

the price of zinc, but since the outbreak of the European war it has reached more than 20 cents a pound, a price higher than that of aluminum. During the six years from 1908 to 1913, inclusive, the price of Cookson's antimony ranged from 7.45 to 10.31 cents a pound, and the yearly averages ranged from 8.24 to 8.58 cents a pound. Much of the time during the present year the price has been still lower, and toward the end of July it was quoted as 7 to 7.10 cents. Other brands have ranged from 0.25 to 1.25 cents lower. As has been pointed out in the United States Geological Survey's reports, at these prices antimony ores can not be worked profitably under the high labor costs prevailing in the mining regions of the United States unless the deposits are very large and advantageously situated. No deposits of antimony ores have been found in the United States which entirely fulfill these conditions, and as a result practically all the antimony metal used here is imported from European smelters, mostly from England. The ores for these smelters come largely from China, Mexico, France and Austria. So long as the war exists and especially so long as sea traffic is disturbed, the production will be curtailed and prices raised, for the use of antimony in type metals and especially in bearing metals is fixed and will continue. Other uses, such as the making of coffin trimmings, which consume a surprisingly large quantity of antimony and from which there is no secondary recovery, might conceivably turn to aluminum or other metals as substitutes. In the United States deposits of stibnite (antimony sulphide) near Gilham, Ark.; Battle Mountain, Lovelocks and Austin, Nev.; Burke and Kingston, Idaho; Tonasket, Okanogan County, Wash.; Graniteville and San Emigdio Canyon, Cal.; Antimony, Utah; Red Bridge, Ore., and other places are potentially productive in times of prices as high as those now prevailing. A greater benefit than the temporary operation of the mines would probably accrue to this country from the establishment of smelters which would import and smelt Chinese, South American, Canadian and Mexican antimony ores. At present the only reg-

ular antimony smelting in this country is done by a smelter which is said to be a branch of an English smelter.

UNIVERSITY AND EDUCATIONAL NEWS

PROFESSOR ALEXANDER KÖNIG, of Bonn, has presented to the University at Bonn the zoological museum and laboratory which he has erected, to be called the Alexander König Museum. The collections are valued at a million Marks.

It may be noted that it was planned to open the new university at Frankfort-on-the-Main October 18 in the presence of the German emperor.

THE Royal School of Mines in Freiburg, Saxony, said to be the oldest school of technology, will celebrate the hundred and fiftieth anniversary of its foundation in July, 1915.

At Syracuse University, college of medicine, a course in pathology was offered during the summer. The course opened on June 15, and continued for six weeks. It was open to both graduates and undergraduates in medicine. There were daily sessions covering the entire day.

PROFESSOR T. G. ROGERS, of the New Mexico Normal School, of Silver City, has been elected professor of mathematics and assistant dean of the Normal University of New Mexico, at East Las Vegas.

DR. O. C. GRUNER, assistant professor of pathology at McGill University, has resigned and returned to England.

DR. LUDWIG BÜRCHNER, of Munich, has been called to the chair of geography at the University of Athens.

DISCUSSION AND CORRESPONDENCE

A NOTE ON DISTINCTION OF THE SEXES IN PHRYNOSOMA

A SURPRISINGLY small amount of knowledge concerning the embryology and development of the Iguanidæ has been collected. One reason for this is the fact that, for most forms, there is no reliable method of distinguishing the sexes by external characters. This is par-

ticularly true in the case of the familiar, but little studied, "horned toad," *Phrynosoma cornutum*, and undoubtedly many "pairs" which have been shipped north by well meaning collectors have been of the same sex.

In making a study of the stomach contents of *Phrynosomas*, I have had occasion to open some two hundred specimens, trying always to find some connection between external characters and sex. The problem very quickly was solved; and I can affirm, that for this region at least, and during the spring months, the crescent markings on the back of the female are much brighter yellow than those of the male. The difference is very marked, and little or no practise is required to enable one to distinguish the sexes, even without comparison of specimens.

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CAHOKIA OR MONKS MOUND NOT OF ARTIFICIAL ORIGIN

A STUDY of the materials composing the so-called Monks or Cahokia Mound, in Madison county, Ill., establishes, beyond doubt, that it is not of artificial origin, as has been so generally held but that it is a remnant remaining after the erosion of the alluvial deposits, which at one time filled the valley of the Mississippi, in the locality known as the "Great American Bottoms."

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SCIENTIFIC BOOKS

Geology of the Yang-tze Valley (China). By YAMAJIRO ISHII. Bulletin of the Imperial Geological Survey of Japan, Vol. 23, No. 2, Tokyo, 1913, pp. 19 + 157.

There are but few inhabited and easily accessible parts of the globe about which there is a smaller fund of geological knowledge than China. For that reason it is gratifying to note that papers on Chinese geology are appearing with increasing frequency. On the other hand, it is regrettable that some of these do not pos-

sess either the practical utility or the scientific accuracy that is always needed.

Since it is printed in the Japanese language and characters, Mr. Ishii's paper on the Yang-tze Valley will be of little use to nearly all geologists outside of Japan and China. This applies not only to the text, but also to the titles of maps and diagrams. Although there may be some compelling reasons unknown to the reviewer, such as popular demands in Japan, it would be hard to defend on general grounds, the printing of technical scientific papers in any language which is not in more or less general use in the scientific world. Only a geologist can read a technical geologic paper with full understanding and appreciation. Nearly all educated Japanese and Chinese read English, if not also French or German, so that even a paper intended largely for local use in Japan would be quite as intelligible to its readers if presented in one of the more important European languages and it would at the same time be available for foreign students in general. A popular summary in Japanese might be appended for the edification of the few who read only the mother tongue. It is greatly to be hoped that the future tendency in Japan will be away from the practise exemplified in this bulletin.

In the English summary of 19 pages at the beginning of the bulletin, there is an interesting account of the origin of the name Yang-tze-Kiang. This is followed by paragraphs on "Hydrography," and "Mountains and Plains." Under the heading of "Geology," the following table of stratigraphic divisions is given: (a) Quaternary, (b) Red Sandstone formation, (c) Coal-bearing Sandstone formation, (d) Great Limestone formation, (e) Sinic or Metamorphic formation, (f) Gneiss formation, (g) Plutonic rocks, (h) Volcanic rocks. The reviewer is obliged to agree with the author's admission (on page 16) that "our classification of the strata in Yang-tze Valley into the Quaternary, red-sandstone formation, coal-bearing formation, etc., as given above, is not the proper method of classification, because the geological age of each member is so indefinite that one formation may represent older Paleo-