pursue a course which leads to the so-called general education, and the question naturally arises, what place has botany in such a scheme of equipment for life ?

To the average college graduate few if any of the sciences can be said to be directly useful, they profit him largely in the breadth of view which they give, and the pleasure they are able to furnish in their contemplation or pursuit. In these latter respects one can scarcely conceive of a science which would rank higher than botany. There are certainly no phenomena which are met with more frequently by the non-professional than those which appertain to plants and plant life. Without becoming sentimental one may say with truth that to one who has an intimate knowledge of this field of nature the world around us takes on a new aspect, and new truths can be discovered and added daily to the fund already acquired. But it is on account of the peculiar adaptability of botany to teaching, that the science should appeal to the smaller institutions.

That science is best adapted to teaching which is able to present its material at first hand for investigation, and whose truths are within the ability of the student to discover.

The material for botanical study is abundant everywhere, and presents problems in a measure peculiar to each region. The early stages of investigation in the science are not difficult and do not require expensive apparatus. The live teacher who sends his students to the field and not to books, will find in botany a science in which enthusiasm can be aroused and progress made without an expensive outfit.

In the planning of our college courses in botany one must needs bear in mind two classes of students, those who are to go on with the science and those who pursue it as one of the elements of a general education. It is the former class who too frequently suffer in the average college.

The courses should be given in such a manner as to give the student who wishes to pursue the science in a university a foundation which does not need repeating because it is antiquated or abbreviated. In this way I believe the small colleges can be made centres of enthusiasm for botanical science, which will materially advance its teaching and its standing in this country.

It is to be hoped that botany will one day take its place in the curriculum of the small college as one of its most important constituents for the training of men. X.

## AMONG THE PUBLISHERS.

"CAMP-FIRES of a Naturalist" is the title of a forthcoming book which sketches big-game hunting in the west from a fresh point of view. The author describes the actual adventures and experiences of a naturalist, Professor Dyche, of Kansas University, who has hunted from Mexico to the northern confines of British Columbia, pursuing grizzly bears, mountain sheep, elk, moose and other rare game. As an outdoor book of camping and hunting this possesses a timely interest, but it also has the merit of scientific exactness in the descriptions of the habits, peculiarities and haunts of wild animals. The author is Mr. Clarence E. Edwards, and the book is to be published immediately by D. Appleton & Co., with many illustrations.

--Professor Charles S. Minot's "Human Embryology" is announced to be translated into German. The translation is being made by Dr. S. Kæstner and will be published by Messrs. Veit of Leipzig. The author has revised the entire work for the German edition and has made a series of changes and additions, which will render the translation practically a new edition. Among the changes is the making of a new chapter in the Introduction, giving a complete account of the external development and growth of the human embryo through all stages. References have also been added to important papers published since the original American edition was issued. The honor of a German translation has hitherto been accorded very rarely to American scientific works.

## Delicious Drink.

## Horsford's Acid Phosphate

with water and sugar only, makes a delicious, healthful and invigorating drink.

Allays the thirst, aids digestion, and relieves the lassitude so common in midsummer.

**Dr. M. H. Henry,** New York, says: "When completely tired out by prolonged wakefulness and overwork, it is of the greatest value to me. As a beverage it possesses charms beyond anything I know of in the form of medicine."

Descriptive pamphlet free.

Rumford Chemical Works, Providence, R. I. Beware of Substitutes and Imitations.

Address N. D. C. Hodges, 874 Broadway, New York.] A complete set of Bulletins of U. S. Geological Survey, various reports and bulletins of surveys of Missouri, Arkansas, Minnesota, Alabama, Illinois, New York, Pennsylvania, Indiana, Ohio and Texas; iron ores of Minnesota; Wailes' Agriculture and Geology of Mississippi (rare). To exchange for periodicals and books on Entomology of for Lepidoptera. Rev. John Davis, the Deanery, Little Rock, Ark.

Exchanges.

[Free of charge to all, if of satisfactory character.

For solar bavis, the bearlety, inthe brock, int. For sale or exchange.—A complete set of the report of the last Geological Survey of Wisconsin, T. C. Chamberlin, geologist. It consists of four large volumes, finely illustrated, and upwards of forty large maps and charts. Will sell for cash or exchange for a microscope. Address Geo. Beck, Platteville, Wis.

riatteville, Wis. For sale or exchange for copper coins or rare postage stamps. Tryon's American Marine Conchology, containing hand colored figures of all the shells of the Atlantic coast of the United States. Presentation copy, autograph, etc. One vol., half morocco, 8vo, usual price, \$25, postpaid, \$15. Botany of the Fortieth Parallel of the Hundredth Meridian of the Pacific R. R. Survey. Other Botanical works and works on Ethnology. F. A. Hassler, M.D., Santa Ana, Cal. I have a fire-proof safe, weight 1150 rounds

I have a fire-proof safe, weight 1,150 pounds, which I will sell cheap or exchange for a gasoline engine or some other things that may happen to suit. The safe is nearly new, used a short time only. Make offers. A. Lagerstrom, Cannon Falls, Minn., Box 857.

For exchange.—Hudson River fossils in good condition from the vicinity of Moore's Hill, Ind., also land and fresh water shells. Desire fossils and shells from other groups and localities. Address Geo. C. Hubbart, Moore's Hill, Ind.

Geo. C. HUDDAr1, Moore's Hill, Ind. For sale at low price.—A fine old-fashioned photographic camera, rosewood box, one foot square, lenses, four inches diameter, made by C. C. Harrison. Plateholders, troughs, baths, etc., all in large wooden case, formerly the property of the late President Moore, of Columbia College. This is a fine example of an instrument of the best make for the old wet-process methods, and valuable to any institution or amateur interested in the history of photography in the U. S. Address M. S. Daniel, 236 W. 4th St., New York. I wish to exchange a collection of 7.000 shells.

I wish to exchange a collection of 7,000 shells, 1001 species and varieties, American and foreign, 1and, fluviatile and marine, for a good micro-cope and accessories. Address, with particulars, Dr. Lorenzo G. Yates, Santa Barbara, California.

W GMCS. WANTED.—Assistant in Nautical Almanac office, Navy Department. The Civil Service Commission will hold an examination on August 15 to fill a vacancy in the position of assistant (computer) in the Nautical Almanac office. The subjects will be letter-writing, penmanship, trigonometry, rudiments of analytical geometry and calculus, and astronomy. Each applicant must provide himself with a five-place logarithmic table. The examination will be held in Washington, and if applications are filed in season, arrangements may be made for examinations in the large citles. Blanks will be furnished upon application to the Commission at Washington.

Wants.

sion at Washington. DRAFTSMEN WANTED.—The Civil Service Commission will hold examinations on August 15 to fill two vacancies in the War Department; one in the position of architectural draftsman, salary \$1,400, the other in the position of assistant draftsman, Quartermaster General's office, salary \$1,200. The subjects of the architectural draftsman examination are letter-writing, designing specifications and mensuration, and knowledge of materials; of the assistant draftsman examination they are letter-writing, tracing, topographic drawing and projections. The examination will be held in Washington, and if applications are filed in season. arrangements may be made for examinations in the large cities. Blanks will be furnished upon application to the Commission at Washington.

A YOUNG man who has been through the course in mathematics in Princeton University, wishes some tutoring this summer. Rates reasonable. Address P. H Westcott, Cramer's Hill, Camden Co., N. J.

A GRADUATE of an American Polytechnic institution and of a German university (Göttingen), seeks a position to teach chemistry in a college or similar institution. Five years' experience in teaching chemistry, Address Chemist, 737 Cary St., Brockton, Mass.

A N experienced teacher in general biology wishes A a position in a first-class college or university. Three years in post-graduate study. Extensive experience. Strong indorsements. Address E. W. Doran, Ph.D., 1327 G St., N. W., Washington, D. C.

THREE teachers wanted for a male and female seminary in central New York. Typewriting, etc., languages, mathematics, sciences, et. al. Send stamp with and for particulars. Box 701, Hempstead, L. I.