ducts of inflammatory decomposition. This diffusive power of the atmosphere would immediately be brought into requisition, and the evolved gases would, as soon as have been produced, become incorporated with the surrounding air, and, assisted by æriel currents, be carried to Patagonia or the Cape of Good Hope, before the steamer would arrive at her destination. I would venture to say that not many weeks would elapse before the very atoms would be assimilated into some useful esculent, growing upon some sea-girt coast. What he means by "external combustion" I cannot imagine, unless it be the consumption of coals, wood, &c., for heating dwellings, and the large amount of fuel used in the furnaces of manufactories. The "internal combustion" I suppose, is that which is emitted from volcanoes, solfatera, or molten lakes, &c. The general condition of the two are the same; the inflammation of hydrogen and the consumption of oxygen. Mr Smith states that on the moving combustion arriving about mid way across the Atlantic, and also "this moving current must arrest another current from Fuego volcano"—"the two currents arrive at Halifax," &c. Now, I want to know how it is possible, after what I have stated concerning the diffusibility of gases, for two currents, the results of combustion of steamers' coals and the volcanoes, to travel thro' the air? I would ask would there be any current at all? You might as well say that the current of the river Amazon would pass through the waters of the Atlantic, and come to the coast of Africa in all its freshness and purity. The following sentence I cannot really understand. "The earth is using her best endeavours to pass from underneath them (the currents), and is trapped (the earth?) by this æriel moving current." The earth trapped by the gaseous products of a few tons of coal is quite a phenomena, for which we will require to get other laws than ours to explain. Again, "the currents enveloping Halifax until wrought into meteoric electricity." This is certainly an enigma, an unsolvable problem. Truly, after this we might make bread of sand and butter from clay. The idea of nitrogen or azote generating electricity, a substance of an imponderable nature, and the highest substance in matter we have become acquainted with, a substance of which we know, comparatively speaking, nothing, is absurd. As for azote, we know it to an almost perfect extent. We might as well say the moon would produce the sun, and that a wheelbarrow would produce a cart, as assert that nitrogen would be "wrought into meteoric electricity," He still goes on, "The earth striking it in particular spots, and causing those disorders that affect the two great divisions of the world," meaning the destruction of animal and vegetable life. The atmosphere which surrounds the earth is carried round with her in her annual and diurnal revolution. The powerful attraction which causes all bodies to adhere to the earth's surface, causes also every square inch of gas, or any other elastic air, to be forced to the surface with a pressure of 15 pounds to the square inch. Now, if such a pressure is exerted upon this tiny stream of azote, by the attractive influence of the earth, how then can it be struck by such a ponderous revolving body when the substance to be struck is immediately fastened upon the body which is to strike, by centipetal force? The word strike conveys to my mind an exertion of the article which is to strike, an exertion incompatible with the vast duties our globe is daily fulfilling.

I will now speak of the way in which nature restores the equilibrium, and replenishes her vast store-houses; *the dread of which becoming exhausted*, has caused Mr Smith to warn the world of its approaching desolation, and that there is a prospect of the once fruitful fields becoming a wilderness, and that the dry bones are to take the place of vitality and exuvia, and remains to usurp the place of living organisms.

Oxygen being the principal vitalizing agent, and the chief supporter of combustion, the earth, under the present system of laws, would, without it, become one vast wilderness, descending at once to a desolating surface, where the genial warmth of the sun itself would be insufficient to breath life, and renew again organic functions. This agent, in the natural state, is a colourless and invisible gas, elastic and incombustible. It enters into the composition of the atmosphere in the proportion of about one-third, and also into water in the proportion of one volume of oxygen to two of hydrogen. It is the oxygen which is conveyed to the blood by the lungs that gives it its florid, red appearance, and keeps up the animal heat. Such an important agent as this, and taking such a prominent part in creation, must have some way in which its daily consumption is renewed; and nature has admirably, with her usual fertility of invention, completely compensated for the large amount consumed of this valuable principle. So necessary to life, whether animal or vegetable; so completely has this renewing system been operating, that we find oxygen as plentifully as ever. No diminution of its bulk appears to have taken place since its discovery. We can account for this by the wonderful contrivance in the leaves of all plants, shrubs, and trees, by which they evolve this gas in its purity from the upper surface of their leaves, the under side of the leaf taking in carbonic acid at night, and a copious discharge of the former element in the day. Other ways might be named if time permitted. However, in analysing the atmosphere, the proportions of nitrogen and oxygen maintain their usual quantities, the former being a regulator of the latter. The latter, if inhaled in its unadulterated state, would accelerate the circulation so rapidly as to produce [illegible]

very shortly; so that this azote which Mr Smith handles so roughly, is another display of the wisdom and benevolence which reign throughout all the works of nature.

At the close of his article, Mr Smith says, "No wonder, then, that this valuable root is in a great measure so deteriorated as to become useless." He has not shown us one reason by which our wonder is removed. The gaseous products of combustion, or, using his own words, "moving azote from moving combustion," so far from being injurious to vegetable life, is even their *very life*. Plants flourish more luxuriantly in an atmosphere where carbonic acid and nitrogen prevail, showing that an atmosphere that would be deleterious to animal life, would be highly nutritious to vegetables. The potatoe rot, instead of being an evil, may be productive eventually of a vast amount of chemical knowledge, gained by the multitudinous number of experiments resorted to for the discovery of the evil. To explain the potatoe disease requires a deeper acquaintance with the wonder-working laws of creation than Mr Smith appears to possess, and Chemistry is the only science likely to unfold the mystery; a science which must Mr Smith must be completely ignorant, even of its rudiments.

I observed other statements in former communications contrary to the general truth of science, but I forebore saying anything until this flagrant violation in his theories appeared, which overcame all considerations; and 'tis possible, if other inconsistencies occur, I shall endeavor to rectify them in the eyes of the public, as it is a pity to see so many columns devoted to an article so *incomprehensible* in its nature, and so mystical in its phraseology.

CORTEX.

Miramichi, October 9, 1850.

ON THE REGIONS OF THE NORTH,

In connexion with the causes now in activity in destroying the Animal and Vegetable Kingdom, or Animate and Inanimate Nature, from all that is well authenticated.

BY WILLIAM SMITH,
Shoemaker, Miramichi, New Brunswick.

TO MOSES H. GRINNELL, MERCHANT, NEW YORK.

One of the most surprising circumstances attending the creation of moving azote from moving combustion, is the amount of capital which, within a short period, has been expended in its preparation. According to a late calculation, there were in actual operation at the commencement of 1849, in the different parts of the globe, a total length of 18.000 miles, on which a capital of £368,567,000 had been actually expended. Besides this, it is estimated that there were at the same time, in process of preparation, a further extent of 820 miles, the cost of which, when completed, would be £146,750,660. It is chiefly in Europe and the United States that the increase of moving azote from combustion, has arrived at any great extent; and when completed these countries will possess a greater amount than would go round the globe, at a cost of above £590,000,000 sterling. To accomplish this stupendous work, human industry must have appropriated out of its annual savings £20,000,000 for 25 years. Of this prodigious investment, that small portion of the globe called Great Britain and Ireland has a share which will form not the least striking fact in her history. Of the total length of moving azote in all parts of the globe, 27 miles in every 100 are in the United Kingdom; but the proportion of the entire amount of moving azote capital contributed by British industry, is even more remarkable. It appears that of the entire amount of capital expended on moving azote, 54 miles in every 100, and of the capital to be expended on those in progress, 68 in every 100 are appropriated in Great Britain alone When they employed Faraday and Playfair to see how far moving azote from moving combustion would be consumed, they little dreamed what they were doing, when it would rise by evaporation and do more mischief, and contribute to poison the pure air of the atmosphere, than in its azotic state. There is nothing more apparent than that it is dividing itself between the animal and vegetable kingdom. In the year 1849, during the Hungarian war, the European Cholera received its existence by the vast quantity of arterial effluvia from the dead and the dying, and eccentric or irregular azote. There is not, perhaps, a more dangerous spot in the world than Hungary to carry on war, from its swamps and marshes, unless it be the pestilential jungles of Hindostan. To carry on war in India, at an enormous expense of blood and treasure, for the sake of increasing the empire in the East, when it is diminishing in the West, is certainly very singular. When we contemplate the changes taking place on the surface of the earth, there are four in activity, which contribute to change the envelope or crust of our earth. The rains and thaws which wear down the steepest mountains, and occasion these fragments to settle at their bottom; the streams of water which sweep away these fragments, and deposit them when their current is abated; the sea, which undermines the foundation of the more elevated coasts, and throws up hillocks of sand where the shore is flat; and finally volcanoes, which pierce thro' the most solid strata, and either elevate or scatter abroad the vast quantity of matter they force up from below. That local inundations or catastrophies have been very frequent, will be easily admitted, if we ascribe them to the depression of the land, rather than the rising of the sea. The change of the level of the sea infers a change of level over its whole surface. That of the land extends no farther than a particular country. Of the two hypothesis the latter is by far the best calculated to resolve the enigma of the mineral kingdom. When natural philosophy begins te wander, it may continue for a while before it gets through all the suppositions that oppose it, and then establish itself upon the vantage-ground of truth. The fact is, every thing is changing and must still change before the human race can receive the benefit they are entitled to on account of their superior creation.

(For the Gleaner.)

LIFE IN CHARLOTTETOWN.

No. 2.

Reader,—Who has visited Charlottetown during the pleasant months of June or July, who has not been delighted with its variegated landscapes and shady groves? Who has cast his eye over the bread expanse of that magic bay, glittering like a sea of molten gold beneath the parting rays of the setting sun, whose heart has not throbbed with emotions of admiration at sight of its enchanted landscapes and fairy lawns? Who has roamed among its villa-dotted groves, and cottage-decorated bowers, who has not fancied himself in a sort of terrestrial paradise? and who has strayed along its willow-shaded streets, whose heart has not throbbed with emotions of chivalry at sight of the bright eyes and bewitching glances that meet you in your evening walks?

For my part, as I roamed down one of its willow-shaded streets for the first time, I almost fancied that the celestial sentinel must have slumbered with his fiery word at the gates of terrestrial paradise, and that man must have taken advantage of his slumbers and again gained admission to his original inheritance! Here, then, thought I, is the early scene of man's few happy hours. There are three of the rivers spoken of in scripture, as flowing from the terrestrial paradise, and abounding with gold and precious stones, and perhaps that through that broad space, in some sportive freak of nature, the fourth may have swelled beyond the measure of its bounds, and spread into that broad sheet of shining water that spreads away to the southward. Here, perhaps, is the bower in which the cunning serpent tempted our mother Eve; and it may be from that tempting looking pear-tree, that bends down its loaded branches, as if to invite the weary passer-by, that she plucked that unlucky fruit that sent Cain a fugitive and a vagabond o'er the earth. Here are the sacred shades upon which the prayers of repenting Adam conferred immortality, and that low, soft and thrilling cadence that falls with heavenly sweetness on the charmed ear, is the warbling of the celestial choir rejoicing o'er the revocation of the sentence, pronounced against the erring race of Adam.

Thus lost in revery, and dreaming about celestial shades, forbidden fruit, and tempting serpents, I was aroused from my trance by some half a dozen parasols, sweeping past so close as almost to startle me, and on looking up you may judge of my astonishment when, instead of beings of pure ether, without either bone or body, I found myself in company with a score of moustached cavaliers, enjoying themselves over their evening "draw," and rolling off such columns of black smoke from between their bristly lips, as would have been a credit to mount Vesuvius in its palmiest days. Here, on one hand, were a number of young and fashionable gallants, tipped off in all the frivolities of the latest imported fashions, and on the other, a host of blushing beauties, in Republican reefing jackets, spencers, satinett chemizettas, and petticoat trowsers. The devil! exclaimed I, this is strange company for so sacred a place; and if man by any lucky circumstance has been fortunate enough to get admission to his original abode, and continues to conduct himself in this manner, the tenor of his second possession will be as short as the first, and I much fear that his expulsion will be brought about by crimes of a more disgraceful nature than plucking fruit. But hark! As I'm a sinner, the music that I imagined to be the dying notes of the angels' evening song, turns out, on nearer approach, to be the shrill screech of the Highland pipes; and there, by Jove, goes a "red coat." Well, perhaps it is no paradise after all; if it is, things must be much changed since the time our first parents were driven from its celestial shades for so trifling an offence. Father Adam would be horrified at the degeneracy that has taken place in the morals of his sons, and Eve would blush for the modesty of her stayed, flounced and painted daughters. My dream was at an end: and instead of shades and celestial bowers, I found myself walking down the main street of Charlottetown. Here were three rivers, 'tis true, running to, instead of from the fancied paradise, encompassing the lands of *Heviland*, instead of "*Hevelith*," and abounding with slime and red mud, in place of gold, bedellium and onyx stones.

Reader, have you ever been in Charlottetown? If you have not I will take you by the arm and lead you from story to story up the winding passages of the Province Building. On top is a platform of some twenty feet square, and from no other place for miles around can you get such a view of the shady groves, sweeping lawns, and winding vales of Hillsborough Bay. The evening is calm and beautiful, and all is hushed around save the merry hum of happy voices, echoing along its shaded streets. The sun has just sank behind yon distant woodland, but still lingers over each spire and dome, as if to take a parting glance at the magic scene, over which night was so soon to spread its sable wing,

As if to take one parting glance
O'er the fading scene of earth's broad expanse,
Ere dropping the folds of its mantle down
O'er the bowers and groves of Charlottetown;
And lingering o'er each tower and dome,
And tapering spire and minarette,
While their bases are lost in the sombre gloom,
That in darkening shadows spread beneath.
From the broad expanse of that shining bay,
Borne on the wings of the breeze along,
From the host of ships that at anchor lay,
Comes the measured swell of the seaman's song;
And the low and soft melodious notes,
Like the fancied strains that round us float,
When of heavenly scenes and visions dreaming,
In low and thrilling cadence streaming,
Borne gently down that placid river,
In whispered sighs through evening's air,
As soft, and low, and sweet as ever
High heaven e're breathed in mortal's ear.
O magic scene, too bright to last—
Too fair to fade—If yet there be
On earth, one spot supremely bles't—
Uncursed by heaven—from sorrow free,
One spot yet pure in heavenly bliss,
'Tis this! 'tis this! 'tis this!

Who would not admire such a scene as this? As far as the eye can reach on either side, is one unbroken continuation of groves, gardens and cottage plantations, fading away in the dim distance, and beyond, a space of the clearest, brightest blue, that bursts upon you like Eternity.

THE STRANGER.

Buctouche, September, 1850.

Spirit of the Press.

From the St. John Freeman.

MR. WILLISTON AND THE LIBEL CASE.

Never has the truth of the old adage, 'Quem deus perdere vult prius demental,' been more fully exemplified in a small way than in the case of Mr Williston vs. the Editor of the Gleaner; and this *gentleman*, and *liberal* M. P. P., has reason to rejoice in the happy consciousness that as the consequence of the trial in this case, his character is now well known, and perfectly appreciated thro' the length and breadth of the Province. He must be a bold man, or one callously indifferent to public opinion, who now-a-days braves the power of the Press in a country where the Press is happily as free and untrammelled as it is in New Brunswick. Had Mr Williston the good sense to pretend that he disregarded the libel, however much he may have felt its sting, perhaps one-half of the few that read it would have looked on it as an electioneering squib; and those who knew Mr Williston too well for that, would be inclined to give him credit for a little magnanimity. At all events the libel would have no effect beyond the immediate neighborhood; and Mr Williston, coming before the country as a liberal member (save us from such liberals), would have an opportunity of effacing the recollection of any former backsliding of which he may have been guilty, and of earning, in the public service, an honorable name. Or if he would have vengeance, he may have prosecuted Mr Hea, the avowed author of the libel, and not Mr Pierce, who was unaware of the insertion of the advertisement, and who expressed his regret that it had appeared in his paper. Instead of acting thus fairly, he appears to have gladly seized on the chance of ruining the Editor. His character had been assailed, and was worth at least £1000, a nice sum to get, and sufficient to ruin his victim. The advertisement, we freely admit, was one that should not have been inserted, and had Mr Williston chosen to prosecute Mr Hea, no one could deny his right to do so. But to bring such a case as this into court a man must have clean hands, else it were far wiser to hide his mortification under cover of a dignified contempt. Had Mr Williston pursued this course, the whole Province would not now know that Mr Hea charged him with having shamefully defrauded him of money