

much easier, how much more reasonable, it is to suppose that a pair of African elands escaped from some passing show, perhaps from one of P. T. Barnum's incomparable aggregations, and fleeing to that mountain side, perished in that fissure! However, the cold fact is that neither our talented physical anthropologist nor any other man knows any more about the number of men in any country during the Pleistocene than he does about the number of Pleistocene elands in North America or the number of chimpanzees that were lived in Europe with the Piltdown man.

The writer wishes to correct two misstatements. In *SCIENCE* of April 12, 1918, on page 371 the statement is made that certain fossils had been found at Wilmington, N. C. Brunswick, Ga., was meant. In the paper in the *American Anthropologist*, Vol. XX., p. 20, it was stated that Dr. Samuel Aughey furnished no details regarding the finding of an arrowhead near Sioux City, Iowa. Details were furnished and the arrowhead was figured.

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WASHINGTON, D. C.,
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SCIENTIFIC EVENTS

RECENT ACQUISITIONS FOR THE LIBRARY AND MAP COLLECTION OF THE ROYAL GEOGRAPHIC SOCIETY

THE *Geographical Journal* reports that the liberality of Mr. Yates Thompson has once more brought some interesting additions to the society's collections. One is an illuminated chart, on parchment, of the coasts of the Mediterranean and western Europe, by a member of the well-known family of Oliva (originally Olives), who migrated from Majorca to Italy and worked as chart-makers during the greater part of the sixteen and seventeenth centuries. Their charts were the lineal successors of the old Portolan charts which so long served the practical needs of seamen, and which continued to be made, long after printed maps and charts had come into general use, as an ornate furniture for the libraries of the wealthy. The present specimen is in excellent condition, and bears the inscription

"Placitus Caloirus et Oliva fecit in nobili urbe Messane, año 1617." It is remarkable for the *duplication*, with but slight variation, of the portion concerned with the Mediterranean coasts, while the Atlantic coasts are shown independently, though with no dividing line, at the left-hand side of the chart. Another interesting gift from the same donor is that of copies, dated 1556 and 1558, of the map of the British Isles, engraved in Italy after the original by George Lily, whose monogram appears on the earliest known specimen, of 1546, preserved in the British Museum. This map was the first printed map of the islands to give a fairly correct representation of the outline of Scotland, though the means by which such an approximation was attained is unknown. It was revised at various dates, and included in Lafreri's famous Atlas. The two versions now presented are almost exactly alike in substance, but the later of the two was entirely re-engraved on a somewhat larger scale, with slightly more ornamentation, and intended to be read with the west, not the north, at the top. In view of the question sometimes raised whether the name "Britain" includes Ireland, it may be noted that in these maps it is distinctly reserved for the larger island only. Other acquisitions have been made at book sales, of which several during the summer were specially important from the point of view of geography. The seventh portion of the great Huth Library was disposed of early in July, and various early works of travel and geography fetched unusually high prices, justified, no doubt, by the exceptional condition of the copies offered. The society secured through Mr. H. N. Stevens, a copy of the rare small quarto Atlas of America by the French cartographer Nicholas Sanson. It is one of four similar volumes devoted to the four larger continents, of which the library already possessed those on Europe and Africa. These volumes consisted of both maps and descriptive text, and were among the earlier productions of their author, anticipating by some years the larger general atlases by which he is best known. Each ran

through several editions, the American volume first appearing in 1556, and being revised in 1657, 1662 and 1667 (?). The copy has a title-page dated 1662, but the maps all bear the date 1657. It may be noted that the volume contains an early mention, in the chapter on Paraguay, of the great Guayra falls on the Paraná river. Copies have also been secured of the first English edition (1708) of François Leguat's "New Voyage to the East Indies," containing a detailed account of his experiences in the islands of Rodriguez and Mauritius, with descriptions and quaint cuts of their remarkable fauna and flora; and of Le Huen's adaptation (with additions describing his own experiences) of Breydenbach's famous "Perigrinationes in Terram Sanctam." This copy is of the third edition, 1522. Lastly, a complete set has been acquired of the great French "Description de l'Egypte," based upon the work of the French scientific men sent to Egypt by Bonaparte at the time of his intervention in that country.

QUICKSILVER DEPOSITS IN THE PHOENIX MOUNTAINS, ARIZ.

THE present exceptional demand for quicksilver in the manufacture of fulminate gives the domestic deposits of this war metal particular interest. Deposits recently discovered in the southern part of the Phoenix Mountains, 10 miles northeast of Phoenix, Ariz., are described in a short paper prepared by F. C. Schrader, just published by the United States Geological Survey. The deposits are easy of access, and being near the rich agricultural region of Salt river valley are otherwise favorably situated for mining. They are being exploited on six or more properties or groups of claims, which lie in a belt, about 3 miles wide, that extends northeastward diagonally across the range.

The rocks in the region are metamorphosed sediments of pre-Cambrian age, chiefly schist, slate argillite, limestone and quartzite. They crop out in narrow parallel zones and dip steeply to the southeast. They are horizontally sheeted and are crosscut by faults, frac-

tures and cleavage. The deposits are in the zones of schist, notably quartz schist and kyanite schist. They are lodelike deposits, some more than a mile long and in places 80 feet wide, which occur along zones of shearing or fracture that are parallel with the lamination of the schists.

The ore minerals are cinnabar and cinnabarite. They are found mostly along the planes of schistosity, forming ore bodies several inches wide and 3 or 4 feet long, but they also occur sporadically in quartz stringers and veinlets. A little native quicksilver has also been reported. Associated with the deposits are copper minerals, especially malachite, chalcocite, and chalcopyrite. The gangue minerals, the chief constituents of the stringers and veinlets, are quartz, calcite hematite, limonite, specularite, kyanite and tourmaline.

The deposits were probably formed by heated solutions or vapors which, ascending through the shear zones, penetrated the interstices of the rocks and deposited their mineral burden as veinlets and films by impregnation and replacement. They are provisionally referred to the Tertiary period, during which volcanism was general in the southwest. Tertiary volcanic rocks occur at several places in the surrounding region.

Although the deposits are but slightly developed, the deepest shaft being but 60 feet in depth, three of the properties yield workable ore that carries 3 per cent. or more of quicksilver. The persistence of the lodes and downward improvement of the ore in the shafts indicate that the ore extends to considerable depths, especially in the oxidized zone.

As the deposits are easily accessible, ore averaging as low as 1 per cent. in quicksilver can no doubt be profitably worked with the metal at its present market price. On one of the properties a retort furnace has been installed and a small amount of commercial quicksilver produced.

The paper describing the deposits, which is published as Bulletin 690-D, under the title "Quicksilver deposits of the Phoenix Mountains," may be obtained by applying to the