

us, to state our reasons for this conviction as fully as we would wish. It may be sufficient to suggest to our author that he has not given their due weight, to the great and rapidly increasing strength of some of the states, to their organized power for good or evil, and to the comparative intensity of the popular attachment to the state authorities. These are incidents to our federative position, which seem to require all men who love freedom, and duly prize our inestimable constitution, that they should labour without ceasing to discourage theoretic jealousies of the general government, and to render its ordinary operations as palatable as they are salutary."

A set of politicians in fact have lately started in America, who zealously and boldly maintain the independence of each separate state. Dr. Thomas Cooper the President of the Carolina College has lately published a pamphlet "On the Constitution of the United States," in which the following dogma is advanced.... "The separate sovereignty of each state in the Union never was at any moment conceded or in any manner renounced." Upon this the Reviewer writes in the following monitory strain; and we think no better evidence can be furnished, that, even in the opinion of intelligent Americans, the machinery of their government does not at present move with that harmony and happy adaptation of part to part, which promises security for the present, and growth and permanency for the future :—

"It is of course perfectly in character for him to deny to the national government the right to establish a national bank; to construct the Cumberland road, and other internal improvements; to impose duties on foreign manufactures, for the purpose of encouraging our domestic industry; or even to erect national fortifications. The feeble pageant which he and a few other such politicians would set up, in place of the admirable government under whose protecting wing all parts of the Union are now prospering, would soon render us a by-word and scorn among the nations. Possessing no internal vigour, and commanding no resources of its own it would be the mere creature and puppet of each of the twenty-four sovereignties at whose pleasure it existed....and whose various and clashing interests would render anything like unity of design or action, for the public good, utterly hopeless. It is quite impossible that it once established, such a government could be of long continuance. The principle of cohesion would be too slight to withstand the centrifugal action of "the separate sovereignties;" and the same generation that permits the national government to be shorn of the salutary and rightful power it now exercises, will live to witness the separation of its elements, and the extinction of the fairest of most hopeful system upon which the sun ever shone."

A man's principles and views are often caught by a stray expression. From the reviews of the same work we transcribe the subjoined paragraph :—

"Chapter VI. treats of the "European Colonies in America." The British possessions are first considered, and then those of Spain, France, &c. At page 211, the author observes, "Had we subdued Canada in the last war, or should we do it at any time hereafter, we should of course restore it at the conclusion of peace, which would never be upon any other basis than that of prior possessions." We are at a loss to know why this restoration follows so much as a matter of course. Has not this same Canada been conquered and kept by the victors on more than one former occasion; and are we never to be strong enough to retain possession of it?" We trust they never shall. Canada next!....when will their am-

bition be satisfied? The Indian Chiefs complained that they wished to drive them beyond the setting sun; and we join Mr. Bliss in the opinion that they are now desirous of driving the British Colonies into the sea."....Ed. Nov.

COLONIAL.

RIDEAU CANAL.

(FROM THE MONTREAL GAZETTE.)

The operations of the Rideau Canal are now in a state of forwardness sufficient to impress us with an idea of the magnitude of the undertaking, and of the difficulties and facilities which may be met with in its progress. We are living in a canal-projecting and canal-making age; we cannot turn our eyes to the columns of a newspaper without meeting some intelligence respecting them, and on the service of every map the lines of a variety of canals intersect in every direction the tract of country intended to be represented. The canals of Europe are certainly wonderful in their conceptions, and stupendous in execution—but we doubt whether from the period of the completion of the canal of Languedoc, to that of Grand Junction, any one has been thought of so gigantic in the project, and likely to be so astonishing in its probable effects, as the Rideau. To any individuals but those enterprising persons who superintend the work, it would have been considered the height of extravagance to attempt to lead a line of water through such tangled wildernesses, such muddy lakes, interminable swamps, and rocky mountains, which latter abound most extensively throughout the route. In addition to the labour that must be undergone in surmounting these almost unconquerable obstacles, it would be necessary to raise the watery element above 300 feet above the level of the Ottawa, and then descend 150 feet to the waters at Kingston....and all this is not for the passage of barges and Durham boats only, but it was contemplated that Steam-Boats and other large vessels should float upon its waters. This, to many enlightened men and scientific engineers appeared impracticable, and when Lieut. Colonel By intimated his intention of causing the locks to be made of a width sufficient to allow the passage of Steam-Boats and other large craft, and that the whole line should be navigable for vessels of that burden, he was laughed at as entertaining ideas impossible to be realized.

A little above Byville, the Rideau is about 100 yards wide, and within the distance of 6 miles, three rapids are met with, after which there is a beautiful sheet of water without any impediment to break its smoothness for the space of 27 miles; and the River at this spot increases about half a mile in width. At Goodwood the river Jacques is met with....it is nearly a continued rapid from the settlement at Richmond, but it might be easily made navigable. In passing through the Rideau Lake the river Tay running from Perth is seen....it is shallow and abounds with rapids, but a small sum of money would render it fit for the purpose of navigation.

The Rideau Lake is a beautiful expanse of water, about 40 miles long, and its breadth frequently exceeds 20 miles. The soil on both banks of the River and on the shores of the lake is excellent, the picturesque scenery, the extent of the waters, and the local advantages for every description of settlers surpassed description. All the maps, charts and surveys give but an imperfect idea of that part of the country. Surveyors and others who have explored this almost unknown country, have demonstrated the practicability of connecting by means of locks the lakes and water of the Rideau to an extensive sheet of water called the Mississippi Lake, which is considerably

higher than the Rideau Lake, and is by comparison on the level of the Lake Erie. By this means there would be a communication from the Rideau to Rice Lake, and lakes Simcoe, Erie and Huron, opening a navigation through the finest part of the Canadas.

IRON WORKS IN NOVA SCOTIA.

In our last we referred to a new establishment of Iron Works in Nova Scotia, with a promise to give this week, some account of them.—Our friends who went last week from this, partly with the view of visiting them, appear to be highly gratified with their excursion.

The works are situated on the East side of Moose River, (about half way between Digby and Annapolis,) and about three quarters of a mile from the mouth of the River.—It would really appear as if nature itself had formed this place as a situation for an establishment of this description. The water which drives the wheel which keeps the bellowses in operation, is conducted under ground by a lead taken from the River, at a distance from the works of about 800 feet, and which, as we are informed, will neither dry up in summer nor freeze in winter. In this respect, therefore, the Moose River Iron Works has the advantage over the greater part of such manufactories, as Steam-Engines, which are attended with a heavy expense, must be applied for the above purpose in place of water.

The Ore, we understand, is furnished at a very trifling expense, the quarry being about three and a half miles distant.—We are not able to state precisely the cost of it laid down at the works, but we think it does not exceed 15 shillings per ton, at the present time. The Ore is understood to be of very superior description, both in point of productiveness and quality of Iron produced. From some parts of the quarry, we are told, that in smelting it, it only lost 15 per cent. of its weight; the average, however, in working the ore from the top of the quarry is supposed to be about 25 per cent. or in words, the Pig Iron produced is 75 per cent. of the original weight. The quality of the Iron, when wrought, is highly spoken of by all judges of the article.

The number of workmen employed about the works is from 20 to 30, and we understand that eight tons of Pig Iron and Castings can be produced in a day. The casting is now in full operation and any article can be thrown off, to a mould furnished, at half a day's warning: the price, we believe, is 4d. per pound.

The operations of the establishment will most likely be for some time continued to the manufacturing of Pig Iron, Castings, and Hollow Ware, as no machinery has yet been erected for the manufacturing of Bar or Bolt Iron. It is, however, intended to carry a Stone Bridge across the River a little above where the present wooden one stands, and about 150 yards above the works, the upper side of which will form a dam; under the arches of the Bridge it is intended that machinery for the working of sledges shall be introduced for the purpose of manufacturing malleable Iron. We may expect, after this is accomplished, to find forges built on the spot which will furnish a supply of nails and spikes of all sizes and descriptions, as well as all sorts of culinary and Agricultural utensils. The undertaking, on the whole, reflects the highest credit on the speculators (for it must for some time be viewed in the light of a speculation,) who have embarked capital in the enterprise, and we hope they will meet with sufficient remuneration and the support of every well wisher to the interests of the Provinces....

Courier, July 28.

[Concluded from the last page.]

"Soon after 1 P. M. we saw lightning; a little before 2 observed a very smart flash; looking at my watch, which marks seconds, I counted four, when the report followed; I felt no alarm, however, having frequently known it to approach nearer without any injury. At 2 o'clock we were astonished by another shock like that in the morning; the flash and sound simultaneous. I happened to be in the cabin with another passenger; a ball of fire seemed to dart down before us; at the same moment the glass in the round house came rattling down below. Those on deck agreed that the whole ship appeared to be in a blaze, from the vividness of the principal flash, which they distinctly saw darting down the conductor, and agitating the water. All parts of the ship, as before, were filled with smoke, smelling of sulphur.

"The ship was again thoroughly examined. The conductor had been rent to pieces by the discharge, and scattered to the winds; small fragments of it were found on deck; in saving the ship it had literally yielded itself to the fury of the blast. The pointed rod was found to be fused and shortened several inches, and covered over with a dark coating; some of the links had been snapped off and others melted. The whole operation was singularly striking, and affords another of those rare cases where the conductor yielded to the violence of the shock, while it effectually diverted the bolt from the object it was designed to protect.

"This was a property of the rod, of which Franklin was satisfied very early after the application of a theory that has disarmed the lightning of heaven. One of the earliest cases which fell under his notice, I believe, occurred in one of the Dutch churches in New-York....a chain connected with the clock probably saved the church much damage, but the chain itself was melted.

"Mr. Ross, the second officer, was prostrated, and three of the men struck, but none much injured. It affected the polarity of all the compasses, causing them to vary from the true point and between each other. They gradually assumed a bearing, by which we have steered, though still three points out, as we have just discovered. The captain's chronometer was very materially affected; it usually crossed the Atlantic without varying three seconds; it has now proved to be out as many degrees. Curious as are these effects, they are still more interesting in an experimental view. Such facts carefully noted down at the time, afford useful data in the cause of science. Thus collected, they are at your disposal. When it is considered that not one vessel in fifty is prepared with a conductor, cases of this kind ought to admonish ship owners of their utility. Captain Bennett is determined to go well armed with them in future. It would be well to have one ready to be raised at each mast in case of emergency; and, for the safety of the chain, it ought to be half an inch in diameter.

"We have visited," says the editor of the Liverpool Chronicle, "the ship since her arrival, and the traces which remain of the operation of the first shock, together with the concurrent testimony of Captain Bennett and his mates, and the state of the iron rod, and such portions of the chain conductor as have been preserved, which for the present, may be seen on application at our office, have served to convince us of the general truth of the foregoing letter, and of the singular good fortune attending the timely application of this simple but philosophical invention of the admirable Franklin, which no ship should be without. Many additional particulars were recounted to us by Captain Bennett, which the pressure of other matter, and the shortness of the time remaining to