

A WOOL PRIMER

History and Uses of
Nature's Noblest Fiber



BOTANY MILLS, Inc.

PASSAIC, NEW JERSEY

A Wool Primer

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Nature's Noblest Fiber



A ram sale in Wyoming

BOTANY MILLS, Inc.
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Behind the Botany Label

THE BOTANY label is the signature which we place proudly on all Botany fabrics. It is a guarantee of our integrity in dealing with our customers, the American public.

We make fabrics which are necessary to the health, the comfort and the appearance of 90 per cent of the people of the country throughout the year. Every process in their manufacture, from the purchase of the raw wools to the delivery of the finished fabric, is our own handiwork. No fabric is delivered into the many avenues of our trade until it has been thoroughly tested to insure its long-wearing qualities in all respects. Only when we are satisfied that each Botany fabric will carry on the traditions of more than half a century do we declare it ready for the Botany label and your confidence in what that label signifies.

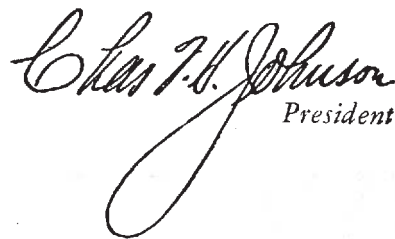
Botany fabrics are fashionable because we combine the newest ideas in well-bred styles with the best raw materials the world affords and the most careful and expert manufacturing processes. No passing novelty of the moment, however, is permitted to change one iota our unswerving policy of supreme quality in fine wools, the best of sun-tested dyes, and high technical skill in every step of our production.

In the selection of all our materials and equipment, we give preference to products of American origin because we

regard it as our duty to support our American economy to the utmost by spending in our own markets the money the people entrust to us. There is a further, very practical, reason. Knowledge and experience have taught us that except for a few specialties, peculiar to their countries of origin, American products have no peer anywhere in the world.

Because wool is so vitally important to the health and comfort of every man, woman, and child in the country, we have prepared this Primer in the hope that it will be read with interest by people of all ages, but especially by children and students.

The future of Botany as an American institution depends upon the coming generation. The more they know about the woolens they buy, the more certain we are that they will depend in greater degree each year upon the qualities of integrity, wear, and style which are the proud assets behind the Botany label.


President

Botany Mills, Inc.
Passaic, New Jersey

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“As Old As Methusela”

NO ONE knows who was the first man to make the happy discovery that the fleecy coat of a sheep could provide warm clothing for humans. We do know that sheep raising was one of man's earliest occupations on the land, and there is evidence that in that long-ago we call prehistoric ages, man had learned to weave garments from sheep's wool. During ancient Greek and Roman days, the spinning and weaving of wool by hand was a well developed art.

It seems certain that sheep originated in Central Asia and as peoples spread out over the continents of Africa and Europe, they transported their sheep and increased their flocks, breeding and crossbreeding to improve the quality of the wool fibers. The most significant crossbreeding in history was made between the North African sheep and the Tarentine sheep of the Romans, because this produced the Merino sheep. The Merino was bred in Spain and was jealously guarded by Spain for many years, but eventually some envious and enterprising competitor smuggled the Merino sheep out through Portugal, and the Merino strain was introduced to other sheep-raising countries. The Merino produced the finest wool fiber of all.

Behind the "BOTANY" BRAND LABEL are generations of skill and integrity.

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Sheep raising followed conquest and colonization to the western hemisphere, to Australia, New Zealand, and South Africa. Sheep provided not only wool for clothing, but milk and meat. And the weaving of wool, which started as a family occupation with the men raising the sheep, shearing and washing the wool, and the women carding, spindling, spinning and weaving, became industrialized. The invention of machine looms brought woolen mills and the rise of a great woolen industry.

While the civilized western world sought its protective clothing from the fleece of the sheep, the peoples of the eastern world and of the Americas used first the pelts and then the fibers of other fleece and fur-bearing animals which were either native to their areas or which were imported during the early migrations of man, who always moved upward on his march toward civilization accompanied by his flocks. These animals included the camel and the angora and cashmere goats in the Near and Far East, and the llama, alpaca and vicuna in South America. The fibers of these animals are all kindred to the wool of the sheep with minor variations in physical structure, in fineness, and in length and softness. The sheep, however, is the world's chief source of the protective fleece known generally as wool.



The "BOTANY" BRAND LABEL is awarded our products that meet our standards.

Where Wool Comes From

TODAY WOOL is grown East and West, North and South, all over the globe, with production concentrated in three great areas of temperate climate where it grows best. The total annual average world production is approximately 3,000,000,000 pounds, coming principally from:

SOUTHERN HEMISPHERE: Australia, New Zealand, Tasmania, South Africa, with an average total production of 1,450,000,000 pounds.

SOUTH AMERICA: Argentina, Uruguay, Chile (the southern part) with an average production of 640,000,000 pounds. Of this total Argentina contributes the largest share.

UNITED STATES: with an annual average production of approximately 300,000,000 pounds.

Wool is also grown in England, Wales, Scotland and outlying British islands. There are many famous sheep breeds and strains in England and Scotland. The fleeces of these sheep are used chiefly to make woolens of a traditional character which had their beginnings in those medieval days when it was an offense punishable by death to export a single sheep from the British isles.

Wools used in carpet and rug manufacturing are of different character than are those used in producing apparel. They come from South America, India, China, and Asia Minor. Their chief properties are a coarse, wiry resilience which makes them resistant to matting down and to wear under the constant scuffing of passing feet.

The methods of manufacturing carpets and rugs differ widely from the weaving of apparel fabrics and constitute a story in itself. Therefore, in this Primer we concern ourselves primarily with apparel wools and their uses for clothing in woven fabrics.

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Wool Growing in the United States

THE UNITED STATES is the third largest wool-growing nation in the world. It possesses the largest and most modern apparel wool textile industry in the world, producing an average of 500 million yards of goods annually. The United States is approximately now the largest per capita user of fine wools requiring each year one billion pounds of wool to meet consumer requirements annually.

The American wool industry had its beginnings in the middle of the seventeenth century, but because of rigorous laws forbidding the export of sheep from Europe, it made few advances until just prior to the Revolutionary War.

In 1889 The Botany Mills was established in Passaic, New Jersey, transforming it from an agricultural community into the center of the country's fine woolen goods industry. From the outset, Botany fabrics established new standards of excellence and made immediately available to the fast-growing apparel industry domestic fabrics of the best character, which, until then, had been imported into this country. Through the years, expert care in the production of its fabrics have established the word BOTANY as the hallmark of excellence in the trade and as a symbol of integrity with the public.

"BOTANY" BRAND WRINKLE-PROOF TIES *resist the telltale marks of age and wear.*

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Every State Grows Wool

DURING the past two decades, the production of domestic wool has shown a constant improvement in quality of fleece and methods of grading and handling. Wool is now grown in almost every state in the Union, but ten great sheep-raising states produce more than 70 per cent of the total wool clipped. With the exception of the state of Ohio, they are all located in the West and Southwest. They include Texas, Montana, Wyoming, Utah, Oregon, Idaho, New Mexico, Colorado, and California. Texas, with an average annual production in excess of 79,000,000 pounds, leads all other states, with Wyoming and Montana striving for second place. Ohio, which is sixth in point of volume of production, has approximately 60,000 persons engaged in sheep raising, the largest number of any state. This is due to the fact that in Ohio, sheep, which consist of small flocks, are raised on farms whereas in the western mountain states and in Texas they are raised in large flocks on ranches covering immense areas of land. Wools grown on Western and Texas ranches are known in the trade as "Territory Wools," while those grown in small flocks on farms in other parts of the country are characterized as "Fleece Wools."

Average Annual Wool Production: 300,000,000 pounds*

Sheep Raised: Approximately 35,500,000

Sheep Clipped in 1947: 31,000,000 head

Average Yield of Wool: 8.00 pounds per head

Persons Engaged in Sheep Raising: 500,000

Average Value of Wool Clip: \$125,000,000

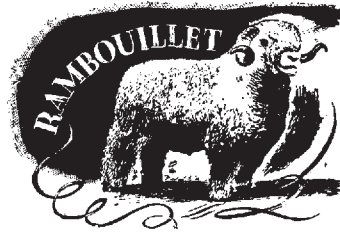
*All weights quoted in the foregoing table are "grease weights" or the weight of wool as it comes from the sheep. "Scoured" or "Clean Basis" weight is wool after grease and foreign matter have been removed. Wool loses from 40 to 60 per cent of its weight in scouring. Of the total annual domestic wool production, an average of 100,000,000 pounds is "pulled wool," which is wool removed by a highly technical, chemical process from the pelts of animals slaughtered for food.

"BOTANY" BRAND is one of the American wool-growers largest customers.

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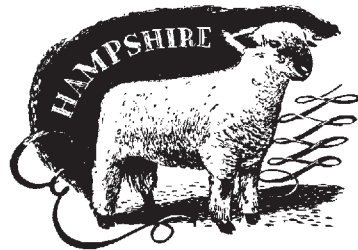
There Are Many Different Kinds of Sheep

FOR THOUSANDS of years sheep raisers have been crossbreeding to obtain more desirable characteristics in the wool. There are now over two hundred main breeds of sheep in the world, differing in appearance, height, weight, and in the structure and texture of their fleeces. Approximately thirty improved breeds of sheep developed in different areas of the world provide the established types of wool for apparel purposes. Of this number, eighteen breeds are raised in quantity within the United States. Chief among them and outnumbering all the others are, in the order of their importance: Rambouillet, Hampshire, Shropshire, Merino, Oxford, and Southdown. They comprise 93 per cent of all the pure-bred sheep in the country.



What Is Quality in Wool

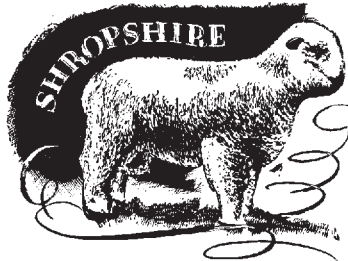
THE WORD "quality" applied to wool fibers has an elastic meaning. Certain types of wool are ideal for specific kinds of fabrics and either useless or poorly adapted for others. Variations in wool



fibers are primarily determined by breed of sheep, but there are wide differences within the same breeds and, in fact, upon the single animal. Climate, food, care, the amount of seasonal rainfall, and the general health of the flocks, all have a bearing on the kind of

"BOTANY" BRAND KNITTING YARNS are top-dyed to insure constant colors.

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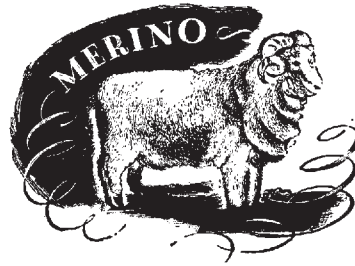
wool which the sheep will produce.

"Quality," meaning the kind of fabric wool will make, is determined by fineness of fiber diameter, length, strength and resilience. A most important factor is the number of crimps, which means the waves or curly irregularities of the fiber. The crimp of wool is responsible for its amazing resiliency, which gives it such astonishing strength and resistance to deforming under strain.

Judging Wool Values

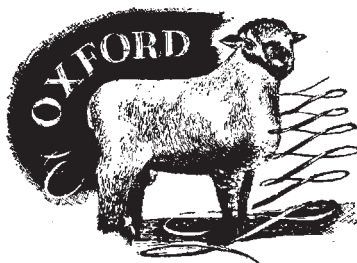
THE MANUFACTURER judges wool by its appropriateness for the fabric he wants to make. The public must judge wool by the texture of the fabric, its color values and general suitability. The lustrous worsted of finest grade wool may cost more than the sturdy tweed of coarser wool, but each has its purposes and each requires a specific kind of wool.

Today the unattained goal of all producers of synthetic fibers is to produce a substitute or replacement for wool. The nearest approach to this goal has been to produce fibers which have the superficial appearance of wool in a fabric, but in no single instance do they even faintly imitate the exclusive, inherent qualities which make wool man's most necessary and valuable fiber. In the wool textile industry their chief value is as an adulterant fiber which simulates wool textures in lower-cost raw materials. Their use always reduces



"BOTANY" BRAND CERTIFIED FABRICS *for home sewing are fully sponged and sbrunk.*

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the quality of the product; it never improves it. The public, reading such terms as "wool-like" or other phrases traditionally associated with wool to describe synthetic fibers should understand that the fibers so described have no relation whatever to wool or its properties.

The Wool Labeling Act.

What Reprocessed and Reused Wool Mean

THE DEMAND for wool throughout the world each year is generally greater than the amount of new wool produced. As a result, during the past fifty years there has been an increasing demand for reused wool which is used in combination with the stronger new wool. In addition, the wool textile industry in recent years has been using larger quantities of synthetic fibers as adulterants. During the past decade this practice has become so general that today reused wool, rayon and cotton comprise an average of 50 per cent of the fibers used by the entire American wool textile industry.

In order to protect the consuming public against the unrevealed use of these substitutes and adulterants, Congress in 1940 enacted the Wool Products Labeling Act which requires that all products containing wool shall bear a tag or a label stating in terms of percentages the fiber or fibers present. The enforcement of the law is under the direction of the Federal Trade Commission. Three definitions for wool were established by the law. They are:

WOOL—The legal definition of the word "wool" in the

"BOTANY" BRAND *has consistently championed legislation*

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United States means the fleece of the sheep or lamb or the hairs of the Angora or Cashmere goat, and may include also the fibers from the camel, alpaca, llama or vicuna, being used for the first time in the complete manufacture of a wool product. It includes new wool which has been partially processed up to, but not including, either weaving or felting. These partially processed wastes are included under the term "wool" on the basis that the damage resulting from the semi-manufacturing is not sufficient to seriously diminish their original qualities.

REPROCESSED WOOL — The term "reprocessed wool" describes wool which has been completely manufactured into a woven or felted state for the first time and which has then been reduced to fiber for reuse without ever having been worn or used in any manner prior to reprocessing. Reprocessed wool includes mill ends accumulated during manufacturing, and clothing manufacturers' clippings of unused new materials.

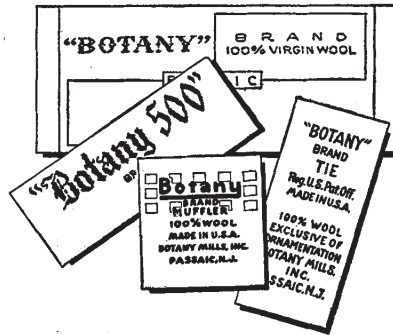
REUSED WOOL — This definition covers by far the largest proportion of reclaimed wool used. It represents the ordinary used rags, old clothing, blankets, etc., collected by dealers who sort them according to the type of goods, their color and their weight. These rags are shredded into fiber either by reused wool manufacturers or by textile manufacturers themselves. Reused wool fibers are broken and weakened in service and in garnetting them back into fiber. They are generally blended with stronger new wool and are utilized by manufacturers as an economy in cost of raw materials. Reused wool, used legitimately in the production of utility fabrics, has definite values. It is superior in all respects to synthetic fibers as an adulterant because it retains in varying degrees, according to the damage suffered through use and reprocessing, the intrinsic qualities which are the exclusive properties of wool. The usage values of the fibers depend greatly on the source from which they are recovered and the skill used in manufacturing them into fabrics.

requiring truthful fiber content disclosure in all fabrics.

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VIRGIN WOOL—In addition to these three major definitions established by the Wool Products Labeling Act, there is a fourth term used to describe wool, which was established and is enforced under the general powers of the Federal Trade Commission. This is "Virgin Wool." This term on any tag or label means, according to a Federal Trade Commission ruling

that it is wool which has never been processed in any way before being completely manufactured into a fabric or other wool product. Grade for grade and quality for quality, Virgin Wool is the best wool of all. All Botany fabrics are made of Virgin Wool.



The Fabulous and Exclusive Qualities of Wool

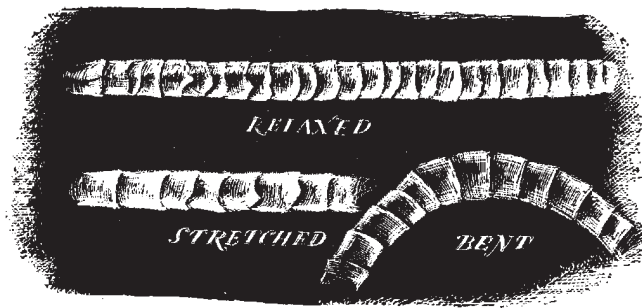
NO OTHER natural or man-made fiber possesses in any comparable degree the exclusive service and protective properties of wool. Wool represents an original miracle of nature which has been aided by the ceaseless efforts of man to improve the basic qualities of a noble fiber without which humanity could not have migrated to, or survived in, any of the now great nations lying within the temperate and northern zones.

The process of manufacturing worsted and woollen textiles merely takes advantage of the inherent structural characteristics of the fiber itself. Each year manufacturers advance in their knowledge of the best means of processing wool into fabrics with the least damage to their original construction.

"BOTANY" BRAND "500" MEN'S SUITS *combine peerless Virgin*

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Wool Is Resilient--
Resists Wrinkles



A MICROSCOPE reveals that a wool fiber has an outer "skin" of scales which overlap like fish scales or tree bark. Under these scales is the "cortex" consisting of layer after layer of interlacing compound cells which adhere closely. They bend, swell, shrink, and stretch but they never break apart. The wool fiber grows in a wavy form with a natural twist or crimp. This crimp, plus the structure of the fiber, enables it to be stretched as much as 30 per cent beyond its length and, when released, spring back to its original measurement. This resilience, which is retained during the long wearing life of a fabric made of new wool, is why garments of wool resist wrinkles and do not crush. It is why they "refresh" themselves after wearing by shaking out wrinkles and why they resist the dust and grime of wear more than garments of any other fiber. This resilience is also the reason why woolen fabrics with fleece and pile surfaces, and woolen blankets do not mat down, lose their warmth-giving properties and become boardy and thin as do materials containing appreciable percentages of rayon or cotton. This is vitally important to health, especially where warmth factors are essential.

Wool fabrics with carefully supervised tailoring.

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Wool Insulates-- Resists Cold and Heat

IN THE manufacture of fabrics the outer scales of the wool fiber interlock or felt together. Air is caught and enmeshed between the interlaced fibers, acting as a wall of insulation which keeps the heat of the body from escaping and cold air from entering. The insulating quality of wool is as effective as a protection from tropical heat and sun as it is against the gale-driven storms of winter. The peoples of the desert countries discovered this ages ago. In recent years we, too, have learned the summertime values of wool, as is evidenced by increasing use and popularity of lightweight and sheer worsteds and woolens for men and women which provide cool, crisp and wrinkle-resistant comfort as does no other fiber.

Beyond these technical facts is the knowledge that wool has an affinity for humans. Witness, for example, the manner in which a garment, after being worn a few times, molds itself into the lines of the body and retains those lines. That is why, on taking off



The informal perfection of "BOTANY" BRAND FLANNEL combines fine wool,

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a garment, it should be hung carefully on a hanger which maintains, as nearly as possible, the lines into which it has formed.

Wool Is Absorbent-- Resists Dampness

DUE TO their porous structure, wool fibers can absorb as much as 30 per cent of their own weight in moisture without even feeling damp. They can absorb up to one-half their weight in water without becoming saturated. No other natural or synthetic fiber possesses like qualities. The maximum moisture absorption point of the man-made fibers used as substitutes for, or adulterants of, wool is between 6 and 11 per cent. When saturated, they lose up to 60% of their strength. That is why fabrics of wool and rayon blends become soggy, lose their shape, and tear apart under pressure or strain.

This absorption quality of wool makes it the most healthful fiber for clothing or coverings. It absorbs perspiration after violent exercise, acting as a thermostat which guards the body against quick changes in temperature. It keeps the fabric from clinging in heat or cold, thus removing the "frost" or "chill" line from the body to the fabric. Experience has taught the American Army and Navy to equip its men on duty in the far northern latitudes with uniforms in several layers of wool in order to keep the "frost" line as far away from the body as possible. Lack of adequate wool clothing is competently reported to have resulted in more casualties to the German Armies in the Russian winter campaign than did bullets or high explosives.*

* Statement by Major General C. L. Corbin, Chief of Procurement, Quartermaster General's Department, U. S. A., in an address to the National Wool Grower's Association at Salt Lake City, Utah, January 21, 1942. Also testimony of Alexis Sommaripa, formerly manager of the Fabric Development Department, DuPont Rayon Company, then Chief of the Textile, Clothing, and Leather Goods Section of the War Production Board, before the House Committee on Military Affairs, March 20, 1942.

clear, fast colors, soft draping texture with tomorrow's fashions.

From Fleece to Woolen Goods

The Manufacturing Process



SHEARING

WOOL SORTING

SHEARING — Sheep are sheared once — and sometimes twice — a year, generally in spring or early summer. On large ranches the shearing is generally done by power-driven clippers; on smaller ranches by hand shears. The fleeces are shipped to wool markets, or at times direct to woolen mills. Wool is a world commodity and is sold chiefly at public auctions in the countries of origin. The most important American wool market is in Boston, although in recent years certain centers in the West and in Texas have risen to contest this supremacy.

SORTING AND SCOURING—The first step in manufacturing woolen textiles is sorting of the wools at the mills into different types and qualities. The wool is then scoured by passing through vats filled with a scouring liquid, at which time animal grease, dirt, and other impurities are removed. In this process wool loses from 40 per cent to 60 per cent of its grease weight. A by-product of this scouring is lanolin, the wool grease with great

"BOTANY" BRAND LANOLIN COSMETICS *have no peers for "dry skin" care.*

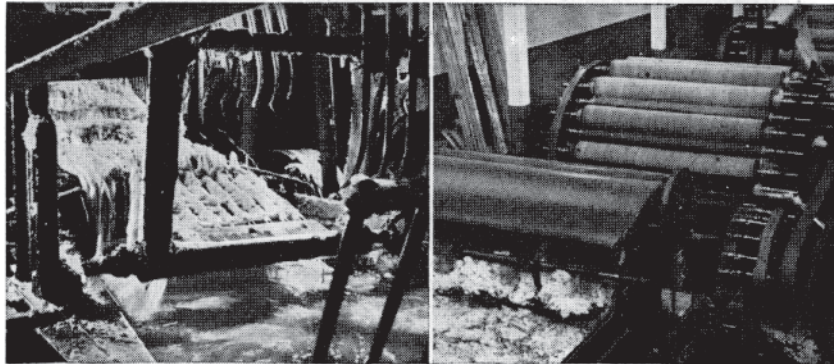
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therapeutic values which is the base of the finest cosmetics and soaps.

CARDING — From the scouring vats wool is carried to drying bins and from there blown through pipes or trucked to the carding machines. Cards consist of cylindrical drums covered with fine wire teeth which revolve in opposite directions. The process removes foreign matter, smooths out and lays tangled fibers into a veil-like mesh. This mesh is condensed and twisted into a fleecy white rope, known as a roving, as it passes through a small cylindrical ring.

SPINNING — Spinning, in its broad sense, means the drawing out and the twisting of carded wool rovings into yarn. There are two basic processes. One produces worsted yarn, the other woolen yarn.

WORSTED YARNS are spun from the long, finer wool fibers. They are combed and gilled after carding so that they lie parallel to one another as they are formed into bands called sliver or top. In this process all short, broken and imperfect fibers are removed. They are called noils. They are used alone or in blends of other wool fibers in spinning woolen yarns.

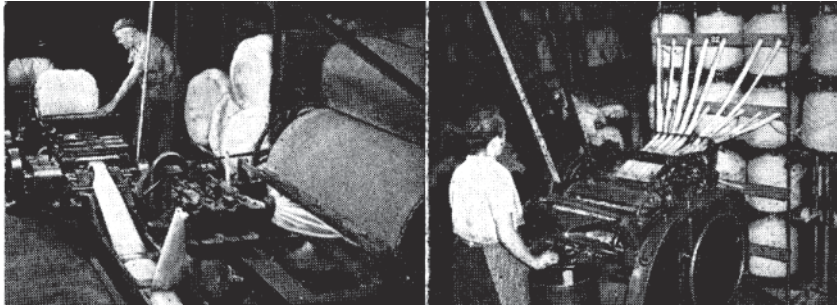


WOOL SCOURING

WOOL CARDING

"BOTANY" BRAND LANOLIN LOTION *gains a new user after its first use.*

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WOOL ROVING

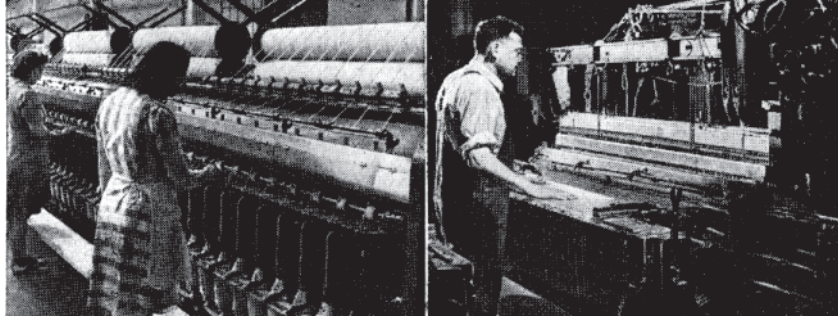
WORSTED COMBING

WOOLEN YARNS—In preparing wool fibers for woollen yarns, less attention is paid to their parallel position. The roving is made in the one operation of carding, so that the drawing operations employed in the worsted system which lay the fibers parallel are eliminated. The roving from the card goes directly to the spinning machine and is drawn and twisted in the one operation of woollen spinning. As distinguished from worsted yarn, woollen yarn is a rough thread which meets the requirements of the type of fabric for which it is used.

WEAVING — Weaving is the interlacing, according to set patterns or weave designs, of two sets of yarn, the warp or lengthwise thread, and the weft or crosswise thread. The warp thread is fed through the loom from a cylindrical drum which can contain sufficient yarn to make as much as 10,000 yards. The filling yarns on bobbins shuttle past back and forth with amazing speed between the lowered and raised warp threads. The weave pattern is determined by a loom "harness" consisting of cords or wires through which each warp thread is passed. Loom "harnessing" is a highly technical process requiring long experience and skill.

"BOTANY" BRAND LANOLIN SOAP *protects, refreshes and beautifies the skin.*

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SPINNING

WEAVING

FULLING — Fulling consists of saturating the newly woven cloth with warm water and soap and passing it between slowly revolving rollers under pressure within wooden vats. This process causes the fibers to entangle and interlock, giving the fabric greater strength and body. The fabric will shrink anywhere from 10 to 30 per cent according to its construction and the amount of fulling given it. Fabrics ordinarily are fullled anywhere from one to five hours, depending upon the character of the cloth.

DYEING — There are many different methods of dyeing worsteds and woolens and many different types of dyes. Wool goods are dyed in the fleece, in the worsted top, in the yarn, and in the piece after weaving. Wool, yarn and top dyeing are used principally when color mixtures are desired. Piece dyeing is employed chiefly in the manufacture of plain goods. A variation is cross dyeing. Goods of different colored yarns are piece dyed, thus obtaining an over-all color variation. In general, dyeing is done by boiling the goods in a dyeing solution for a specified time. Exceptions are in indigo and vat dyeing.

CARBONIZING — Where vegetable matter, including burrs,

"BOTANY" BRAND FABRICS *are your guarantee of quality, wear and style.*

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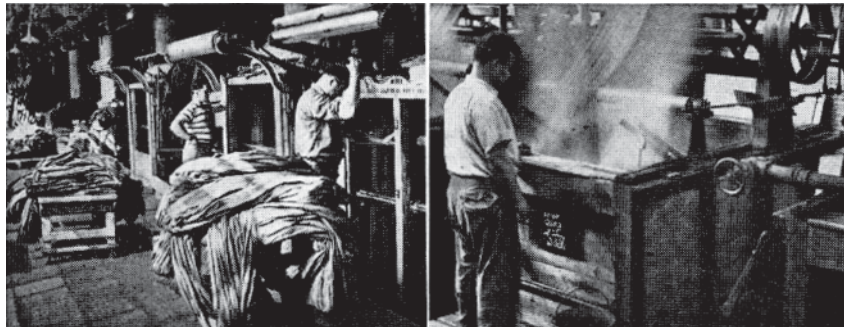
etc., are not entirely removed from wool in scouring and carding, they are eliminated by passing the wool fleece or the woven goods through baking ovens at temperatures from 210° to 220° F., after steeping them in an acid solution. The vegetable matter is charred to ashes which are removed by dusting and beating.

FINISHING PROCESSES—Broadly speaking, all the processes to which woolens and worsteds are subjected, after leaving the loom, are characterized as finishing processes. They give the goods their final qualities of texture, drape, lustre, and resistance to shrinking under the iron or during wear.

There are three main types of finish for woolen textiles:

- (1) Clear finish worsteds, such as Men's Wear suitings and gabardines.
- (2) Natural finish, such as tweeds and shetlands.
- (3) Face finish, such as broadcloths, fleeces and velours.

Clear finished goods are those with little or no surface nap which show the weave structure and design. Worsteds come in this class. In final form they resemble the cloth as it comes from the loom. All the finishing processes in manufacturing worsteds are designed to add to their natural characteristics



FULLING

DYEING

"BOTANY" BRAND BATHROBES for men include peerless Botany Flannel and

A WOOL PRIMER

without changing their original woven appearance.

Fancy woolens—cheviots and shetland types—partially retain their woven characteristics through the finishing processes, but are fulled and shrunk to close up the fabric and give it a firm handle. These woolens are sheared just sufficiently to leave a fiber covering of even length on the face of the goods.

Face finished goods are those which are subjected to long fulling processes after weaving, so as to felt them to a point where the weave construction is not visible. They are then napped or giggered to produce the required surface finish.

When woolen goods come from the loom, they are loosely held together without definite characteristics. From then on, each process brings them nearer to the final desired result, which may be a broadcloth, a velour, a fleece, a tweed or a cheviot, depending on the construction of the fabric.

The first operations are known as "wet finishing." Depending on the finish desired, the goods are passed through fulling or felting machines and scouring machines. When a clear finish is desired, some of the goods are singed by passing the material rapidly over a gas flame which burns off loose fibers.

After the goods are dyed and dried, they pass through "dry finishing" operations, which include shearing, pressing, decating, and examination of the finished material.

In shearing, the fibers are sheared off by passing through knives sharpened to razor keenness. In pressing, the cloth passes through heated cylinders which carry the cloth over a polished surface, which irons out all unevenness.

The cloth is then ready for finished examination for the purpose of finding and correcting any imperfections or differences in color. At last the woolen or worsted fabric is ready for shipment. It is measured, weighed and folded, and marked with the manufacturer's stamp. The long journey from wool fleece to finished apparel fabric is ended.

Botan's own high standards of tailoring and distinctive style.

The Difference Between Woolens and Worsteds

WOOL FABRICS are of two main types—woolens and worsteds. The difference begins with the spinning of the yarns and ends with the finished appearance of the goods. The clear-cut division between the two types of materials has been modified in recent years by the use of worsted and woolen yarns in the same fabrics. This combination is used to obtain greater strength, or suppleness of fabric, and novelty of design or texture. A pure worsted is the best guarantee that the fabric is 100% wool.

WOOLENS—Woolens are woven from shorter fibers which do not lie parallel in the yarn. Most woolens have a soft, somewhat fuzzy appearance, and are more loosely woven than worsteds. Woolens are especially desirable in the heavier weight materials for men's and women's suitings and coatings—in tweeds and in other fabrics of casual weave designs and in color mixtures. They do not have the cool, crisp wrinkle resistance of worsteds but they do have their own exclusive qualities of texture, warmth, suppleness, and color values.

WORSTEDS—Worsteds are made from long fine wool fibers which lie parallel in the yarn. Fabrics made of worsted yarns have smooth, clear textures. The degree of smoothness is determined by the finishing processes. Worsteds are widely used for men's and women's suitings and for clear finished, tailored types of materials represented by serges, gabardines, and coverts. The increasingly important light-weight tropical suitings and sheer dress weight goods, some of which do not weigh more than five ounces to the yard, are chiefly of worsted construction. Worsteds drape and hold their shape better than woolens and are the most wrinkle and dirt resistant of all textiles. Botany is traditionally famous for its superlative worsteds in all weights for all outer apparel purposes.

The name BOTANY on fabrics is the Sterling mark of quality.

