SCIENCE

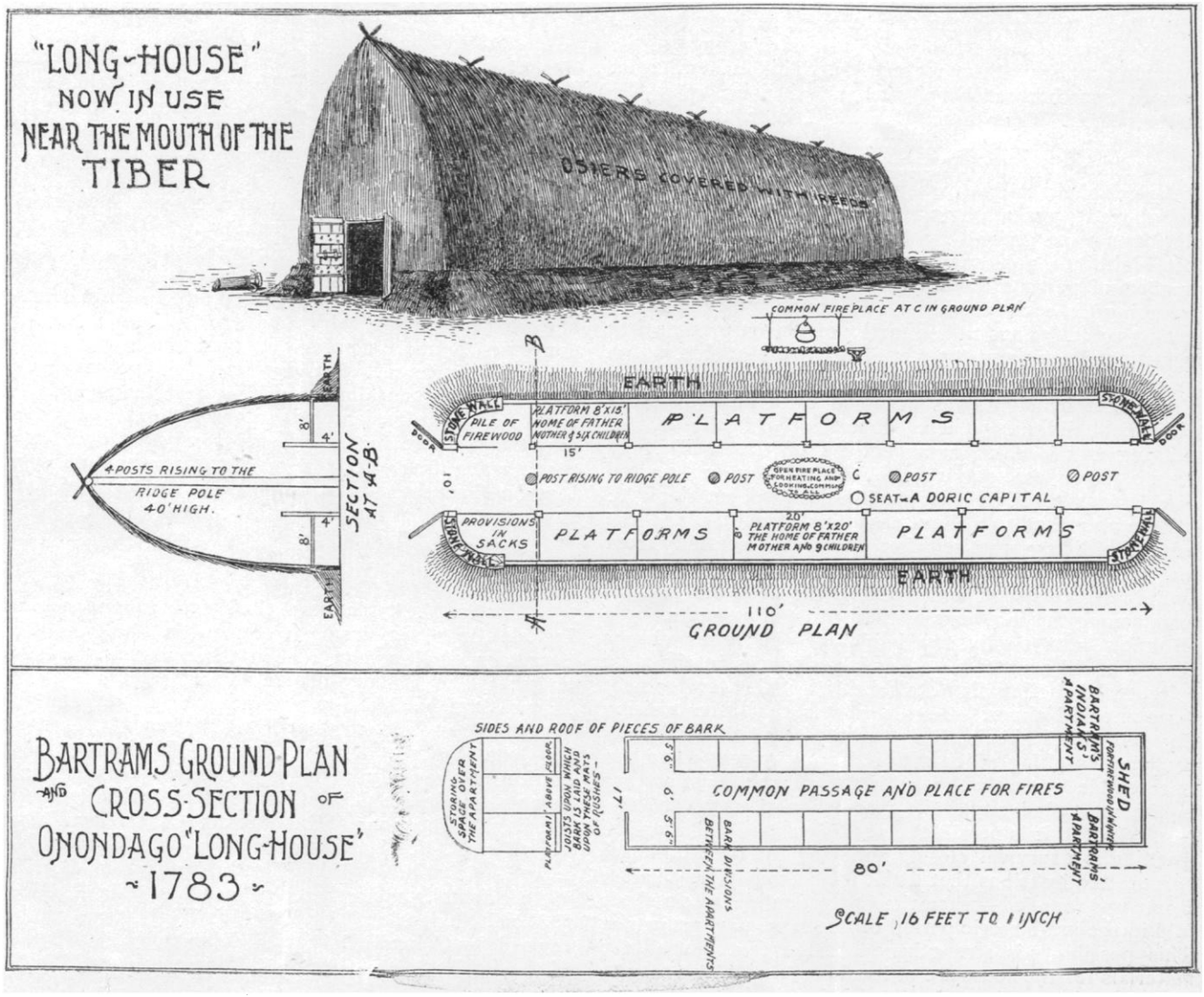
NEW YORK, MARCH 2, 1894.

SOME ITALIAN "SURVIVALS"—A "LONG-HOUSE" IN THE TIBER DELTA.

BY ROBERT H. LAMBORN, PH.D.

AROUND the Eternal City, within easy riding distance, one may study many surprising phases of civilization. Six miles north-eastward across the Campagna from the Porto del Populo, in a secluded valley far from the beaten roads, on the lands of Prince Borghese, I found several families numbering 26 persons, living in caves with their shaggy white dogs. They subsisted by gathering wild chiccory for Roman salad-eaters, and by begging for alms at the city gates. A furlong from this cave is a veritable cliff dwelling. A deep cavity in an almost perpendicular escarpment of tufa rock is reached by a zig-zag path. Its entrance is closed by a swinging bundle of bush, and within, the irregular floor is divided by rough stone walls into pens resembling those in a Colorado cliff-dweller's habitation. On the western slope of the Alban Hills I once dismounted to inspect a flour mill owned by the Cenci family, where the vertical shaft of a horizontal flutterwheel carries the diminutive grinding stone and the water flowing from a historic Etruscan drainage-tunnel shoots down a steep stone channel, and dashing out a sparkling shower, whirls the toy-like wheel with all the prettiness and childish carelessness of force-expenditure that one may see in a New Mexican Indian corn-mill. The shepherds on the broad domain of Prince Torlonia live in beehive-shaped *capanne*, built of brush and reeds almost as simple in construction as the dwelling reared by our western beaver. Their rent they pay weekly by selling ewes' cheese, made over a fire kindled on the earthern floor close to the bunk in which the shepherds sleep.

On April 13, 1888, I rode by the Via Ostia, through the Tiber Valley, to the district where that river divides and enters the Mediterranean. I reached, not far from the sea, the property of Prince Aldobrandini and soon approached his country seat, near which arise



four curious and conspicuous structures, in close proximity to the roadway. At first they seemed to be huge haystacks, the stored herbage of Tiber's fertile delta, but nearer inspection proved them to be houses. It was quickly evident, too, that they did not lack inhabitants, for a number of women and children flocked from an opening in the eastern end of the largest structure, and stood awaiting my approach. I was so strongly reminded of the "Long House" of the Onondaga Indians as given by Morgan (after Bartram) in his "House Life of the American Aborigines," that I handed my reins to a young man who had approached expectantly and entered the open doorway; men and women coming forward with alacrity to show me the interior economy. I was told that this, with the three additional structures, were the dwellings of the laborers on the Aldobrandini estate, and that about 70 of the total population of about 250 found in this house their home. Its form is best shown by the accompanying sketches made in my note book on the spot. It is 110 feet long, about 26 feet wide, and is drawn to a comb about 40 feet above the ground. Vertical and horizontal poles form the framework, upon which are fastened osier walls, overlaid by flags and reeds gathered from the neighboring lagoons, thus producing a wind and rain proof covering. The storms and sunshine of years falling upon this thatch of water plants gradually change their color until the exterior is as black as a stack of clover hay. Only two openings, one at each end, admit you to this windowless house, and these are closed at night by heavy plank doors that are swung together and securely barred. In the corner to the left was a pile of dry faggots, the common property of the community. This fuel is burned upon a hearth that occupies a central point upon the earthen floor. Over a smouldering fire on this hearth a brass kettle was simmering, and a wreath of smoke ascended into the gloomy chimneyless upper-spaces. On both sides of the middle passage way, and raised about four feet above it, was a long platform of rough plank. These platforms were divided by board partitions, about three feet high, into pens varying in length according to the number of persons intended to be accommodated, but averaging for each individual a floor space of about two feet by eight. Thus to one family of eleven persons was apportioned a pen twenty feet long by eight wide, which answered for them every purpose of a home: another, fifteen feet by eight, was occupied by a father, mother and six children. These divisions held the boxes, clothing and sleeping arrangements of the family. In them children were playing, mothers nursing, and several sick persons were lying wrapped in dark woolen blankets.

I see no reason to believe that this structure, and the method of living practised therein, varies essentially from that which existed in the Maremma when Pliny possessed a villa near this spot, and when Cæsar drew his soldiers from among the forebears of these Roman peasants. We all know how slowly the habits of the lower classes change in old countries, and even residences in the most enlightened Italian districts show but little development since imperial times. Göethe relates that after visiting Pompeii with Tishbein, in 1787, he entered a neighboring occupied dwelling which with its furniture seemed to him to resemble perfectly the habitations he had just studied in the mummied city, built more than twenty centuries ago. Indeed it is possible that this curious Aldobrandini dwelling is a survival closely imitating the form of house constructed by tribes that dwelt in this valley long before Rome was founded—when the Capitoline hill was a sheep fold in the pre-historic period of the Ausonian peninsula. This possibility is strengthened by the fact that all the materials for the house are of local production, are easy to transport and require only the simplest tools to assemble and erect, while the result is an enduring and excellent shelter. An additional and striking evidence of the aboriginal character of the structure is the close parallelism shown in the American "Long House" already mentioned, which was habitually built and inhabited by some of our best known savage tribes. For purposes of comparison I have reproduced here Bartram's sketch of the Onondaga "Long House," made on the occasion of his visit to attend a council of that tribe in 1743. It was 80 feet long and 17 feet wide. A common passage, in which the fires were built, ran between two sets of occupied apartments. These apartments were raised about a foot above the level of the passage on two platforms made of hewn saplings, that extended along both sides of the house. They were formed by erecting bark partitions upon the platforms, and one division was allotted to each family. Soft pieces of dry bark and sleeping-mats were spread upon the rough floor, and a fire for each four apartments kept the house warm and served for cooking. Above each fire a vent in the roof allowed the smoke to escape. Extending over the apartments was a sort of second story in which household effects could be deposited. A corner in this dwelling was devoted to the common store of firewood.

"Long Houses," resembling the one pictured by Bartram, are described by Greenbalge, who visited the village of the Iriquois-Senecas near the present site of Rochester, in New York, in 1677. One was about 100 feet in length, made of a strong framework of poles set in the ground and covered with strips of elm-bark tied to this frame with strings. The living apartments were arranged as described in the Onondaga house. Skins, forming curtains, hung over the entrances, and from the roof were suspended bunches of Indian corn ears with their husks braided, and festoons of bits of dried squashes and pumpkins strung upon long pieces of cord.

My visit to this cheerful community in the Tiber delta, I regret to say, was too brief to allow me to enter upon the study of its domestic economy. Valuable material for comparison with the Indian customs would be obtained by investigating how far the property and supplies, such as firewood and food, are procured and held in common, and what household habits had developed to increase the convenience and comfort of families crowded into a place so restricted. But my destination that day was further southward along the blue Mediterranean, to the beautiful Castle Fusiano, with its vast domain of towering pine trees, where for miles one may gallop over smooth roads made fragrant by myrtle and sweet daphne, with long level reaches where the shadows are as profound as those that darken the primeval forests of the Allegheneys.

—Messrs. D. Appleton & Co.'s spring announcements include the "Memoirs of the Baron de Meneval, Private Secretary of Napoleon I.," in three volumes, with portraits; "The History of the United States Navy," by Edgar Stanton Maclay, vol. ii., from the close of the War of 1812 to 1894; "The Life of Edward L. Youmans," by John Fiske; Smith's Classical Dictionary, a new edition, thoroughly revised; "General Washington," a new volume in the Great Commanders Series, by General Bradley T. Johnson; "Creatures of Other Days," by the Rev. Dr. H. N. Hutchinson, author of "Extinct Monsters"; "Symbolic Education," by Susan E. Blow; "Aphorisms from Herbert Spencer," by Julia R. Gingell; "Aërial Navigation," by J. G. W. Fijnje, translated and revised by Colonel George E. Waring, Jr.; "Evolution of the Public School System in Massachusetts," by G. F. Martin.