

Nylon was developed in the United States in 1935, the same year Firestone began operating its textile plant in Gastonia.

## First true synthetic fiber

In the beginning, clothing and other textile goods were made from fibers which nature provided first-hand, such as cotton, wool, linen and silk. It was a long time before synthetic fibers became a major material of textiles. In the mid-1850s there were experiments in production of man-made fibers (really rearranged through chemical process).

The original man-engineered, commercially-produced fiber in the United States was rayon, first in 1910. It is made from cellulose, a fibrous substance in all forms of plant life. Today, synthetic fibers are divided into two main groupings—cellulosic (as rayon, acetate and triacetate) and non-cellulosic (as nylon, polyester, olefin).

Nylon, developed in the United States in 1935, has been commercially marketed since 1939. Perlon was developed in Germany in 1938. It was produced from a single-ingredient raw material derived from coaltar. Nylon, from the same source, and perlon belong to the family of polymers called polyamides.

These fibers were first adapted mainly to clothing uses, later to defense materials in World War II. Into the mid-1940s further ranges of application were discovered for these leading palymaid materials. In more recent years they have been a part of space exploration and microsurgery—examples of 'exotic' uses. Today these fibers are greatly used for tire fabrics; hosiery, lingerie and other clothing; upholstery and decorative fabrics, and industrial items such as webbing and belting.

**IT HAS BEEN** more than 43 years since the two pioneering and fully-synthetic fibers—perlon and nylon—were introduced to the world.

Today, many scientists and industrialists believe that within the next few years, two-thirds of the world's textile requirements will be met by synthetic fibers. With the ever-growing needs for synthetic materials, especially in textiles, the chemical fiber industry promises a great future.

1. Production of nylon fibers begins with hard, white fragments called nylon polymer chips.

2. Chips are melted and liquid is pumped to a spinneret where it is extruded and solidified to form continuous monofilaments.

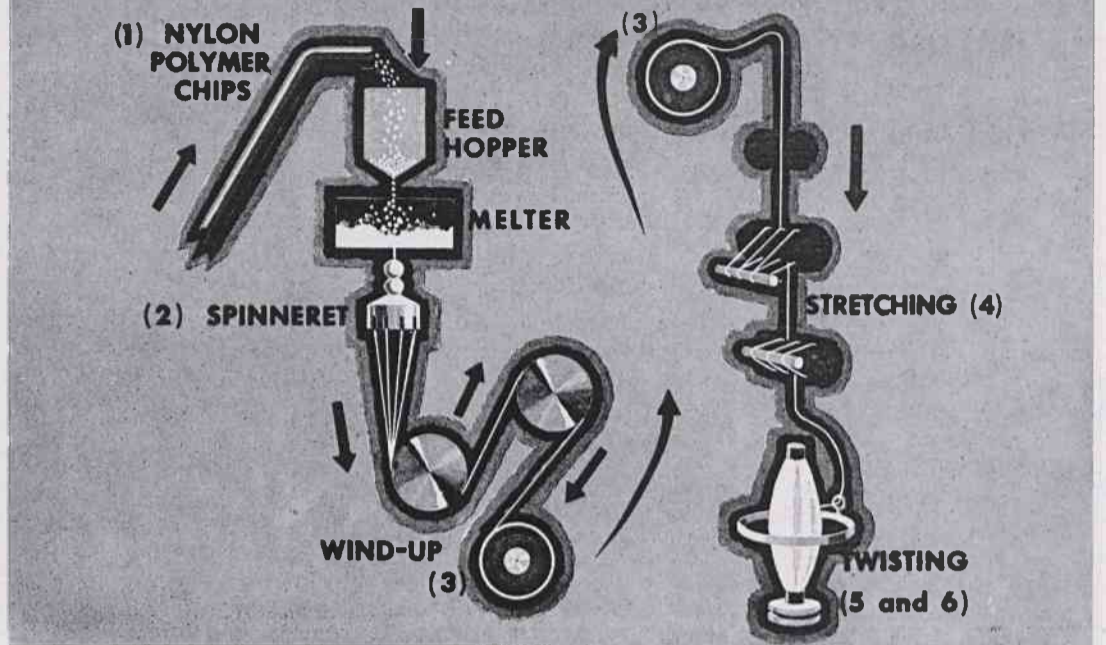
3. Assembled continuous filaments are wound onto a bobbin.

4. Bobbin is transported to another area where nylon is stretched, allowing monolecules within the continuous filaments to be arranged in a

**OTHER** now-common synthetic fibers derived from coal and oil are polyesters and polycrylnitrils. The United States is a leading producer of chemical fibers. Japan and the Federal Republic of Germany also are leading suppliers.

Non-cellulose, man-engineered fibers of all kinds are made from the basic raw materials of coal and petroleum. These fibers can be engineered so as to give them special qualities and characteristics for special end purposes. A yarn or fabric may be made 100 percent from one type fiber or may be a blend of fibers, either natural or chemically-produced, to provide a variety of characteristics.

## NYLON PRODUCTION



Drawing from a Fact Book of the Man-Made Fiber Producers Association

more-orderly pattern.

5. Assembled continuous monofilaments are twisted into yarn.

6. Yarn is wound onto bobbins, ready for shipment.

The Firestone company manufactures synthetic fibers at its Hopewell, Virginia, plant of the Chemicals and Raw Materials Group. Producing synthetic fabrics, the three U. S. plants of Firestone Textiles Company process synthetic yarns supplied from Firestone, Hopewell, and from a number of other producers. Bennettsville turns out nylon fabric altogether. Gastonia produces nylon, polyester, rayon and some kevlar. The Bowling Green facility produced fabric in polyester, nylon and some in fiberglass and kevlar between 1968 and early 1980. Since early June, its primary function has been fabric-treating in the No. 1 unit.

••• When Horace Robinson retired June 30, he "came out even to the day" at 45 years service. That's the longest work record at Firestone-Gastonia, for a retired person. Robinson was foreman of Maintenance.

He and the others who closed out long careers at Gastonia last month have various things planned to do in their retirement which began July 1.

The "most cut-out" plans belong to Elder David Adams, who spent 39 years, 2 months and 21 days on the job—his early times in cotton, and last a beamer operator in Preparation.

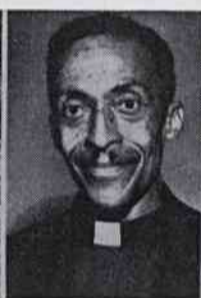
Adams, a ruling elder and junior bishop in the Christian Fellowship Church of God, is pastor of Gastonia 10th Avenue Bethlehem CF Church of God. He is devoting fulltime to the congregation and evangelistic work.

**A PREACHER** for 28 years, his missionary work has taken him to several states and to the Bahamas. He plans some tent meetings this summer, in Chester, S. C., Newport News, Va., and other places. His church in Gastonia has just completed a building addition of Sunday-school rooms and a library. In July, Bethlehem will entertain the general assembly of the Fellowship Church of God.

Somewhere apart from his church duties, Elder Adams



Annie Hubbard Bertie Mahaffey



David Adams Maford Sanders



Horace Robinson

### They've 'gone out'



plans to travel some—first to Louisville to see a daughter; and "to fish a little now and then."

Of others whose retirement began July 1, Annie L. Hubbard had 43 years, 6 months and 23 days 'work put in.' She was last a cloth burler in the Cloth Room.

**THEN**, Maford M. Sanders had 43 years and 1 month service. For the last several of those years, he was a storekeeper in the Supply Room.

Bertie Mahaffey's work record at retirement: 24 years, 9 months, 15 days. She was last

a cloth burler in the Cloth Room.

Two others who retired but were not listed in the paper in recent months:

• Cleo W. Buchanan, a weaver in Chafer Weaving. Her service record is 17 years, 1 month and 15 days.

• Thelma Vickers, last a re-spooler operator in TC Twisting, worked 31 years and 10 months. Approval of her application for disability retirement dates back to February.

• Christine H. Cooper, filling supplier (Unifil) in TC Weaving, worked 16 years and 1 month. Approval of her application for disability retirement dates from January.

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The Firestone company announced successful testing of tires reinforced with polyester cord fabric, 21 years ago. Firestone introduced tubeless tires for tractors and airplanes in 1954.

## Aucott executive vp NA Tire group

George W. Aucott Jr., last month was named executive vice president for sales and marketing of the Firestone company's North American tire group. In the new post, he is responsible for the group's private-brand sales, original-equipment sales, Firestone Canada Inc., product planning and the Fidesta Company.

The textiles operations in Canada are included in Firestone Canada. Firestone Textiles Company U. S. division (plants at Gastonia, N. C., Bennettsville, S. C., and Bowling

## Most go early

A nationwide survey this spring learned that most working Americans want to retire early and are more concerned about having enough money to live on than about having too much spare time on their hands.

Of those already retired, an early life of leisure appeared less alluring, according to the survey done for the National Commission on Social Security. The survey also found that 61 percent of those still on the job, fear that the Social Security system will not have money enough to pay benefits to them when they do retire.

Green, Ky.) were recently re-assigned from the Raw Materials and Chemicals group to the North American tire group. Leon R. Brodeur is group vice president.

Aucott, 45, has been with Firestone since he joined the Pottstown, Pa., plant in 1956. He was central scheduling manager in Akron; manager of Akron Plant I; manager of the tire plant at Decatur, Ill.; president of Hamil Manufacturing Company, a Firestone division; president of Firestone Industrial Products of Noblesville, Ind.; president of Firestone Canada since 1978. Albert Kraemer succeeded Aucott as president of Firestone Canada.

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Going Somewhere? Some July events in South Carolina: S. C. Peach Festival, Gaffney, 13-19; S. C. Festival of Flowers, Greenwood, 18-20; Water Festival, Beaufort, 21-27; Summerthing Arts Festival, Sumter, 23-24; Flower Day, Clemson, 25; Tobacco Festival, Lake City, 24-27; Reunion, Little Mountain, 21-Aug. 1.

Early Aug.: Jam & Bluegrass, Winnsboro, 1-2; Fox on the Run Bluegrass, Little Mountain, 8-9; Tractor Pull, Saluda, 8-10; S. C. Grape Festival, York, 8-10.