

# FABRICS AND CLOTHING

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## PREFACE

Styles and modes of clothing and furnishings are ever variable, but certain fundamental facts regarding the fabrics used remain constant. These basic facts must be understood if fabrics are to be judged intelligently and satisfactorily.

This book is presented in the hope that it may fill a long-felt need in the teaching of fabrics in junior high schools and the upper elementary grades. It aims to give to girls an understanding of the fabrics they use and see around them every day; to give a foundation for satisfactory buying; to foster the interest every girl naturally has in her clothing; and to awaken interest in the furnishings of her home.

The content and plan of presenting the various phases are the result of classroom teaching. Only those terms have been used which are already familiar or will be easily understood. Without the use of technical terms and the confusion of detail of manufacture a definite background is given as an aid in interpreting fabric problems.

The study suggestions are of such a character as to stimulate interest that will develop self-reliance and increase the powers of observation. To be of value, work and study in this subject must extend beyond the classroom, and the teacher will greatly enhance this value if she will use as illustrative material for her lessons samples of fabrics contributed by the pupils and

collected by herself, as well as exhibits of raw material and manufacturing processes. There are many sources of such textile illustrative material. Through actually seeing and handling everyday fabrics, the girl will become familiar with facts, terms, and names that she will need as an intelligent consumer.

The content of the book is adaptable to any course of study in connection with technical work in clothing construction.

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# FABRICS AND CLOTHING

## CHAPTER I

### TO THE GIRLS WHO USE THIS BOOK

"She looketh well to the ways of her household."

— *Proverbs*, XXXI, 27.

Years of study, training, and actual experience are the main roads that lead to success in any business, profession, handicraft, or trade. The woman who manages the home, which is the greatest of all establishments, must travel these roads continually to be able to solve intelligently the daily problems of the household.

In other businesses or professions usually the years of preparation are devoted to one or only a few lines of thought. The profession of home making demands training in a great variety of subjects. To be successful, the home maker must be an experienced accountant and must be able to meet the money problems of shelter, food, and clothing. She must understand the relationship between food and health, clothing and health, and house furnishings and health. In fact, the welfare of the entire family depends mainly upon the ability of the home maker.

One of the most important factors in keeping an ideal home is the home maker's understanding of how to

select, use, and care for fabrics. Did you ever notice the many different kinds of fabrics we use every day in our clothing? Outer clothing, underclothing, hosiery, gloves, hats, and shoes are entirely or partly made of some kind of fabric. Can you think of any

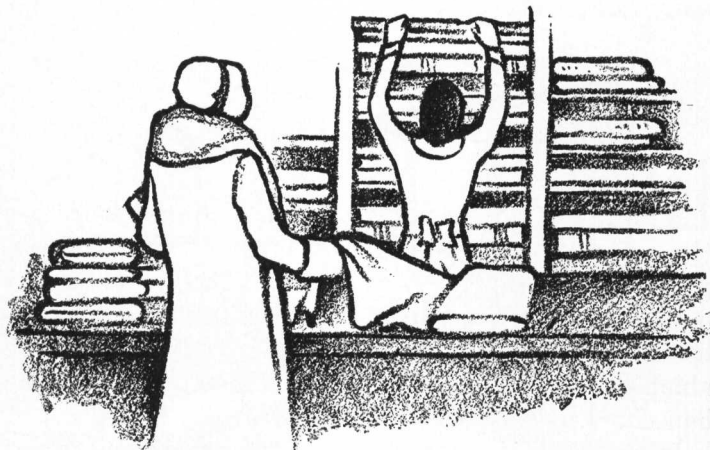


Fig. 1. — Fabrics in the Store

problem in the home the solving of which does not include the use of one or more fabrics?

Comfortable beds, spotless table linen, glistening glass and china, cheerful, attractive rooms, and the ability to perform household duties so as to conserve energy, strength, and time are not the outcome of mere chance. They are all the outcome of skill won through actual experiences. And where does the home maker gain the knowledge that leads to these ideal conditions? Not from books or hearsay but from handling, caring for, using, and testing fabrics. And how and when is the



girl who is some day to assume the task of home making to receive this training? The best and surest way is to start in little-girl days and to grow up finding out about the fabrics seen and used about her until a knowledge of them gradually becomes a part of everyday living.

Suppose that a girl grew up ignorant concerning the many fabrics needed in the home until she reached the

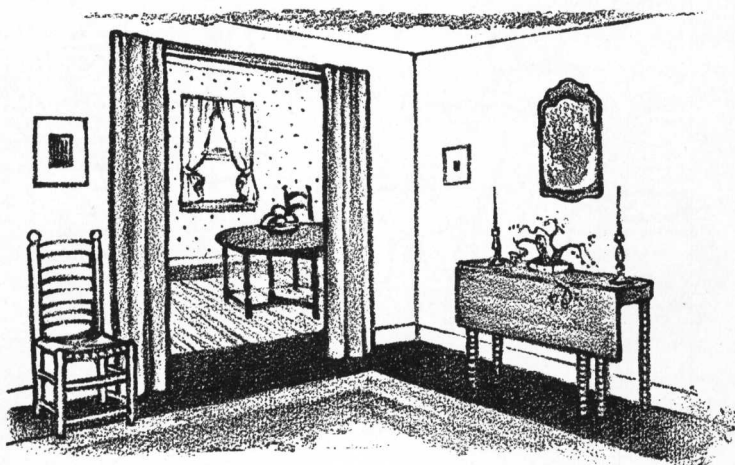


Fig. 2. — Fabrics in the Home

time when she had to take charge of them. Could she learn all about them in a few days? No, indeed. Women who have had years of experience in home making find that, to get satisfaction, it is necessary to study the fabrics of the day most carefully. New styles and new fabrics arrive with each season of the year, and the many imitations and adulterations are perplexing. Fortunately certain fundamental facts aid in judging a fabric of any type.

Favored is every girl who has a share in helping at home and is capable of taking the entire responsibility of doing some daily home task. Interest in one's own clothing as to effect of wear, color scheme, and cleaning and the doing of such homely tasks as setting the table or making a bed seem to some of small consequence. If done in an intelligent way, these interests and duties are a big part in educating a girl to realize that, no matter what her career in life, she cannot make her home the comfortable, livable place it should be without a knowledge of fabrics. Be ready when your turn comes.

#### SUGGESTIONS FOR STUDY

1. Make a list of the different types of work, so far as you can think of them, which the one in charge of your home does every day.
2. What regular tasks or responsibilities do you have? How many of these are connected with your personal clothing or household fabrics?
3. Glance at the fabrics used in your home. Which kinds are used to beautify it? Which are necessary in daily life?

## CHAPTER II

### HOW MANY FABRICS DO YOU KNOW?

If one should attempt to name or classify the many kinds of fabrics seen in our homes and in the stores, do you think it would be an easy task? It would be practically an endless one. A glance at the clothes we wear shows some woven materials, some knitted, this material figured, and that plain. One garment keeps the body warm; another may be worn on the hottest day with comfort. One cloth surface is smooth, another rough; some materials are more durable than others. There is cloth that is stiff and thin and a kind that is soft and thick. Bewildering is the array of fabrics on the counters and shelves in the stores or on the racks of ready-to-wear garments. Styles of one season require smooth, soft, clinging fabrics while a succeeding style will create a demand for rough, stiff goods. In different localities entirely different trade names may be given to identical materials.

Styles of fabrics used in household furnishings vary almost as much as those of clothing. Soft fabrics of gauzy weave are supplanting lace curtains; semi-transparent, lightweight fabrics have replaced the heavy, thick fabrics common a few years ago for hangings and draperies. Novelty bedspreads, light in weight, inexpensive, and easily cared for, are so much in vogue that the manufacture of heavy ones has prac-

tically ceased. The standard fabrics that have been known for generations are given new names and new uses, and seasonal novelties are constantly appearing. Texture, weight, color, and appearance vary with each succeeding style.

How many of these everyday fabrics could you select that are guaranteed to give satisfaction? And do you know how they are affected by wear and cleaning? Would you know exactly how, when, and where to use them? Carefully considering the illustrations in this book, trying out the suggested experiments and tests, following the studies proposed, and knowing the fabrics in your clothing and those you handle in your home should help in any such problem that arises.

When studying the subject of fabrics, go to the modern store. It is an Aladdin's cave of treasures, and some girls never see them. We may pause long to gaze at a beautiful painting or other works of art but pass with indifference filmy laces, gorgeous silks, marvelous rugs, and shining table damasks that possess beauty just as peerless in their way.

### SUGGESTIONS FOR STUDY

1. How many fabrics can you name beginning with the letter *a*? With *b*? Continue through the alphabet and see how long a list you can write.
2. Compare your list with the glossary at the end of the book and see what you can add.
3. Collect as many pieces of fabrics as you can to illustrate your list.

## CHAPTER III

### THE ORIGIN OF FABRICS

When we see the wonderful array of fabrics in our homes and in the stores, how many of us ever stop to think or question from what they are made and how they are made? Each fabric we see means a wonderful story. Let us study a few of the fabrics we see and use every day in our homes.

Everyone can find scraps of dress and underclothing materials, scraps of stockings, toweling, tablecloths and napkins, furniture coverings, or old handkerchiefs, or pieces of some kind. Pull each scrap apart and what do you find? Threads, threads, and threads! Although the materials differ in strength, feel, appearance, and thickness, the continuous pulling apart distinctly shows that all the fabrics are made of threads.

Now let us take these threads and find from what they are made. Examine them closely and then pull them apart until they become fuzz. Hold the fuzz toward the light or examine it with a magnifying glass and you will find that it is made of a great number of very fine hairs. These hairs are called *fibers*. And from where did these fibers come? Strange as it may seem, nearly all these hundreds of fabrics we see around us every day are made from only four different fibers. There are two kinds of animal fibers and two kinds of vegetable fibers. The animal fibers are silk and wool, and the vegetable fibers are cotton and flax. To these

four sources provided by nature we must add the marvelous man-made, or synthetic, fiber commonly known as rayon. This is also a vegetable fiber, being made from chemically treated vegetable matter.

Our study of the scraps has told us that, to make a fabric, it is necessary first to have fibers. The fibers

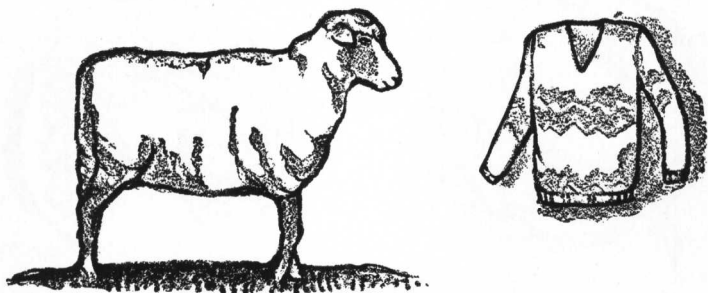


Fig. 3. — From Sheep to Sweater

must be made into threads. Then the threads must be firmly fastened together to make the fabric.

The three little statements in the preceding paragraph do not sound amazing or wonderful. But does it not seem as if some magic had been performed to change the wool from the sheep's back into fluffy blankets, soft sweaters, or stiff, heavy overcoats? What magician has changed tiny cotton fibers, the longest one about three inches in length, into firm sheeting or lace almost as fine as a cobweb? The silkworm spins a fiber finer than a hair on anyone's head. From it ribbons stiff or soft and many different silk fabrics are produced. Fibers grayish tan in color are taken from the stalk of the flax plant and made into snowy white table linen.

The changing of hairlike fibers into fabrics is indeed

magic and a magic that means many intricate processes. So intricate are many of these processes that few except the skilled workers in the mills and factories where the goods are manufactured understand them. But the results of some of these processes are readily recognized,

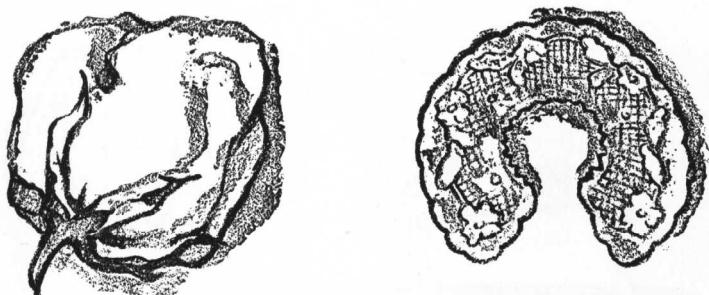


Fig. 4. — From Cotton Boll to Lace

and an understanding of the results is a great aid when either judging or using fabrics.

Each kind of fiber has its own history and each kind requires special treatments. Their characteristics are so varied that each one must be studied separately. The stories will also reveal that a fabric which may be purchased for a very small sum of money may be the result of the labors of many people in many different lands.

### SUGGESTIONS FOR STUDY

1. Make a chart showing pieces of as many different kinds of fabrics as possible. Ravel all the edges to show the threads and pull the threads apart to show the fibers. How many fibers can you recognize?
2. List the articles of clothing you wear. Group the articles according to the kind of fiber from which each is made.
3. Do the same with fabrics found in your household furnishings.

## CHAPTER IV

### THE STORY OF TEXTILE FIBERS

#### COTTON

Cotton is the fiber of universal utility. It is used for underclothing and outer clothing, especially for children's wear, and for sheets, bedspreads, coverings for mattresses and pillows, many towels, some tablecloths, and numerous other fabrics in the home. Sewing threads, laces, braids, trimmings, and tapes are mostly cotton. Woven cloth, knitted cloth, sheer dress and curtain fabrics, and the thick, heavy canvas used in making tents, awnings, and automobile tires are cotton. Fabrics imitating linen, silk, and wool are made of this fiber. The great variety of cotton fabrics shows how extensively the fiber is used.

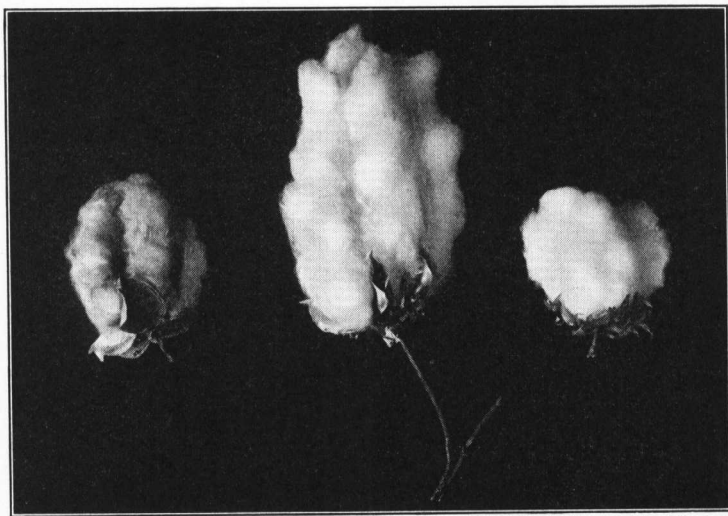
**Cotton fibers.** The United States is the greatest cotton-growing country in the world, the southern states yielding about two-thirds of the world's supply. Other countries producing cotton extensively are Egypt, Peru, Brazil, India, China, and Russia.

Cotton grows on a bush. It bears a flower that develops into a pod called a cotton boll. (Fig. 5.) When the boll is ripe, it bursts open and the cotton hangs out in a soft, downy bunch. In this bunch are a number of seeds, each covered with tiny hairs, which are the cotton fibers. There are so many of these fibers



that the cotton appears to be a solid mass. Pulling apart a piece of absorbent cotton or any other mass of cotton will show these tiny seed hairs, or cotton fibers.

There are several varieties of cotton, the seed hairs in them varying in length, fineness, and color. The length of the fibers ranges from three-eighths of an



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**Fig. 5. — Cotton Bolls**

inch to nearly three inches ; the color varies from white to a creamy yellowish shade. The longest and finest fibers grown in the United States are used in the manufacture of such soft, fine fabrics as nainsook, batiste, and laces. The strength of sewing cotton is given by the use of the longer fibers. A large part of the cotton goods used is made from another variety of fiber grown in the United States, a short fiber but strong and white.