

The caterpillar is stated to be green, with yellow lines and black dots, and feeds on the various trefoils; we have never seen it.

This butterfly is one of our most abundant species. In September we have seen more than twenty pitched at the same time on a bush of Michaelmas daisy, and in some parts of Canada the fields look almost yellow with their dancing forms. It is fond of pitching in muddy spots on roads, sometimes assembling in such places in considerable numbers. It is much more numerous at Sorel than about Montreal, but is very generally distributed over the whole of North America. It appears at the beginning of June, and having several broods during the season, worn individuals linger on the end of October, even to the confines of our desolate winter.

(Canadian Naturalist and Geologist.)

OFFICIAL NOTICES.



ANNEXATION OF PART OF THE TOWNSHIP OF BLANDFORD TO THE SCHOOL MUNICIPALITY OF GENTILLY.

His Excellency the Administrator of the Government in Council, has been pleased to approve of the sixth lot in the first range of the Township of Blandford, in the County of Nicolet, being comprised in that portion of the said Township, which was annexed to the school municipality of Gentilly in the ninth day of July last.

FEES ALLOWED FOR COPIES FURNISHED BY DEPARTMENT.

His Excellency the Administrator of the Government has been pleased to authorize the Superintendent of Education to demand and receive for every copy of any document demanded under and by virtue of the 13th clause of the Act 9th, Vict. cap 27, six pence per hundred words for each such copy, and one shilling for the certificate, which fees are to be applied towards paying the expenses of the departmental library.

APPOINTMENTS.

JACQUES CARTIER NORMAL SCHOOL.

Mr. John Brauneis, professor of music, has been appointed associate professor, in the place of Mr. Labelle, whose resignation has been accepted.

SCHOOL COMMISSIONERS.

His Excellency the Administrator of the Government, has been pleased to approve of the following appointments of school commissioners.
County of Beauharnois.—*St. Stanislas de Kostka*: Messrs. Denis Campbell, Louis Bertrand, Joseph Cousineau, Théophile Courville and François Devoyeau dit Laframboise.

County of Charlevoix.—*St. Tit des Caps*: Messrs. Thaddée Simard and Louis Lamothe.

—*St. Fiddle*: Mr. François Tremblay Picoté.
County of Two-Mountains.—*St. Jérôme No. 4*: Messrs. Edouard Gougeon, François Thérien and Isidore Paquin.

County of Gaspé.—*Perce*: Mr. Edouard Guilmet.

County of Arthabaska.—*Bulstrode*: Messrs. Jean Paul Landry, Olivier St. Cyr, Joseph Belliveau, Charles Hébert and Olivier Bergeron.

County of Dorchester.—*Frampton*: Messrs. Léon Rousseau and Peter Lyons.

PIERRE J. O. CHAUTEAU,
Superintendent of Education.

NOTICE TO SCHOOL COMMISSIONERS.

School Commissioners are hereby notified that they will no longer be permitted to dispose of any property belonging to their respective corporations, unless they shall have previously obtained the opinion of the Inspector of their district, as well on the necessity of the sale, as also on the sufficiency of the sum demanded therefor, or the set-up price, if it be intended to sell the property by auction. To facilitate and expedite sales, when deemed expedient, the Commissioners would do well to name their price, (or set-up price) in their application for permission to sell, and also obtain the recommendation of the Inspector of their particular district.

SHERBROOKE COUNTY BOARD OF EXAMINERS.

The Sherbrooke County Board of Examiners will meet at the Court House in Sherbrooke, on Tuesday, the first day of December next, for the examination of teachers.

S. A. HEND, Secretary.

JOURNAL OF EDUCATION.

MONTREAL, (LOWER CANADA) OCTOBER, 1857.

American Association for the advancement of Science.

(Continued from our last.)

The section of natural history and geology, seems even independently of its subsections of ethnology and statistics, the labours of which we have just been laying before our readers, to have absorbed a greater share of attention than the section of physical sciences.

Professor Dawson of McGill University, Montreal, read a paper on the varieties and mode of preservation of the fossils known as *Sternbergia*. These are usually more cast in clay or sand having sometimes an external coating and traces of internal coaly partitions. They are found in the coal formation rocks of most countries and very abundantly in those of Nova Scotia. Until the recent discoveries of Corda and Williamson they were objects of curious and varied conjecture to geologists and botanists and were supposed to indicate some very extraordinary and anomalous structure. They are now known to be casts of the piths or internal medullary cavities of trees and the genera to which some of them belong have been pointed out.

Professor Dawson entered into a minute examination of several specimens of *sternbergia*, showing that they are most of them the impression of piths or of the compressed or flattened bark of the branches of conifers. He concluded by saying, "The coniferous character of the *sternbergia* in connection with their state of preservation, seems to strengthen a conclusion at which I have been arriving from microscopic and field examinations of the coal and carbonaceous shales, that the thickest beds of coal at least in Eastern America consist in a great part of the flattened bark of coniferous sigillaroid and lepidodendroid trees, the wood of which has perished by slow decay or appears only in the state of fragments and films of mineral charcoal. This is a view however on which I do not wish to insist, until I have further opportunities of confirming it by observation.

The most abundant locality of *sternbergia* with which I am acquainted, occurs in the neighbourhood of the town of Pictou, immediately below beds of erect calamites described in the journal of the geological society (vol. 7, p. 194.) The fossils are found in interrupted beds of very coarse sandstone, with calcareous concretions imbedded in a thick reddish brown sandstone. These gray patches are full of well preserved calamites which have either grown upon them, or have been drifted in clumps with their roots entire. The appearances suggest the idea of patches of gray sand rising from a bottom of red mud, with clumps of growing calamites, which arrested quantities of drift plants, consisting principally of *sternbergia* and fragments of much decayed wood and bark, now in the state of coaly matter, too much penetrated by iron pyrites, to show its structure distinctly. We thus probably have the fresh growing calamites, entombed along with the debris of the old decaying conifers of some neighboring shore, furnishing an illustration of the truth that the most ephemeral and perishable forms may be fossilized and preserved contemporaneously with the decay of the most durable tissues. The rush of a single summer may be preserved with its minutest striæ unharmed, when the giant pine of centuries has crumbled into mould. It is so now, and it was so equally in the carboniferous period."

A paper was read by Sir William Logan on the series of rocks which he has called the Huronian and Laurentian Series, the one from Lake Huron, and the other from the range of mountains which Mr. Garneau has the first called the "Laurentides." Sir William was followed by Mr. Hunt, who spoke on the origin of magnesian rocks. He contends that the deposits of mineral springs, and especially of calcareous waters, play an important part in the formation of rocks, and thus explains the interstratification of dolomites with pure limestone in the silurian rocks of Canada.

Professor Cook read a paper on the subsidence of lands on the atlantic coast of this continent, and from his own observations, and the published opinions of Professor Hitchcock and others, he came to the conclusion that this subsidence may be set down to an average of two feet in a century. The following curious fact was quoted among others by Mr. Cook: "At Dennisville, in Southern New Jersey, there is a large tract of marsh underlaid by cedar swamp