RESOURCES

Cotton Socks and Rayons Predicted for Hosiery

"Bottled Stockings" and Slacks May Be Necessary; Drawstrings and Ribbing Replace Milady's Garters

By MARJORIE ESTABROOK

NEXT WINTER, according to expert opinion, the average woman's stockings will be mostly cotton socks (ankle, calf and knee-length), relieved by service-weight rayons. If she has anything sheer- to dress up in, it will be what she has saved out of present supplies. She won't be too particular whether it is silk, nylon, rayon or cotton mesh.

Last year's silk shortage was solved by revolutionary improvements resulting in high-grade sheer rayon hosiery and lace and net designs in full-fashioned cotton. But this year's problem is not only the disappearance of silk and nylon, but of a y yarn with sufficient strength and elasticity to produce sheer hose.

High-tenacity rayon is needed for supply-parachutes and tires; summer uniforms, underwear, and fine broadcloth service shirts absorb the long-staple cottons that were used for full-fashioned hose. And what Uncle Sam doesn't need, our allies do.

In view of these unprecedented government needs, it is startling to learn that silk and nylon stockings are still available. But apparently production has all but stopped on these, and they are trickling through because retail stocks have been held back by wholesalers and jobbers. Small manufacturers of sheer, fine-gauge hose are out of luck now that sheer yarns are not available. While the large mills can close down part of their plants and convert the rest, no way has been found to convert those luxury machines which knit fine-gauge, full-fashioned hose.

Only 10% Cotton

John Shireman, chief of the War Production Board knit-goods section, predicts that by August 1 90% of the women's hosiery produced will be rayon, the other 10% cotton.

"Business Week" in a review of the situation predicts that the squeeze on long-staple cotton will soon force that 10% out of existence. Discounting small companies altogether, they estimate that the big full-fashioned manufacturers will be lucky if they can keep going at 55% to 65% capacity.

That leaves us with service-weight rayon for the duration, and a dubious quantity of that. But even if no manufacturing miracles reverse this situation, "bottled stockings" provide a summer solution, and slacks a winter one. Cosmetic hosiery, in tubes, bottles and leg sticks, are already being displayed on stocking counters in forward-looking stores, rather than in the cosmetic department. However, the new WPB order limiting production to last year's level may not supply next summer's demand for leg paint.

Slacks and overalls will cover a multitude of socks, runs and snags next winter, and for glamor there are seductive evening and dinner slacks to be worn either with a snagged pair of silk stockings or sheer cotton-mesh socks now being sold in exotic bright colors. Under WAAC uniforms, regulation rayon or mercerized lisle will appear in a modest sunburnt tone, "appropriately called 'Victorious.'"

Drawstring in Socks

If you've been wondering how those new slack-length socks would stay up without rubber, the July "Underwear and Hosiery Review" explains that they will either have tightly knit ribbing at the top, or you will use a drawstring, setting a new style in sportswear.

The post-war hosiery picture looks very bright. Presumably women will not forget all about sheer glamor, but many experts think they will forget about silk. The wearing qualities of nylon will have spoiled them. But high-tenacity rayons, according to E. Max Schenke, Director of Research for the National Association of Hosiery Manufacturers at the Bureau of Standards, will replace silk in the lower-price lines not reached by nylon. Other favored successors to the silkworm are such synthetic fibers

as Vinyon. "Bare-leg," seamless stockings will be the particular favorite, judging by the way they sold before nylon was snatched away.

Seamless rayons are also a possibility, particularly since the recent development of acetate rayon hose. Because of its plasticity, acetate can be "preboarded" (molded to a desired shape) like nylon. It is less weak than other rayons when it is wet, dries faster and is said to have a greater snag resistance. Already being offered in small quantities, the acetate stocking is a child of necessity, developed in a hurry when the government began making unprecedented demands for viscose and cuprammonium rayon yarn, the only two kinds hitherto used by the hosiery industry. But there is no guarantee that acetate, too, will not be snatched away from them for the duration.

Process Not New

While acetate stockings are providing the biggest news in the hosiery world, the process itself is not new. According to the trade journals, it has accounted for 20% of all rayon production. It has often been combined with other yarns for stripe effects. Because of its different affinity to the dye, it will produce harmonizing or contrasting color designs from a single dye-bath.

The name "acetate" comes from the use of acetic acid to steep the liquid cellulose. As in the other rayon methods, this cellulose, derived from wood pulp or cotton linters, is chemically converted into a liquid and forced through the tiny holes of a sieve-like "spinneret". The liquid filaments which result are hardened into yarn when they meet an acid-coagulating bath. The finer yarns result from going through a finer sieve, so to speak.

For the present, the most useful contribution which science can make to the ladies is to teach them how to wash rayon hose. It's not hard if you remember that rayon is allergic to heat of any kind and to stretching while wet—so much so that the rooms where rayon hose are knit have to be kept at a constant humidity.

The higher-priced rayons (meaning fine-gauge, high twist, and expensive "finish") pay dividends in longer wear, but one pair cannot be worn every day. They should be washed every night, and must be thoroughly dry before they can be worn again. The Bureau of Home Economics, who advise laying them on

a towel to dry, estimate 18 to 24 hours for drying, but the Bureau of Standards says the welts and soles must have 24 to 36 hours for safety.

Directions given by one manufacturer, the American Viscose Corporation, tell you to put them on carefully, wash them after wear in mild suds with tepid (and they mean tepid!) water, squeeze gently, don't rub, twist or wring; hang on smooth rod away from heat and sunlight; never use clothespins; and let them dry for two days.

This may sound tedious, but in these days the most important fashion advice is how *not* to buy clothes, but to conserve the ones we have. And that's one patriotic duty which has definite advantages to the pocketbook.

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MILITARY SCIENCE

Natural Vegetation Used in Highly Successful Camouflage

Camp in Everglades Is Scattered Over Nine-Mile Site With No Streets and Buildings Hidden Under Trees

SOMETHING revolutionary and logical in the art of camouflaging an army camp has been developed in the jungle back of Hobe Sound, Florida. Instead of imitating nature with artificial disguises, easily discovered by the camera, nature has been drafted to provide the black whiskers.

Camp Murphy, the latest training center for Signal Corps radiomen, has been so ingeniously planned that it is almost as invisible from the air as from the ground. The 5,000 men it will accommodate will be as well hidden as though they were the native rattlesnakes, lizards and chameleons working in underground bomb shelters.

The site of the camp is a wild spot on the fringe of the Everglades. It is covered with dense tropical growth. Shrub and cabbage palmetto, swamp maple, Australian pine, palm, live oak, cactus and impenetrable mangrove in the wet places, flourish on the reserva-

Instead of making a big clearing and massing the barracks, bakery, meat storage plant and the rest of it into a crowded town—an inviting target for enemy planes—the camp is scattered over the nine-mile-long reservation. There are no streets. The buildings face every point of the compass. It is a town planner's nightmare.



LARGEST LATIN AMERICAN BRIDGE

New step in completion of the road which will run from Alaska to Argentina.

The contractors were ordered not to remove one tree or shrub unnecessarily. Workmen disobeying were fined. The buildings are painted a dull green to blend with the subtropical flora that often brush their walls, or, if bending palms, shade their roofs.

You can walk through the camp and not know you are near a building until you bump into it. Radiomen don't need a big open space for maneuvers, so there is no tell-tale white sand drill ground to give the camp's location away to enemy planes. It would be waste of bombs, anyway, to drop any on such a sparsely populated area. Not so far away there are as many alligators per square mile as there are building at Camp Murphy.

Florida trees being evergreens, Camp Murphy's protective covering will be as effective in the winter as in the summer.

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ENTOMOLOGY

American Cockroaches Produce Large Families

WHY so many cockroaches manage to appear just where they are least wanted is revealed by studies of their family life at Iowa State College.

Experiments showed that prolific American lady roaches raise a family of 163 offspring, on the average, during an adult lifetime of less than one year. In some cases reproduction was found to occur even in unmated females. Others continued to produce offspring from several months up to a year after a single mating.

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ENGINEERING

El Salvador Opens Big Suspension Bridge

THE Republic of El Salvador has just completed the largest suspension bridge in Latin America, thus tying the two American continents by the 14,000 mile ribbon of Pan American highway.

The new bridge is another step in the completion of the road which will eventually carry military or civilian traffic from Alaska to Argentina. Spanning the Lampa River, the 1,350-foot bridge replaces ferry service by a scow propelled only by the river's current, according to Lieut. Col. Evelyn E. Valentini, technical adviser of the Pan American Highway Confederation.

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