"sea margins,) into successive terraces, some of which "are from 200 to 300 feet above the level of the ri "ver, and the whole have a general parallellism "with it. These terraces are occupied by extensive "beds of clay and sand." The economic materials of this district, traversed by the St. Maurice and other large rivers, appear to be those of *bog iron ore*, of which the largest fields appear in the country between St. Maurice and Batiscan; and in the same localities, especially in the St. Nicholas range of Pointe du Lac, *iron ochre* is extensively found, occupying, it is said, an area of about 400 acres, with a depth ranging from four to six feet, and affording eight varieties in colour. *Iron sand*, *wad*, and *bog manganese* are also found, and *clay* for pottery, bricks, and roofing tiles, to an extent which enables them to be manufactured in almost any locality where wanted; and the *white sandstone*, although harder than most building stone, possesses, as Mr. Logan remarks, the valuable property of resisting fire. This, with limestone and the yellow calcareous stone, called the "Deschambault's one," and the *millstones* over the Potsdam beds, fit for flagging, are in beds from one to two feet thick. *Marble* of various colours, and susceptible of the highest polish, is found, and *peat* has been turned by the *habitants* to excellent account; when burned and combined with the surface beneath, it becomes a very fruitful soil.

The conflagrations which have destroyed so large a portion of the two principal cities in Canada have naturally called public attention to the roofing of the houses, and several slate quarries in the Townships of Kingsey and Elzear are now in operation. Their specific gravity and chemical composition are said to resemble the finest Welsh slate. In the Eastern Townships of Lower Canada clay states have been extensively discovered.

Sir Charles Lyell and Mr. Logan have declared—and it is feared with too much truth—that from the geological structure of Canada coal cannot exist.

If Canada, however, has not coal she is conveniently situated to it: on the north-west are the immense coal fields of the Michigan Territory, and on the south-east is the still greater coal field of Appalachia, the one with a supposed surface of 12 000, and the other of 60,000 square miles, and said to be the largest known carboniferous tracts in the world.

But little copper has been found in Lower Canada. On the River L'Assomption and other places where it has been discovered the lode is said to be of trifling value.

Mr Logan has devoted much attention to the discovery and distribution of gold. The auriferous tract is clearly shown to exist over 10,000 square miles on the south side of the St Lawrence, especially in the Eastern Townships, in the valley of the St. Francis, from Richmond to Salmon River, and on the Magog River above Sherbrooke; but he remarks "that the deposit will not, in general, remunerate unskilled labour, and that agriculturists, "artisans, and others engaged in the ordinary occupations of the country, would only lose their labour by turning gold hunters."

The report of Mr. Logan on the Upper Province is accompanied by one by Mr. Murray, the Assistant Geologist, who especially refers to the district between Kingston and the River Severn, connecting Lake Simcoe with the Georgian Bay. The economic material met with in this district are *magnetic and specular iron ore*, which exists chiefly in the Township of Bedford in the County of Frontenac, Madoc and Marmora in Hastings, Belmont in Victoria, and Seymour in Northumberland; and of these Mr Murray thinks the deposits in Madoc, Marmora and Belmont will become of great commercial importance. The Marmora mines are now worked by an English Company with large capital, and every modern improvement in machinery. They are situated on a rocky flat, and the iron ore is said to be rich in the extreme, yielding sometimes ninety per cent. It is found chiefly on the surface or in its immediate vicinity The Company owning them also possess extensive beds of marble and lithographic stone. In the same district are found galena and plumbago; and the Potsdam formation yields grindstones and flagging stones; clay producing the red and white brick is also abundant.

The copper on Lakes Superior and Huron is becoming an important article of national wealth, and is found occasionally in masses of 2000 pounds weight in a pure and malleable state.

Canada abounds in mineral springs, and the Caxton Plantagenet, St Leon and St. Catherines waters have acquired great celebrity

The soil of Canada is generally extremely fertile, and consists principally of yellow loam on a substratum of limestone It greatly improves to the westward, and its quality, when uncultivated, is easily ascertained by the timber it produces, the larger and heavier kinds growing on the best soil. In Upper Canada the brown clay and loam, intermingled with marl, predominates in the district between the St Lawrence, and the Ottawa; but further west, and north of Lakes Ontario and Erie, the soil becomes more clayey and far more productive The virgin soil is rich beyond measure, and the deposit of vegetable matter for ages improved by the ashes of the fires which sometimes sweep the forest, render it abundantly productive for several years without extraneous help.

WHEAT.

The following is from J. Payne Lowe's forthcoming book on Wheat.—[Ed.

Meteorological Influences.—It is a well established fact that in England wheat cannot be cultivated at a height of 1000 feet above the sea, while in the South of France it may be grown at an elevation of 1500 feet. This, of course, is due to difference of temperature.

It is also well understood that the hygrometric condition of the atmosphere influences the composition of wheat; for in moist climates, such as that of Ireland, it will contain a larger per centage of water.

Now, for the reason that a great amount of fertilizing material is received from the atmosphere during a rainy season, the necessity of proper mechanical and chemical condition of the soil becomes still more apparent, for thus the effects of the rain will materially be governed If proper under-drains exist in soils that need them, all excess of moisture will pass away, thus permitting the free circulation of air to exercise its beneficial efforts both in increasing the fertility of the soil, and enabling the wheat plant to withstand the various diseases to which it is liable.

As already stated, the per centage of gluten is invariably greater in warm climates.