

lower members of a series of beds which, in the form of an irregular syncline, constitute the ridge known as Blueberry Mountain. The best specimens have been taken from the northern slope of Fitch Hill, the most northern eminence of the mountain. Here the succession of strata² is as follows: (1) A coralline limestone (30 to 50 feet thick)³ resting unconformably upon an igneous foundation;⁴ (2) a calcareous slate (5 to 8 feet thick)³ in which are the impressions of brachiopods and trilobites; (3) limestone, partly dolomitic; (4) coarse feldspathic sandstone (arkose); (5) a thick mass of regularly banded argillites, passing upward into (6) a dark, pyritiferous sandstone. Previous to last summer no fossils had been found above the calcareous slate.⁵

In August, 1911, while engaged in geological investigations which were undertaken through the advice and generosity of Mr. R. W. Sayles, of the Harvard Geological Department, the writer discovered the distorted impressions of brachiopods, probably *Spirifer* or a related genus, in talus at the foot of the "crag," a precipice of the dark sandstone; but the specimens were not well preserved. In continuation of the same work, during the present summer, we chanced upon a fossiliferous sandy layer in the banded argillites, where a north-south road crosses the ridge between Blueberry Mountain and Bald Hill. This spot is two and a half miles from the Fitch Hill exposures of the same series, southwestward along the strike.

Soc. Am., Vol. 15, 1904, pp. 462, 479, 480. Also, by the same author, "The Geology of Littleton, New Hampshire," with an "Article on a Trilobite from Littleton and Notes on Other Fossils from the Same Locality," by A. E. Lambert. Reprint from the "History of Littleton." Published by the University Press, Cambridge, Mass., 1905, p. 38.

² *Op. cit.*, 1904, p. 464, and *op. cit.*, 1905, pp. 15, 34.

³ *Op. cit.*, 1905, p. 34.

⁴ We shall publish a more detailed report on the geology of Fitch Hill at a future date.

⁵ *Op. cit.*, 1904, pp. 479, 481, and *op. cit.*, 1905, p. 31.

Since the lower part of the banded argillites is about 400 feet above the coralline limestone (omitting two thick basic sills which have been injected into the formation), and since this new locality is at least 300 feet above the base of the banded series, these fossils occur stratigraphically 700 feet or more above the Fitch Hill fossiliferous horizon.

The impressions are chiefly of brachiopods. They will be submitted for identification at the close of the field season. Meanwhile we shall make a more extended examination of the argillites.

FREDERICK H. LAHEE

LITTLETON, N. H.,
August, 1912

A PUZZLING PHOTOGRAPH

TO THE EDITOR OF SCIENCE: In the issue of *Collier's Weekly* for August 3, under the caption of "A Prehistoric Peruvian Graveyard," Grace Whitworth gives a halftone picture of a remarkable ossuary which is stated to have been taken from a structure discovered, by some person unnamed, in a tropical jungle on the Ucayali River in Peru. The structure is stated to be a square of 200 feet enclosed by a wall 25 feet high, built "apparently of red clay," with no entrances, and along the top of the wall at regular intervals it is ornamented with vases made of the same material. Inside was an immense mass of human bones free from any superincumbent deposit and mostly in an excellent state of preservation (judged by the picture) and in some parts of the enclosure heaped to a depth of 18 feet. "Some entire skeletons were lying out straight, while thousands of other skulls and bones appeared to have been dragged about, probably by buzzards."

Allowing nine feet for the average depth of the mass and one cubic foot for the space occupied by one skeleton, there should be a total possibly amounting to 72,000 human beings represented by the deposit.

In an ordinary newspaper such a communication might be allowed to pass unnoticed with snake and fish stories, but in the

present instance it seems worth while to give some reasons why it seems practically certain that *Collier's* correspondent has been the victim of a hoax, especially as "an archeologist of repute" in America is stated to have said: "This looks very much as if we should have to begin our research all over again," presumably meaning in South American archeology.

To my mind, there is a probability, almost amounting to a certainty, that the photograph, which is certainly taken from a real scene, represents a structure which is not prehistoric, which is not South American, which is not the work of a savage people, and which is situated not in a tropical jungle subject to a rainy season like the Peruvian Ucayali, but in an arid country probably devoid of vegetation. Where or why it exists is a problem to be solved by some one better posted in Eurasian archeology than the present writer.

The halftone does not lend itself to magnification like an original photograph but it can be seen that the top of the wall is absolutely rectilinear and level, and provided on a bevelled edge with long smooth sloping slabs of some substance, probably stone, roofing it from the weather. These slabs are of uniform length, apparently about fifteen feet, and at their junctions are placed the vases on a presumably flat surface. The latter are of a "classical" design like no product of the American aborigines. No structure with such unvarying lines is known among American prehistoric ruins nor as the product of a people in a state of savagery.

It is notable that there is no trace of tropical or other vegetation in the picture. If some skeletons still remain in a natural position, and no deposit of vegetation or drift of dead leaves and mold has formed on this immense heap of bones, and those in the lower part of the heap seem (from the picture) to be perfectly preserved, it is evident that the deposit can not be prehistoric but is very recent; that it can not have been subject to tropical rains and blown débris for centuries, but must be in an arid climate where bones do not read-

ily decay, and where there is no vegetation of a kind to form a covering of humus.

The picture is interesting enough in itself to be worth an authentic explanation.

WM. H. DALL

SMITHSONIAN INSTITUTION

"TERMS USED TO DENOTE THE ABUNDANCE OR RARITY OF BIRDS"

TO THE EDITOR OF SCIENCE: I sympathize with Mr. John Dryden Kuser's desire to standardize the terms used to denote the abundance or rarity of birds,¹ but it seems to me that the chief difficulty is the inherent one that lies in the personal equation. No two persons can have just the same notion as to the precise meanings of the various terms used. What one calls rare another calls uncommon, and still another, having in mind the relativity of all such terms, may call the species "fairly common,"—for a hawk, for instance, hawks being judged by a different standard from warblers. Undoubtedly the best system is a numerical one when that is possible, the exact or estimated number of individuals observed being noted. That entails, however, in some cases an amount of labor that the observer may prefer to expend in other directions, while for generalizations it is unsatisfactory.

As to the list of terms with synonyms offered by Mr. Kuser, it seems to me that it is open to objection in some particulars. It is not quite clear, for one thing, just what he means when he states that "not uncommon is equal to common." Is he making an arbitrary ruling for his own guidance, or is he stating what he believes to be a fact? Presumably the latter, since he says he limits himself to eight terms, and "not uncommon" is not one of the eight listed. And yet I venture to express the belief that to most ornithologists the term "not uncommon" expresses a status distinctly less common than "common." It comes nearer to "fairly common," but to my mind means less common than that. In short, it seems to me that we can not treat

¹ SCIENCE, June 14, 1912, p. 930.