

Everyday Electricity

By Joseph R. Lunt, Head of the Department of Science, the Teachers College of the City of Boston.

An interesting and accurate discussion of electricity, supplemented by unusually excellent diagrams and half-tones. Its simple language, practical content, and scientific soundness make it a book of interest to every type of reader, from the enterprising boy to the student of elementary physics. The experiments are easy to set up and understand. The subject is brought up to the minute with a thorough explanation of the radio and of the trans-Atlantic radiophone.

Fabrikoid. 12°, *ill.* 297 pages. \$1.60.

Elementary Electricity and Magnetism

By Dugald C. Jackson, Professor of Electrical Engineering, Massachusetts Institute of Technology, and John Price Jackson, Professor of Electric Engineering, Pennsylvania State College. Revised and enlarged by N. Henry Black.

This book, for seventeen years a standard authority in its field, has been rewritten and enlarged by one of the authors of Black and Davis' *Practical Physics*. The subject matter has been modernized through a treatment of the latest electrical devices, such as the wireless telephone; by placing greater emphasis on commercially and industrially important applications of electricity, such as street lighting and electric railways; and by introducing the latest and most approved electrical theory in all cases where this has undergone change since the appearance of the original edition.

The authors "have in mind two types of readers: first, the student who has had one year's work in physics and who wants a course in applied electricity; and second, the general reader who is interested in or handles electrical machinery and who wants to know how and why it works."

Cloth. 12°, *ill.* 598 pages. \$2.20.

The Macmillan Company

New York
Chicago
Boston

Atlanta
Dallas
San Francisco

Alaska's Fossil Mines—Continued

doubtedly evolved in Africa and Asia, and mammoth and mastodon came to America as immigrants. But the horse is, with equal certainty, an American product that crossed over into Asia, whence it spread during the Stone Age into Europe and Africa. Then it died out on this continent, probably before the coming of man, and was re-introduced by the Spaniards.

The most American of all modern animals, the bison, whose image shares with the Indian head the honors of our five-cent piece, has left here the record of his exodus from Asia, to prepare the way for the copper-colored tribes who followed him and who depended upon him for food, clothing and shelter throughout the whole vast interior plains and prairie country.

It is curious, and may be scientifically significant, to find the bones of the musk-ox at Elephant Point. This strange animal is not an ox, in spite of its name. It could be called the missing link between cattle and sheep but for the obvious fact that it is not missing. So far as known, it is entirely American, though it has some possible cousins in the high mountains of Asia. It seems to be of comparatively recent evolution, for no fossils of it have been found of older than Ice Age date. Will it perhaps some day be possible to trace the trek of the musk-ox across the plains and mountains of Asia to those remote peaks where lives its putative cousin, the takin, or did some relative or ancestor cross over in the opposite direction? The skulls of Elephant Point stare solemnly out of empty eye-sockets, and will not answer yet.

Another possible line of inquiry opens up in the discovery that the Arctic slope of Alaska was free from ice during the days when all of eastern America as far south as the Ohio river groaned under mile-thick glacial sheets. The parts of Alaska fronting on the Pacific were glaciated, but no signs of ice action can be found in the whole vast northern stretches, from the shores of the Arctic sea to the foot of Brooks Range, along whose crest the continental divide runs.

This does not mean that it was not cold in northern Alaska. It may have been intensely cold there in the winter, as it is now in central Siberia, but the snowfall was so scanty that it melted off every summer and did not accumulate from year to year. Glaciers will not form unless there is residual snow, solidified by partial melting and re-freezing, lasting through the summer

and adding new snow to its bulk during the winter.

During the Ice Age, then, the Arctic slope of Alaska was probably as open land as it is now. Yet great animals roamed there, as witness the bones of the mammoths. They were probably in this region during all or most of the glacial epoch.

Were they indifferent to the cold? Did their half-yard hair, deep wool, and thick layers of fat under the skin make them as freeze-proof as the modern musk-ox? Could they fatten up sufficiently during the short summers, and pick up enough fare during the hard, dark winters, to keep in good condition? Or did the privations tell on them at last, and cause dwindling and degeneration to set in?

Whoever first collects some hundreds of mammoth skulls from beneath the frozen soil that underlies the tundras will be able to answer some of these questions. The skulls are there, as surface finds indicate. Beneath the surface there are undoubtedly whole skeletons, and possibly complete frozen elephants, such as have been found in Siberia.

One of those cold-storage mammoths is now the pride of the Lenin-grad Museum. Who will bring its Alaskan brother to an American city?

Science News-Letter, March 29, 1930

Fencing

Fencing has ceased to be merely sport at the University of Pennsylvania, and is being used as a psychological device to bring about a fine adjustment between mind and body.

Exercises developed by Leonardo Terrone, fencing instructor at the university, and Dr. R. T. MacKenzie, of the department of physical education, are so planned as to draw on the student's reserves of mental alertness and at the same time to bring the body closely under control of the mind. One of the innovations introduced by Mr. Terrone is the introduction of both right and left handed fencing. Championships are now held in left handed fencing, and popularity of this branch of the art has spread as far as Brazil. Fourteen colleges now participate in the inter-collegiate league.

Psychology

Science News-Letter, March 29, 1930

When Caesar invaded Britain, he found the Britons using horse-drawn chariots to carry fighters quickly to strategic posts.