

Science Notes

BY WILLIAM G. HAYNES.

NITRATED COTTON

The Du Pont Fabrikoid Co., with plants at Newburgh, N. Y., and Toronto, Canada, is the world's largest producer of leather substitutes, and hence an enormous user of cotton. The base or backing of this material is cotton cloth, the weight and strength of which must depend on the quality of the Fabrikoid desired and the use to which it is to be put. This cloth is carefully and artistically coated with soluble cotton to produce the type of leather substitute desired. It has been erroneously stated that Fabrikoid is coated with guncotton. This is not true, as the grade of dissolved nitrated cotton used in the coating is not explosive and could not be used as guncotton because of its low nitration. Furthermore, in the process of coating it is dissolved in solvents and mixed with oils and pigments so that even guncotton would be rendered non-explosive. It will burn if ignited with care, but the coating supports combustion less readily than cloth and hence the inflammability of Fabrikoid is low.

The Fabrikoid plants now have a combined capacity of 64,000 standard yards per day. In this manufacture more than 12,000,000 yards of cotton cloth, equivalent to more than 5,000,000 pounds of cotton are used annually. The raw cotton consumed in coating this quantity of goods will total nearly three tons per day. Even with this enormous production, the company has been unable as yet to build fast enough to keep production to within 30 days of its orders.

The interest of the Du Pont Company in soluble cotton does not end here, for through the Du Pont Chemical Works it sells the major portion of the soluble cotton employed in other American industries. The enormous quantity of soluble cotton consumed can be realized by even a superficial knowledge of the industries affected. Some of these are:

Split Leather Dope—Dissolved cotton prepared for coating and finishing split leathers in different colors and grades.

Patent Leather Dope—Dissolved cotton for treating leathers in the manufacture of patent leathers for all purposes.

Leather Substitute Coating—Dis-

solved cotton for finishing leather substitutes in all kinds, grades and colors.

Bronzing Liquids—Dissolved cotton that has been further treated for applying bronzing coats to different substances.

Wood Lacquers—Dissolved cotton that has undergone further chemical treatment for the manufacture of a variety of high-class wood lacquers.

Metal Lacquers—Dissolved cotton that has undergone further chemical treatment for the manufacture of a variety of high-class lacquers.

Contractile Collodion—Dissolved cotton especially prepared for surgical use in closing and sealing small wounds and abrasions.

Parlodion—A form of nitrated cotton or pyroxyline bottled in water for use in preparing pure contractile collodion and for laboratory uses.

Mantle Dip—A high-grade of dissolved cotton especially prepared for dipping gas mantles.

Belt Cement—Dissolved cotton that has been especially treated for making a strong, tenacious, waterproof leather cement. There is an additional cement manufactured along the same line that is used as a general household cement.

Leather Renovator—Dissolved cotton leather dope containing pigment for resurfacing worn leather or leather substitutes to restore their appearance.

Enamels—Of any color for coating coloring and preserving articles of wood, metal or composition.

The use of 15,000 pounds of cotton paper per day in the manufacture of Pyralin plays an important part in the consumption of cotton cellulose. This substance, which is a waterproof, flexible, pyroxyline material, is manufactured in a great variety of forms and colors, one of the best known of which is clear, transparent sheeting so often noticed in the form of windows in automobile and carriage curtains. Its use is enormous for a variety of purposes, such as the manufacture of toys, novelties, flexible windows and scientific instruments, for which purposes it is prepared in sheets of variable thickness.

Transparent sheeting is also manufactured in a great variety of colors, chief of which are amber, green, blue and red. These sheetings find extensive use in the manufacture of glasses, goggles, buttons and flexible windows, such as headlight dimmers and glare shields. The full list of Pyralin sheetings would run to great length, for it is manufactured by the Du Pont Company in a great variety

of forms, such as ivory sheeting, tortoise shell sheeting, bronze sheeting, pearl sheeting and opaque colored sheeting.

A great profusion of rods, beading and tubes is manufactured in transparent, opaque and colored Pyralin.

These different forms of Pyralin are sold by the Du Pont Company to different concerns that use them in the manufacture of:

Spectacle frames, rims and cases.
Combs, hairpins and hair ornaments.

Buckles.
Brushes.

Manicure sets.

Toilet boxes.

Mirrors.

Toilet and manicure cases.

Buttons.

Pocketbook and handbag frames.

Powder puff boxes.

Cream boxes.

Fair receivers.

Novelties.

Bathroom fittings.

Picture frames.

Trays.

Clock cases, dials and crystals.

Handles for knives of all kinds.

Shoe and glove buttoners.

Napkin rings.

Signs.

Shoe horns.

Umbrella handles.

Shoe findings.

Musical instruments.

Poultry markers.

Smokers' articles.

Office supplies.

Recording instruments.

Typewriters.

Whips.

Dolls.

Billiard supplies.

Lighting fixtures.

The Du Pont not only manufacture the Pyralin sheeting, tubing, rods and beading as such for the use of others, but uses large amounts of this high-class material in manufacturing attractive and useful articles, such as:

Sporting goods.

Dressing and toilet sets.

Buttons.

Collars.

Desk fittings.

Boxes.

Cases.

Knives.

Scissors.

Polishers.

Files.

Tweezers.

Picture frames.

Brushes.

Buttoners.

Musical instruments, pegs and picks.

Pipe bits.

Salad forks and spoons.

Cuffs.

Clock dials.

Teething rings.

Razor and knife handles.

Bottles.

Shirt fronts.

Baby rattles.

As in the case of Fabrikoid, the demand for Pyralin and Pyralin articles far exceeds the limits of the plant. The increase in production has been spectacular, and has far surpassed the most ambitious plans of the superintendents. It is hard to prophesy just how far this development will go, as new uses are being constantly found for Pyralin.

Go to Gordon's Drug Store, 24th and Burdette Sts., for Brown Skin Powder, Dr. Palmer's Skin Whitener Soap and Skin Whitener. Webster 6174.—Adv.



Phone Doug. 2190
524 S. 13th St.

More Sickness and Accident Insurance for Less Money

Old line protection. No assessments. No medical examination. Everything guaranteed.

GET ACQUAINTED WITH
LUKE A. HUGHES.

Continental Casualty Co.

334 Brandeis Theater Bldg.
Douglas 3726.

GOOD GROCERIES ALWAYS

C. P. WESIN GROCERY CO.

Also Fresh Fruits and Vegetables.

2005 Cuming St.

Telephone Douglas 1098

ST. PHILIP'S EPISCOPAL CHURCH

PRESENTS

Clarence Cameron White

Violin Soloist

Monday, Oct. 30 at the Grove M. E. Church
22nd and Seward Streets

Admission, 50c