

WILLIAM HENRY PERKIN—*Shown in this old photograph is William Henry Perkin (1838-1907), who created the first synthetic dye, mauve, in 1856. Many years after his original discovery, honors were heaped upon him, including knighthood.*

stuffs used in ancient times were discarded, so that only a few survived.

Natural dyes are seldom used today. Chemical dyes, discovered in the last century, have proved so popular there is little demand for the old time favorites such as indigo (blue), madder (red), woad (blue), logwood (purple), fustic (yellow), and tumeric (yellow).

European chemical manufacturers quickly seized the opportunities opened by Perkin's discovery of synthetic dye.

The Germans, particularly, learned from the British and built, with government support, an industry that until 1914 had a virtual monopoly on the manufacture of dyestuffs.

When foreign sources of dye were cut off from the United States during World War I, chemical manufacturers in this country began making dyes.

Today, the United States has a dye industry that is unsurpassed.

Research in dyes is continuing and new types are still being developed. At the present time, there are more than 1,000 separate dyes that include all the colors of the spectrum, with degrees of fastness capable of meeting almost every normal requirement.

The dye industry has contributed more than color. Research in dyes developed a whole array of important organic chemical products.

Explosives that increase ability to wage war arose out of research on nitrated com-

pounds, which are close in structure to dyes.

Many photographic chemicals, perfumes, flavorings and insecticides had their start in dye chemistry.

Synthetic camphor, so important in the making of plastics and for medicinal purposes, was developed in a dye research laboratory.

The raw materials and intermediate chemicals used in dye manufacture provide a broad range of modern medicinal chemicals. Drugs of the "sulfa" family and atabrine, the anti-malarial, are notable examples.

Other new commercial products, although not directly related to dye research, are being developed as a result of engineering research and experience gained through dye production.

SCIENCE SERVICE has prepared a kit containing a sample of Perkin's mauve dye, a swatch of material dyed mauve, and an undyed swatch of material. There are also samples of four other types of dyes: acid, direct, vat and disperse. A booklet accompanying the kit describes simple experiments that can be performed with the dye samples to demonstrate their unique qualities.

These kits are available for the curious-

minded at 75 cents each, or three for \$1.50, from SCIENCE SERVICE, 1719 N St., N. W., Washington 6, D. C. When making a request, ask for the Dye Unit.

Science News Letter, September 8, 1956

MEDICINE

Heart Drugs Hunted In Costa Rican Plants

► FROM THE JUNGLES of Costa Rica there is hope that new heart drugs and new sources of old remedies can be brought to America's clinics.

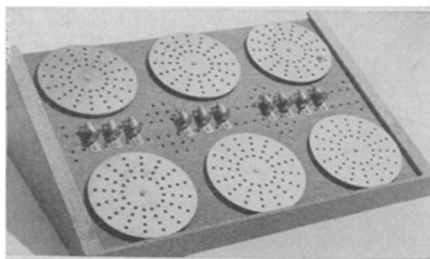
Dr. Bernice G. Schubert of the U. S. Department of Agriculture's Plant Industry Station, Beltsville, Md., told the American Society of Plant Taxonomists meeting at the University of Connecticut about making 600 collections of plants during two "alkaloid-hunting" expeditions to Costa Rica this year and last.

The National Heart Institute of the U. S. Public Health Service is testing the promising plants collected and identified by Dr. Schubert.

Some of the plants collected were those used medicinally by natives and in this way recommended for scientific attention.

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