supporting shoulder points

In this quartering view of the back, study the long sweep from the high shoulder, halfway down and across the back. This is a constantly recurring fold when an angular tension is created

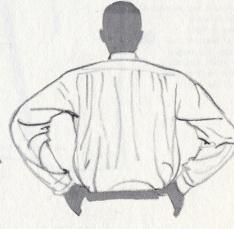
Notice the very large half-lock fold that occurs at the waist button position on the coat. This occurs because the figure is bent sideways and there is a great deal of slackness in the garment



When the coat is not buttoned, the folds taper out toward the bottom in a free sweep from the shoulders



The greatest difference between the shirt and the coat is that the shirt is held rigid at the waist. The shirt is full and contains drop folds and pipe folds of great variety radiating from the waist to the shoulders. They vary in character in relation to the degree of tension present. A twist of the body will sometimes give them a tight spiral character, while a relaxed attitude, will create numerous diaper folds

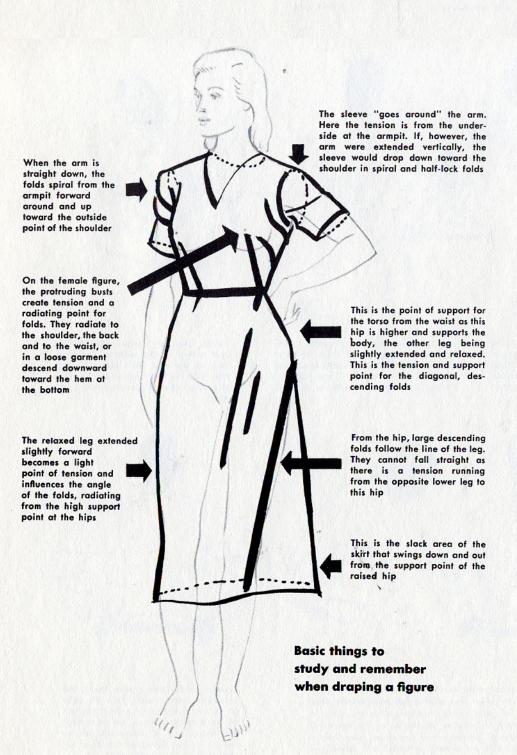


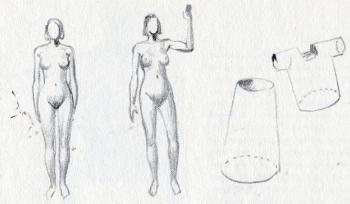
Because shirts have a yoke across the shoulders, folds descend from the yoke to the waist rather than from the top of the shoulders. These are pipe folds and drop folds. A change of tension caused by the lifting of the arms will change them to diaper folds

# Draping the female figure

Regardless of the wide range of cut and style in women's clothes, there are fundamentals that cannot be changed. A dress is supported from the shoulders, extends out over the bust and descends due to gravity in drop and pipe folds to its hem. It may be gathered at the waist and fall from the bust to the waist, to the hips — and then descend. Or it may be a separate blouse and a skirt. The skirt extends out from the waist and falls due to gravity from the point of largest circumference at the hips. This is traditionally a female costume, just as a man's costume is a coat, trousers and shirt.

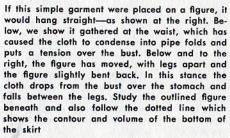
Because of the variety in female clothing you should always sketch in the form of the figure first, and then drape the form. This gives you something to build on. It will be much easier for you to find the different points of tension and support and have the folds correct if you draw the figure first. The variety of volumes of cloth in different cuts of female garments makes this procedure necessary. Always follow the fold "through." That is, draw it completely around from start to finish by drawing its volume, its depth and its contour. When you do this, the fold that is controlled by tension will follow the form. Those controlled by gravity will find the protruding edge and descend.

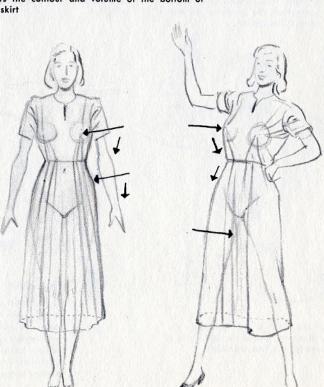


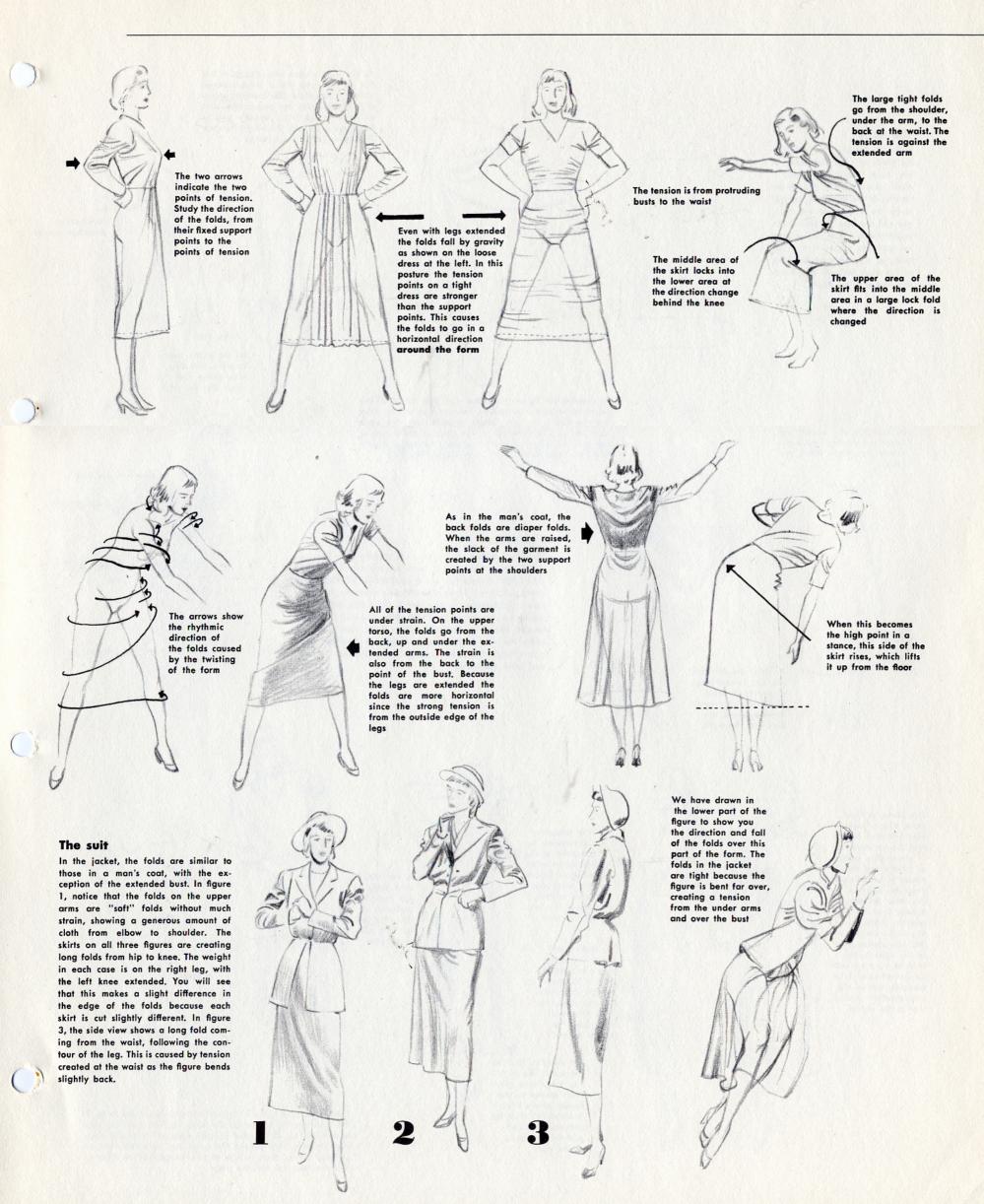


The Form — The Action — The Garment You must remember these three things to drape the figure correctly



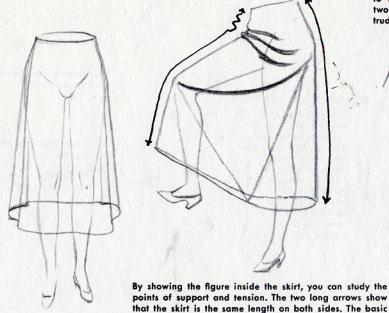




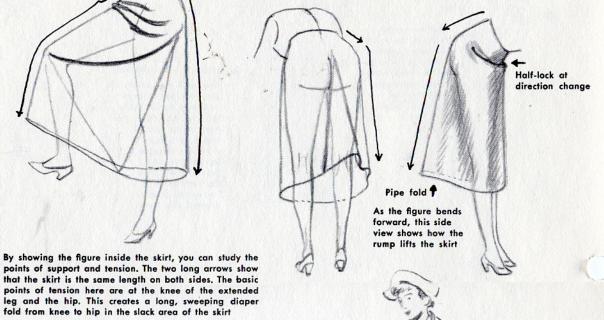


#### The skirt

Basically, the skirt is a cylindrical piece of cloth, narrower at the waist than at the hem. It must accommodate the lower portion of the figure. If you will study the diagram at the right, you will see how the form looks below the skirt. You must always be conscious of this underlying form, as it governs all the folds of the skirt through the action and stance of the figure.



As the figure leans over, the skirt lies flat on the rump for a short distance before it descends. This forward extension of the torso has caused the skirt to raise in the back. Usually one or two large pipe folds drop from the protruding edges at the buttocks



Half-lock

Diaper folds in this slack

- Pipe fold

- Half-lock

By studying the underlying figure you can see how these protruding edges affect the



As the hand lifts this full skirt, several large diaper folds occur. The points of support are the hands, the hips and the waist

#### The dress

Our chief concern is in the basic pattern of a dress that is, those with tight or loose bodices and full or tight skirts. Most dresses fall into a combination of these basic designs. Different types of folds occur when the bodice is loose, as compared to one that is tight. This change demands careful study, as it will show how the degree of tension affects the character of the folds. This applies to either the skirt or the bodice. Below we show the basic types. Study the differences in folds between the tight and loose garments.



This shows a fitted dress with a reason-ably full skirt. By cutting the garment to fit the bodice, points of tension are reduced to a minimum. From the point at the waist the dress fits out over the hips and the looseness of the skirt from there to the hem causes most of the folds in this type of garment, with the exception of those occuring around the arm-shoulder connection at the sleeve



The tight dress shows the many points of tension quickly because it hugs the form. This causes endless small folds radi-ating from the tension points

Pipe folds from the shoulder to

waist, and from

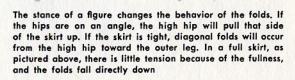
this point also

down around, toward the back

at the waist

the point of the bust down to the

The dress is fitted at the waist. The skirt has four, large pipe folds caused by the design of the skirt. Contrast this with the gathered, pleated skirt on the figure at the right



## Cloth in action



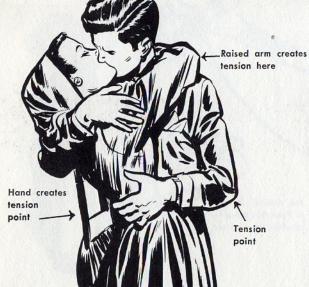


Heavy flight pants are apt to look more dented than wrinkled

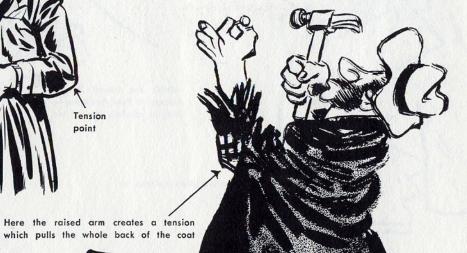


Simple blacks of the hat and cloak make this character stand out. He was designed to be outlandish — and he is

Point of support

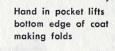


Tension point



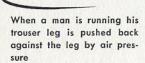
Look at and study the work of professional cartoonists

**Button** is tension



Baggy pants create a bunch of folds

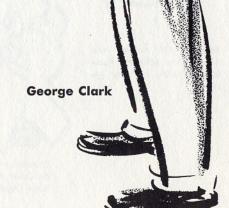




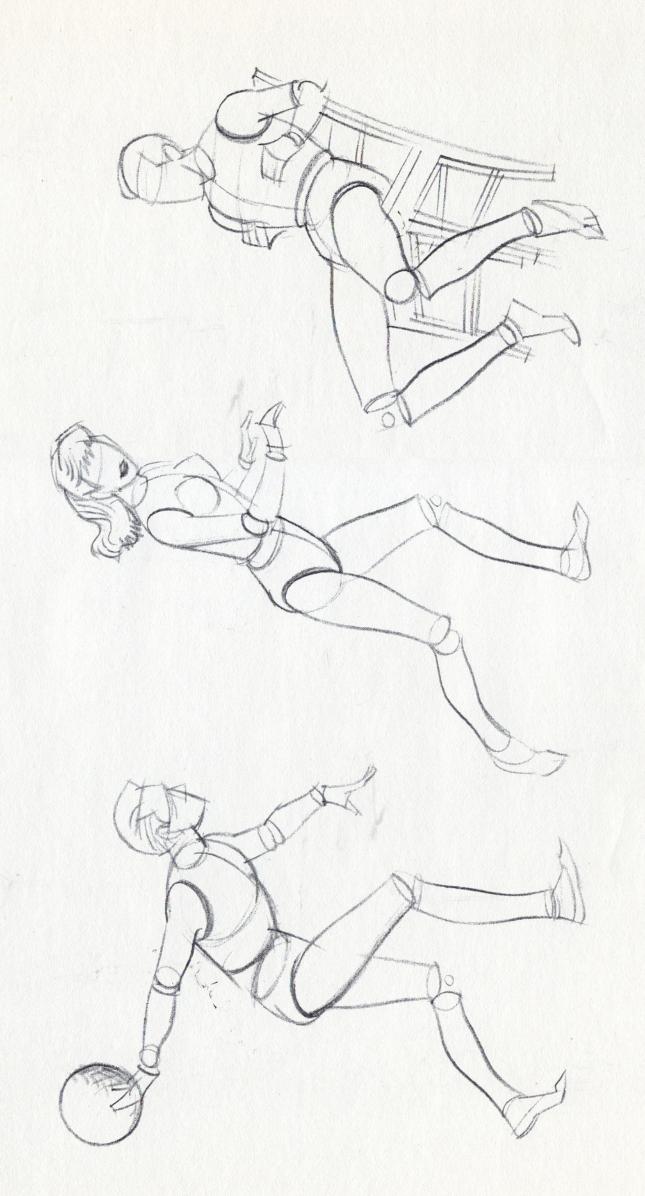


EMMMIN.

Air pressure pushes the cloth







#### FAMOUS ARTISTS CARTOON COURSE Student Work Lesson 9

#### To study and practice

When it comes to drawing simplified clothes and folds there is no substitute for knowledge of the real thing. This lesson, therefore, presents the subject in rather complete, realistic detail. Before considering yourself qualified to simplify the wrinkles on cartoon characters, you should spend plenty of time on this lesson.

For practice, make simplified tracing-paper overlays of photographs of men and women in magazines, working out the most important folds in their clothing. Study these folds carefully, noting especially the points of support, pull of gravity and effects of tension. Sketch your friends' and relatives' clothing -- and your own. Look through your course to see how professionals simplify the basic actions of cloth.

Your grade on these assignments will depend on how well you understand and draw cloth in action. The figures on the page marked <u>Plate 1</u> and the actions in Assignment 2 were carefully chosen to let us see what you have learned in the lesson.

### The assignments you are to mail to the School for criticism

# ASSIGNMENT 1

Draw the following prescribed clothes directly over the figures on Plate 1.

Man Bowling -- Slacks, shirt with sleeves buttoned at the wrist, no tie

Girl Running -- Full skirt, blouse, apron

Man Seated -- Shirt with four-in-hand tie, business suit with vest, coat open, thumbs hooked under vest, hat tipped back on head

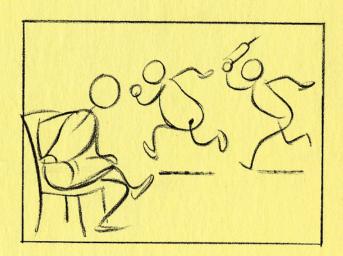
Before executing this plate, work out the folds in the clothing on tracing-paper overlays. Draw the folds on the plate itself with ink lines, using pen or brush. Keep the folds simple and do not put any shading in the drawing.

IMPORTANT - Mark this sheet ASSIGNMENT 1.

### ASSIGNMENT 2

On a piece of ll x 14-inch Bristol board, rule and ink a panel 7 inches high and 10 inches wide. Draw a cartoon of the following incident: A young man dressed in a business suit is seated in the faded parlor of a small-town boarding house. He is startled to see the owner of the boarding house, wearing work pants and a shirt without a tie, run through the room closely pursued by his wife. She is wearing slippers and a housecoat. Do this in pen and ink. Use either comic or realistic adventure style. You may follow the layout of this accompanying sketch or dream up your own composition, as you wish.

IMPORTANT - Mark this sheet ASSIGNMENT 2.



Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number in the lower left-hand corner of each drawing. In the lower right corner, place the Lesson Number and Assignment Number. Mail to: