First Glances at New Books

AMERICAN ANNUAL OF PHOTOGRAPHY—Edited by F. R. Fraprie and E. J. Wall—*American Photographic Publishing Co.* ($1.50). In this, the 42d volume of a classic photographic work, the standard of previous years is well preserved. Of particular interest to scientific readers are the articles by Dr. Wightman on the latent image, one by Dr. Wightman and Dr. Trivelli on photomicrography, the latter with some splendid illustrations, and one by Dr. Wall on water as a chemical. Dr. Wall also reviews the year's work in photographic technique. The numerous illustrations, examples of modern pictorial photography, are of interest to all.

Science News-Letter, January 7, 1928

OUR TIMES — Mark Sullivan—*Scribner's* ($5). The social evolution of *Homo americanus* during the past quarter-century. There is certainly no other species that has ever changed its habits so much in so short a time.

Science News-Letter, January 7, 1928

ZWEITE SAMMLUNG ASTRONOMISCHER MINIATUREN—Elis Strömgren and Bengt Strömgren—*Berlin: Julius Springer.* A group of brief papers from the director of the international clearing house for astronomical discoveries.

Science News-Letter, January 7, 1928

WHITE LEAD—International Labour Office at Geneva — *World Peace Foundation* ($2). Data collected by the International Labour Office in regard to the use of white lead in the painting industry.

Science News-Letter, January 7, 1928

ANNUAL REPORT OF THE SECRETARY OF LABOR, 1927—*Government Printing Office.* Secretary Davis presents the status of labor for the fiscal year ending June 30, 1927.

Science News-Letter, January 7, 1928

ANNUAL REPORT OF THE SECRETARY OF THE INTERIOR, 1927—*Government Printing Office* (40c). Secreeary Work tells of the year's activities in this most diversified of the Government departments.

Science News-Letter, January 7, 1928

THERMIONIC PHENOMENA—Eugène Bloch—*Dutton* ($2.50). With the development of modern radio technique that has been made possible by the emissions from hot filaments, thermionic phenomena have assumed an importance they never before enjoyed. Here is a brief, but complete, treatise on the theory and application of the subject.

Science News-Letter, January 7, 1928

BIOLOGY

NATURE RAMBLINGS

By FRANK THONE

Geranium

Of all the bright flowers that can be raised indoors to keep us cheerful while we wait for spring to return, none is more easy to raise than the old-fashioned favorite, the geranium. The geranium can get along with almost any kind of soil in any kind of a pot, on any kind of watering short of none at all. It roots readily from cuttings, and grows at a pace that would make it a noxious weed if it were capable of withstanding outdoor conditions during the winter. And it comes into bloom readily and copiously, with bright, sturdy colors, predominantly red. A very comfortable, thrifty, bourgeois sort of a plant.

The geranium of our indoor gardens, however, is really parading under a half-stolen name. By rights the title belongs to the wild geranium of the woods, and to its wild European relative, which was known to the Greeks many centuries ago. Geranium is a Greek word, and means a crane. The name was given to the plant because of its slender, pointed seed pods.

Our indoor geraniums, to be sure, are related to those true, "cranesbill" geraniums; but they were not known in Europe until after the early exploration and settlement of South Africa, their native home. Even their seed pods show the kinship, for they also are sharp and pointed, though not so slender as those of the wild geraniums. Hence the plant has been christened "Pelargonium," which means "stork-bill." But for ordinary familiar purposes the Pelargonium will be a Geranium still.

Science News-Letter, January 7, 1928

How a whale can stay below water at great depths without discomfort from the great pressure has never been understood.

Sea bathing was recommended in 1795 as a cure for goiter, with a diet of "salted fish and vegetable acid, particularly cyder."

ZOOLOGY

Feathers Depend on Skin

When a piece of skin from a White Leghorn chicken is grafted on a grey Barred Plymouth Rock, the grafted section of epidermis continues to bear white feathers even in its new surroundings.

This discovery, made by Prof. C. H. Danforth of Stanford University, assisted by Miss Frances Foster, opened the way for the study of some of the controlling influences in the production of feathers, Prof. Danforth said.

"It has been found," Dr. Danforth explained, "that a number of the characteristics of feathers are controlled by factors which are inherent in the skin, or feather follicles themselves, rather than by general constitutional peculiarities of the breed as a whole. The reason why chicks of some breeds produce a good covering of feathers rather young, while other breeds are slow in this respect, is found to be due in a large measure to inherent characteristics of the skin itself. Barring, mottling and penciling which might have been ascribed to nervous or constitutional influences are found in general to be due to factors that are resident in the feather follicles.

"It is not something about the Plymouth Rock *as an entire organism* that gives it a barred plumage, but an inherent rhythmicity in the color producing function of its individual follicles. When the union of host and grafted skin is good, feathers typical of two entirely different breeds may grow side by side with even less space intervening than is normally present between two adjacent feathers.

"At the same time evidence has been found in some cases of a certain amount of incompatibility between graft and host tissues and feathers produced by grafted skin may be greatly influenced by the endocrine condition of the host, as revealed especially by secondary sexual characteristics. Thus skin from a Leghorn male grafted on a Plymouth Rock female produced feathers characteristic of a Leghorn *female.*

"The rare appearance of a mosiac feather which reveals characteristics of both the donor and the host suggests a parallelism with hybrids in plants, and indicates that cells of very different lines of descent may join harmoniously with one another in the production of a single feather."

Science News-Letter, January 7, 1928