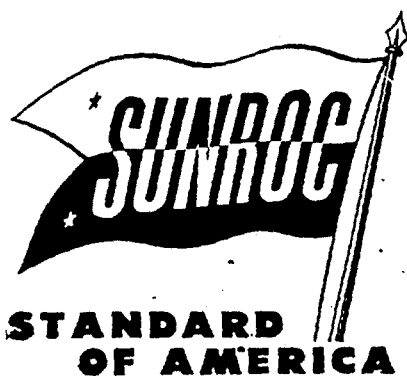


★★★★

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PRODUCTION



CHIEFS of research: Edward Schulte (left) of Glidden's paint and varnish division; Dr. Percy Julian (right), director of the company's soya products laboratories

Glidden Emphasizes Research

And the policy has paid dividends. Revolutionary resin-base, water-mix paint just announced is only one of the many new products that have marked the company's growth in its 30-year history.

From a small manufacturer of paint to a highly diversified maker of a multitude of products in just 30 years—that's the record of Cleveland's Glidden Co. A major part of the credit for this expansion goes to the company's ceaseless emphasis on research and the development of new products.

• **New Water-Paint**—Newest of these new products is Spred-Satin, a water-mix paint based on a new synthetic copolymer resin. Glidden executives describe the new paint as the first truly plastic coating. They say it will "definitely establish the superiority of water-mix paints for nearly all interior applications."

Among the qualities claimed for Spred-Satin:

- (1) It is practically odorless.
- (2) It can be applied to all interior surfaces, including wood.
- (3) It is dry enough 20 minutes after application to permit picture-rehanging.
- (4) It resists rubbing.
- (5) It can be spot-washed with soap and water without changing color.
- (6) It has a rather "flat" appearance when viewed directly, a sheen when looked at from an angle; these qualities are said to last indefinitely.

• **No Oil**—The new paint will be offered in 12 colors. Distribution will be limited at the outset, may have to be limited for as long as a year because of scarcity of several raw materials. The formula is a closely guarded secret. Glid-

den will say only that this is the first time that the ingredients have been successfully emulsified, that it contains no oil, and that titanium dioxide is one of the raw materials.

Development work on Spred-Satin started more than 10 years ago. But just when Glidden thought it was ready for the market, "bugs" developed.

Company officials did their best to forget the whole thing. But four years ago laboratory workers revived the problem, making use of added knowledge in the field of synthetic resins that had been gained since the first try. More than a year ago, the present product was pronounced ready. Since then it has been under test for behavior in typical home use.

• **Policy**—Much of the credit for Spred-Satin goes to Edward Schulte (picture, above), research director of Glidden's paint and varnish division. Like most of the company's new products, however, the revolutionary coating is, in part, a product of several of its divisions. Company policy insists on close integration of research activities of its eight major product divisions and its 26 laboratories.

This policy has been a major factor in Glidden's expansion from paint into such apparently unrelated fields as food products, vegetable oils, soybean processing, chemicals, pigments, powdered metals, type metal, livestock and poultry feeds, naval stores, and sex hormones. It is still, of course, one of the country's

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PRESIDENT Dwight P. Joyce of Glidden heads the company his father founded

largest producers of paints, varnishes, enamels, lacquers, and other coatings.

• **Program**—This diversification is partly the result of a program developed with the idea of controlling raw material sources and using all plant facilities to the fullest.

For instance, mills that made vegetable oils for industrial products were put to work to produce vegetable oils for food products. This led to Glidden's purchase of several food companies, and to the creation of its Durkee Famous Foods Division, which makes and markets margarine, coconut, spices, condiments, and other food products.

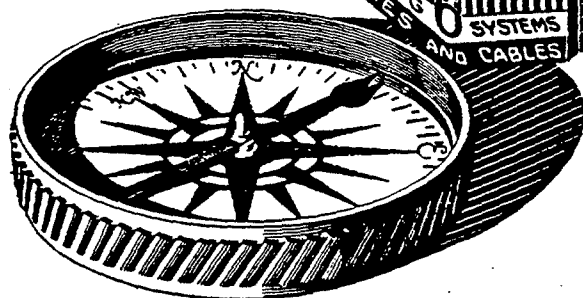
In the same way, the company's chemical and pigment division grew out of the need for raw materials for paint and varnish. Today this division is the country's largest producer of lithopone, a major white pigment, and of cadmium reds and yellows, used in making coatings for automobiles and other metal products subject to sustained exposure. It also produces titanium dioxide.

• **Soybean Research**—Glidden's emphasis on research and new products is particularly evident in its Soya Products Division. Among the achievements of its research chief, Dr. Percy L. Julian (picture, page 40), is the synthesis of the sex hormones, progesterone and testosterone, from the soybean. This development has led Glidden into a patent-infringement suit by the Schering Corp.; Schering holds patents on a method of making progesterone from an alcohol obtained from the spines of cattle. The suit is scheduled to come to trial in Chicago in January, but an out-of-court settlement is predicted.

Another of the soya division's important products is lecithin, used in numerous industries (BW—Nov. 9 '46, p31).

• **The Other Divisions**—Glidden's naval stores division produces tars and resins.

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in Wiring
points to—*



—AND more and more buyers point specifically to *National Electric* trade names like those listed below when job material lists are being made up:

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turpentine, solvents, synthetic rubber compounds, and compounds for plastics. It has led the way in modernizing the age-old naval stores industry.

The company's Metals Refining Co. Division at Hammond, Ind., makes cuprous oxide used in barnacle-destroying ship coatings; powdered iron, lead, and tin; and type metal.

Glidden's other activities include joint operation of the Growth Products Co. at Pascagoula, Miss., which produces growth factors for stock and poultry feeds from "fish stick" water—a waste product of fish-oil processing that used to be thrown away; and joint operation of the Zinc Chemical Co. which makes and markets the zinc crystals used in insecticides.

Probably not even Adrian D. Joyce, founder and board chairman, could name offhand all the products Glidden manufactures. The paint division, for example, produces soapless cleaner, floor wax, polishes, insecticide, weed killer, and other household specialties (BW—May 3 '47, p 58). Nearly every division of the company has a similar list of subsidiary but important products.

• **Personnel**—The growth of the Glidden Co. in its brief 30 years is a tribute to Adrian Joyce, an alumnus of paint-competitor Sherwin-Williams Co. In 1917, Joyce and several of his associates bought the old Glidden Varnish Co. From this small start, the present sprawling giant has grown.

Now 75, Joyce still actively guides the company as chairman of the board of directors. R. H. Horsburgh, vice-chairman of the board, is the only other executive remaining of the company-founding group. Dwight P. Joyce, son of the founder, was elected president a year ago (BW—Feb. 8 '47, p 72).

One of the striking characteristics of the older Joyce's leadership has been his insistence that the company utilize apparently useless raw materials. For example, the fume dust from which Glidden's lithopone is made was once a waste product. Other examples are the feeds from "fish stick" water; the wide use of formerly wasted portions of the soybean; and the materials used by Metals Refining Co. in making the powdered metals which are its major product.

• **In Good Health**—Financially, Glidden is in the soundest position in its history. Prepayment of a \$7-million balance on a \$10-million bank loan last October leaves Glidden entirely free from borrowings. Sales for the fiscal year ended Oct. 31, 1947, are estimated at \$185-million, up from about \$122-million in fiscal 1946.

Plant modernization and expansion are being pushed. Expenditures in 1948, including a new \$750,000 laboratory in Chicago, will be in the neighborhood of \$2-million.