

Yerkes news. July 31, 1950

# Du Pont—77 Years Along The Niagara

Americans had been introduced to the comforts of travel by Pullman, but black powder was still being shipped by canal boat and mule-drawn covered wagon in 1873, the year Du Pont Company first settled in the Riverside-Black Rock Community.

It was the year of Grant's second inauguration as president that the Du Pont Company and the Hazard Powder Company, equal partners in the venture, bought the 170-acre farm of S. T. Cornell, on River Road overlooking the Erie Canal and Niagara River, as the site for a powder magazine.

Today, nearby this site of Du Pont's first local venture, on land once known as the Klepser farm, stands the company's vast Yerkes plant. By the end of 1949, it was employing 2,640 men and women. Their combined salaries and wages for the year totaled \$10,124,260.

The 1873 magazine was built at River Road and Sheridan Drive, then called Two Mile Creek Road, near Buffalo's present city limits. The same year

the failure of Jay Cooke and Company, who had financed the Civil War for the Union, was the forerunner of bank crashes throughout the country that marked a decade of depression.

Writing of the plight of explosives makers in 1877 General Henry du Pont, head of the company, declared:

"More than half the powder machinery in this country has been lying idle since the panic of 1873."

But Du Pont found the area Buffalo a thriving community in which to do business. Small businesses and industries totaling 800 enterprises provided jobs for 18,000 men and women in the city of 150,000 population.

Explosives were shipped from the Du Pont Magazine through-

(Continued on Page 3)



(Continued from Page 1)

the growing industrial section of Western New York. Du Pont blasting powder helped to deepen the Black Rock Harbor. Large quantities of the company's explosives helped the city expand facilities as new streets and roads were opened, and sewers, gas and water mains were laid.

Du Pont made 24 kinds of gun powder and 17 types of blasting powders, according to a circular of that time supplied to agents. Refined saltpeter, sulphur, charcoal, and safety fuses were products offered as sidelines.

Despite depression and competition, the new magazine flourished. Black powder from the mills on the Brandywine Creek in Delaware was shipped by lake vessels, canal boat, and mule-wagon throughout Western New York—Lockport, Tonawanda, Niagara Falls and other centers taking the bulk of the company's product in that area.

Men living in communities throughout the United States where Du Pont kept stores of explosives in depots for local distribution handled the company's business. A well-known and popular citizen of the Riverside community operated the magazine on River Road.

He was Anthony Benzinger, father of Jacob and Henry Benzinger who now operate the present Du Pont magazine on Abbott Road near Orchard Park and where Anthony's widow still lives. Two other sons, William E. Benzinger of the rayon weaving laboratory, Newport, Del., and Theodore Benzinger, of the Yerkes plant, are also Du Pont employees.

The father, better known as "Tony" Benzinger, came to this country from Germany in 1885, at the age of 23, following the death of his parents. He chose Buffalo as the most progressive place in which to settle.

From 1887 to 1891, Mr. Benzinger, as a farmer and milk dealer, worked the tract upon which the present Chevrolet

plant stands. In 1891, he moved to the Du Pont farm previously mentioned, and at that time contracted with the Du Pont company to take charge of its powder and dynamite storage and delivery business, also leasing the land for farming. The River Road was a dirt thoroughfare, passable for travel in dry weather with the ruts scraped down, but terrible in the wet spring and fall. The Two Mile Creek Road was even worse and, therefore, little travelled.

Paving of the River Road started about 1900, but for a long time the hard-surfaced macadam extended only one and a quarter miles, from the City Line to the end of the Du Pont farm. At that time, the E. R. Thomas Motor Car Co. and the Pierce Arrow Motor Car Co. used this section of good road to test out new cars then built in Buffalo.

As for the powder and dynamite business, it kept two teams of horses busy delivering six days a week to the railroad depots in Buffalo, stone quarries,

Buffalo Harbor, and various contractors in Western New York.

The Benzinger homestead was a large two-story square house, always painted white. The Benzingers moved to Orchard Park in 1910, the house and barns being razed when Du Pont abandoned the farm as a magazine site to make way for the Dunlop Rubber Company. The farm occupied the site of the present Dunlop plant golf course.

Du Pont sold part of the old site to the Pierce Arrow Co. in 1918; another part to Levering Bros. in 1919, and in 1920, Dunlop Rubber Company bought the rest. Dunlop used one of the old Du Pont mule barns as a storehouse for many years.

Even before the company sold the last bit of farm lands, however, developments were progressing that would put Du Pont into business in the Riverside area on a scale of far vaster importance to the company, the community, and the nation than ever before. As early as 1909 Du Pont began studying processes for making artificial silk. These

investigations were under way in 1917 when Leonard A. Yerkes, an experienced textile scientist and chemical engineer, joined the company.

Mr. Yerkes, rayon pioneer for whom the Du Pont plant at Buffalo is named, was advanced to assistant director of the company's Development Department in 1919. In this capacity he took part in the purchase by Du Pont from French owners of the rights to make artificial silk.

In April, 1920, three months after Du Pont completed this transaction, Mr. Yerkes was named president of the Du Pont Fibersilk Company upon its formation to make the artificial textile fibers. It was originally capitalized at \$5,000,000.

The new company bought the present site of the rayon plant in September, 1920. On it stood an unfinished reclaiming plant of the Philadelphia Rubber Works Company, abandoned when World War I ended. Ample land for expansion surrounded the buildings.

There the Du Pont Fibersilk Company established headquarters. During the first year of operation the plant employed 576 men and women at an average wage of 40 cents an hour. Now more than 1600 are employed in the production of fibers, the average wage roll worker receives \$1.71 an hour and the total wage payroll is \$4,000,000 a year. By May, 1921, the new plant produced the first synthetic yarn. The first year 287,461 pounds of yarn were produced. Current production is more than 150 times greater.

Fibersilk yarn sold for \$2.266 a pound and cost Du Pont \$2.223 a pound to make, the year operations at Yerkes plant began. Only continuous filament yarn was made then and it was sold at first in skeins weighing less than a pound. Now staple is sold in 500-pound bales and "Cordura" high-tenacity rayon on 1000-pound beams as well as cones and tubes.

A second unit went into opera-

tion in May, 1926, and over the intervening period, the plant has been expanded. Artificial silk had been named rayon in 1924 and in March 1925, the Du Pont Fibersilk Company became the Du Pont Rayon Company. This company became the Rayon Department of the Du Pont Company in 1936.

Meanwhile Mr. Yerkes and his associates, had become interested in cellophane, a transparent film which the French had disclosed during the negotiations over artificial silk. On June 9, 1923, Du Pont executed an agreement with French interests for the joint formation of the Du Pont Cellophane Company.

The first cellophane plant in the United States was opened in April, 1924, on a tract of the Buffalo Fibersilk plant where Du Pont began making the new film. During the first year of operation the new plant employed 136 men and women. The working force averaged 451 in 1949.

Wages of workers in the new  
(Continued on Page 4)

## ERIC LEE HAS LONGEST BEARD



Miss Lee

Eric Lee

Mrs. Lee

## Sheridan Volunteers



MR. & MRS. BILL SENN



(Continued from Page 3)

film industry in 1924 averaged 66 cents an hour. Today the average hourly wage at the Yerkes cellophane plant is \$1.71 an hour. The annual payroll of the cellophane plant is about \$1,800,000.

Since Du Pont produced the first cellophane film at Yerkes plant, the selling price has been reduced by successive cuts from \$2.65 per pound in 1924, to the present price of 48 cents a pound.

Scientists of the Rayon Technical Division at the Yerkes



RED SCHMITT ELMER ARNS

plant had an important share in pioneering rayon production. Their contributions to fiber and film research have been of equal significance. Members of the group have also pioneered the development of virtually every advance in this field of Du Pont achievement.

Beginning on May 1, 1920, when Dr. George Rocker and a group of aides encountered the manifold problems of making the early version of Du Pont's fiber-silk competitive with a strongly-entrenched counterpart of another manufacturer, the technical staff has been accomplishing outstanding scientific feats in the River Road laboratories.

After assisting in getting the first unit of the Du Pont Fiber-silk Company's plant to produce continuous filament yarn here—which was repeated when cellophane was introduced in 1924—the technical men began adapting a French bucket-spinning process in 1923. By January, 1925, their work had progressed to the point where the system was used to spin the first yarn at Du Pont's new plant at Old Hickory, Tenn. This process ultimately eliminated skein processes as any significant factor in the industry.

Also in January, 1925, Dr. W. Hale Charch and his assistants began working on a process for making cellophane moisture-proof. Commercial manufacture of this type of film, which now represents the greater portion of the industry's total output, began in 1927.

The early development of Du Pont's "Acele" acetate rayon began here in 1927 and became commercial at the new Waynesboro plant in 1929. Another 1927 attainment of the technical group was the first production in the

United States of viscose process rayon staple.

Cellulose closures had been manufactured prior to 1931, but that year the present process was introduced as the result of the technical development work here. In 1933, Buffalo was the scene of the first work done with cellulose acetate sheeting and in 1935 came acetate rayon staple.

One of the foremost developments in rayon history took place at Buffalo in 1934 with the first production of "Cordura" high-tenacity rayon. Of equal importance to the rubber and rayon industries, "Cordura" was the pace-setter among the high-tenacity yarns. Introduced dramatically in yacht sails, it is now used principally in tire cord and as the cord for industrial beltings. A variation is also making interesting fabric in the apparel field.

The cellulose sponge was not exactly new in the world when introduced by Du Pont in April,



Pictured above are three Riverside girls who finished one-two-three in the Centennial Beauty contest and Talent show. While we at Yerkes cannot boast that any of the three are employees of our plant we can and do say that all three are among our good neighbors in Riverside and Black Rock.

1936, but the brand bearing the familiar oval trademark had been developed from scratch here at Buffalo and it was the first made in America.

In the widening of rayon's versatility, the Buffalo technical group has contributed in whole or in part to the perfection of delustered yarns, crimped fibers, fine-filament and fine-denier yarns, staple tow and thick-and-thin yarns.

To the general cellophane development, the Buffalo technical group has made important contributions to adhesives, heat sealing, improved surface characteristics, durability of the film, printing, and anchored coat-

ings. Evaluation work on many non-cellulosic films such as nylon and polythene has also been done here.

In addition to valuable technical contributions about the manufacture, processing and handling of yarns, the Buffalo technical staff made no small



"This is 'Cordura' and we make the best in the world at Yerkes," says Ben Running, above, Staple Plant foreman, as he prepares to answer some of the many interesting queries of visitors to the Du Pont exhibit.

contribution to the nylon development.

"Orlon" acrylic fiber, now in production at Camden, S. C., originated in the Pioneering Research Section at Yerkes. Developed here as Fiber "A," the substance was named "Orlon" acrylic fiber after its transfer to the Acetate Research section at Waynesboro. Early studies at Pioneering on polyesters led to the company's interest in the British fiber, "Terylene," which is now being evaluated by the Nylon Division as Fiber "V."

Others in the alphabetical series are the crimped regenerated cellulosic Fiber "D" and Fiber "E" and high-strength Fiber "G." "Bubbifill," the unusual fiber with the air pockets along the yarn was also developed here.

Cellulose sponge mop yarn is one of the latest contributions of the Buffalo technical group to Du Pont's list of important products. Not only is Buffalo the starting point of the Rayon Department, which includes plants at Old Hickory, Tenn.; Richmond, Va.; Waynesboro, Va.; Seaford, Del.; Martinsville, Va.; Chattanooga, Tenn., and Camden, but each of those plants either manufactures a product, or uses an important development which came through the research of the Technical Division at Buffalo. Men—you bet, technical men from Buffalo are spread throughout the organization as are products which are manufactured or have been originated or developed on historic River Road.

## Du Pont Ownership Now Is Shared By 118,732 Persons

Wilmington, Del.—E. I. du Pont de Nemours & Co., (Inc.) was owned by 118,732 stockholders as of June 30, 1950. This represents an increase of 2861 over the number of holders recorded at the close of the first quarter of 1950 and an increase of 19,069 over the number as of June 30, 1949.

There were 101,701 holders of common stock, and 23,611 holders of preferred stock as the second quarter period of 1950 ended. These figures include 6,580 holders of more than one kind of stock.

Of the individual stockholders women comprise about 57 per cent, and every state in the union continued to be represented among the owners of the company.

## TURNOVER LOW

A low rate of job turn-over is an impressive aspect of Du Pont's employment picture. The company's separation rate for all reasons—quits, deaths, pensions, discharges, layoffs, etc.—has averaged 32% of the average number employed over the past five years.

The national industrial average separation rate is 67% of the average number of employees—more than double the Du Pont rate.

The last two years the Du Pont job turnover rate was only 21% as compared with 52% in industry nationally.

The job turnover rate for the Rayon Division of the Yerkes plant for 1949 was only 5.5%.

## Laboratory Honors Dr. Bengler

(Continued from Page 1)

of Chemical Department scientists working under the late Dr. Wallace Hume Carothers.

Dr. Bengler, who was closely identified with the nylon development, was appointed assistant manager of the Technical Division of the Rayon Department in July, 1939 and in that capacity directed research and development on viscose and acetate process rayon, nylon, cellophane, Fiber "A" which has since been put in commercial production as "Orlon" acrylic fiber, and Fiber "V" which is being evaluated.

Dr. Bengler is the author of numerous scientific and technical papers on rayon, nylon and related subjects. During the 1949 session of the General Assembly of Delaware he was a member of the House of Representatives.

D. E. A. A. vice-president and publicity chairman, there will be an opportunity to get it out of our system in the course of the picnic. Plan now to provide a day of entertainment for yourself and your family at very little cost, he says.

Should transportation appear a problem, forget it, Charlie advises. Buses for the park will leave from the Broadway side of the Buffalo Public Library every forty minutes from 11 A. M. until 1:15 P. M. and every 30 minutes thereafter. The fare to the Park is only 20 cents. Buses run all night.

## Shops No. 1—Cello Slitters Tie For League Lead

At the end of the seventh week of play, Cellophane Slitting and Combined Shops No. 1 were deadlocked for the lead in the D. E. A. A. softball league. Each had won six and lost one. Service and Sponge and "Cello Seal," tied for third, were pressing the leaders with five wins and two losses.

Occupying fifth place with four victories and three defeats was Rayon Finishing. "C" shift while three teams were tied for sixth. They are Cellophane and Cellophane Manufacturing Control, "Cordura" and Technical Assistance. All had won only three games while finishing on the short end of four. Project Engineering with only one win and six losses were in the cellar.

Three teams, each having forfeited two regularly scheduled games, were dropped from participation in the League. The three are Combined Shops No. 2, Cellophane Chemical Bldg. "D" shift and Rayon Finishing "A" shift.