

The Secret of Du Pont Py-ra-lin Enamels

WHAT does the word "enamel" mean to you—the white paint you see on doors and furniture, or the porcelain finish on your bath tub, or the varnish, mirror-like enamel on your automobile?

Quite likely, it is associated in your mind with such types of finishes, but there is another kind of enamel which has much different qualities and produces a superior finish for the articles on which it is used.

This is the enamel made from cotton—the nitrocellulose or pyroxylin type of enamel. There is a secret in the preparation of Du Pont Py-ra-lin Enamel which causes it to greatly excel other makes of enamels of a similar type, but before going further, it may be well to briefly explain what these enamels are used for and how they are used.

The white, egg-shell enamel finish on the towel racks, soap dishes and similar articles in your bath room is probably Py-ra-lin Enamel. The green, brown, and mahogany enamel on your lighting fixtures; the rubber black finish on your pocket flash light; and the red, white and blue effect on your metal pencil all have their origin in the cotton fields of the South. These finishes, which have attained their highest perfection in Du Pont Py-ra-lin Enamels, are all products of the nitrated cotton industry.

A special apparatus is necessary for the application of the pyroxylin type of enamel, and it is therefore used only in factories which have such equipment. An electric motor supplies the power which drives an air pump, or compressor, from which the air is forced into a tank similar to the hot water boiler in your kitchen. A rubber hose then carries the air to a spraying machine, which is really only a large atomizer with a short neck and a large jar holding the enamel. With the pressing of a trigger, the air sprays the enamel from the nozzle onto the work, and, with a little care and practice, articles of all shapes can be sprayed with a perfectly even coat of enamel.

Brushing does not give a satisfactory finish because the enamel "sets" and dries too quickly. It "sets" almost immediately and is dry enough to handle in twenty or thirty minutes. This feature makes it very valuable to manufacturers who have to turn out thousands of pieces each day.

The basic ingredients of all pyroxylin enamels are pyroxylin (nitrated cotton), pigment colors and solvents. The secret of Py-ra-lin Enamels is in the combination of these materials, but before combining them it is imperative that these ingredients should be of the very highest quality.

Selected cotton is nitrated and treated with the greatest

care, and long experience has produced an unusual grade of nitro-cellulose for this purpose.

As to solvents, there are so many, with such different characteristics, that it would seem bewildering to try to decide which to use. But for Py-ra-lin Enamels, enormous laboratory facilities and years of experimenting have produced a combination of many types of solvents, which gives all the qualities desirable in a finished enamel at a most reasonable cost. By manufacturing each of these solvents in Du Pont plants, their quality is maintained and assured.

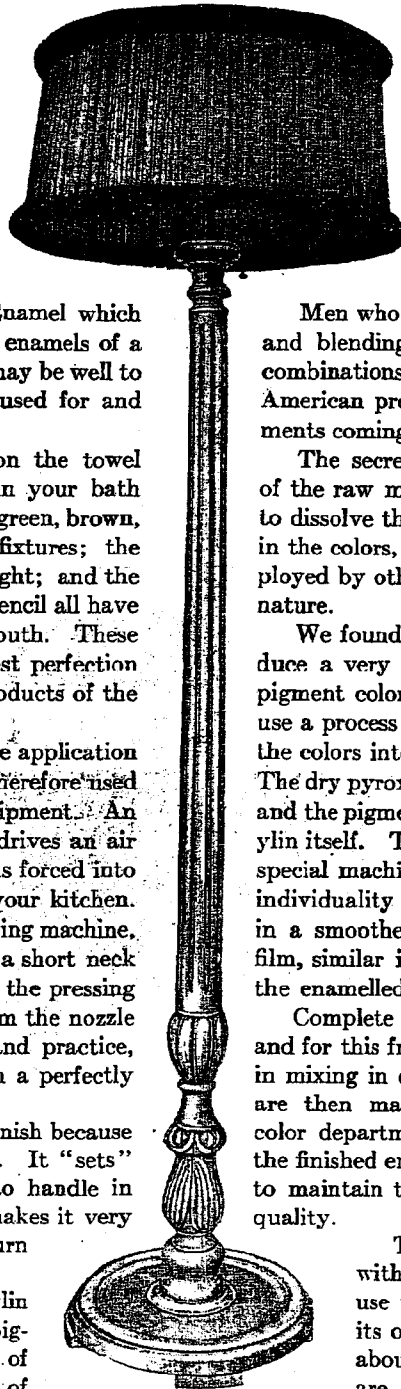
Men who have spent their lives in the manufacture and blending of colors have developed the pigment combinations which are used in Py-ra-lin Enamels. American products are used, the great bulk of the pigments coming from Du Pont factories.

The secret, as we said before, is in the combining of the raw materials. The simplest method would be to dissolve the pyroxylin in the solvents and then mix in the colors, and we believe this to be the system employed by other manufacturers of enamels of a similar nature.

We found, however, that this process did not produce a very tough and durable enamel, and that the pigment colors soon settled out of the solution. So we use a process similar to the one used for incorporating the colors into the well known Py-ra-lin toilet articles. The dry pyroxylin is made plastic, like stiff bread dough, and the pigment colors are "built right into" the pyroxylin itself. This process is expensive because it takes special machinery and hours of labor, but it gives an individuality to Py-ra-lin Enamels, which is expressed in a smoother and much tougher and more durable film, similar in every respect to a sheet of celluloid on the enamelled article.

Complete solution in the solvents is then necessary, and for this from twelve to eighteen hours is consumed in mixing in even the most efficient machines. Tests are then made by the manufacturing department, color department, and laboratory to make sure that the finished enamel meets every specification necessary to maintain the Du Pont standard of uniformity and quality.

The general public is not well acquainted with Py-ra-lin Enamels because it does not use them. But a superior article will make its own way; and people, who are particular about the finish on goods which they buy, are, in an increasing number, becoming familiar with Py-ra-lin Enamels and specifying this finish whenever possible, confident that it will add beauty and service to the finished article.



Good Homes and How to Paint Them

J. Coleman Beniley

GOOD homes, beautiful homes, how shall we define them? One might as well try to describe beauty in Nature in a single phrase, as to endeavor to arbitrarily define beauty in architecture. No single factor renders a building beautiful. Size and proportion, style and decoration, setting and color of painting, all must be given careful consideration. Any of these factors can make or mar the beauty of the building.

The average home-builder seldom builds more than one home, and it makes little difference whether it be a palatial residence with great expanse of green lawn and great clumps of shrubbery, or a bungalow with its modest grass plot and old-fashioned garden of four-o'clocks, snap-dragon and holly-hocks—it is home. Into that home he puts his very best thought in design and plan; pays particular attention to the quality of the lumber and hardware; selects the very best heating and lighting systems that he can afford—because it is to be *his home*.

The selection of colors with which the house is to be painted should call for equal care. One may build a home that is perfect in every architectural detail and yet detract from its beauty by using an improper combination of colors for that particular style of house, or by using one that does not harmonize with the surroundings.

Homes of the California bungalow type, setting low in the ground, should generally be painted in light colors for the masses, with strong, sharp accents of color on the smaller parts, such as the windows and door sashes, the frames and some of the smaller mouldings. If the porch is not paved with red brick, the floor should be painted in dark red.

The New England Colonial house, with its free treatment of the classic orders, looks at its best in white or light buff tones, without any strong accent, with the possible exception of the shutters or blinds, which are often painted with very pleasing effect in a dark green or a blue green color.



Familiar to all who travel through our beautiful suburbs is the Suburban Cottage style of home which followed the unattractive Mansard roof period of American architecture. It was suggested originally to our native architects by the designs of such Englishmen as Norman Shaw, Goodwin and other illustrious men who followed Ruskin in the Gothic revival. This type of house lends itself to a wide range of colors. Brown russets and gray greens fit this style well and blend harmoniously with

almost any surroundings.

The Dutch Colonial house, with its homey, comfortable, gambrel roof, was adopted by the Dutch settlers of Long Island and is extremely attractive to a great number of people. It lends itself to the many special features that make a home particularly cosy. The two great stone chimneys suggesting the big open fireplaces inside the door, with the side lights, are characteristics that carry with them an atmosphere of warm welcome. The color treatment of this house permits of considerable latitude. The vertical wall surfaces should, however, be light, and the details in white or very light tones to show the fine mouldings; the shutters should be in brown or green.

The English half-timbered house is an American adaptation of a style of house built in certain districts of England during Elizabethan times. Its distinctive characteristics are indicated by its name, light tone plaster panels alternating with dark timbering. Strong contrasts in colors may be selected for this house. Dark green or brown for the timbers and barges, using stain rather than paint in order to retain the natural grain of the lumber, although paint can be used with just as much satisfaction, and russet tone for the roof shingles, with strong color accents for the sash and other small parts, combine to produce most pleasing effects.

The use of concrete or hollow tile with concrete or stucco facing is increasing as a building material for "good homes." The emphasis given

DU PONT AMERICAN INDUSTRIES



A suggestive combination of Harrisons Town and Country Paints for the body and trim of a Dutch Colonial design house, with Harrisons Shingle Stain for the roof

GOOD HOMES

and How to Paint Them

WE seldom build more than one home in a lifetime, and we put into that home the very best material and equipment that we can afford. We go very carefully into the quality of the lumber that is to be used—it's to be our home, that we expect to live in for years to come; but do we look as closely into the quality of the paint that is to be put on this lumber—isn't it oftentimes a

question of "looks" rather than "protection"?

Harrisons Town and Country Paint will give you the protection as well as the beauty—there are years of additional wear in it. It is not just an ordinary mixture of lead and oil, but one that is built on a formula with a reason for every pigment that goes into its manufacture.

If you are going to build this Summer, or intend re-painting, write for a copy of "Good Homes and How to Paint Them." In it you will find a suitable combination of colors for the type of house you are building and something on Harrisons Town and Country Paint—the house paint with the accumulated experience of a century and a quarter in the manufacture of paint products, as an assurance of its quality.

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