

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

JOURNAL
OF A
TOUR IN NORTH AMERICA,
IN 1841-2.

CHAPTER XIV.

Dr. Channing. — Agitation in Rhode Island. — Armed Convention. — Sail through Amboy Straits. — Journey to Philadelphia and Baltimore. — Harper's Ferry. — Passage over the Alleghamies by National Road. — Parallel Ridges. — Absence of Drift. — Structure and Origin of Appalachians. — Theory of Subsidence and Contraction of Subterranean Fluid. — Kentucky Farmers. — Emigrants. — Cumberland Coal Field. — Clay with Stigmaria. — Marine Shells in Coal Measures near Frostburg. — Wide Geographical Distribution of Fossil Coal Plants.

April 17. 1842.—DURING my stay at Boston, I was fortunate enough to hear Dr. Channing preach one of the last sermons he delivered from the pulpit. His declining health had prevented him from doing regular duty of late years; but there seemed no reason to anticipate that he would so soon be taken

VOL. II.

B

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

away from a community over which he exerted a great and salutary influence. His sermon was less impressive than I had expected, and fell short of the high conception I had formed of him from his writings; but this I imputed entirely to his want of physical strength, and the weak state of his voice. I had afterwards the pleasure of conversing freely with him at a small dinner party on various subjects in which he was interested; among others, the bearing of geological discoveries, respecting the earth's antiquity and the extinct races of animals, on the Mosaic account of the history of man and the creation. I was struck with the lively interest he took in the political affairs of Rhode Island, — a neighbouring state, containing about 110,000 inhabitants, and now convulsed by a revolutionary movement in favour of an extension of the suffrage. The sympathies of Dr. Channing appeared to lean strongly to the popular party, which, in his opinion, had grievances to complain of, however much, by their violent proceedings, they had put themselves in the wrong.

As some alarmists assured me that the railway to Providence, by which I intended to pass southwards in a few days, “was commanded by the cannon of the insurgents,” my curiosity was awakened to enquire into this affair, the details of which were not

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

CHAP. XIV. RHODE ISLAND CONVENTION.

3

uninstructive, as giving a curious insight into the character of the New England people, and showing their respect for law and order, even when their passions are highly excited. I found that Rhode Island was still, in the year 1842, governed according to a charter granted by Charles II. in the year 1663, no alteration having been made in the qualifications of voters at the period when the sovereignty was transferred from the crown of Great Britain to the freeholders of Rhode Island. Although the State has been flourishing, and is entirely free from debt, a large majority of the people have, for the last forty years, called loudly on the privileged landholders to give up their exclusive right of voting, and to extend the suffrage to all the adult males, in accordance with the system established in all the neighbouring states. The dispute turned mainly on a question of a very abstract nature for the comprehension of the multitude, though in reality one of great constitutional importance; namely, whether the change should be made according to the forms prescribed in the charter of 1663, or might be effected by the people in its capacity of sovereign, without regard to any established forms. The latter method was advocated by the democratic leaders as most flattering to the people, and with such success that they organized a formidable association in opposition to

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

the government. Their demands did not differ very materially from those which the legislature was willing to concede, except that the democrats claimed the suffrage, not only for every American-born citizen, but also for the new-comers, or the settlers of a few years' standing. Both parties agreed to exclude the free blacks. At length, as their wishes were not complied with, the "Suffrage Convention" resolved to intimidate their opponents by a military enrolment and drilling, and were soon joined by several companies of militia.

The governor of Rhode Island was so much alarmed as to call on the President of the United States to afford him aid, which was declined on the ground that no overt act of violence had been committed. The insurgents then elected a separate senate and house of representatives, and one Doïr as governor of the State, who proceeded to Washington, and had an interview with the President of the United States and with several members of congress. Meanwhile military preparations were making on both sides. A second appeal was made in vain by the State of Rhode Island for aid from the federal government at Washington. Meetings of sympathizers were held at New York to co-operate with the popular party, who had now obtained some pieces of cannon, and attempted to get possession of the

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

CHAP. XIV.

IN RHODE ISLAND.

5

arsenal at Providence. On this occasion, however, the State government called out the militia, who mustered in great force, and, after a bloodless affray, the popular party, which had already dwindled down to a few hundreds, deserted their leader, Dorr. This champion made his escape, but was soon after taken, tried for high treason, and condemned to imprisonment. Before the conclusion of this affair the government at Washington signified their readiness to furnish the required troops, but their offer of aid came late, and the assistance was no longer needed.

The firmness of the Rhode Island legislature under the threats of the armed populace at home, and, what was more formidable, of the sympathizers from without, and the respect shown to constitutional forms by the mass of the people in the midst of this excitement, are circumstances highly creditable to the majority of the citizens. It remains to be seen whether an extension of the suffrage, which was afterwards granted, will promote or impede the cause of freedom and good government in this small State.

May 2. 1842.—We now set out on a tour to the valley of the Ohio and the country west of the Alleghany mountains, taking the railway to Providence, and a steam-boat from thence to New York. Afterwards we went to Philadelphia by Amboy, passing through the beautiful strait which separates

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

the mainland of New Jersey from Staten Island. This winding channel is, in parts, only half a mile, and even less, in width, with many elegant villas and country houses on Staten Island. Its banks are often well-wooded, and it resembles a river, or Homer's description of the broad Hellespont, which, as Gibbon observes, the poet had evidently likened to a river, and not to an arm of the sea.

The trees in New England are now only beginning (in the first week of May) to unfold their leaves, after an unusually mild winter. They remain leafless for nearly seven months in the year, although in latitude 42° and 43° N., corresponding geographically to Southern Italy. In New Jersey the scarlet maple is putting forth its young leaves; the horse-chesnuts and lime-trees are in bloom; the lilacs flowering in the gardens, and the Judas tree conspicuous with its purplish pink blossom. The dog-wood also abounds in the forests, with such a display of white flowers as to take the place of our hawthorn.

We reached Philadelphia without fatigue in less than twenty-two hours, a distance of 300 miles from Boston, having slept on board the steam-boat between Stonington (Rhode Island) and New York. We proceeded from Philadelphia to Baltimore, and from thence ascended the beautiful valley of the Patapsco, for 60 miles, to Frederick. Between

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

CHAP. XIV.

HARPER'S FERRY.

7

Baltimore and Frederick, I passed over highly inclined strata of gneiss, mica schist, and other metamorphic rocks, which began to be covered at Frederick, and between that and the first ridge of the Alleghany hills, with unconformable beds of the New Red Sandstone, dipping gently to the southwest, or towards the mountains. We continued chiefly on this red sandstone between Frederick and Harper's Ferry, and then entered again upon mica schist and chlorite slate.

At Harper's Ferry, in Virginia, the Potomac, about fifty miles above Washington, is joined by the Shenandoah, a river as large as itself, and after uniting, they issue through a transverse gorge in the mountains. This gorge interested me from its exact resemblance to the Lehigh Gap before described in Pennsylvania, by which the Delaware flows out from the hilly country. The scenery of Harper's Ferry has been overpraised, but is very picturesque.

I had hired a carriage at Frederick to carry me to Harper's Ferry, and thence to Hagarstown, on the main road across the mountains. When I paid the driver, he told me that one of my dollar notes was bad, "a mere personal note." I asked him to explain, when he told me that he had issued such notes himself. "A friend of mine at Baltimore," he said, "who kept an oyster store, once proposed to me to sign

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

twenty-five such notes, promising that if I would eat out their value in oysters, he would circulate them. They all passed, and we never heard of them again." I asked how he reconciled this transaction to his conscience? He replied, that their currency was in a very unsound state, all the banks having suspended cash payment, and their only hope was that matters would soon become so bad that they must begin to mend. In short, it appeared that he and his friend had done their best to hasten on so desirable a crisis.

The next day two Marylanders, one of them the driver of the stage coach, declared that if the State should impose a property tax, they would resist payment. As funds are now wanted to pay the dividends on the public debt, the open avowal of such opinions in a country where all have votes, sounded in my ears as of ominous import.

In our passage over the Alleghanies, we now followed what is called the National Road to Cumberland and Frostburg, crossing a great succession of parallel ridges, long and unbroken, with narrow intervening valleys, the whole clothed with wood, chiefly oak. The dogwood, with its white flowers, was very conspicuous. The north-western slopes of the hills were covered with the azalea in full flower, of every shade, from a pale pink to a deep crimson. They are called here the wild honeysuckle. Had not

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

CHAP. XIV. STRUCTURE OF THE CHAIN.

9

my attention been engrossed with the examination of the geological structure of the numerous parallel chains, the scenery would have been very monotonous, the outline of each long ridge being so even and unbroken, and there being so great a want in this chain of a dominant ridge. There is a remarkable absence of ponds or lakes among these mountains, nor do we see any of those broad dead flats so common in other chains, especially the Pyrenees, which seem to indicate the place of ancient lakes filled up with sediment. Another peculiarity, also, of a negative kind, is the entire absence of the boulder formation, or drift with transported blocks, which forms so marked a feature in the hills and valleys of New England.

I have before spoken briefly of the structure of the Alleghanies (p. 92.) and their geological conformation, as explained by the Professors W. B. and H. D. Rogers. The accompanying map (pl. 2.) will serve to give the reader some idea of the manner in which the parallel belts, or long narrow zones of disturbed strata of different ages, break out at the surface along the line of this mountain chain, so as to be represented by numerous stripes of colour, running in a general direction from N. E. to S. W. It will be seen that the inferior or older groups of the Silurian series range chiefly along the eastern or south-eastern flank

Cambridge University Press

978-1-108-02021-3 - Travels in North America, Volume 2

Charles Lyell

Excerpt

[More information](#)

10 STRUCTURE OF THE APPALACHIANS CHAP. XIV

of the Appalachians, while the newer groups of the same series, together with the Devonian or carboniferous formations, make their appearance as we proceed farther westward. After having found fossils in such abundance in the corresponding Silurian rocks of New York, I was struck with their absence, or much greater rarity, in the inclined strata of these mountains, especially in the oldest limestones, or those corresponding in age to “the Trenton group.” I have before endeavoured to give, at p. 92., an ideal section of the structure of the Appalachian chain, in accordance with the views of the Professors Rogers, and have described the numerous arches and troughs, or parallel, anticlinal, and synclinal bends into which the strata are folded. Between these and the external geographical features of the country there is a manifest connection; nevertheless, it is necessary to bear in mind that the present outline of the hills has been due to changes long subsequent to the era when the rocks acquired their principal flexures and fractures. These changes have consisted of the denuding operations of the sea, which probably took place, in great part at least, during those movements of elevation which, after the period of the New Red Sandstone, uplifted the Appalachian strata to their present level above the ocean.

To those who are not accustomed to reflect on the