

familiar. It is true that two or three rings of growth in a tree are often very close together in consequence, perhaps, of adverse seasons, or insect depredations upon the leaves; and this is easy to understand.

It seems therefore not easy to say what can have occasioned this apparently abrupt cessation of vigour in a tree which had previously made good progress, and which again as suddenly renewed its former healthy condition.

Would any extraordinary convulsion of nature be likely to account for the facts of the case? But might we not expect to see evidence of similar catastrophes at various epochs in a tree of such great age? Nothing, however, afterwards appears but ordinary average growth, becoming gradually less with increasing age.

Now the dates given on the part of the section about where the thinning occurs run up comparatively close to, but do not quite correspond with a very remarkable period of the world's history, viz. towards the middle of the fourteenth century. If the tree had ceased to grow for a few years before it was cut, the correspondence would be very close indeed.

About this period many extraordinary particulars are given in Hecker's "Epidemics of the Middle Ages." In this work details occur of the appalling convulsions, terrestrial and atmospheric, to which the world was subjected for some years prior to the outbreak of the Black Death.

Amongst others of a similar tendency the following passages appear.

"Mighty revolutions in the organism of the earth of which we have credible information had preceded it (the Black Death). From China to the Atlantic the foundations of the earth were shaken; throughout Asia and Europe the atmosphere was in commotion, and endangered by its baneful influence both vegetable and animal life."

"Before the earthquake (that of Cyprus) a pestiferous wind spread so poisonous an odour that many were overpowered by it, and expired in dreadful agonies. This phenomenon is one of the rarest that has been observed, for nothing is more constant than the composition of the air."

"Earthquakes were more general than had been within the range of history. In thousands of places chasms were formed from whence arose noxious vapours."

"It is probable, therefore, that the atmosphere contained foreign and sensibly perceptible admixtures to a great extent, which at least in the lower regions could not be decomposed and rendered ineffective by separation."

"The order of the seasons seemed to be reversed—rains, floods, and failures in crops were so general that few places were exempt from them."

"In the inmost depths of the globe that impulse was given in the year 1333, which in uninterrupted succession for six-and-twenty years shook the surface of the earth even to the western shores of Europe. From the very beginning the air partook of the terrestrial concussion. Atmospheric waters overflowed the land, or its plants and animals perished under the scorching heat." (Hecker's "Epidemics of the Middle Ages," trans. Babington.)

Particular mention is made of the fearful natural calamities then visited upon China, which seems to have suffered more than any other place recorded. Now this points to the special activity of subterranean forces on the Pacific sea-board; and, consequently, British Columbia is not unlikely to have come in for a heavy share of the physical disturbances of that period. If so, is it not very probable that as strong an impression would be made upon the plants and animals of that part of the globe as upon those of other countries that are mentioned? Now trees are the only beings at present living which could possibly have been contemporary with these calamities; and, as it is not difficult to determine their age approximately, it would be very interesting to carry out investigations in other instances, and thus ascertain if nature has recorded in the giants of the forest some impress of events which were fraught with such dire consequences to the human race.

HENRY J. COLBURN.

Woolhampton, Reading, April 4.

#### Carib Pottery.

LAST year in St. Kitts, in a cliff fresh cut by a wash, a gentleman found what were apparently the contents of a Carib grave—fragments of pottery, two complete utensils, and pieces of human bones. The whole is now in the possession of Dr. W. J. Branch.

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This is the first discovery, as far as I can ascertain, of either bones or pottery in the Leeward Islands, though Carib pottery is common in some of the Windward Islands. Since then, however, I have found a kitchen-midden, and procured plenty of small fragments, along with crab-claws, broken shells, fish-bones, &c.

The human bones above mentioned are the shafts, without the ends, of a femur, tibia, and fibula, a fifth metatarsal, a phalanx of the thumb, and several chips of the other fibula and



FIG. 1.



FIG. 2.

tibia. The tibia is curious as being very flat—almost two-sided, the interosseous border being merely a ridge on the outer surface.

The pottery consists of an oval bowl (Fig. 1), which the finder unhappily broke, a small plate (Fig. 2), and a number of fragments. The bowl is mended so as to be now entire; it measures  $9\frac{1}{4}$  in. by 6 in. and  $3\frac{3}{4}$  in. in depth; and was probably made in St. Kitts, where there is no good clay, for it is of a coarse dark earth, soft and badly baked. The plate, size 8 in. by 7 in., is nearly complete; it is of the same material, and is ornamented with an



FIG. 3.

incised line winding round and ending in the curious spirally curved handle; there is a small perforated knob on the outside opposite the handle, apparently for a string to hang up the vessel. About fourteen of the fragments have been pieced together, making part of a large jar. From this I have restored the jar as in the sketch (Fig. 3). The dimensions were:—Diameter at brim  $13\frac{1}{4}$  in., diameter at bulge  $10\frac{1}{2}$  in., depth  $12\frac{1}{2}$  in. It is of the red Nevis clay, apparently turned on a lathe, and well baked. The pattern is in white lines, and fired.

St. Kitts, W. I., March 30.

C. W. BRANCIU.

#### The New Education Bill and Local Museums.

I DESIRE to call the immediate attention of those solicitous for the progress and improvement of local museums to the opportunity afforded by the Education Bill now before Parliament for obtaining some public recognition of their value in any scheme for the encouragement of secondary education. By some County Councils the Technical Instruction Act has been construed as permitting grants being made from the "Customs and Excise" funds to local museums, but other Councils have not so acted, and it is very desirable that this point should be definitely settled. All that would be required is the insertion in Section 12 (page 8 of the Bill as printed), and perhaps best at the end of Clause 2, of words giving power to the "Education Authority" to aid in the establishment and maintenance of museums, whether the property of a public body or a private society, provided that such museums are devoted to the instruction of the public, and are, of course, under such regulations and control as might be deemed necessary.

There can be little doubt, I think, of the valuable services which well-arranged local museums could afford to the work of technical instruction, more particularly in calling forth and encouraging a taste for natural science studies. But the great