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The Swan Song of the Silk Worm

By Clareta Walker

We hear so much about synthetic jazz, synthetic blues and now—synthetic fibers. The silk worm and spruce tree are running in competition with each other.

Said a little silk worm to an old spruce tree,
If you were a mulberry I'd eat thee;
But hein's as you're just a spruce,
For me you aren't any use,
To waste my time from spinning thread
For milady's silken ted.
For she must have her silk—oh, yes!
Or she wouldn't know how to dress.
She might have to stay at home
For fear she'd be called a 'prone,'
So they must be silk—all her clothes—
Her hat and gloves besides her hose.
The silk worm went to find her tree,
Saying, this is the last you'll see of me.

About this time another tree—the spruce,
Thought she, too, should be of use,
So she asked man to find a way
To keep up with that worm today.
He took some chips out of her trunk,
Added caustic acid to make them drunk.
He pressed, then pulled this stuff apart,
To make a fiber—it was an art.
Now the motto is—by a new old name—
Synthetic fiber for every dame.

There was a great need for an artificial silk because so many people wanted to wear the real silk that the silk worm could not supply the demand. So about one hundred and fifty years ago the first attempts were made to produce, artificially, fibers of a fine, silk-like character.

In 1883 Joseph Swan of England is reported to have made synthetic fibers by squeezing a mixture of wood and cotton pulp through minute openings. In 1884 patents were taken out by Count Hilnaire de Chardonnnet of France, covering the first synthetic fiber to be commercially successful. This he called artificial silk. Not until seventeen years ago was it produced in America. About six years ago the National Retail Dry Goods Association agreed to call it "Rayon." The Federal Trade Commission and Textile Testing Group of the United States Bureau of Standards used it as the generic term covering all of the man-made or synthetic fibers, considering it the fifth basic textile.

The process by which synthetic fibers are made is the nitro-cellulose process which is used by the Tubize Artificial Silk Co. The cellulose acetate process goes by the trade name of celanese, while cuprammonium process is used by the American Bemberg Corporation. About eighty-five percent of all the processes used are the viscose processes that have many trade names. Products from these processes are sold in about 18 different departments in all leading stores in the country.

Much agitation has been aroused over the use of the word rayon because of the many products, each with different trade names. Celanese and Bemberg do not use the name rayon at all and so to distinguish their fabrics from silk they speak of them as Bemberg flat crepe, celanese voile and so on.

Some of the most distinctive characteristics of acetate yarns are due to the hard surface, which makes them highly resistant to stains and soil; for the firm, smooth surface sheds dirt, while grease, and even ink, fruit juices and similar substances likely to produce stains do not penetrate the fiber. White cellulose acetate remains white, not becoming yellowed with washing or exposure to light. It will stand dry cleaning as well as laundering, but will not hold up under a hot iron, as an iron that would scorch silk or wool would melt acetate fabrics. The drying qualities are superior to that of cotton, and fabrics made of acetate yarns will neither shrink nor stretch, nor are they affected in any way by sea water. Even pleats, when steamed in, are not affected by moisture or actual laundering if washed in tepid water and a warm iron used with a dry cloth over the pleats.

Much is being done in the way of obtaining beautiful colors in these synthetic fibers, and in connection with other textiles. Acetate yarns have no affinity for the dyes that other fibers have, so a great variety of color is obtainable. One could almost say we are shock proof when wearing these fabrics, as they prevent the conduction of electricity. Because cellulose acetate dries well and does not have the harsh, shiny appearance, it is very well liked and is coming to a wider range of uses every day, especially because of the fact that most of the fabrics made from this cellulose acetate fiber are wrinkle proof.

Practically all of these points may be said of all synthetic fibers which helps to prove that we probably will, if we haven't already, go synthetic mad.


The Romance of Linoleum

"Well, I would certainly try the new linoleum I saw in town today if I knew anything about buying it," sighed Mrs. Davis, "but the last I put down was so ugly it cracked all out inside of a couple of months."

"We were just talking about linoleum in school the other day, Mom, and in our institutional administration classes we found out that there are no less than seven kinds of linoleum. Wait till I get my notebook and perhaps we can fix the problem up."

And here is what they found:

Some linoleum is lacquered and waxed to insure absolute security from dirt and water and makes the surface practically scratchproof. This same treatment provides for a far more durable rug which is also easier to clean.

Linoleum derives its name from its principal ingredients, linseed oil, linseed oil is made of linseed, flax and oleum with oil added. The linseed oil is boiled up and then oxidized until it hardens into a tough and rubber-like substance.

The material is then mixed with powdered cork, wood flour, kauri gum and resin, with the addition of some color pigments. This mass is pressed onto burlap by presses. The linoleum then passes into drying stoves kept at a uniform temperature. It remains in the stoves from one to six weeks depending upon the thickness of the material. Materials for linoleum come from all over the world. From Argentine comes the linseed, from Spain the cork, from Scotland the burlap, from British India the Jute (which is sent to Scotland to be made into burlap), from New Zealand comes the kauri gum from the pine tree (this binds the ingredients together), from England comes the whiting which is the basis of paints on printed linoleum and of dry colors in inks, and from Germany come the tinting colors.

Don't Mistreat Linoleum

After you have purchased linoleum, you should follow certain rules in using it. Linoleum must not be laid upon a painted floor. Remove or sandpaper the paint first. Do not lay linoleum on a ground floor without first water-proothing it, for the cement will not hold the linoleum in place. Don't unroll the linoleum while it is cold. Keep it in a room at about 70 degrees for three or four days. If you find when unrolling it that it is starting to crack, stop unrolling or the entire roll will be ruined. Keep linoleum in a warm, dry and clean place away from stoves and damp cellars. Printed linoleum with a varnished surface should be varnished. Inhale, breathless or plain when unrolling it that it is starting to crack, stop unrolling or the entire roll will be ruined. Linoleum in a warm, dry and clean place away from stoves and damp cellars. Printed linoleum with a varnished surface should be varnished. Inhale, breathless or plain when unrolling it that it is starting to crack, stop unrolling or the entire roll will be ruined.