

BOTANY
**NATURE
RAMBLINGS**



Dutchman's Breeches

➤ AMONG THE earliest of our wild flowers, and among the flowers most delightful to children, are the "Dutchman's breeches." Many fancied resemblances for which flowers have been named require a considerable stretch of the imagination, but here the likeness is too obvious to escape. If there are nationalities among fairy folk, we know where the fairy "Vrouwen" hang their little boys' small clothes to dry.

It surprises some people a little to learn that these flowers, so unlike poppies in superficial form, are fairly closely related to them botanically. But there are marks of resemblance, nevertheless. The sepals, or outer green parts of the flower, are evanescent in poppies, falling off very easily. So also in the Dutchman's breeches, the sepals vanish as soon as the buds open. Again, the petals of the Dutchman's breeches are short-lived, as are also those of the poppy.

If you cut across the seed-pod of the two flowers, you will see a certain resemblance between the structure and arrangements of the reproductive parts. Another sign of the relationship can be found in the bitter taste of the sap, though that of Dutchman's breeches does not, like the juice of the poppy, contain a poisonous principle.

This dainty little plant grows best in rich soil. You can often find it hiding

away in rich leaf mold accumulated between boulders and in rock crevices in deep, moist woods. Its leaves, very pale on the underside, all come directly from the ground. The leaves have three main divisions, all of them finely cut.

When big bumblebees visit the blossoms, their weight sometimes bends the delicate clusters to the ground. The bumblebees and long-tongued butterflies are its most frequent guests, however, for short-tongued insects cannot sound the depths of its nectar cups.

Closest botanical relatives of Dutchman's breeches are the squirrel-corn of the woods and the bleeding heart, that old favorite of our grandmothers' gardens. These three flowers belong to the same genus, known to botanists as *Dicentra*, a Greek name meaning two-spurred. They are thus botanical first cousins, while the poppy is related only as a second- or third-degree-removed kinsman.

Science News Letter, April 2, 1955

MEDICINE

Hormone Reaction Gives Cancer Detection Clue

➤ A LEAD to a cancer detection test for some kinds of cancers is seen in the reaction of men with cancer of the prostate to large doses of anti-arthritis cortisone.

Such patients, when given cortisone, excrete large amounts of the chemical scientists call 17-ketosteroid. Healthy persons and men sick with non-cancerous conditions excrete only normal amounts of 17-ketosteroid after large doses of cortisone.

This finding by Drs. Joseph E. Sokal, Philip K. Bondy, Pasquale J. Costa, Clyde L. Deming and B. Marvin Harvard Jr., of the Yale School of Medicine, was announced by the American Cancer Society.

The scientists have reached no conclusion yet about the value of this discovery as a method of detecting cancer. They are certain by now, however, that it will not show up all kinds of cancer.

Science News Letter, April 2, 1955

INVENTION

Indicator for Tire Pressure Patented

➤ A GAUGE permanently attached to the valve stem of a tire to show the pressure of the tire has been patented. The device is also made so that the tire can be inflated through it, without removal from the valve.

Working by means of a calibrated spring, when the pressure in the tire is too low, a colored indicator pops up beneath the transparent glass cover on the gadget. If the pressure is just right for the tire, the colored indicator is not visible. The pressure indicator was invented by Ellwood F. Riesing of Dayton, Ohio, who assigned the patent rights to the General Motors Corporation of Detroit, Mich. The invention was awarded patent No. 2,704,045.

Science News Letter, April 2, 1955

OPTICAL BARGAINS



SPITZ JR. PLANETARIUM
LATEST MODEL! One of the Greatest Scientific Toys We Have Ever Offered! Projects nearly 400 stars, more than 70 constellations in their correct relationships. Use it in any darkened room of the house, project it on the ceiling. No batteries, works on ordinary household current. Rheostat control for brightness.

32-page book included free of extra cost. Contains valuable information about the stars, provides easy identification of the constellations. About 14" high on a 7" x 7" base. Projection sphere 7" diameter. Illuminated Pointer included FREE! Weight 3 lbs.
Stock No. 70,040-Q \$14.95 Postpaid

4 1/4" "Palomar, Jr." A REAL ASTRONOMICAL REFLECTING TELESCOPE \$74.50



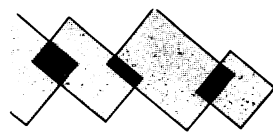
With this scope you can see the craters on the Moon, the rings of Saturn, double stars, or a newspaper headline at a mile! Mirror guaranteed to give theoretical limit of resolution. Rack and pinion focusing removable mirror mount, counterweight. Real equatorial mounting—only one adjustment follows stars! Aluminum tube. Combination eyepiece gives 57 and 115 powers. Takes standard eyepieces for greater power. Mirror f/11. Mirror corrected to better than 1/4 wavelength.

Stock No. 85,008-Q . \$74.50 f.o.b. Barrington, N. J.

"MAKE-YOUR-OWN" 4 1/4" MIRROR KIT

The same fine mirror as above, polished and aluminized, lenses for eyepieces and diagonal. No metal parts.
Stock No. 50,074-Q \$16.25 Postpaid

POLARIZING FILMS



Exclusive Buy! You Can't Buy Them Anywhere Else—At Anywhere Near These Amazing Low Prices!

HUNDREDS OF APPLICATIONS! In photography, telescoping, etc. Use two pieces to make your own polariscope. For telescope enthusiasts, a polarizing screen is helpful in eliminating "planetary glare." Get some today—find out how useful polarizing material can be in your work or hobby.

Stock No. 50,089-Q—1 sheet, 12" x 12", best grade \$3.00 Postpaid
Stock No. 50,090-Q—2 sheets, 12" x 12", best grade \$4.00 Postpaid
Stock No. 60,036-Q—1 sheet, 12" x 12", imperfect grade \$1.50 Postpaid
Stock No. 60,037-Q—2 sheets, 12" x 12", imperfect grade \$2.00 Postpaid
(Best grade may have slight imperfections—still plenty of good, useful area.)

New! 2 in 1 Combination! Pocket-Size 50 POWER MICROSCOPE and 10 POWER TELESCOPE

ONLY \$4.50 p.p.d.



Useful Telescope and Microscope combined in one amazing, precision instrument. Imported! No larger than a fountain pen. Telescope is 10 Power. Microscope magnifies 50 Times. Sharp focus at any range. Handy for sports, looking at rare objects, just plain snooping.

Send Check or M.O. Satisfaction Guaranteed

Order Stock No. 30,059-Q . \$4.50

50-150-300 Power MICROSCOPE
Low Price Yet Suitable for Classroom Use! Only \$14.95
3 Achromatic Objective Lenses on Revolving Turret!

Imported! The color-corrected, cemented achromatic lenses in the objectives give you far superior results to the single lenses found in the microscopes selling for \$9.95! Results are worth the difference! Fine rack and pinion focusing.
Stock No. 70,008-Q . \$14.95 Postpaid

WE Have Literally Millions of WAR SURPLUS LENSES AND PRISMS FOR SALE AT BARGAIN PRICES. ALSO DOZENS OF LOW COST IMPORTED INSTRUMENTS.

Write for Catalog "Q"—FREE!
Order by Stock No. Send Check or M.O.
Satisfaction Guaranteed!

EDMUND SCIENTIFIC CORP.
BARRINGTON, NEW JERSEY

YOUR HAIR

Its Health, Beauty and Growth

By Herman Goodman, M.D.

A medical specialist tells you what to do to save and beautify your hair, stimulate healthier hair growth, and deal with many problems, as: Dandruff—gray hair—thinning hair—care of the scalp—baldness—abnormal types of hair—excessive oiliness—brittle dryness—hair falling out—infection—parasites—hair hygiene—glands—diet—coloring—and myriad other subjects concerning hair.

"Discusses the many problems of hair retention, regrowth and removal."—Science News Letter.

287 pages—PROFUSELY ILLUSTRATED!
Price \$2.95, Postfree. 5-Day Money-Back Guarantee

EMERSON BOOKS, Inc., Dept. 400-K
251 W. 19th Street, New York 11

