Remarks on the Rev. Mr. Leach's observations on the Inland Sea.

Let us examine the ver, be rash in our conclusions. evidences, and see if they bear out this prima facie view city. When, therefore, a stream of water has to work of the case. For this purpose let us cross the tide, and its way through such a mass, it has a tendency to form see of what the other shore consists. It is the very same greywacke, intermingled with limestone and slate, that has all along been meeting us, and it rises out of the same slaty clay with which we are now familiar. The rocks are evidently the same on the one side as on the other, and you may trace the greywacke on till it joins the granite of the northern chain. One locality, the Falls of from the upper end, being expended on the sides, and Montmorenci, where this union is easily seen, deserves to be noted. The rush of that great waterfall has bared a small peak of the underlying granite, and you see it, consequently, rising right out of the superjacent wacke. It is clear, then, that what is now the channel of the St. Lawrence, was once filled up by a mass of rocks, consisting chiefly of greywacke and slaty clay. How has that mass been cleared out ? Surely we need to seek no other agent than the wearing powers of that great stream, which we see every day deepening and widening its. bed. But if the channel be the work of the river, it must, you say, have been a gradual work, and there Perth and Kingston. I am cognisant of the fact, as I know should be traces of this gradual progress. There are such traces. Go to any elevated point on the north-west side of the city, and contemplate the valley which lies between you and the northern granite chain.

his Note its smooth and equal slope downward below youits-smooth and equal rise beyond : mark its connection above at Cap Rouge, with the present channel of the St. Lawrence-its connection below by the suburb St. Roch with the same channel. Tax all your antecedent experience, and tell me is not this in reality a river scooped valley ? Say must not great waters have flowed through it in ancient times ? Evidently there was a time the old destroyer, rejoicing in the power in these regions when had we two been standing on this, the site of what is called the high town of Quebec, we should have seen a great stream passing to the northward of us, in addition to the great stream which now passes to the southward of us. Where we stand had been an island washed all round by the St. Lawrence, though smaller, yet similar to what the Isle of Orleans now is. At this period the bed of the now-existing south channel could not have been greatly deeper than this ancient northern channel. It must then have been more than a hundred feet higher phaniit now is. Hence, therefore, is one evidence of evidence of the ancient elevation of the waters, I find I she gradual lowering of the great stream at this point of its passage. I shall only call your attention to one other. But previously to doing so, it is necessary for the distinct had assigned to our journey. I take my leave unwillingly, comprehension of the nature of the proof exhibited, that we consider some ascertained facts concerning the mode in which a current of water works among rocks, and the we have aimed at enough to warrant the conclusion at traces it consequently leaves of its workings.

Every large rocky mass has different degrees of tenaislands. Wherever a portion of the rocks, possessing gre ter hardness and density than the adjoining parts. presents a firmer front to the stream, the action of the water is diverted from the point, and turned to wearing out channels on each side of it. Hence arises an island of an oval form. The force of the stream, warded off leaving the lower end nearly in tranquillity, and consequently extending somewhat largely down the stream.

Again, water in moving by such an island, impresses on it very distinct marks of its action. We know that the velocity of a stream is always much the greatest at its surface. It is on the surface also that ice and other matters are floated along. There is, consequently, an intensity of action at this level, which impresses on the rock a horizontal indentation or groove. The thing is to be witnessed in Norway, and in that strange miniature alpine tract of granite and limestone, which lies between both regions by personal observation.

Having thus formed a distinct perception of general principles, let us go to the farm about two miles north of Cap Rouge, on which twelve years since the late Andrew Stuart had his summer residence; and some hundred yards to the south of the road, we find one or two rocky knolls rising from the surface. Let us examine them. Here are the traces which the living waters impressed on them in long antecedent ages. You see their oval form-you see those deeply graved indentations, the workings of a current gradually subsiding. Time, of his great workers-summer, with her sun and rainwinter, with his frost and ice,-has, no doubt, succeeded in somewhat crumbling away the original smoothness of their water-worn surface ;---in making here a dint, and there a gap, in the horizontal grooves, and intervening protuberances, and in burying their bases in confusion; but enough remains to satisfy you that the great stream" of the St. Lawrence once swept them. When it did so its surface was two hundred feet above its present level.

Having brought you, my dear Sir, to this scene, the must here leave you ; for, counting the pages of my manuscript, I see we have already exceeded the limits I and, with many rock recorded facts on all sides of us, which I should be glad to point out to you, yet probably which I arrived, and further continuance might be tedious