

they made many false starts and experiments that ended in failure, but finally they did succeed in making fairly good "iron silkworms," and these are today pushing the natural silkworms hard for their share of the glossy-fabric business. For rayon threads and all their silky synthetic kin are made by first digesting vegetable material (cellulose) with acid into a gluey mass more or less like the stuff secreted by a spider's or a caterpillar's silk gland, and then squirting it out through microscopic holes and letting it harden into fine fibers which are then twisted into thread or yarn.

The old classic legend has it that the goddess Athene, being challenged to a contest in weaving by a mere mortal woman named Arachne, turned her presumptuous rival into a spider. Athene was credited by the Greeks with having taught the daughters of men how to spin and weave. But it would seem that after long ages Arachne has had her revenge: she has taught mankind a secret that not even Athene knew.

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STANDARDS

Bureau of Standards Urges Use of Informing Labels

IN ACCEPTING commercial standards projects the U. S. Bureau of Standards will give priority to those in which producers are willing to label their products guaranteeing compliance with standards. This move, just announced by Director Lyman J. Briggs, is taken to give maximum service to the consumer in over-the-counter trade.

In a letter addressed to those interested in simplified practice and commercial standards, the Director announced that it has been decided to continue this type of work at the Bureau of Standards, in cooperation with the American Standards Association and other organizations and groups.

Some months ago, it was announced by the Secretary of Commerce that certain of these activities would be transferred to the American Standards Association, but this plan is now modified.

"The work has an added importance at this time because of the need for reference to standards of dimensions and quality in the NRA codes for fair competition," Dr. Briggs said.

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There are 225 languages spoken in India.

First Glances at New Books

Zoology

HANDBOOK OF FROGS AND TOADS—Anna Allen Wright and Albert Hazen Wright—*Comstock Pub. Co.*, xi+231 p., \$2.50. This is a book for which thousands of biology teachers in high schools and colleges all over the country have been waiting. It gets together into one place all present available taxonomic and biological information about the Salientia, keys them out, describes them fully, and backs up description with beautifully definite photographic illustrations. The specified range is the whole of the United States and Canada, but excursions are made into the tropics with descriptions of such interesting species as the giant *Bufo marinus*. The book is announced as volume 1 of a new series: Handbooks of American Natural History. If succeeding volumes hold up to the standard set here, they will be valuable indeed.

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Nature Study

NATURE CHATS: A YEAR OUT-OF-DOORS—John Harvey Furbay—*Science Press*, xv+255 p., \$1.75. This book is just what its title implies: chatty, discursive essays on all manner of out-of-door things, arranged season by season and week by week. It is well adapted for school use with more mature students, or it can be used to advantage and with pleasure by the solitary reader. Useful supplements tell how to collect and preserve biological specimens, suggest study projects, etc.

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Medicine

THE PREGNANT WOMAN—Porter Brown—*Eugenics Pub. Co.*, 174 p., \$2. The author of this book, a physician, discusses the subject clearly, simply and thoroughly. Physiology and anatomy, diagnosis and general care during pregnancy and childbirth, sex education and the foolishness of old superstitions regarding pregnancy are all included.

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Biochemistry

THE LYOPHILIC COLLOIDS (THEIR THEORY AND PRACTICE)—Martin H. Fischer and Marian O. Hooker—*Charles C. Thomas*, 246 p., \$4.50. This is a technical discussion of the authors' theory, their fifteen-year research on the subject, and some applications to problems of applied chemistry and of biology and medicine.

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Geography

POLAND PAST AND PRESENT—Stefan Karski—*Putnam*, 160 p., \$2. An informative book, telling in plain fashion facts about a country perhaps less widely known than most European lands. Among the topics covered are the history of Poland, its government, finances, literature, arts and sciences, agrarian reform, social legislation, religion, and education.

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Archaeology—Ethnology

THE HISTORIC TRAIL OF THE AMERICAN INDIANS—Thomas P. Christensen—*Laurance Press Co., Cedar Rapids, Ia.*, 193 p., cloth \$2, paper 65c. A very successful effort to pack into small space essential facts about the Indian. The author stresses the historic angle and carries his survey forward from conditions as they were in pre-Columbian times to the conflicts with white men, and finally to the Indian of today. Both North and South American Indians are included, and a wide range of information is covered.

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Physics—Chemistry

MOLECULAR HYDROGEN AND ITS SPECTRUM—Owen Willans Richardson—*Yale*, 342 p., \$3. The hydrogen molecule H_2 is the simplest of all molecules and it was one of the first structures found to be inexplicable on the old quantum mechanics. The author, whose name occupies a firm position in the development of modern physics, and who is Yarrow Research Professor of the Royal Society and upon the faculty of King's College, London, treats the spectrum of the hydrogen molecule exhaustively in this compilation of the Silliman lectures delivered at Yale. Incidentally, the hydrogen molecule should not be confused with double weight hydrogen (heavy hydrogen or deuterium).

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Psychology

CHILDREN'S FEARS, DREAMS, WISHES, DAYDREAMS, LIKES, DISLIKES, PLEASANT AND UNPLEASANT MEMORIES—Arthur T. Jersild, Frances V. Markey, and Catherine L. Jersild—*Teachers College, Columbia Univ.*, 172 p., \$1.75. A study of 400 children aged 5 to 12 conducted by means of intimate personal conversation with each child alone. A rare view of the child mind.

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