

JOURNAL
OF
A TOUR
THROUGH
THE UNITED STATES,
AND
IN CANADA,
MADE DURING THE YEARS 1837-38

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If a man would study human nature in and for itself, he must take a much larger tour than that of Europe. . . . The tour of Europe is like the entertainment that Plutarch speaks of, which Pompey's host of Epirus gave him. There were many dishes, and they had a seeming variety; but when he came to examine them narrowly, he found them all made up of one hog, and indeed nothing but pork variously modified.—*Warburton's Letters to Hurd*

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P R E F A C E.

THE contents of the following pages are really what their title imports—the hasty Memoranda, set down at my earliest convenience, in relation to such matters as seemed worthy of notice during each day of my sojourn in the New World ; and as it has been my wish, that they should continue to convey the actual impression left upon my mind at the time by the incidents that presented themselves, I have been careful, in revising the original manuscript, to make only such additions to it, as seemed necessary, in order to develope more fully the meaning of those passages which appeared obscure, or to supply omissions as to matters of detail which struck me upon the subsequent perusal of my Notes.

Under such circumstances, I have naturally felt reluctant to offer to the world under my name a production of a character so immature, and as there

seems in reality but little difference between the wide distribution of an unpublished work, and the act of its publication, I have purposely confined the impression of this little volume to the number of one hundred copies.

It has therefore appeared to me, that in a Work of such limited circulation, no greater degree of delicacy was called for in mentioning the names of the individuals with whom I had been thrown into contact, than ought in propriety to have been observed respecting them, in the general intercourse of society, or in one's correspondence with private friends.

As however I should have acted in this respect differently, had my Notes been designed for publication, it is my hope, that if they should chance to share the fate, which has befallen so many Works, both bad and good, written by Englishmen on the United States, and be seized upon hereafter, without my sanction, by some American Publisher, the latter will at least have the good taste to omit, in his Edition, the names of individuals, moving only in a private circle, which occur in the course of my Narrative.

If it be moreover inquired, why I should have been at the pains and expense of printing for distribution amongst friends, a production confessedly of too slender pretensions to be deemed worthy of being offered to the public — it may be replied, that I cherished, in the first place, a natural wish to shew,

that I had reaped some fruits during so long an absence from the scene of my duties at home—that I was likewise actuated by a desire to afford a kind of answer to the embarrassing question so often put to me since my return, “What do you think of the United States?”—and that, independently of these motives, I have been also encouraged to this step by the favourable reception which, if I may judge from a newspaper sent to me by a friend in Philadelphia, has been experienced by the Preface to my little “Sketch of the Geology of North America,” embodying, as it does, in a few brief sentences, those impressions with respect to the people, of which the present Journal may be regarded as supplying the groundwork and the justification.

It has, I own, been my ambition to shew, that the citizens of the United States are capable of receiving without displeasure a view of their manners given by an Englishman, whose position in the Old World is one certainly not calculated to impart to him an undue bias in favour of popular rule; who, devoted to that Constitution in Church and State, which was fixed by the glorious Revolution of 1688, and averse to any further changes in either, excepting such as may be called for by the different aspect which society has since assumed, or are manifestly involved in the principles then established, is as little disposed to overlook the evil workings of a democracy in another country, as he would be to welcome its

approaches in his own ; but who nevertheless abhors the idea of exaggerating the defects of a kindred nation for the sake of disparaging their Institutions ; is willing to make for their real failings such allowances, as the peculiar circumstances of their condition seem in candour to demand ; and has endeavoured, as much as possible, to avoid the unfairness of measuring the position, in the scale of civilisation, of a new and a distant people, by an exclusively European standard.



MAP
of the
United States.
and of the
CANADAS.
English Miles.
0 50 100 150 200

JOURNAL.

July 27, 1837.—On board the Packet Ship Mediator.

HAVING been now seven days on the Atlantic, and a little recovered from the effects of those horrors which most landsmen have to encounter, when first launched upon the wide ocean, I sit down to indite my Journal, which, if it should serve no other purpose hereafter, will at least be the means during the voyage of whiling away many a heavy hour; and may serve also as an introduction to those notes which I intend during my sojourn in the New World, to continue if possible from day to day.

As yet, we have been the sport of the winds and waves, suffering grievously, without the satisfaction of making much progress—but the good ship has acquitted herself, as a vessel ought, which was built to be presented to the Sovereign of the greatest of maritime nations, himself a seaman, as a token of gratitude from the United States for his royal services in the capacity of Mediator, when General Jackson and Louis Philippe threatened to go to loggerheads. Why Jonathan, whilst he allowed the vessel to retain her name, degraded her from her high destiny to the rank of a common packet ship, to receive humble persons like ourselves, deponent sayeth not—nor does it much matter. She is, however, one of the most elegant and commodious of the noble class of vessels to which she belongs, and is provided for our comfort with a captain who looks a thorough seaman—equal to every emergency. I find myself fortunate also in my fellow passengers, whether English or American: amongst the

former are, Mr. Draper, the solicitor general, of Upper Canada, who, as I understand, has worked his way up to that high post solely by his talents and assiduity, and is evidently a superior person. Secondly, Major Bonnycastle, of the Engineers,* whom I find to be the son of the late Professor of Astronomy at Woolwich, the author of several standard works. Thirdly, his brother, a civilian, who being left a widower with one fine boy, is going to join his brothers in America, one of whom, the major, is in the Canadian service, whilst the other holds a professorship in the University founded by Jefferson, in Virginia. Both are agreeable and intellectual persons, the former having seen much of service, the latter well acquainted with modern languages and literature.

There are, likewise, two Thespians bent on trying their fortunes in the New World, the one by the name of Horncastle, a young man of a cultivated mind, and some vocal talent—the other, Mr. Williams, a comic singer, who has already made us at times forget our miseries by his fun and drollery.

Nor have I any reason to complain of the generality of the American class of passengers, amongst whom, I may mention the amiable family of the Motleys, from Boston, and a son of John Harrison Otis, the eminent Federalist, of the same city, a young man of intelligence and gentlemanlike address, but evincing the length of his absence from his native country by his Parisian air—and, above all, by the possession of a well-grown moustache, calculated, no doubt, to do execution on the continent, but which, nevertheless, the merciless decree of fashion will, I understand, consign to destruction, so soon as he reaches the confines of New England. We have, also, on board, the celebrated Commodore Rogers, of the American navy, the wreck of a fine seaman, but now debilitated in constitution and shaken in intellect; in whom, however, the ruling passion has been evinced, almost as it were in the ribs of death, by the fact of his having undertaken, in the present state of his health and infirmities, unattended, except by a black servant, a voyage of pleasure to the Old Country, from which he is now on his return, shortly, as is manifest, to deposit his bones within his native land.† But the most talented and in some respects the most agreeable person amongst them is Mr. Duer, of New York, the friend of Senior and Archbishop Whately, who, judging from the little intercourse I have yet had with him, seems a hard-headed and sagacious person, whose legal avocations have not prevented him from attaining an extensive acquaintance with general literature. Of ladies, there are but few on

* Now Sir R. Bonnycastle, author of "Canada, in 1841."

† He died the winter following, at Washington.

board, and these chiefly from the United States, but the roughness of the weather has hitherto chiefly confined them to their cabin.

August 2nd.—As sickness wears off, I begin to find, more and more, that the great problem on board ship is, how to *kill time*. There is, fortunately, amongst our cabin passengers no propensity for gambling, such as might serve to give a zest to the otherwise tedious monotony of games of chance—chess requires too much thought to become a frequent and popular occupation—and shuffle-board, the only out-door amusement, if I may so term it, at the best not a very attractive one, is practicable only when the deck happens to be pretty steady.

I contrive to keep the *enemy at bay* during one portion of the day by a course of observations, on the temperature both of the air and water—on the intensity of the sun's radiation, as determined by Herschel's actinometer—and, on the dryness of the atmosphere, by comparison between the indications afforded by the dry and wet bulb thermometers.*

Perhaps, fortunate for the undisturbed prosecution of these experiments, that there should be on board a kind of rival philosopher, in the person of a Mr. Swaim, of the United States, who, having purchased in London a grand electro-magnetic apparatus, and being likewise addicted to flying electrical kites, acts himself as a sort of conductor, to draw off attention from my meteorological experiments, to his own more attractive exhibitions.†

I fear, however, I have given him mortal offence to day by delivering a verdict against him, when appealed to by the passengers, as to the harmlessness of his drawing down electricity from the clouds. I confess, I do not feel sufficient confidence in *his* science, to be willing to trust him with so dangerous a *play-thing* as his electrical kite might prove in unskilful hands.

In addition to these observations, I also make my servant draw up for me every day a bucket full of the sea water, with which a quart bottle is regularly filled, and this, after being corked, sealed, and ticketed with the date, latitude, and longitude in which it was brought up, is set aside in a box for future examination. I shall also occasionally obtain samples of the water from a considerable depth, by means of the instrument of my invention which is described and figured in the Transactions of the Society of Arts.‡

* For a summary of these observations, see appended.

† He is the person alluded to in Mr. Horncastle's lines, "On board the Mediator," as the "Learned Pundit," and is the son of the inventor of a patent medicine, which enjoys as great a celebrity in the New World, as Morrison's Pills do in the Old.

‡ I was thus enabled, on my return to England, in 1838, to obtain

Such are my expedients for wiling away time—in behalf of the other passengers, however, who have no such means of the following results, indicating a pretty uniform rate of increase in the saltness of the sea, as we recede from either coast :—

THE QUANTITY OF SALT IN SEA WATER.

Locality.	Latitude.	Longitude.	Sp. gravity of the water.	Proportion of solid matter in 100 grains obtained by evaporation in a water bath	
Off Southmptn.	50.54	1 24	1027.00	19.40	
	49.38	2 0 abo t	10267.26	20. 4	
	49.10	4. 0	10269.08	
	49.23	6.36	10269.99	20.95	
	50. 5	9.19	10269.99		
	50. 0	12. 0	10269.99	
	49.34	12. 7	10270.90	
	47.27	13.35	10271.81	20. 9	
	48.50	15.30	10271.81		
	48.40	17.40	10271.81		
	46.45	17.34	10272.72	20.85	
	44.40	20.15	10272.72		
	43.41	21.42	10272.72	21.00	
	43.43	24.18	10275.45		
	Water taken up during a voyage between Portsmouth and New York, in 1837.	43.18	28.38	10275.45	21.00
		43.30	32. 9	10274.54	
		44.45	33.22	10272.72	
	45.12	34.52	10273.63		
	45.36	37. 3	10271.81		
	45.40	40.14	10269.08		
	42.49	45.45	10272.72		
	41.10	48.23	10254.52		
	41.30	50.48	10249.06		
	42.30	52.10	10249.06		
	44. 0	53.51	10249.97		
	42.52	57.18	10248.15		
	42.52	57.58	10249.06		
	42.35	62.00	10254.28		
	41. 0	65.43	10254.28		
	40.40	67.24	10256.34		
	39.50	69.27	10249.06		
	39.27	71.13	10265.44		
Off Sandy Hook	10229.04	19. 2	
Drawn from a depth of 80 fathoms.	411 0	48.23	10265.44	
Do. of 100 fths. Surface-water nearest to above	39.54	67.34	10273.63	21. 0	
	10254.28	18. 7	
				2. 3 grs. difference.	

"*strenua inertia*" to exercise themselves upon, a suggestion has been thrown out for their relief, which seems to promise well. It is proposed that a Journal shall be brought out twice a week, filled with contributions, in verse and prose, from the various cabin passengers; and it is to go by the imposing title of the Atlantic Gazette, or Mediatorial Galaxy—Mr. Motley, senior, a quondam senator of the State of Massachusetts, and therefore yecept an honourable, having condescended to confer the dignity of his name and title on the functions of its editor.

August 3rd.—The first number of this *important* publication has to-day made its appearance, and has been voted by acclamation to possess merit of a very superlative order.

To be sure, we are most of us contributors in one shape or other to its columns, and may therefore be excused for feeling a parent's fondness for our progeny.

The Editor, however, wisely considering the *motley* character of the expected contributors to his Journal, collected as they are

To this I will take the opportunity of appending the results of my examination of certain specimens of sea water, which were collected from other localities, viz. :—

Locality.	Latitude.	Longitude.	Sp. gravity of the water.	Proportion of solid matter in 500 grains, obtained by evaporation in a water bath
Between Charleston and Havana	28.16	80. 8	10258.16	....
	27.30	—	10277.27	....
	24.40	—	10273.63	} 20.90
	23.28	—	10273.63	
	23.15	—	10276.36	....
Gulph of Mexico between Havana & N. Orleans	24.23	84.30	10276.36	....
	26.33	86.47	10275.45	....
	28.20	89.00	10278.18	21. 1
	Indian Ocean..	Equator.	84. 0 East	1026.00	19.00
Ditto	Ditto	8.16	1025.90	19.23
Ditto	Ditto	Do depth 625 ft.	1027.47	20.88
Atlantic Ocean	Ditto	19.30 West	1026.70	19.10
Bay of Naples	40.50	14 15	1030.00	22.30
Marseilles	43.17	5 22	1031.00	23.10

And of subjoining those obtained some years ago, by Dr. Marcet, as reported in the Philosophical Transactions, viz. :—

Atlantic Ocean	Equator	23. 0 West	1027.85	19. 6
South Atlantic	21°.0'	0. 0	1028.19	20. 6
North Atlantic	25.30	32 30	1028.86	21. 3

from both sides of the Atlantic, deserves credit for the tact he has displayed in selecting a topic for discussion, which seems not calculated to engender or to call forth any latent party or national animosities—

“ An onion will do well for such a shift.”

But his drift is best explained in the following introductory address which he has put forth :—

“ THE EDITOR TO HIS READERS.

“ It may reasonably be expected upon the first appearance of a periodical, such as now claims the attention and patronage of an indulgent public, that the editor should avow in summary terms his political views, and his notions on matters and things in general.

“ On these subjects he forbears at this time to make any avowals or professions, reserving to himself the right, in common with his fellow-subjects and fellow-citizens, to express his sentiments from time to time as circumstances may to him seem meet and proper.

“ But upon one topic vastly more interesting and absorbing than perhaps all others, he feels that he cannot be too explicit or too energetic.

“ He owes it to his ancestors—he owes it to his coadjutors—he owes it to the past, the present, and the coming generations of men, and of freemen—to take unequivocal, and he would fain hope, impregnable ground. The great question to which the editor alludes, and which doubtless is anticipated by his readers, is, ‘ Ingyons or no Ingyons ?’ that is emphatically the question.

“ The editor on this point, avoiding all circumlocution, comes to the scratch at once. He avows himself distinctly, undisguisedly, unequivocally, and unalterably, an Ingyonist of the deepest dye and richest flavour. Ingyons in all their shapes, in all their phases, in all their essences, he will advocate at all hazards.

“ Perish the Atlantic in dust and ashes, perish the Mediatorial Galaxy, with all its present and hoped for brilliancy and glory—but live, long live, and for ever live,—Ingyons and Liberty !”

There is also some humour in Mr. Horncastle’s song, “ On board the Mediator,” which appeared in the same number.—

“ SONG.—ON BOARD THE MEDIATOR.

“ When first I thought I’d like to be
A young United Stater,
Thinks I, I’d better go to sea,
On board the Mediator.

“ For I’d been down to Kitty’s Dock,
Just to investigate her,
And found all things uncommon snug
On board the Mediator.

- “ So straight I went to Captain C—
 He wasn't no abator,
 And there I *stump't the precious tin*
 Aboard the Mediator.
- “ Thinks I, a bit of good salt beef
 And mealy kidney tater,
 Will be the *prog* as I shall get
 Aboard the Mediator.
- “ But Bobby Peel, nor Mister Bunn,
 Nor Dan the Agitator,
 Would ever dream how things are done
 On board the Mediator.
- “ We've niggers clad in calicos,
 Handy as any waiter,
 Wot makes the soup, and brings it up,
 On board the Mediator.
- “ The captain heads the table top,
 A rig'lar fine first rater—
 And don't he push the wine about,
 Onboard the Mediator?
- “ There's *shampain* twice a week, d'y'e see,
 And hosheons of the crathur—
 And brandy punch, and good bohee,
 On board the Mediator.
- “ A learned pundit too, is here,
 A fine young demonstrator,
 Who sends up kites, and loses 'em
 Aboard the Mediator.
- “ We've gay guitars, and wry-necked fifes,
 And a comic recitator,
 Whose up to snuff, and something more,
 Aboard the Mediator.
- “ And blooming samples of the sex,
 Stern life's ameliator,
 Whose beaming smiles the soul perplex,
 Aboard the Mediator.
- “ In short, there's all sorts of delights,
 I'm no equivocator—
 And squalls by day, ditto by nights,
 Aboard the Mediator.
- “ If any point I overlook,
 Forgive the enumerator,
 His head has been so very much shook,
 Aboard the Mediator.”

In order to contribute my quota to the general stock, I sent

them some lines, in imitation of Wordsworth, which I once indited on a favourite cat :—

“ ODE TO A FAVOURITE CAT.

- “ Chubby ! thou surely art, I wean,
A puss of most majestic mien,
So stately all thy paces ;
With such a philosophic air
Thou seek'st thy professorial chair,
And so demure thy face is.
- “ For as thou sitt'st, thine eye seems fraught
With such intensity of thought—
That superhuman knowledge
Would seem to breathe in every mew,
And learning yet undreamt by you,
Who teach in hall and college.
- “ And when in solemn taciturnity,
Thine eye seems wandering through eternity—
What happiness were mine,
Could I then catch the thoughts that flow,
Thoughts such as ne'er were hatched below,
But in a brain like thine.
- “ Oh ! then throughout the livelong day
With thee I'd sit, and purr away
In ecstasy sublime ;
Since from thy face, as from a book,
I'd drink in science at each look,
Nor fear the lapse of time.”

August 5.—The Gazette seems to improve in interest. The subject of Onions serves as the seasoning to many a friendly controversy, both in verse and prose. Mr. Duer has sent us an amusing parody upon the ordinary style of newspaper correspondence, in an invective against onion eating, which I regret to find too long for insertion in my journal. I must make room, however, for the facetious lines which Mr. Horncastle has contributed, in imitation of Phillips' favourite Song of the Sea :—

“ SONG :—THE ONION.

Tune :—The Sea.

I.

- “ The root, the root, the bulbous root,
The young, the strong, the sweet to boot ;
In every tiny plot of ground
The *Ingion* is certain to be found.
'Tis pickled in jars for home supplies,
Or on the rumpsteak tempting lies.

I'm for the root, I'm for the root,
 Upon this theme I can't be mute,
 With its green above, and its white below,
 And fragrance wheresoe'er it grow.
 If a salad be drest without its aid,
 No matter, no matter, I'd blow up the maid.

2.

"I love, oh, how I love to walk
 Thinking of nothing, and chewing a stalk.
 When rabbits are boil'd, and mutton is hash'd,
 They both should be smother'd in onions, well mash'd.
 An *Ingion* when clapp'd to a widow's eye,
 For her darling duck will tears supply,
 I ne'er sat down to a roasted goose,
 But I lov'd, oh, Onion, thy savory juice,
 And backward flew from her brawny breast,
 Like a bird that seeketh her mother's nest,
 And my mother, I'm sure, she was fond of thee,
 For I'm marked with an *Ingion* upon my knee.

3.

"The root was ripe in the autumn morn,
 The seed was sav'd, when I was born,
 The ploughman whistled, his Onion gnaw'd
 As out of the bed a whacker he claw'd,
 And never was nurse so heard to scold,
 For I squalled for an Onion at two days old.
 I have eat since then, in spite of my wife,
 Full fifty *Ingions* each day of my life.
 Though I have munch'd ripe peaches with Grange,
 Yet I never have sought or sighed for a change,
 And whoso wishes to read me right
 Will find me a staunch old Onionite.

In humbler prose I have communicated the following account of a Dream, in which the same potent vegetable also figures conspicuously :

"MR. EDITOR,

"Monday, August 7th.

The public papers, the Mediatorial Galaxy not excepted, descant largely on the various damages and mishaps occasioned by the heavy gale of last week. They have already apprised us of the dismantled and forlorn condition, not only of the many *merchantmen* and *privateers* who had been exposed to its violence, but even, in some cases of *men-of-war*, tried long in her Majesty's service, who were thrown on their *beam-ends* during the continuance of the storm, and are only just beginning to come again under weigh.

They have pictured to us the melancholy condition to which the latter were reduced, compelled as they were *to lye to*, and often unable, even in the extremity of their misery, to *hoist signals of distress*; and they have given us reason to apprehend the most serious consequences

from the loss of *stores* and *ballast*, which several *vessels*, previously *well provisioned*, incurred in the course of it.

But, Sir, they do not appear to have yet dwelt on the many minor miseries inflicted by the storm in question, during the violence of which even nature's kind restorer, sleep, was either denied the unhappy sufferer, or by a refinement of cruelty converted into a new instrument of torture.

For my own part, it was long ere the conflict of the elements allowed me any chance of oblivion, but at length exhausted nature seemed to exert her supremacy, and I sunk unconsciously into the arms of Morpheus.

But what a sleep! 'if sleep it could be called where sleep was none.' I found myself whirled through the air, astride on a gigantic onion, bathed in an atmosphere of perfumes—not, indeed, perfumes of Arabia, but of Ascalon, the fragrant reminiscences of the day before, although my stomach had as yet been guiltless of the enormity of onion.

But whilst I was struggling to keep my seat on this extraordinary Pegasus, a sudden shock, probably a lurch of the vessel, brought me to the ground, and restored me for a moment to a sort of half-consciousness of my situation. This, however, was unattended by any mitigation of suffering, for though I felt myself in the good ship Mediator, I imagined it to be transported along by a West Indian hurricane, and myself vainly struggling to reef the sails, which the captain seemed obstinately bent on straining to the utmost.

At length a change came over the spirit of my dream, and I thought myself in the market-place of Kingston, in Jamaica, surrounded by Niggers and Mulattoes of every variety of duskiness, grinning, and making mouths at me as I ran the gauntlet amongst them.

Ensnconced behind a wall, I found myself listening to the conversation that passed, and at length had my attention arrested by a colloquy between two Creole women, which I report as a specimen of polite manners and infant precocity, as exhibited amongst our African cousins.

'How do you do, ma'rm?'

'Ver well, I tank you, ma'rm. How do little piccaninny, ma'rm?'

'Oh, ma'rm, poor piccaninny die!'

'Oh, ma'rm, I so sorry. How he die?'

'Ou can't tink how affectionate he die, ma'rm! He turn up he littel eye, an say, 'D—— your eyes, mama,' and die like a lamb.'

The pathos of this dialogue communicated such a shock to my feelings, that I could resist them no longer, and awaking suddenly, found myself in my berth in the good ship Mediator, with the black steward standing at my bedside.'

To shew that we do not deal altogether in the humorous, I subjoin the following lines by the author of the preceding song:—

“AN EVENING AT SEA, AFTER A STORM.

“A light yet lingers in the west,
Reflected on the broad sea's breast,

Which pants and heaves as almost spent
 By grappling with an element
 Its mortal foe ; for never yet
 Hath wind and wave in friendship met.
 The slightest breeze, a murmuring sigh,
 Will ruffle ocean's dignity ;
 Then how much more, when winds arise,
 That draw dark clouds o'er sunlit skies,
 Doth angry ocean chafe, and tear,
 With maddening wrath, the frolic air !
 And such but now has been the fight
 Betwixt two foes of equal might,
 Until that power, supreme o'er all,
 Had bid this elemental brawl
 Its wild contending fury cease,
 And hush'd both winds and waves to peace.
 'Tis past. A sweet, delicious calm
 Flings on the soul its magic balm.
 A stillness, that is not repose,
 But kindred to it, hath arose,
 And like a lull'd child, on its pillow,
 Slumbers the cloud-empurpled billow.
 Safely our gallant vessel glides
 Through gentler gales and smoother tides,
 The only human fabric seen
 Amidst this soft, this gorgeous scene,
 With human ties and feelings fraught,
 And all the wondrous world of thought.
 Her white sails set, and towering masts,
 That erewhile shivered in the blasts,
 Now, decked in all their stately pride,
 The yielding ocean's depths divide,
 Careering onward, swift and strong,
 She'll make the far off West ere long.
 And doth not this resemble life,
 One mingled scene of calm and strife ?
 For as this gallant vessel's form,
 Braves both the lightning and the storm ;
 So, if to virtue's path allied,
 The soul herself shall safely ride
 Through every grief, triumphant driven
 Until she gains the port of heaven."

August 22d.—A most gorgeous, but, at the same time, a most singular sunset, just such as Turner would delight in, has been this evening exhibited: a large tract of red light pervading the whole region of the west, whilst the horizon was bordered by a fringe of grass-green, of a tint which I had never before seen, extending along the margin of the ocean for a considerable distance. The breeze was at the time light and favourable; but I observed with surprise that our experienced

Captain began to take in sail. It was evident that he received it as an indication of an approaching tempest; and we soon found his prognostications verified. As the evening advanced, the wind began to freshen, till about ten o'clock, when it blew such a gale as I shall not soon forget. Still, however, it was in the right direction, and although almost every rag of sail had been taken in before the fury of the storm was at its height, yet our ship seemed to be propelled like lightning through the waves.

At midnight, however, this state of things was reversed, for after a moment's lull, the blast came directly in our teeth. We were thus obliged to ride out the storm as best we could, till morning dawned, when the wind began to moderate, and the barometer, which from the beginning of the tempest had been fearfully depressed, was, to our great relief, perceived to be rising.

The passengers were indeed confined to their berths, and little able to judge of what was going on above; but about two in the morning, a summons to the steward to serve out a supply of grog to the exhausted seamen, who had hitherto adhered strictly to the temperance pledge, made us all feel the greatness of the emergency.

When the storm had subsided, the captain, whilst he congratulated us that he had not lost a spar, or even a portion of his canvass, during its continuance, expressed, at the same time, his persuasion that the coasts had been visited by a hurricane from the West Indies; and so in fact it proved, for on our arrival at New York a few days afterwards, I found the newspapers filled with the report of wrecks that had strewn the coasts, from Florida upwards, on several successive days, all of them anterior to that in which we felt the storm.* That it was confined to a certain limited tract on the ocean was also evident, from our meeting the next day a vessel from New York which had experienced no indications of it whatsoever.

* The course of this hurricane is delineated by Colonel Read, in the seventh chart of the atlas appended to his interesting work, entitled, "An attempt to develop the law of storms."

It appears that it was perceived north of Antigua, in latitude 18°, on the 15th of August; that it had reached the coast of Florida, in latitude 28°, on the 16th; that it did much damage in the parallel of Wilmington, South Carolina, about 34° north latitude, on the 19th; that it was noticed off Cape Hatteras, in latitude 35°, on the 21st, and in various places to the northwards, as far at least as latitude 41°, where our ship met it, in the course of the 22d.

Thus, in addition to a rapid rotatory or centripetal motion, the storm had a slower progressive one, pursuing a curvilinear course, which brought it from the 18th parallel of latitude to the 41st in about seven days.

August 24th.—The Atlantic Gazette has to-day reached its sixth and last number, for there is now every prospect of our getting to our destination in a day or two. Its columns are therefore filled with valedictory addresses from the various poets of our party; but I shall content myself with noting down the lines contributed by Mr. Draper, of Upper Canada, which are elegant and descriptive:—

“FAREWELL.

- “Again have I traversed the dark western ocean,
 Adieu to its billows, its long heaving swell;
 Adieu to the calm—to the tempest's commotion,
 Dark, heaving Atlantic, I bid thee farewell.
- “I've watched, when the first rays of sunshine were peeping
 Across the blue waters, and gilding their crest;
 When zephyr's soft breath scarce aroused thee from sleeping,
 And the loud howling winds in their caves were at rest.
- “I've seen thee, when noon shed its rays fierce and burning
 Upon thy broad bosom, which mirror-like lay,
 Reflecting the beams, and their brightness returning,
 And adding fresh light to the splendour of day.
- “I've seen thee at sunset, when rich and red glowing,
 The sinking sun tinted the waves and the sky,
 And the rainbow of peace its hues bright was throwing
 O'er the cloud that betokened a tempest was nigh.
- “I've seen thee at midnight, when storms loud were howling,
 And flinging to heaven thy foam-crested wave,
 When the face of the sky was dark, lurid, and scowling,
 And thy billows, in fury, yawned wide like a grave.
- “'Tis o'er—when at home, and reclined on my pillow,
 With grateful emotions my bosom shall swell,
 To Him who has guided my path on the billow.
 Dark, heaving Atlantic, I bid thee farewell!”

At length, on Monday, the 27th of August, after a long passage of thirty-seven days, we reached Sandy Hook, and from thence, on the evening of the 28th, were safely conveyed in a handsome and commodious steamer up to New York, where I took up my quarters at Bunker's Hotel.

September 2d, New York.—Respecting the beautiful bay and the city itself, in which my stay now is, I shall make but few notes, for there seems no use in recording what has been already represented under every possible variety of aspect in the journals of hundreds of antecedent travellers.

The extreme heat of the weather, which for the first two or three days of my stay at New York raised the thermometer by day

to 85°, and at night to 77°, has indeed circumscribed, in a great degree, my rambles through the town and neighbourhood. I have seen enough, however, to rest under the persuasion that there is but little in its public buildings to arrest attention; and that it is the general aspect of bustle and business, the semblance, if not the reality of wealth, which is most striking and interesting to a stranger. New York stands in the same relation to the New World which London does to the Old; not the queen of literature, science, and the arts, but of industry and commerce; and though at the present time less magnificent, less extensive, and less affluent, bidding fair to become one day its rival in all the essentials of prosperity. I must indeed confess that the Broadway, as a single street, eclipses in certain respects anything that I can call to my mind in London; there are, it is true, no such public edifices as those in Regent Street, but there is in it a longer line of shops and of merchandise; it may not equal the stir and hurry of the Strand, but it is much cleaner, and contains many better houses. If compared to cities purely commercial, such as Liverpool, the superiority of New York strikes me as even greater, for it must be admitted there is nowhere such a street as the Broadway in any one of our provincial emporiums. We remark, however, an absence of taste, an indifference to what is merely ornamental, in all that appertains to the city and neighbourhood. The Battery, for instance, is a promenade which in point of situation might compete with any in Europe, even with the boasted Villa Reale of Naples, commanding as it does the most extensive views of the beautiful Bay, enlivened by the numerous vessels constantly passing and repassing. It is kept, however, in a slovenly manner, and laid out with no sort of taste: nor are either picture galleries or museums, on the plan of European cities, to be met with. The only public buildings that rank above mediocrity, are the City Hall, (which, however, would cut but a mean appearance by the side of any of the rich, though antiquated looking buildings of the kind in the Netherlands, or by that of the Bourse at Paris,) and the new University in Washington Square, which seems to be an imitation externally of C. C. College, in Cambridge.

Monday, September 4th.—After having participated in the hospitality of several gentlemen to whom I had brought introductions, and met, in particular, with a very kind reception from my fellow traveller, Mr. Duer, I proceeded this morning by the Albany steamer to West Point, in company with Dr. Torrie, who, like myself, fills the chair of Botany as well as of Chemistry, in the University of New York, and who was good enough to conduct me thus far on my voyage up the Hudson. The river presents a succession of beautiful prospects, which I have no

time at present to dilate upon, but the situation of West Point is particularly beautiful. I here saw the Military Academy, the only establishment of the kind existing in the United States, and from its supposed aristocratical tendencies, regarded with some jealousy by the democrats. The college is so plain a building, and one so totally destitute of all architectural embellishments, that it looks more like a factory than a national institution, and is a sad eyesore in the midst of the romantic scenery which encompasses it. The cadets are fine, intelligent-looking lads, but of their military air and accomplishments, as compared with those of other nations, I do not pretend to be a judge, though I saw them at parade in the afternoon, and learned something of the course of studies required of them from the Professors.

I also visited the Garden, called after Kosciusko, as being the favourite retreat of that patriot, which is delightfully secluded on the bank overlooking the Hudson; and then ascended to the ruins of fort Putnam, an important fortress during the revolutionary war, elevated on a mass of rocks, 598 feet above the river, and commanding, in consequence, an extensive view over the river and adjacent country.

Tuesday, September 5th.—Ascended the Crow's Nest, the highest eminence near West Point, in company with Dr. Torrie, Mr. Bailey Professor of Chemistry, and another gentleman, Professor of Natural Philosophy at the Military Academy. The path lay chiefly up a ravine, which in many parts was steep and difficult. I succeeded, however, in getting my instrument for measuring heights transported to the top,* and by the kindness of Mr. Bailey brought away a whole tin case of plants, which Dr. Torrie has been kind enough to assist me in naming. The most beautiful were *Lobelia cardinalis*, *Corallorhiza multiflora*, *Cypripedium americanum* (not, however, in flower), *Impatiens biflora*, *Rubus odoratus*, *Neottia cernua*, two species of *Helianthus*, *Chelone glabra*, *Gerardia quercifolia*. The summit was covered with two species of Oak, the *ilicifolia*, *Banisteri*, or Scrub Oak, and the Chinquapin, or Dwarf Chestnut, and so dense was the wood, that to my disappointment, a view of the country below could scarcely be obtained from it.

Wednesday, September the 6th.—Proceeded in the steam-packet to Albany. I shall not soon forget the beauties of this voyage along the majestic Hudson, but they have been so

* The height above West Point indicated by the barometer, which I afterwards found to correspond with that obtained by trigonometrical measurement, was 1270 feet.

often described that I forbear particulars. Suffice it to say, that the whole extent of 140 or 150 miles, from New York to Albany, presented a succession of landscapes, which, if they are surpassed by those of a few other rivers, taken one by one, must, *as a whole*, be allowed to surpass them all, from the number of pleasing and majestic objects they bring before us. The most striking of these were the view at West Point already described, the scenery about Hyde Park, the Catskill mountains in the back ground, with the rich and fertile ground in front, and the first prospect of Albany, on approaching that city.

But in our estimate of the charms of the Hudson, we must not forget that they are for the most part derived exclusively from the features of inanimate nature, for the works of man have either not contributed at all towards the composition of the landscape, or have tended only to mar its interest.

How different is it in this respect from the Rhine, and some other European rivers, where we perceive a blending of all the beauties which can be derived at once from nature and from art!—

“streams and dells,
Fruit, foliage, crag, wood, cornfield, mountain, vine,
And chiefless castles, breathing stern farewells
From grey but lofty walls, where Ruin greenly dwells.”

Thursday and Friday I spent at the inn called the Congress Hall, at Albany, much indisposed with a cold or influenza, and likewise by the sultry nature of the weather. The Congress Hall is full as good as Bunker's at New York, and I got there a better bed-room, with somewhat more attention, though, considering American habits, I have no right to complain of either in the latter respect. I visited the courts of justice now sitting, and made two botanical excursions.

Albany itself would be called in Europe a straggling place. It contains one street of considerable width, at the top of which, on an eminence, stands a large square, embellished by public buildings, imposing, perhaps, as a whole, but constructed in too gaudy and ambitious a style of architecture to bear minute criticism. Several of them have gilded domes, which appear to more advantage when seen at a distance than when near.

On Saturday I started with Mr. H. Webster, of Albany, a gentleman devoted to Meteorology, for whom I had brought an introduction, for Lebanon springs, which lie in one of the prettiest and most romantic situations I have yet seen.

The water had the temperature of 73° Fahrenheit, which it is said to preserve at all seasons. Bubbles of gas rise up through the water, which I collected and analysed. No trace of car-

bonic acid could be detected, but phosphorus caused an absorption amounting to 8.6 per cent. (mean of two experiments). Now adding 2 per cent. for phosphoric vapour, the composition of the gas will be—Nitrogen 89.4, Oxygen 10.6, or atmospheric air 53 to 47.

The situation of this spring is such as would afford a presumption in favour of sudden violence, or rather, I should say, is quite in harmony with that hypothesis. It issues near the junction of the limestone rock with a coarse talcose slate, which latter is here in highly inclined beds, and sinks downwards abruptly. The hotel contiguous to the spring is built against this almost perpendicular rock, so that the upper story of the house is connected by a balustrade with the summit, giving the guests an opportunity of going out without descending to the basement floor.

The whole of the neighbouring country is composed of a very beautiful succession of hill and dale; the hills, indeed, of no great height and not very precipitous, but covered with forests to their very summits—the valleys, green, fertile, and interspersed with neat cottages. The neighbourhood of Bath, perhaps, presents some similarity, only that art has there, by destroying the seclusion, interfered somewhat with the interest of the scenery. Lebanon, on the contrary, lies apart from any great town, has only one road leading to and from it, and presents all the external features of another Arcadia. But it must be confessed its Yankee inhabitants are not altogether Arcadians, for, though they may have at bottom sterling qualities, they certainly possess no pastoral simplicity, nor have they that native courtesy of manner which distinguish the mountain peasantry of many European countries. My friend took me to what he considered a favourable specimen of that class, a thermometer maker, by the name of Kendall, and certainly a shrewd, and in the main, an obliging fellow he proved. Having gone in search of him after night-fall, he was rather at a loss to find the house, and accordingly accosted a countryman whom he saw going into a cottage near us. The following is the dialogue that passed: "Pray, sir, is this Mr. Kendall's?" "No; you'll have passed it some way." "Is it the next house, or the one after that?" "You must go back to the third house, I guess." "Is Mr. Kendall like to be at home at this time of day?" "Have you any particular business with Mr. Kendall?" "Yes; I have brought a professor from England who wishes to know him." "Well, I am that gentleman." Upon which the introduction took place, Mr. Kendall offered me very condescendingly his brawny fist, and telling us to proceed to his house, followed us there soon afterwards. We found his thermometers graduated on a plan invented by his father, which obviates the

inaccuracy arising from the unequal bore of the tube. They are neatly made, and about equal in price to those of England. He supplies half the country with them. Upon further acquaintance he turned out very intelligent, and well disposed to be communicative.

I find the inn at the springs very good, and the people obliging. Being curious to compare the prices with those in England, I noted down the following scale of wines, calculating the dollar at four shillings English:—

Madeira	16 to 6	shillings English,
Sherry	12 to 7	ditto
Port	8 to 6	ditto
Hock	10 to 8	ditto
Claret	12 to 8	ditto
Champagne	8	ditto
Inferior	4	ditto, per bottle.
Board and lodging,	8	ditto, per day.

The difference, therefore, is not very material, except as to servants, who do not here expect a fee.

Actinometer, at 9 a. m.—

Maximum	14.25
Minimum	9.50
Mean of 5 obs.	11.95

Ditto, at 2 p. m.—Maximum 15.25

Minimum	13.50
Mean of 5 obs.	14.85

Thermometer at Lebanon 75°.

Lebanon, Sunday, September 10.—Drove over to the Shakers' Village, and arrived just in time for their church. It was, as I am since informed, a great *revival* amongst them, and I, therefore, have seen them under peculiar advantages. The beauty of the weather also attracted a large number of spectators to the place, and the assemblage of Shakers was increased by an influx of them from many neighbouring villages where they are established. The church was a large oblong building, perfectly plain within and without, and remarkable only for its neatness, rivalling in that respect the Moravian establishment at Hernhutt. It had a vaulted roof, underneath which, at a little distance below it, was suspended a large wooden sounding board, extending about half way from the centre of the room to either end, as a means of assisting their voices in singing.

Along one side of this room was placed a series of benches, tier above tier, for the spectators, the women being placed on the right, the males on the left. This row of benches occupied about one quarter of the whole width, the rest being reserved

for the Shakers themselves. When we first entered, the latter were seated on benches, the men and women being at opposite ends of the room.

The women were dressed in one uniform costume, consisting of a loose flowing bedgown, (as we should call it,) concealing the figure and extending down to the feet; and of a white linen shawl covering the neck and bosom. Each female held in her hand a large white napkin, which was in frequent requisition during the course of the subsequent exercises. On entering the room they took off and deposited on a peg a plain straw bonnet, and then displayed upon their head a very neat and brilliantly-white muslin cap, on which it would appear that all their arts of embellishment had been concentrated. Their shoes had immoderately high heels, like those used by our grandmothers. As to person, they were in general thin, and in every instance that I remarked, excepting in one, (who probably was a new convert,) their faces were pale and devoid of colour, so that sitting as they did with their arms crossed before them, on their respective benches, almost motionless, during the half-hour preceding the commencement of the ceremonies, they looked like so many statues.

The male Shakers, at the other end of the room, were dressed in drab coats, which, however, were pulled off before they began to dance, in dark trowsers, and other habiliments corresponding to those which a respectable labourer in this country, or a farmer in England would wear. They were in general a harsh forbidding set of men, with a peculiar solemn, gloomy, ascetic, and rather stolid expression of countenance; in some cases, however, there was a degree of wildness in their physiognomy which bordered upon insanity. Their hair was allowed to grow behind, and was combed straight, so that it hung over their back and shoulders, as with the Puritans of old, for whom some of them might have been mistaken. I remarked amongst the number two black men and one coloured woman, so that they have achieved the difficult task of overcoming the prejudices of their country in that particular. There were a few boys amongst them, but the majority of the men seemed rather advanced in years.

The ceremony began by the removal of the benches, and the marshalling of the men and women in two separate *battalions*, oppositely placed one to the other. The men's battalion consisted of five ranks, each of sixteen individuals; the females, of seven, containing the same number of persons; so that about one hundred and twelve women and ninety men must have assisted in the service.

The lines extended nearly to the middle of the room, leaving, however, a small interval between the men and women,

in order to give space for one of the elders to get up and address the persons present, and, in order that he might be heard and seen by the strangers beyond, the ranks on both sides slightly receded more and more as they approached the side in which the latter were stationed. Being thus marshalled, they began their religious exercises by a song or chaunt, very monotonous and somewhat harsh and grating, accompanied by a gentle stamping of the feet, which seemed intended to keep time with their voices.

This was followed by a very brief address or exhortation from one of the elders, who planted himself between the front columns. But little of it was audible where we were, and from what I collected it did not seem worth listening to. Next commenced the great business of the day—the dancing. The first dance consisted in a slow advance, of all the men and women, five or six paces towards the wall, who then wheeled round, and proceeded the same number of steps in the direction in which the spectators were placed. All this was done with the utmost gravity, and the most unbending rigidity of feature; the feet performing a sort of measured step, but the other parts of the body stiffened, as though they were parts of so many automata.

A pause at length took place, and the same elder who had before risen, availed himself of it to address the spectators, whom he told in pretty plain language, that it was indecent to come there and indulge mirth at the sight of exercises done with the view of serving God; that he must request them not to interrupt the proceedings by getting up on the benches, talking to their neighbours, &c., as had heretofore been the case. This done, one of the most singular exhibitions I ever witnessed came on. A portion of the men planted themselves in the centre of the room, and began to sing a kind of monotonous stave, and the remainder of both sexes, in files of three each, began to dance, or rather amble, round and round them, in such a manner that a continued series of men or women was made to pass close to the front benches of the spectators; whilst another series, consisting chiefly of the young and less experienced practitioners, were kept in the back ground, sweeping round between the groupe in the centre, and the back of the room.

The men preceded, the women followed, each with the same rigidity of feature, and the same measured pace as before, but now having their arms extended before them, and moving their hands up and down continually in so loose a manner, that one might fancy them attached by wires to their wrists, and shaken by the mere agitation of their persons. As each groupe, of the women especially, approached me, it looked like a succession of

as many spectres, so cadaverous and unearthly was their general aspect.

After this had been gone through, one of the elders advanced again towards the strangers' seats, and addressing himself pointedly to them, declared how much happier he and his brethren were in their despised condition, than the followers of this *world*, (pointing to the seats), with all its pomp, and all its vanity, and all its wickedness, and all its lies, and all its deceit.

Then commenced another species of dance, in which each file moved forwards three steps, and as many back; after which several, who felt, I suppose, more than ordinarily inspired, began to whisk round and round with the greatest rapidity, like so many spinning Dervishes. The women, I observed, were most expert in this exercise—but one or two of the men likewise attempted it. This motion was continued much longer than even a practised waltzer could have conceived possible, and after it was concluded, the exciting effects which it had produced often gave rise to sundry other contortions of the body, which continued for some time. The more phlegmatic, indeed, shewed it only by a *twitching* of their arms and legs; but others manifested the excitement under which they laboured in a much more decided manner. Several of the women appeared to be thrown into violent hystericks, and in particular, one girl of seventeen, threw up her handkerchief into the air, tore off her cap, and required the care of two or three of the older women to hold her down. One man, rather stout and short, with a large bald head, aquiline nose, and otherwise marked physiognomy, exhibited a degree of wildness in his manner which savoured of insanity. After his gyrations had ceased, he shook his head, squatted nearly down on the ground, rose again, whisked round and round, and performed various other fantastic evolutions, which one should have some difficulty in believing to have been seriously intended by any person in sound mind to do honour to the Supreme Being.

Then followed another exhortation from the same preacher, which was brief, and consisted as before of one idea repeated two or three times over, in words nearly identical. The separation of the true believers from the world of sinners, their living in a different element, their hungering after spiritual meat, and thirsting after spiritual drink, &c., were the points I chiefly recollect to have been dwelt upon in these, and other subsequent exhortations given in the course of the service. I can call to mind nothing which a perfectly uneducated man, with a proper share of self-confidence, might not have readily been taught to deliver after a week's drilling. A short respite from dancing followed, which, however, was filled up by the singing of a hymn, accompanied as before by a stamping of the feet; after

which a dance took place similar to the former, excepting that, as a kind of chorus, both men and women, as they promenaded round the room, clapped their hands together violently, but in time to the chaunt.

By this time the requisite pitch of fervour seemed to have been attained, for in the place of the one chosen elder, who had before addressed us, several, both men and women, from all parts of the room, began one after the other to give expression to their emotions. They were in general brief enough, and confined themselves to a single ejaculation or sentiment, reiterated in words nearly identical, thus:—"I am determined to be obedient to the laws of Christ!"—"I have no care for the lusts and pleasures of this life!"—"I have not given them up in the thought of coming back to them again!—I do not intend to do so!"—"I am not ashamed of the gospel of Christ!" &c. Then the same man, who had so attracted attention before, came forwards in front of the male spectators, brandishing about his arms, like a drunken man, and crying out, again and again,—“This is the testimony of Christ!—this is the testimony of Christ!”

I observed, however, that on several occasions when some one of the orators was going on in a strain more incoherent than ordinary, a stop was put to his extravagance by the striking up of a psalm, which drowned the voice of the individual.

Next, the whole troop were marshalled as before into two battalions; after which they all dropped on their knees, and rose again after a few seconds. They then shook themselves violently from head to foot, in such a manner that every limb appeared to be at once in a sort of a tremulous motion; after which, an elder exclaimed—"I intend to cleave unto God!" upon which, the whole congregation cried—"So do I!—so do I!"

Then followed some fraternal and sisterly hugs, and several of both sexes began to take each other by the hands, and dance round and round. One old man continued for some time blubbering like a child, whilst two younger ones holding his hands, and singing at the same time vociferously, supported him. I observed one of the females continuing a long time on her knees, who went on without intermission bowing her head and body nearly to the ground, like a Chinese mandarin.

At length towards the close of the service, when all present had become excited to their highest pitch, one or two of them began to address their exhortations more directly to the strangers; and a woman in particular moving several times to and fro, along the ladies' benches, with an air and manner like that of another Pythoness, went on exclaiming:—"The end of the world is at hand—the word of God is to be preached to kindred tongues and peoples—yea, to kindred peoples and tongues—by

the despised society of Shakers—by the poor despised Shakers." Towards the end, one of the elders addressed to us a more connected, and at the same time, a more audible discourse than we had before heard. He talked of the separation that had taken place between the men of this world and those of the next; he pointed to this very assembly as a proof of this separation. He said, that God had punished us for our disobedience with sundry plagues by land and by water, and that now was the time for those who wished to serve God to join him. That they, the Shakers, were the saints, and all the rest of the world sinners. Lastly, that he had himself been forty years a Shaker, and had never regretted the pleasures he had given up.

The above may pass for a sketch of the extraordinary picture of fanaticism, exhibited this day at New Lebanon, which, however, absurd and irrational as it is, does, nevertheless, appear to produce a phenomenon, which no worldly skill, no fear of temporal pains and penalties certainly could accomplish, I mean the exercise of such a control over the animal passions and appetites, as to maintain communities of men and women living under the same roof in a state of almost total continence: for the evidences of a breach of chastity amongst the females are very rare, and are punished, when they occur, by an immediate expulsion from the society; nor could the men indulge their passions, out of the precincts of the community, without being soon detected and exposed. I am aware that rumours exist respecting the women, to which the paleness and unhealthiness of their complexions may seem to lend some countenance, but I believe there is nothing to corroborate any such suspicions, and it may be suggested, that any practices, which should be sufficiently prevalent amongst them, to prevent the natural consequences of illicit connexions from taking place, could hardly escape detection for any long period, and would thus, before this time, have brought about the downfall of the institution.

There is, indeed, some truth in the remark that the women themselves are antidotes to the tender passion, but the sallow and withered appearance they present seems to have arisen from their continuing as members of the society; for certainly some of the fresh converts look more like beings of flesh and blood. A gentleman, who attended one of these meetings some time ago, related to me an anecdote, which went to show that the Shaker morality really did result from a strong feeling of duty, such as triumphed over, but did not extinguish, the grosser appetites. It happened, that a young Georgian who was one of the spectators, a remarkably fine man, had fixed his eyes pretty intently upon one of the girls, who appeared to be a new convert to

Shaker principles, and was one of the few tolerable looking females in the whole number. After some time, this girl seemed herself to be struck by the young man whose eyes had been fixed upon her. Her countenance was lighted up, her frame trembled, and her emotions were such as to arrest the attention of the groupe of women near her. They accordingly attempted to interpose themselves, so as to intercept from their youthful sister a view of the youth who had so much fascinated her; but finding this impracticable, they next announced publicly that a sister was discomposed, and that the person who caused this disturbance on her ought to leave the room. The Georgian, however, did not choose to obey this indirect summons, which he was not obliged to take to himself, and a sort of *scene* ensued, till at length the Shaker woman, who had exhibited these demonstrations of excitement, rushed up to him herself and exclaimed, several times,—“Eschew devil! Eschew devil!” The young man and his friends accordingly left the church, and quiet was restored.

If then, it be true that these ignorant people, whose minds and bodies are in a manner blighted by an absurd and unnatural system of observances, do, nevertheless, achieve a victory over their animal passions by the aid of strong religious feeling, I fear that more enlightened persons cannot plead the *irresistible* force of appetite as a valid excuse for infringing the moral law.

On returning to Lebanon, I was struck by an illustration of Lynch law in the state of New York, where at least I did not expect to find it spreading. A wretched family, of very loose habits, had resided in the parish, and were regarded as great nuisances to the place and neighbourhood. On the night of our arrival, a mob, collected, no one knew from whence, had pulled down the roof, demolished the front and sides, and left nothing but the back remaining. The miserable females were there sitting the next day in a state of abject destitution. My landlord said it was a great shame, but supposed it would be difficult to find the offenders, who came, he believed, from a distance, and so the affair rests. One does not quite understand such an outbreak of moral indignation against prostitutes exhibited in this lawless manner, by the young men of America. Returned in the evening to my old quarters at Albany.

Monday, September 11th.—Proceeded by the railroad to Schenectady, and from thence immediately on to Ballston Spa. The distance, twenty-five miles, was accomplished in about two hours and a half, including stoppages.

At Ballston, my principal object was the mineral spring, which, when it rises, is highly ferruginous, but deposits its iron

on standing so completely, that after twenty-four hours ferrocyanide of potassium and tincture of galls fail to discover it. Bubbles of gas are given off, smaller ones uninterruptedly, *but one large bubble exactly at intervals of a minute*. I collected some of it, and found it to contain of carbonic acid 60 parts in the 100. The remainder consisted of nitrogen and oxygen, in the proportion of 91 of the former and 9 of the latter, allowing 2 per cent. for the expansion caused by phosphorous vapour. I examined the temperature of two of the springs, and found them as follows:—

Park Spring 50.5 F.
United States Spring 49.5 F.

The temperature of the air being reduced this evening to 57.5 F. I had no time to examine particularly the water itself. It contains lime, much chlorine, but no sulphuric acid. The rock through which it passes is a dark bituminous shale. The village of Ballston consists of a few shops, and two or three large hotels. The "Sans Souci," to which I went, was large and well conducted, and the few people who lingered still at the spa were genteel and polite. Ballston Springs were discovered before those of Saratoga, but the principal supply of water having been from some cause stopped, an impression prevailed that no more genuine water was to be had, and the Saratoga Springs hence acquired the ascendancy.

Tuesday, September 12th. — Went on by the railroad to Saratoga, and proceeded to examine the springs. The gas was collected from two of them, and analysed. The springs were those called "New Congress" and "Hamilton." In both cases the greater part was carbonic acid, but there was a slight residuum amounting to about 5 per cent., which consisted of nitrogen and oxygen.

In Hamilton Spring the nitrogen was 85.0
oxygen was 15.0

allowing the usual amount (2 per cent.) for phosphoric vapour.

In New Congress there appeared to be—
Nitrogen 83.0
Oxygen 17.0

The water I had no time to examine minutely, but it appeared destitute of iron, strongly impregnated with chlorine, and contained lime, but no sulphuric acid.

The temperature of
The New Congress Spring was 49½ F.
The Hamilton Spring 49½
The Congress Spring 51

The rock about Saratoga was a hard quartzose sandstone.

The town consists of a number of very large hotels, and a certain amount of shops, &c. The United States, where I was, makes up more than two hundred beds; the dining and drawing rooms are spacious, lofty, and handsome; the bed rooms small, and as usual, raw and unfurnished. The season lasts little more than two months, when every place is crowded; the rest of the year it is a desert. The immediate neighbourhood presents no striking features, woods and recently cleared land dividing the prospect. For the amusement of the company, a speculator, from New York, has established, what he calls, a circular railway, upon which a carriage, something like a velocipede, is placed, which the person seated moves with great velocity, by turning a wheel with his hands.

Wednesday, 13th.—After an early dinner, proceeded towards Whitehall. Two ladies and their little boy filled the seat looking towards the horses; two other ladies, each with a baby, and one gentleman the second, and a lawyer, from Newhaven, my servant James, and myself, the farthest seat, with our backs to the horses. I had here plenty of conversation, though some of the Yankees maintained their characteristic taciturnity.

Mrs. Trollope's work came upon the *tapis*, and was as usual abused; but one lady remarked, that, with all its lies, it contained, nevertheless, one truth—and that was, her setting forth the grievous annoyance arising from the *hope I do not intrude* system established in all country places throughout the country; in consequence of which, you are never secure from interruption in your own house, and are liable to be broken in upon at all hours of the day by some Paul Pry or other, who enters whenever he pleases, without even the ceremony of knocking at the door, and inflicts upon you his presence for any length of time that may suit his own convenience, without any regard to yours.

The first place of any note we met with was Glen's Falls, where the Hudson River tumbles boldly down the escarpment of some black limestone rocks, which, from the existence in them of *trilobites*, I presume to belong to an ancient date. Here, amongst the rocks in the bed of the river, which are laid bare at this time owing to the lowness of the water, is a cavern, or rather a wide fissure, in which the last of the Mohicans was shot by his Mohawk enemy, as described by Cooper. The tree still exists in which the latter took his aim. We then proceeded to a very cheerful looking settlement, called Sandy Hill, five miles beyond which we left the stage, and proceeded by the canal-boat, along the Troy and Champlin Canal, reaching Whitehall about eleven at night. The Phoenix Inn is, indeed, a *phœnix* in America,

for civility, and the board and lodging are both excellent. I prefer it, in many respects, to that either at Albany or New York.

Thursday, 14th.—At one o'clock, I started for Montreal, by the magnificent steam-jacket the "Franklin," which plies on Lake Champlin. It is the largest, as well as the cleanest and best appointed that I have yet seen, even in America. It is 180 feet long, and is worked by two engines, each of 150 horse power. The sleeping berths are much less crammed than those in the Hudson vessels, and the cabin is more spacious, as well as more cheerful, and better lighted. The banks of the lake are exceedingly varied and beautiful, finely wooded from the summit of the hills to the water's edge. The most striking point of view, perhaps, is at Ticonderoga, where Lake Champlin unites with Lake George. Beyond, on the north-east, the White Mountains of New Hampshire were conspicuous in the distance.

We passed the night in the vessel, and found ourselves about seven o'clock the next morning near St. John's, at the extremity of the lake. Here we breakfasted, and proceeded by railroad to the St. Lawrence, where we met with another steamer waiting to convey us to Montreal, and we accordingly reached that city about eleven o'clock.

Montreal is a large straggling place, built in an island formed at the confluence of the St. Lawrence and Ottawa rivers. It presents rather an imposing appearance at a distance, from the number of spires covered with tin, which glitter in the sun, and the handsome and lofty cathedral, which rises in the centre of the city. On a nearer inspection one is apt to feel disappointed, for the streets are in general narrow and dull, with little of business stirring, and few of the houses rise above mediocrity. It is, however, a respectable town, considering the scanty population of the province of Lower Canada, and contains, I am told, more wealth than any other city within its precincts.

The cathedral was begun in 1828, and the towers are still wanted to complete it. It is a Gothic structure, erected with the grey marble found in the neighbourhood—internally wanting in ornament, and less crowded, than most Catholic churches, with altars and crucifixes. The other public buildings, such as the nunnery near the cathedral, which was the scene of Maria Monk's supposed adventures, the hospital, the courts of law, &c., are plain, and at best deserve no further commendation than as substantial buildings. There is a mountain at the back of the town, from the slope of which we command a very striking view of the latter, and of the river beyond. It is composed of the black limestone, so common in the vicinity, in horizontal strata, but is here intersected by

numerous dykes of trap, which traverse it, sometimes horizontally, but more generally vertically. They seem to run up the mountain in all directions.

Montreal contains a few individuals addicted to science, especially Mr. M'Cord, who keeps a very exact meteorological register. It appears from his observations that the mean temperature of Montreal was—

In 1830 .. 47.8	In 1834 .. 45.0
1831 .. 46.8	1835 .. 42.9
1832 .. 44.7	1836 .. 40.43
1833 .. 44.8	

So that it would seem that the weather has been getting colder during the last seven years.

On Saturday evening I proceeded by the steamer *St. George* to Quebec, and found myself in the morning on the broad river *St. Lawrence*, the borders of which were studded with villages, or covered with woods, presenting a lively appearance, though nothing particularly picturesque or striking. At length, about twelve, we came within sight of Quebec, and were gratified with one of the most imposing spectacles that I have seen since I visited the *New World*. The town itself contains, indeed, but few buildings of any magnitude or beauty, and is, for the most part, a congeries of second-rate or mean looking houses. But its position, at the foot of and along the declivity of an abrupt rock, gives it an air of importance, to which the fortifications that crown the brow of the precipice greatly contribute.

The river for some distance round seemed covered with vessels, no less than eighty sail having arrived a few days before. Beyond is an undulating and apparently fertile plain, interspersed with cottages, and, at a distance, is a range of pretty lofty mountains. On the opposite side of the river is the island of *St. Orleans*, also thickly peopled and well cultivated, which may be compared to *Long Island*, near *New York*. But in contrasting these two localities one with the other, it must be allowed that the features of the neighbourhood of Quebec surpass, in grandeur and sublimity, those of the former city, though less varied and less amply provided with the softer elements of beauty.

The two sons of Mr. Chief Justice Sewell took me out on Monday to see the celebrated falls of *Montmorenci*, where the river precipitates itself down a ledge of rocks to the depth of 240 feet! (according to the guide book). The water at the time was scanty in volume to what it is in the spring, when the melting of the snows have commenced, but it was still grand and magnificent. The geological structure of the rocks over

which it falls is curious. From the margin of the river, nearly up to the point from which the water precipitates itself, the rock is syenite, but just beyond the fall to the north occurs a clay slate, which seems to rest, in nearly vertical strata, upon the syenite. Above this latter rock are horizontal strata of a dark, fœtid, bituminous limestone, distinctly divided into beds, from one to six inches thick, so as to form a series of *steps*. This limestone contains trilobites, encrinetes, and orthoceratites.

We traced it to a point a little higher up the same river, where its waters are confined within a narrow ravine, which it has cut in the limestone rock by gradual attrition. To the edge of the stream as far up as the wood, which stretches about twenty feet above, the rock is washed away in such a manner as to form a series of irregular natural steps. The limestone here contains various petrifications, but chiefly of the kinds already enumerated. It is from this point that the river descends till it reaches the precipice at Montmorenci, down which its waters are precipitated.

There is also another geological curiosity at a village called Beauport, where, at a height of about fifty feet above the St. Lawrence, occurs a bed of tertiary shells, which I suspect to be Lyell's pleiocene deposit. The strata are quite horizontal. Uppermost is a congeries, chiefly of bivalve shells, so thickly crowded together as to leave little room for any cement. Though very numerous, yet *venericardia*, *tellina*, *solen*, and *natica*, were the only species I could collect. Below occurs a mixture of bivalves with a few univalves, with more earthy matter intervening. The bed is altogether about ten feet thick, and rests upon alluvial matter.

Tuesday, September 19th.—After breakfasting with my hospitable friend, Dr. Skey, I went to the Indian village of Lorette, where, however, little trace of Indian costume, or even of Indian physiognomy can be recognised. The villagers employ themselves, either in making toys, representing their canoes, utensils, and native dress, or in a rude and slovenly description of husbandry, being no longer nomadic. The river here forms a picturesque cascade, but I preferred the scenery above, where it tumbles over the rocks, foaming and murmuring on its way.

Dined afterwards with Chief Justice Sewell, a distinguished lawyer, and a very agreeable man, aged seventy-five, but with all his faculties entire.

Wednesday, 20th.—Dr. Skey drove me over to Woodfield, where is a nice house, belonging to a Mr. Sheppard, commanding fine views of the river, and containing a good collection of dried Canadian plants.

We afterwards went to the Heights of Abraham, the scene of Wolfe's exploits, on which the races were at the same time taking place. I remarked that some of the ground was higher than the citadel itself, so that if an enemy were to establish himself, as Wolfe did, on this elevated ground, it would seem, to an unprofessional eye, that the fortress would be commanded.

A feeling of security has hitherto prevented the British Government from taking the same precautions in fortifying the contiguous ground, which the Prussians have thought not superfluous even for their impregnable fortress of Ehrenbreitstein.

Dined with Lord Gosford, the affable and kind-hearted Governor of Lower Canada, who deserves a good word from every one, if good nature and tolerant views towards his most bitter political opponents* are sufficient qualifications for such a post in these *troubled* times.

Thursday, 21st.—At six p. m., started in the steam-vessel for Montreal, but, owing to the number of vessels we had in tow, did not reach the latter place till Saturday morning, at eight o'clock.

This evening, there occurred probably the finest *aurora borealis* I had ever seen; not merely a bright arch of light, extending from north to west nearly on the level of the horizon, but likewise numerous successive bright coruscations and streaks, shooting out from this brilliant zone, and reaching sometimes to the zenith. The phenomena continued for more than an hour.

* I had an amusing instance of the rapidity with which information in the present day circulates, as well as of the caution which ought to be observed, in repeating any thing that may pass in one's casual intercourse with official persons, from seeing in the *Times* newspaper, not three months afterwards, a report of a conversation that passed at table between Lord Gosford and an English traveller, relative to Papineau. The reporter quoted it as a proof of his Lordship's easy and careless good nature, that he asked his guest whether he had brought letters to Papineau, and upon his replying in the negative, added, it was a pity, for that he was, in the main, a very good fellow, and a little time ago he should have been happy to have given an introduction himself: "it is true," he added, "he says hard things of me sometimes, but he does not mean half what he says."

As the substance of this conversation actually passed, when I had the honour of sitting next to his Lordship at table, I suppose I must have reported it, as an instance of Lord Gosford's forgiving temper, at some party or other in the United States, and that it had thus found its way to England, and ultimately to the *Times*.

The scenery along the St. Lawrence presents nothing remarkably striking, but its banks are, for the most part, covered with trees, the autumnal tints of which please the eye, and give variety to features which would otherwise be somewhat monotonous. Cottages occur at intervals along the sides of the river, almost uninterruptedly, from Quebec to Montreal, but they are not picturesque in their character like those of Switzerland, or of some parts of England.

Saturday I spent at Montreal, and took a drive across the island on which the town is built, but saw nothing remarkable on my road.

Sunday, 24th.—This day was also spent at Montreal. Saw Mr. M'Cord's meteorological instruments—very complete, and of the best kind. Promised to attempt to arrange a plan with the British Association for supplying Canada with standard instruments.

Monday, 25th.—Started for Bytown, on the Ottawa river, in company with two officers of the Canadian service, bound for Kingston, Captains Glasgow and Swinton, in charge of some ammunition for that citadel, accomplishing the first five miles in a stage, next proceeding by a steam-vessel for about fifty miles, and then availing ourselves of a very jolting conveyance (a mere open waggon), for fifteen miles, during which the river itself is impassable for vessels.

If the St. Lawrence disappointed me, the Ottawa surpassed my expectations. It is true the borders are mostly flat, but they are so well wooded, and at the same time so diversified, that with their autumnal tints now in their full richness upon them, they afford fine materials for a picture. The most enchanting portions of the river, however, are where it swells out into the dimensions of a lake, including a number of little islands, almost all of which are covered with trees and shrubs, or overspread with grass of the brightest green. In the midst of this labyrinth of islets, a little bark canoe or two may be seen shaping its course, whilst our comparatively gigantic steamer was pressing forward in the only channel that was sufficiently deep to sustain it. In one part, indeed, it has been found necessary to cut a short canal, thus avoiding the shallows that are apt to occur in the part of the river most beset with islands. We passed an Indian village, wretched and mean as usual, the houses looking all the more forlorn from the total absence of gardens. Why is this? I was told that the priest objected to them—but can this be true? If so, with what motive does he interfere?

At Grenville we resumed our steam conveyance, stopping, however, until the morning, to allow of the arrival, by the canal, of the barges which our first steamer had taken in tow. These did not come up (one of them being aground in the canal) till about eight, a delay which caused us to spend another night on the water before arriving at Bytown. During our voyage this day the same character of scenery prevailed; the banks of the river flat, but wooded to the very water's edge; partial clearings occurring, but the evidences of cultivation few and far between. This part of the Ottawa does not appear a favourite resort for colonists: the land is, I believe, barren, the soil sandy. Here and there some lovely islands, covered with timber, rise in the midst of the waters, and, upon the whole, the voyage of this day presented beauties of the same kind, though, perhaps, not quite equal in degree to those of the day preceding.

Wednesday, 27th.—This morning I found myself at Bytown, which, from its commanding situation and central position, seems marked by nature, at some future period, as the capital of Upper Canada. Even in its present embryo condition it is certainly a picturesque spot, though injured by the injudicious clearing of its timber. The view from Captain Bolton's house is particularly striking. We see from thence, not only the undulations of the river at that point, and a finely wooded island in the midst of the waters, but also from the back ground, at some distance, the rapids and falls of the Chaudiere. I took a walk to the latter, and consider, that though not remarkable for height, they surpass in grandeur those of Montmorenci.

The river descends over a ledge of rocks, which stretches across its channel, but is broken in such a manner as to cause the water to flow, not in one continuous stream, but in a series of rapids or minor cataracts on the one side, where the rocks constitute a series of steps, and, on the other, to be precipitated into a sort of gulf, formed by the removal of the rocks below, which is called "La grande Chaudiere," the great Caldron. Advantage has been taken of that portion of the stream which descends by a series of falls, instead of by one great one, and which is consequently more manageable, to construct three channels, one sufficiently gentle for canoes to descend, and the other two forming an inclined plane, down which raft-timber can be projected. Over these falls a wooden bridge, of very bold construction, had been thrown, but it has unfortunately given way, so that, until its place is supplied by a chain bridge, or some other expedient, the only communication across the river is by a ferry.

Bytown itself consists of two collections of houses, divided by a hill, and distinguished as the Upper and Lower towns. It

contains several decent houses scattered over it, but the view of *recent clearings*, covered with half burnt or withered stumps, the ghosts of departed trees, give a desolate and melancholy look to the place. This, however, is a feature common to most new settlements, and Bytown is no worse than others in this respect, whilst, in the aspect of its houses and inhabitants, it is in advance of many. I may remark, however, that I have seen no new settlement, and scarcely any old one, since I passed through Sandy-hill, which exhibited any general attention to neatness or elegance, anything, in short, that reminded me of the neat Swiss or English village.*

Obtained from Captain Bolton a specimen of *Sarracenia purpurea*, which grows in the swamps adjacent. He also presented me with several minerals, obtained from boulders, broken during the formation of the Rideau Canal. The rocks found *in situ* at Bytown and neighbourhood, consist of that dark, fetid, limestone, loaded with organic remains, which I saw at Quebec and Montreal. The Captain had found in it *Trilobites* of several species, both large and small; the *Huron fossil* (*orthocera-tite*), *turritellæ*, *encrinites*, common and hily, and several other fossils. The organic remains are very abundant near the *Chaudiere falls*.

Captains Glasgow and Swinton left me in the morning for Kingston, and in the evening I proceeded to join the steamer, which was to carry me still further up the river. The *Chaudiere*, and other falls, prevent the latter from proceeding further than Aylmer, a settlement nine miles higher up the stream than Bytown. We were therefore compelled to take to the same kind of carriage as before, for a distance of nine miles, over a road not much better than that to Grenville. At Aylmer we met with rather a superior description of inn, which surprised us in so wild a country; but the land hereabouts is good, and at intervals throughout the whole distance from Bytown, was to be seen a succession of rather tidy farm houses, apparently not wanting in the essentials of comfort. Wages of farm servants, and other labourers, are from two to five pounds a month, and when the lower rate is given they expect to have their board besides. Along the greater part of the road the clearings were new, and consequently the aspect of the country uninviting.

* The population of Bytown is in great measure Irish, who retain in many cases, their lawless habits, and in this wild country it is not very easy to bring them under the dominion of law. The streets, in wet weather, are almost impassable, from mud, and form puddles or rather ponds of water, that are allowed to collect at the very threshold of the houses.

Thursday, 28th.—This morning I proceeded still further up the river, by a fresh steamer, and reached, at the termination of our voyage, a very picturesque expansion of the waters, called the Lake de Chaudere. Here the water descends, by a series of rapids or falls, to a depth of twenty or thirty feet, which in fine weather must have a beautiful appearance. The whole pleasure of the voyage was however spoiled to me by the incessant rain, which prevented my leaving the cabin, or seeing anything more than the general aspect of the country, which, where not recently cleared, or, what is worse, prepared for clearing by scorching the trees, was finely and thickly wooded. At the extremity of the Lake de Chaudere I took leave of my fellow passenger, an agent of the Hudson's Bay Company, who had to ascend the river 300 miles further, to Lake Temiscoming, by bark canoes manned by Canadians, trusting to the shelter of a tent in wet weather, and sleeping out in the open air in fine.

Several villages, or rather hamlets, are scattered along the margin of the lake; indeed, the country is settled for fifty miles higher up. The trade in timber finds employment for a large portion of the time of the settlers, red and white pine being the kinds principally sent down for sale to Quebec, to supply the English market.

The weather prevented my landing during our short stay at Fitzroy, or going to see the Lake du Chat above. The slippery nature of the soil, which was clayey, prevented my walking far. Found a syenitic rock near the point at which we stopped, which appeared to be *in situ*. A moose deer was killed a short time back near this spot. Musk-rats are common; beaver less so. The Hudson's Bay Company had a station here, but have sold their property, the settling of the country having much diminished the amount of game.

The Ottawa divides the upper from the lower province, but both its banks are principally inhabited by British emigrants, few of the old French settlers having extended themselves so far. The feeling is, therefore, here decidedly anti-Papineau. The captain of the steamer, who is a member of the Representative Assembly, has evidently no sympathies with that demagogue.

Friday, 29th.—This morning embarked on board the steamer, which conveys passengers and luggage from Bytown by the Rideau Canal to Kingstown. The communication between the two places is partly natural and partly artificial; the point aimed at being to connect by canals several existing lakes and rivers, and at the same time to deepen them in some places by damming up the current, and to interpose locks in others, where rapids formerly occurred. From Bytown a canal and several locks connect the River Ottawa with the Rideau River, along

which we proceeded for a considerable distance. At the Hog's Back, a dam, forty-five feet in height, is thrown across the stream, and the great body of water is caused to fall down two artificial cataracts on the eastern banks of the river. Proceeding from the Rideau River to the Rideau Lake, through a series of locks, which take the place of the rapids previously existing, we reached at length the summit level, which is 292 feet above the Ottawa, and 161 feet above Lake Ontario. This, and other lakes communicating, serve as feeders to the canal on either side, and afford an inexhaustible supply of water in the driest weather.

From thence, we gradually descend by the aid of a numerous series of locks, proceeding through a chain of lakes, designated as Mud Lake, Clear Lake, &c., till we reach Jones's Falls, where the water is ponded up by a most stupendous dam of hewn stone, seventy feet high and four hundred feet long, so that what had before descended by rapids, is now made to flow down by four locks, each fifteen feet in height.* The scenery about Jones's Falls is extremely picturesque. From thence to Kingston the country has a gloomy and desolate appearance. The creek or river of Catarqui is here taken advantage of, the fall of water at Kingston Falls being broken by the construction of four locks, each eleven feet eight inches in height. Between these locks and the entrance to the harbour of Kingston, for a considerable way, the water is remarkably shallow and the navigation difficult. The total number of locks between Bytown and Kingston is forty-seven: the entire distance being one hundred and twenty-six miles. Having three barges to tow along, the steamer proceeded at a provokingly slow pace, and it was twelve o'clock on Monday before we reached Kingston.

There is something, however, novel and striking to the eye of an European in the aspect of the country through which we had passed. Sometimes moving along in the midst of a narrow and winding stream, hemmed in on either side by forests, that ap-

* The pamphlet on the Rideau Canal states that the dam is built with blocks of freestone, backed with rubble masonry to the thickness of twenty-seven feet. The wall is sixty-two high from the foundation, and about four hundred feet long; it is strengthened by clay and gravel to the thickness of three hundred feet at the base, but slopes up to about sixty feet at top. It forms an arch against the water raised by it, and is placed at the foot of the rapids, immediately across the bed of the stream, between lofty rocks. This dam is, without exception, the most stupendous and perfect of its kind in the world, and is alone worth the expense and trouble of a visit. The locks are framed in the solid rock, to the westward of the dam, at a short distance below it, and are of the prodigious lift of fifteen feet each.

pear as yet untouched by the hand of man; at other times emerging into a lake, diversified by wooded islands, and stretching out in all directions into a number of creeks and bays, connected with other pieces of water, of which the eye only reached the commencement. The perfect silence that prevails in these regions, the absence of all signs of human life, excepting what was contained within our own steam-boat and its accompanying barges, and the rarity even of birds or other animals in the forests, that extend to the edge of the water, and appear to stretch to an interminable distance into the interior, impart a solemnity to the scene, and compensate for the want of bolder features in the character of the surrounding country. Still, there is a great monotony in that eternal succession of forests, which stands in the place of all other objects, or is only broken at intervals by a clearage, in which the stumps, and often the withered and leafless trunks of trees that have been scorched and destroyed by fire, are seen scattered over the face of the land. But the most sombre and disagreeable feature that presents itself has arisen out of the construction of the canal itself, which, by damming up, and altering the course of previously existing streams and lakes, has caused the land on the banks to be in many places overflowed, and by this means has brought about the destruction of the trees that there over-spread the country. These for the most part still remain standing, though leafless, covered with moss and lichen, and in every state of decrepitude, so as to present a most forlorn and woe-begone appearance to the eye. A few have already fallen, and occasion some danger to the navigation. About eighteen months back, a steamer was transfixed by one of these pieces of timber, and foundered in consequence. The engine and cargo were removed, but the vessel still remains in the midst of the water at the place where the accident occurred, the difficulty of getting her up being thought too great to be worth encountering.

Kingston is built near the point at which the waters of Lake Ontario discharge themselves into the river St. Lawrence. The river Cataraqui forming a considerable expanse of waters here discharges itself into the lake. Over the stream a wooden bridge of considerable length is thrown, connecting the town on the one side with the barracks and fort on the other. The fort now erecting is of great strength, and may be defended by a single regiment. It consists of two stories, the barracks being above, the stores, &c., below, and is built of the compact limestone found in the neighbourhood.

On Tuesday morning I proceeded on my way towards Toronto, by the Bay of Quinte, having preferred the steamer which

takes that direction to the one that crosses the lake, both from the chance of meeting with tempestuous weather on the open expanse of water, and from a wish to see the country on the borders of the bay. The latter is for the most part cleared and cultivated on the side of the main land, but the peninsula of Prince Edward opposite is wooded, and apparently in rather a less advanced condition. The sides of the bay were only slightly elevated above the water, and there were no hills of any height to impart variety to the landscape, which owes whatever beauty it possesses to the rich foliage of the trees scattered over the country, and the small islands that occur in the channel betwixt the main-land and the peninsula.

But I have already descanted enough upon this feature of Canadian scenery. The sun was bright to-day till after mid-day, as my actinometer evinced, but the wind blew very cold. Thermometer at eleven a. m. only 44°. We did not arrive at our destination, namely, the village at the mouth of Trent river, till eleven o'clock, but in spite of the lateness of the hour, met with very comfortable accommodations for the night. I have indeed found great reason to be satisfied with the cleanliness, civility, and general good management of the little inns in Canada. For the most part the rooms are carpeted, the tables of well-polished mahogany, and the walls papered, or neatly white-washed. The bed-room small, usually opening into a sitting-room. The absence of shutters, and, in general, of curtains to the windows and beds, are the chief grounds of complaint.

Wednesday, October 4th.—Proceeded this morning by the stage, a rumbling conveyance, like those I had before met with at the portages of the Ottawa river. Breakfasted at the neat little village of Brighton, where every thing was good but the bread, and proceeded on to Cobourg, through the best cultivated and most thriving country I had seen in the Canadas. Even one or two gentlemen's seats presented themselves on the borders of Lake Ontario. At Grafton, eighty miles from Kingston, and the same distance from Toronto, two most respectable-looking inns appeared in rivalry on opposite sides of the road; the houses, too, were mostly painted white, and displayed taste as well as attention to comfort in their construction.

The roads alone did not evince any very great improvement: they were mostly in a state of *nature*, with deep ruts and holes, which jumbled us unmercifully in our heavy vehicle. The country has, for the most part, been cleared long enough for the vestiges of stumps to be removed, a great solace for an eye wearied by the lugubrious aspect of fields covered with half scorched and dissevered trunks. The town of Cobourg, situated on the shore of Lake Ontario, seems a thriving place, and the houses of which

it consists are clean, and cheerful-looking. The Academy, at a little distance, is a very imposing building, with a portico in front, surmounted by a cupola, and two wings. It was erected by subscription amongst the members of that numerous sect, the Methodists, but is not restricted to persons of this persuasion.

Thursday, 5th.—This morning, the wind blew so high, and the lake was so rough, that the steamer from Kingston could not touch, as it was expected she would have done, to take up passengers at Cobourg. I was therefore detained, much against my will, in that little place, till the mail-coach (what a misnomer!) arrived, which was not till four o'clock. I had then to submit to seventy-two miles of travelling, over infamous roads, in a waggon without springs, and with nothing but curtains to keep out the cold on the sides. The night was chilly enough, and the whole of it, as well as the next day till forenoon, was spent in this conveyance. Nor is the time to be wondered at, when the state of the roads is taken into account, the deep holes, rather than ruts, that lay in the midst of it, the trunks of trees standing up at various intervals, &c. We passed over a bridge with a large hole in its centre, and several rotten timbers, that seemed hardly equal to bearing our heavy vehicle. At night the passage must be positively dangerous. After passing Fort Hope, the country seemed in a less advanced state of cultivation than near Cobourg. Even as we approached Toronto there were few houses, a belt of forest encircling the town for some distance. I was glad to see some symptoms of macadamizing as we came near, though in too infant a state for us to profit much by it.

On Friday, about two p. m., reached Toronto, which though, like most other American towns, rather in an embryo condition, yet holds out more promise of prosperity than any other place I have seen in the Canadas. Its population at present does not much exceed 10,000 persons, but the streets, which are wide and straight, stretch for a distance of nearly two miles, from east to west, along the lake. These *streets*, however, consist for the most part of houses with gardens or void spaces intervening, and towards the extremity are at such distances apart, that we should naturally imagine ourselves in the country, if not reminded by the name of the street placed up at intervals, that we are still within the precincts.

There is certainly space enough for 100,000 people within what is called the city, and should Canada increase in population, as may be looked for, there is no saying whether, in a century, Toronto may not attain that amount of population. There are, at present, more genteel and respectable houses than in Montreal and Quebec, all erected since the last American

war, at which time Toronto was twice taken and burnt. Its situation along the borders of the lake is agreeable, though there are no distant objects, either on the side of the land or of the water, to impart variety to the prospect. There are some substantial public buildings, likewise, built of brick, such as the College, the Parliament Buildings, the Courts of Law, &c., and a broad avenue of half a mile in length, leading up to a spot which is fixed upon for the future University. I see no reason why it should not, some time or other, vie with those of the United States.

The surface water of Lake Ontario is transparent and tasteless; its specific gravity is so nearly that of distilled water, that I could not estimate the precise difference. Nitrate of silver produces no precipitation; acetate of barytes none; oxalate of ammonia a trace of lime; spirituous solution of soap causes a cloudiness; barytic water the same. Sixteen ounces evaporated to dryness, left of solid residuum only 0.5 grains, which, when dissolved in water, gave traces of muriatic and sulphuric acids, and of lime.

Monday, October 9th.—I dined with the Governor, Sir F. Head, and met there, besides Lady Head and Mrs. Dalrymple (his Excellency's sister), Mrs. Draper, Mr. Jameson the Vice-Chancellor, Mr. and Mrs. Sullivan, the Archdeacon of York, and several others. Spent a very agreeable day. Sir Francis is somewhat reserved at his own table, and it is only now and then that the characteristic humour of the author of the "Bubbles" oozes out in his conversation.

Tuesday, 10th.—Proceeded by the stage to Holland Landing, Lake Simcoe. The country all the way is pretty well cleared on either side of the road, and some thriving farms and cheerful houses occur all along. Were we not aware that the cultivation stretches chiefly along the borders of the road (the interior being in general uncleared), we might imagine the country thickly peopled.

There is a gradual rise from Toronto till we approach Lake Simcoe, and but little descent, comparatively, to the latter lake, which therefore stands on a much higher level. It is, I understand, the highest lake in Upper Canada.

Wednesday.—Proceeded by the steamer round the western side of the lake, and reached the Narrows on its southern side in the evening. Being favoured by a fine day, I saw much to be pleased with in the general aspect of the lake, its little capes and bays, its finely wooded shores, and its islands, covered by trees, exhibiting all the richness and variety of the autumnal

tints. There was, however, no back-ground to give grandeur to the scenery, the shores being uniformly flat and tame. The most picturesque part was the Narrows, where Lake Simcoe communicates, by a comparatively narrow channel, with Lake Couchiching above. The number of islands here seen, and the manner in which, after entering the narrows, we appear shut in by the land on all sides, are the points that chiefly strike one.* Occasional clearings and detached houses are to be seen on the borders of the lake, but the portion of land brought into cultivation seems to bear no comparison with that still covered by forests. Near the narrows is a village, partly of Indians, some of whom were seen in a pretty savage state, bivouacking round their fires near the lake, at the place where the steamer halted. The men and boys were dressed in blankets, the girls looking very like Gypsies, except in their physiognomies, being much uglier.

A limestone quarry is found near this spot; before, all the way from Toronto, nothing but sand, clay, and detached granitic boulders was visible.

Thursday, 12th.—Proceeded by the steamer from the Narrows to Mr. Lally's, in the parish of Oro, where I stopped, and thus had an opportunity of seeing how the best class of settlers in this remote part of the world are circumstanced, as regards board and lodging. Mr. Lally's abode is a log-house, the interstices plastered without, and boarded within rather neatly. It consists of a small entrance hall, with a sitting-room on one side, a bed-room on the other. Behind is a kitchen, of about the same size as the parlour, and above-stairs are garrets, in one of which I slept, but with the rafters of the roof leaning so directly from the floor, that to stand upright, except in the centre, was impossible. There was a verandah surrounding three sides of the house, and, in front, a wonder in this part of the country, was a flower-garden.

The furniture was scanty, and simple enough, but there was something, nevertheless, which told you that you were in the house of an English gentleman. In Mrs. Lally I saw an instance of cheerfulness (for I will not call it *resignation*), under circumstances calculated to try the temper of a lady, accustomed to the comforts and the resources of an English household. Since the summer of last year she had *never* slept off the premises; she was totally destitute of female society: in front was the lake, the only means of communication with her

* Roche's Point, too, about fourteen miles from the mouth of the Holland River, on the east side of the Lake, presents some agreeable prospects.

neighbours; behind, a forest, without a single path sufficiently trodden for a female to venture upon. In consequence, though a good pedestrian, she had not walked eight miles in the course of the last year, and all visiting was out of the question, as I had ocular proof, from the scantiness of servants and their rawness. In fact, *bells* are unknown within the precincts of Lake Simcoe, and the servants do not wait, but merely leave the dishes and retire.

As to Mr. Lally, it is deplorable to think, that energies and talents, such as his, improved by a good education, should have been squandered away in the chopping of trees, and in labours which a common hind could perform so much better. Six years ago, in the month of December, when the thermometer on Lake Simcoe ranges at 5° or 10° below zero, he began the clearing of his estate, within a month of his arrival in the colony. He lodged in a common shanty, not better than an English cowshed, which still remains as a memorial of the hardships he must have encountered, and persevered during the whole of that winter, the succeeding summer, and the following winter, in clearing with his own hands the land which he had purchased. His spirit at the time carried him through all this fatigue triumphantly, but I fear that he has felt the effects of it since; and after six years labour, when his estate begins to wear a more settled and more promising aspect, he begins to think of relinquishing it for the South of France, on the score of health. It surely is a losing speculation for any English gentleman, whatever may be his fortune or expectations, to purchase an uncleared estate; such should be left for the rough farmer, or the regular backwoodsman, and when the preliminary labour is thus accomplished, it is time enough for the capitalist, whether great or small, to step in, and to purchase the privilege of improving and rendering it profitable.

It would be long before my eye could get reconciled to the prospect of an estate recently cleared—to a field covered, as it were, with the stumps of the trees that had been removed, and with one's view everywhere, except in front, intercepted by the forest, which spreads to an indefinite extent in all directions. Surely, this is not a position which can hold out attractions to any but those who are unable to maintain themselves in their native land. With regard to the gentry who resort to such localities, it is *pride* which fixes them there, as it is *pride* which first induced them to leave their own country; the *pride* of moving as important personages amongst the new settlers, the *pride* which deters them from sinking to an inferior grade at home.

With regard to the relative value of labour in the two countries, I have the assurance of more than one settler, that the same amount expended on agriculture in the *old country* would

produce equal results, for when summer commences, the concerns of husbandry succeed each other with a rapidity which we have no idea of at home, and here nothing can be done by deputy, so that the Canadian gentleman works much harder than the English farmer.

The young men brought up in these distant settlements seldom turn out well; it is difficult to educate them, and still more so to preserve them from bad company; so that it would seem, that if a gentleman of small fortune contrives by migrating into Canada to keep himself from losing *caste*, he cannot prevent his children from doing so, seeing that a residence in the backwoods inevitably degrades them more, than an apprenticeship to farming or to mechanical employments in the old country would have done.

Friday, 13th.—I took a ramble with Mr. Lally, and traced for a little way the terrace or *ridge-road*, which, I am told, extends nearly round this lake, as it does round Ontario, indicating, as is supposed, that the waters once stood at this higher level.

After fighting our way through a dense forest, we reached at length a recent *clearage*, which had till lately been in the occupation of a half-pay officer. This poor man, with a wife and ten children, lived in a house consisting of three rooms, a kitchen, parlour, and bed-room; but his wife became insane, and in one of her fits, broke loose, and wandered into the woods, where she continued five days before she could be found. She was, however, alive, having subsisted upon berries, but has continued mad ever since.

In these vast forests, indeed, one part of which is an exact counterpart of another, it is by no means uncommon for persons in their sound senses to lose themselves within a few miles of their homes, and it has happened to them to become so completely bewildered, that they have wandered for days round and round a given point, almost in a circle, without making all the time any nearer approach to their destination.

But the great annoyance of this country is the plague of mosquitoes, of which there is a larger and a smaller sort, together with that of black flies and of sand-flies. Such is the misery these insects occasion, that the settlers generally, in summer, regardless of the heat, fill their houses almost to suffocation with smoke, in order to get rid of these tormentors.

Saturday, 14th.—A violent east wind forced us to take shelter in a bay, not many miles from the Narrows. Verily, this is a vexatious kind of travelling! I am truly glad it is over. The steamer remained in this harbour, weather-bound, till early on

Sunday morning, when, the wind moderating, we proceeded to Holland's Landing, and from thence by the stage to Toronto, which we reached late on Sunday night.

Monday, 16th.—Stayed at Toronto, made some calls, saw the model of the projected College, which, if completed, would be the finest thing in America of its kind. But where are the requisite funds? the estimated expense being 130000*l.* sterling!

Rowed on the lake, which was now perfectly tranquil, and glittered most invitingly in the sun.

Tuesday, October 17th.—Proceeded from Toronto across the lake, in the Transit steamer, to Niagara. Captain Richardson very obligingly gave me the means of drawing up water from a depth of seventy-five fathoms (the extreme depth not exceeding eighty), by the instrument of my invention.

The water had a mawkish taste: its specific gravity differed little from that of distilled water, it, however, gave indications of chlorine, sulphuric acid, and lime, so that it was not so pure as the surface-water seemed to be. The difference, however, was very slight, for sixteen ounces left only 0.7 of a grain of solid residuum, whilst, as is stated above, the same quantity of the surface water left 0.5. There is, therefore, no foundation for the singular opinion current in Canada, that the bottom of the lake is salt like the sea.

Reached Queenstown, on the river Niagara, about one o'clock, where we found a stage to convey us to the Falls, and reached them in the afternoon.

Wednesday, 18th.—The weather appearing unfavourable for seeing the Falls, I proceeded by the stage which was to convey us to Buffalo, but contrary to the assurances of the agent, it came so late into the village where the ferry stands, that we were compelled to sleep at a poor inn, kept by Dutch people, which was not over clean.

I here had a warning, that in this border district, which harbours the vagabonds from either country, it would be necessary to look sharp after my luggage; one of my portmanteaus having been carried off by a passenger, who had fixed to cross over the ferry that same evening; and as he had before stated that he possessed no luggage of his own, the capture could not have been accidental. I had previously found the party on the stage vulgar and offensive in their conversation, the most respectable person amongst them being a young English shopkeeper from Toronto. The driver ran after the culprit and overtook him, in time to recover my property, before he had passed the frontier.

Thursday, 19th.—This morning, I crossed over to Black Rock Village, and thence by the rail-road to Buffalo, where I took up my quarters in one of the finest inns I have seen in my travels, viz. *The American Hotel*. Captain Hall is quite wrong in asserting that private sitting-rooms are unattainable in America. Here, at least, were several, most handsomely fitted up; and meals might be had in private, by paying an extra price. Buffalo is itself a cheerful, prosperous looking place, with several churches of a better style than I have seen in general.* The main street is wider than the Broadway at New York, has broad and excellent pavements on both sides, and consists, for the most part, of substantial brick houses. It is nearly a mile in length, extending down to the water, where are to be seen, at all hours, steam-packets to Detroit, Michigan, &c. The one which I observed on the point of starting, a large vessel, was literally crowded with passengers; it would seem difficult for one half of them, not merely to have sleeping berths, but even space in the cabin to lie down. The city lies at the mouth of Lake Erie, just where it begins to discharge its waters by the Niagara River into Lake Ontario. A lighthouse is placed on a sort of break-water, which commands a view of the lake. Its shores are flat on the side of the States, but more diversified on that of Canada. The neighbourhood of Buffalo, indeed, if I may judge from my visit to the settlement of the Seneca Indians, five miles off, appears flat and uninteresting; and the roads, at this season, are execrable. Buffalo contains some handsome private dwelling-houses, an Exchange, and a neat Theatre, but for the acting in the latter I can say but little.

Friday morning, I returned to the Falls, and remained there till the Monday following; during which time I examined a mineral spring, two miles below the cataract, which smells of sulphuretted hydrogen, but affords only a slight trace of that ingredient. A pint contains only about six grains of saline matter, consisting of common salt, lime, and magnesia, upheld by the sulphuric and muriatic acids. I also went to the so-called Burning Spring, three miles above the falls, springing out very near the bed of the river. There is here, also, a smell of sulphuretted hydrogen, but the main portion of the gas is carburetted hydrogen, as appears both from the kind of light it gives when kindled, and likewise from the products of its combustion, which are water and carbonic acid, as I ascertained, by

* It is remarkable, that the largest and handsomest part of the city was erected with forged capital; a great speculator, named Rathbone, having gone on building on a grand scale, paying his people with bills which were regularly counterfeited as they became due.

carrying some of the gas to the hotel, and examining it there. The water of the spring is sensibly warm, but I neglected to ascertain its temperature by the thermometer.

But what shall I say of the Falls themselves, of which so much has been written, but to which no description has ever yet done justice? * After three days' view of them under all their various aspects, in wet weather and in dry—in bright and in gloomy, I am still so far unwearied at the spectacle, that it is with the greatest reluctance I have resolved to tear myself away from them, and proceed on my route.

Nevertheless, the first sight somewhat disappointed me; for of an object so long known by report, each person, before he reaches the spot, conjures up in his mind some sort of idea, which in certain respects must differ from the reality, and may, therefore, lead him to imagine the latter as falling short of his previous conceptions.

Thus I had imagined, that the fury of the waters, after they had been launched over the cataract, would have been more terrific, and was surprised at seeing the ease, with which an insignificant ferry-boat crossed the stream within a very short distance below. † The noise also, produced by the waterfall itself, I had conceived would have been more stunning, and it was with a feeling nearly allied to what one might entertain at hearing a person of solid weight and character talked down by a noisy upstart of yesterday, that I found the roar of this stupendous natural phenomenon overpowered by the hissing of a locomotive, which was letting off its steam at the rail-road station adjoining.

The presence of these evidences of human ingenuity was, in other respects, likewise very unpropitious to the feelings which the scene itself was calculated to inspire, and though no enemy to rail-roads or factories in their proper places, I could have wished all vestiges of the one and of the other banished from a spot, where nature ought to have been allowed to reign undisturbed and alone.

But, after a time, these first prepossessions wore away, and I then began to feel more impressed with the solemnity of the sound, which the cataract produces in its descent, than I had expected to have been, by the deafening tumult of waters, for which my imagination had prepared me. In surveying it too under various aspects, I found new scenes of admiration and

* For my geological remarks on the neighbourhood of the Falls, see the "Sketch of the Geology of North America," which I read to the Ashmolean Society of Oxford, and which is now published in their Transactions, 1839.

† This, however, is owing to the backwater, which counteracts, in a great degree, the force of the current.

astonishment continually opening themselves upon me, of which I had previously no conception, nor did the interest of the scene appear to flag, when I turned to contemplate the phenomena presented in the course of the river, both above and below, which may be regarded either as concomitants or as consequences of the cataract itself. Writers, indeed, speak of the neighbourhood of the Falls as being tame and uninteresting, but they cannot mean to extend this remark to any part of the River Niagara, which, from its origin at Buffalo to its termination in Lake Ontario, at Fort Niagara, is throughout the seat of the grandest and most varied scenery.

To begin with the point at which it terminates in Lake Ontario—What can be finer than the windings of the river till we reach Queenstown, where the alluvial and comparatively flat country ends, and the rocks that extend to Buffalo rise suddenly on both sides of the river into a cliff three hundred and seventy feet in height, which is thirty-eight feet higher than the level of Lake Erie, and twenty-five higher than the level of the land at Schlosser, at the summit of which, on the Canadian side, stands the column erected to the memory of General Brock, one hundred and twenty-six feet in height?

From the commencement of these cliffs to the Falls, the river is in general circumscribed within a comparatively narrow channel, and the velocity of its current is consequently much increased. About three miles below the Falls, however, it begins to foam and roar in a manner far exceeding what is witnessed previously; and here, in consequence of a bend in the river, which deflects the current from its direct course, both to the right and left, occurs the celebrated whirlpool, in which, objects once committed to the stream are carried round and round with extreme velocity for a long period, or sucked up by the eddy in the centre and drawn down to a great depth. At this point opens the first view of the Falls, and it is, perhaps, one of the finest, in consequence of the two distinct cataracts, which we observe when near, being blended in the distance into one, and appearing like an entire sheet of foam, shining and sparkling in the sun's light.

Arrived at the village, on the American side, opposite the Falls, which goes by the unromantic name of Manchester, the first object that attracts our notice, to the east of the village, is one portion of the Niagara River, which is here divided into two branches, by the intervention of Goat Island. The branch next the village is seen rushing down with the greatest impetuosity, to the point where it precipitates itself down the rocks, forming the Western or American Fall, and the rapids here are the grandest and most terrific I have ever seen. The stream is, nevertheless, spanned by a wooden bridge, which enables us to

reach a little island, called Bath Island, large enough to contain a paper-mill, and a kind of toll-house, where a contribution of twenty-five cents is levied upon each visitor of the island beyond. This second, or larger island, is connected with the first by a wooden bridge, upon crossing which, we find ourselves on the piece of land which divides the waters of the American from those of the greater or Horse-shoe Fall.

The island itself presents several most interesting objects; from one part of it we get a close view of the American Fall, and a still closer one, from a little island, which is reached by a bridge composed of a couple of planks, thrown lengthways across. A staircase, inclosed in a kind of wooden tower, enables you to descend nearly to the level of the water, in the interval between the two falls. Here you may walk some way under either sheet of water, when the wind blows the spray in the contrary direction to that in which you are going. The sight of the waters dashing over the cliff above you, whilst standing in the space between them and the rock, is singularly sublime and terrific, seen by the light of the sun transmitted through them. They are perfectly sea-green, till having descended the precipice, they become dissipated in foam. Perhaps, however, the view of the two cataracts from a moderate distance is still more beautiful, especially when the sun shines sufficiently to produce, in all their brilliancy, the hues of the rainbow, which it occasions in the mist, arising from the spray of the descending waters.

A tower erected by General Porter, on the very verge of the Horse-shoe Fall, enables us to obtain a clear view both of this magnificent object, and of the rapids leading to it. In short, the whole walk round the island is so pregnant with interest, that it was with difficulty I could bring myself to leave it, and with unabated interest that I paid it a second visit the day following.

Such are the most striking features on the American side, but the views I obtained on the Canadian are even more magnificent. At the Table Rock we may approach almost within reach of the Horse-shoe Fall, and contemplate at our leisure the waters of this, the more considerable portion of the Niagara River, beating over the face of the escarpment, and precipitated to a depth of more than 160 feet. From the Clifton Hotel, from the Museum, and from the heights above, the views of both falls are peculiarly grand, and the whole effect is enhanced by the abruptness and height of the banks on either side, and (at the time I visited it) by the exceeding richness of the autumnal tints exhibited by the trees that cover the face of either cliff. It was, as if the fissure at St. Vincent's rocks had been filled by a clear, deep stream, instead of a dark, muddy river, and had a breadth greatly surpassing its natural dimensions, with waters

roaring and tumbling down their rocky bed, and then precipitating themselves down a perpendicular cliff, 160 feet in height. To this we must add the volume of water, being the whole of that immense tribute, which the lakes, or rather seas, of Erie, Huron, and Superior, pour into the lap of the Atlantic.

I must not forget my passing below the sheet of water at the great Fall; it was an achievement which I am glad to have performed, though I would not desire to repeat it; my breath having been almost taken away by the violence of the wind, mixed with the spray which it carries with it. Before I had quite reached *Termination Rock*, my exhaustion was such that I was compelled to desire the guide to return. I literally felt gasping, but I have no doubt that this partly arose from the effort of running so quickly through the cave. Were I to do it again, I would proceed more leisurely, in which case the convulsive breathing, which so annoyed me, would have been in great measure avoided. I returned, of course, thoroughly drenched to the skin, but did not feel cold, the exertion of fighting one's way through such a place having produced a glow, and, if my breath would have stood the trial, I might even have thought the experiment an agreeable one. It was, however, a more serious exploit than I had anticipated, and certainly one that should not be attempted by persons of weak nerves or short breath. How Captain Hall contrived to ascertain the height of his barometer in such a locality, is to me a mystery. I could not even see, whilst I was under the sheet of water, the objects most near me.

The album at the Register Office, as it is called, where certificates of having reached *Termination Rock* are obtained, is presented to every visitor to obtain his contribution to its contents, and of course contains much doggrel; the following served as my contribution to the stock: which, bad as it is, being nevertheless about an average sample, may console me for not having taken notes of the remainder.

“I've been under the cataract, *gone the whole hog*,
Am come out alive, but as wet as a dog;
And now that I've tasted my shower-bath, a sonnet
I'm asked to inscribe in the album upon it.
But my muse is confoundedly *stump'd*, for 'twould stagger a
Scott to find language and rhyme for Niagara,
Except that nought less than Strychnine or Mandragora
Could make me forget thee, thou wondrous Niagara!”

On Monday, October 23rd, I took my leave of the Falls, and proceeded by the railroad to Lewiston. Thence I took my place for Rochester by the stage, which was announced as starting at four o'clock, but instead of this I was summoned to go at *midnight*. Such is the irregularity of conveyance in this

country. Got to Lockport about sunrise, staid there till eight, and then proceeded by the mail to Rochester, along the Ridgeway road, which is macadamized, and one of the best in this part of the world.

The ridge over which the road passes is a slight elevation, like a lake shore, shelving a little both ways, and appears to have been caused by the beating of the waters of Lake Ontario, when they stood at a higher level than at present. Though the road was so good, yet we continued on it from breakfast till eight o'clock in the evening, making in that time only sixty-two miles, owing to the frequent stoppings, and the delays in changing horses. I can say but little in favour of my coach companions; there was only one who had at all the appearance of a gentleman, and he was most uncommunicative, and could not be drawn into conversation. The rest were low fellows, who, with their friends, the drivers, were tipping at every place we stopped at, until one of them, at least, became stupidly drunk. There was not much interchange of words, even amongst themselves, and of course little could be gleaned from such company. We passed through a few cheerful-looking villages, especially Clarkson and Parma, with neat churches, generally surmounted by a spire. The ground, for some distance on either side of the road, was for the most part cleared and enclosed.

I arrived at Rochester about eight o'clock, and took up my quarters at the Eagle Tavern, a respectable and well conducted inn. The next day the rain continued so incessantly, that I was chiefly confined to the house. I contrived, however, to get out as far as the Falls above the town, down which the celebrated Sam Patch took his leap. The river Genessee here descends a precipice of rock, to the depth of about sixty feet. Niagara, however, spoils one for other waterfalls, and the day was unpropitious for such sights.

Rochester itself is a thriving town, with wide, straight streets, and good substantial houses. The Erie Canal here crosses the river over an aqueduct. The town was all intent on the discovery of a murder, the first, it was said, ever committed in the place. A gentleman of the place was shot on Monday night, in going from his office to his house, within the very boundaries of the city. He had about him more than 5000 dollars, which was supposed to be the temptation. His body was not discovered till the morning.

The rain still continuing, I thought it best to give up my design of visiting Canandagua and Geneva, and to proceed on my journey eastward by the canal. The canal boats are convenient enough by day, and carry you at the rate of four and a half miles an hour, but by night the accommodations are not of an inviting character. Three tiers of shelves are suspended from

the ceiling on either side of the narrow cabin, about six feet in length being allowed for each person. Consequently, as the cabin for gentlemen is about twenty-four feet long, each side will afford berths for eighteen persons; and thirty-six passengers are disposed of in this way. Moreover, when there is a redundancy of company, the centre of the room is also occupied, so that persons will often be stowed within these narrow limits. But, besides this is the ladies' cabin, which will contain at least a dozen more, separated from ours by a curtain. Being placed with my head nearly touching that of another man, who was a great snorer, it was some time before I could get to rest, and the crying of a child in the ladies' chamber afterwards awakened me prematurely.

Here, as well as in the bars of all the inns, a public hair-brush and comb are suspended, but I have not yet seen a public *tooth-brush*. The latter, if indeed it exists anywhere, is, I should hope, confined to the *West*.

About one o'clock on Thursday we reached Weedspond, where I left the boat, finding there a land conveyance to Auburn. I reached that place in the evening, after passing over an execrable road. Lodged at the American Hotel—an excellent inn.

Friday, Oct. 27th.—This morning I went over the prison at Auburn, which has long been celebrated for the mode in which it is conducted. The system pursued is described in much detail in the works of Tocqueville, Hall, and others. Its merit consists in the economy with which the whole is managed, and in the strict silence maintained among the prisoners. Its defects are, the arbitrary power of inflicting corporal punishments allowed to the superintendants, and the knowledge which each prisoner must obtain of the persons, at least, of his neighbours. The culprits are distributed into gangs, which are set to work at certain mechanical trades, forty-five generally in each room. The trades which I saw going on were, cabinet-making, shoemaking, tailoring, saddle-making, carpet-making, stocking-weaving, tool-making, comb-making, &c. Behind each workshop was a narrow passage, separated by a partition of boards, having holes and notches cut in it at intervals, so that the inspectors, in passing, might easily detect any infringement of discipline on the part of the prisoners, during their hours of labour. The sleeping-rooms are cells, each six feet by four, closed by a door with an iron grating, and opening into a gallery. There is a recess of about two feet between the gallery and the door, which effectually prevents any intercourse between the prisoners. The allowance of food is rather liberal, but the prisoners eat it

without any conversation being allowed between them during the hours of meals. They were all at work when I visited the prison, and seemed to be pretty healthy. An inspector was sitting in each shop, whose office was to prevent any infringement of rules. The work was let out by contract, and I have seldom seen more elegant specimens of cabinet-work than were exhibited in a shop at Auburn, supplied from this prison. The carpets and rugs made there were also good, and I am told the receipts more than cover the expenses of the prison. I suspect indeed, that the profits of the establishment are better looked after than the moral improvement of the prisoners. In each cell, however, is a Bible, and occasionally some tracts, and the chaplain is expected to converse at times with each culprit on religious subjects.

The town of Auburn is one of the neatest and most thriving I have seen. It contains many good houses, and the shops bespeak a degree of opulence in the neighbourhood. There are also several handsome churches, one for each of the leading persuasions.

Having returned to Weedspond, I proceeded in the canal-boat to Syracuse, where I spent the night.

Saturday, Oct. 28th.—This morning I walked over to the village of Salina, to see the extensive salt-works there existing. The salt water is obtained from wells, sunk in the soil, and it is pumped up through wooden pipes, by means of a large wheel, worked by water, to a tank placed at the height of about forty feet from the lower part of the village. Other wooden pipes, descending from this reservoir, convey the salt water to the works below, where it is to be boiled down. It first, however, is allowed to remain some time in tanks, where it deposits a certain quantity of calcareous earth. This done, the water is admitted into iron boilers, round which the fire circulates, the salt being removed by ladles when it forms a crust in the pan, and fresh water added from time to time, to supply the waste from evaporation. I find the specific gravity of the salt water previous to its being boiled 1104°, after boiling some time 1211°.

The water at Syracuse seems less impregnated with salt than that of Salina; for it is found economical to expose it in the first instance to the sun's rays during summer, in shallow wooden pans, which are protected, in wet and cool weather, by a sort of penthouse. These pans cover several acres of ground near the town. When sufficiently concentrated in this manner, the salt water is conveyed into the salt pans, where the rest of the water is driven off.

The rock at Salina is a red marl. Near the works is the Lake of Odontaga, which, judging by the taste of its water, seems en-

tirely destitute of saline matter. The manufacture of salt in this neighbourhood is carried on to a very great extent, and has rendered Syracuse, and the neighbouring villages, both populous and thriving. The inn, Syracuse Hotel, is good, and the shops in its neighbourhood indicate prosperity.

After dinner, I proceeded by the canal boat to Utica, slept in this conveyance, with about fifty people, and reached my destination on Sunday morning. *Bagge's Hotel* here afforded me very comfortable accommodations.

The town, or *city*, (as they prefer to call it,) is large, and if not handsome, at least respectable and cheerful from the absence of squalid poverty. The streets are wide, straight, and well-paved, the churches numerous. I attended the Episcopal, and heard a preacher considerably above par; the congregation was decent, and the church neat.

In the evening, I proceeded with Mr. Doubleday, a zealous English entomologist, to Trenton Falls, and found very comfortable quarters at the inn adjoining.

Monday, Oct. 30th.—This morning we proceeded to the Falls, which begin about half a mile above the inn. Here the river, called West Canada Creek, is confined within a narrow ravine, between cliffs about 150 feet in height, and tumbles successively down several ledges of rock, which extend across its course, forming, within the space of two miles, at least six falls, the steepest of which is said to be forty-eight feet. The volume of water is, of course, not comparable to that of Niagara, but the accompaniments of the falls are, I think, superior, or at least would appear so, when the foliage of the overhanging woods is in its full luxuriance. At the time I visited it, the period of the year, if it diminished these, imparted, nevertheless, to the landscape some new and distinct beauties. The thermometer, in the night preceding my visit, had sunk to 18° of Fahrenheit, so that the ice was, in some places, an inch and a half thick. The sides of the cliffs were therefore studded with long, pendant icicles, like stalactites, caused by the freezing of the water which trickled down the rock. These, sparkling in the sun's rays, added greatly to the beauty of the scene. The view from a spot above the High Falls is particularly striking. From this point you look down upon the principal cataract, where the water, striking against the rocky bottom, is returned to the air in foam. You see, likewise, the wooden bridge thrown across the waters below, and a wide extent of the precipitous ridge which circumscribes the waters on either side.

The remarkable circumstance in this river's course is the frequent bendings which it has made in its rocky channel. You see distinctly the markings which the water has left on the side of the

cliff, nearly to its summit, and its *meanders* are so frequent and extensive, that no one, I think, can doubt the whole of the cleft in which the river now flows to have been formed by the slow action of the stream. But what an immense period must have elapsed before the channel could have been cut into to the depth here seen !

The seclusion of Trenton Falls constitutes one of their principal attractions ; you come upon them almost unexpectedly, for the existence of the river is quite concealed by a thick belt of wood on either side. Captain Hamilton is horrified by the existence of a grog-shop on the spot from whence the Great Falls are best seen ; but the *object* of the building in which this abomination is carried on is, at least, not obtrusively displayed, and after a hot, fatiguing walk up the rocks, a visitant may perhaps pardon the profanation for the sake of the refreshment afforded. The inn below is excellent, and kept by a very respectable and intelligent man, the nephew, I believe, of Roger Shearman, the son of the individual by that name who assisted in drawing up the Declaration of Independence.

The rock at Trenton is a black limestone, full of petrifications. There are various bivalves, orthoceratites, encrinites, and several very fine and uncommon species of trilobites, one, I believe, *Asaphus gigas*, measuring sometimes ten inches from head to tail. Of these, Mr. Moore, the innkeeper, sent a specimen, valued at one hundred dollars, to Mr. Henry Bright of Bristol, in return for some English minerals he had received from him. They seem common enough in the limestone, but are with difficulty detached. I saw also a specimen which looked very like a *Cololite* (See Buckland's Bridgewater), and a singular fossil, which I believe is called *Conularia quadrisulcata*.

Returned in the evening to Utica, and on Tuesday morning proceeded by railroad to Albany. The train proceeds through the picturesque and fertile valley in which the Mohawk river has cut its course. The latter, at Little Falls, has had a rocky barrier to contend with, which at some former period blocked up the valley, but an opening, not exceeding half a mile in breadth, having been made across it by nature, it has been improved by art, to allow the Erie Canal and the railroad to traverse this mountain pass. The river Mohawk still descends a series of rapids, or small falls. The rocks which rise on either side of the pass are of gneiss.

I slept at Albany on Tuesday night, and on Wednesday morning proceeded down the Hudson to New York, in a steamer. The day was beautiful, being bright, and with only that slight haze over the atmosphere which characterises the Indian summer. I had, therefore, another opportunity of admiring the unrivalled charms of the scenery. The view at Catskill struck me as most

varied, and most abounding in the softer beauties of nature, that at Westpoint most romantic. The trees were stripped of their foliage, but the soil retained its verdure. Like most of the nobler works of nature, this scenery improves on acquaintance. We started from Albany at nine, and reached New York at ten at night, distance 146 miles, in thirteen hours. My servant, in a steamer which started the evening before, arrived in ten hours, and paid only half-a-dollar. Such was the competition.

Thursday, November 2nd.—This morning I proceeded from New York, by the steamer to Newhaven, plying along the sound which separates Long Island from the Coast of Connecticut. About twelve o'clock we entered the Bay of Newhaven, and had from it a pleasing view of that cheerful and thriving town, which, with its white houses and numerous spires, presents quite a gay spectacle to the eye. The nearer view of the city, on landing, confirmed these agreeable impressions. The houses are usually very neat, and the better ones commonly stand detached one from the other, with gardens encircling them. In its neat, spruce, and tranquil appearance, Newhaven resembles very much a Dutch town; the streets are straight, regular, and well-paved, having both their sides lined with avenues of elms, most of which are fine trees.

The public Square is remarkable for its size, which exceeds in that respect most of those in London, almost rivalling the park at Brussels. About its centre is a range of churches, three in number, two of them Presbyterian, one Episcopal—and just behind, a Court House. One side of the square is occupied by the Collegiate Buildings of Yale College, which are plain, and undistinguishable, in point of architecture, from the private houses around it. The appearance of the square is somewhat disfigured, by the want of uniformity in the architecture of the several public buildings, and their close proximity; the Court House, for example, a heavy Gothic building, stands just at the rear of one of the churches, which is a brick building, with sash windows, and a pointed spire. There is, also, behind it a Methodist Church of brick, which looks like a barn stuck out in the square—a most unsightly object. The material too, of which the houses, in this and most other American towns, are constructed, being wood, gives a character of flimsiness to the whole, and this, together with their whiteness, makes their cities look, at a distance, like a collection of pasteboard boxes.

I am glad, however, to find at Newhaven, many of the newer mansions built of a more substantial material, namely, either of brick, or of the red sandstone which is procured in the immediate neighbourhood.

Yale College is a presbyterian establishment, but of course

persons of all denominations are admissible. The students are obliged to attend chapel on week days, morning and evening, and on Sunday to hear two entire duties. The latter, however, is dispensed with if they belong to a different persuasion. They take their meals at a common table, where commons are served up to them, and the poor students wait upon the rest, for which they have their meals gratis, and may also earn something towards their maintenance by chopping wood for fuel. Two students generally chum together, having distinct bed-rooms and a common sitting-room. I saw one which was small and very naked of furniture, containing also but a scanty provision of books. To my surprise, I found the students were not locked in at night, the only security against their getting out being that of a tutor sleeping on each staircase. Their expences annually vary from 250 to 1000 dollars. I should conceive, that there was less of that dissipation which is too prevalent in our English Universities; but the tutors complain, that the young men come there very ignorant, and are frequently contented to go away with a small *modicum* of knowledge. Nearly one half of those that enter leave without obtaining a degree, the College wisely preferring to reject many, than to lower the standard for all. The greater part of the youths I saw were decently dressed and nice looking lads, not so gentlemanlike, indeed, in their appearance, as the general run of English collegians, but superior in that respect to the inmates of the German Universities. The average number does not exceed four hundred. At Professor Silliman's class on chemistry above a hundred attended, and, what surprised me a little, there were also about thirty young ladies, boarding-school misses, &c. They sat, it is true, on side benches apart from the young men; but in some countries, I should think, such a degree of contiguity might be productive of inconvenience, and tend to draw off the attention of both parties from the retorts and crucibles. The New Englanders, however, are not, it is said, of a very inflammable temperament.

Professor Silliman is, himself, a very clear unembarrassed lecturer, perfectly devoid of affectation, and equally free from vulgarity and provincialism. His voice is pleasing, and his mode of experimenting successful, so that he has all the qualifications for a popular lecturer. He appears a thoroughly amiable man, excellent in his domestic relations, and of great urbanity. If he does not flatter, he is decidedly partial to the English, and views them almost in the light of countrymen. I saw at his house the entire *senatus academicus*, but was thrown most nearly into contact with the very intelligent Greek Professor, Wholsey, with whom I dined the following day, and with Professor Dana, the mineralogist. I had some conversation, too, with Mr. Hilhouse, a man of independent fortune, living in the town, a poet of some

distinction, and a strong Federalist, of a cast, such as would almost entitle him to be considered an ultra-tory in England. He was eloquent on the dangers of the Reform Bill in England, and agreed entirely with an article, attributed, I think, to Mr. Croker, in the Quarterly Review on this subject. He spoke of General Jackson, as a man well calculated, from the decision of his character, to fight Indians, but as ignorant of political science as the Indians themselves. He attributed to government measures the present commercial crisis, and spoke rather despondingly as to the prospects of his country.

Newhaven possesses a very capital mineralogical cabinet, collected originally by Colonel Gibbs, the specimens in which are large and often splendid. I observed some meteoric stones of great size. It contains, also, a small Gallery of Pictures, the best of which are the original paintings of Colonel Tumbrull, who, now in his eighty-second year, has retired to Newhaven to finish his days in the family of Professor Silliman, who is married to his niece. The principal and most interesting, consist of a series of historical paintings, illustrating events in the American war, from the Declaration of Independence to the Surrender of Lord Cornwallis. The likenesses of persons distinguished, on both sides, during that period, and subsequently to it, would be sufficient alone to give an interest to these productions, which, likewise, shew talent, whenever the subject admitted of it. This can scarcely be said to be the case in the celebrated picture relating to the "Declaration of Independence," for what can be made of a set of plain-dressed and plain-looking men, seated rank and file on benches, and doing nothing? Yet, the group in the centre, of persons standing up, is an interesting one; you see there the portrait of Jefferson, which I could swear to be a good likeness,—the keen penetrating countenance, coupled with something of harshness, not to say, malignity in its expression, agreeing well with the known character of the man. The battle pieces are better, and the figure of Washington stands nobly out in most of them. He has evidently taken particular pains with this, his favourite hero.

I likewise saw the Grave-yard, which is neat and formal. There are too few trees, and such as there are, not handsome, being chiefly poplars, and these pollarded. It is a proof of the good order maintained, that although a horror of disinterment exists here, quite as strongly as in England, yet no fence higher and more effectual than a wooden paling is thought requisite to protect the graves from the incursions of medical students. Subjects, I understand, are supplied to them from New York.

On Monday morning, November 6th, I started at six o'clock for Hartford, and proceeded over an excellent road through a

very pleasing country, in a stage of a more easy description than heretofore. The country in Connecticut is so uniformly cultivated, that one might imagine oneself in England, and the villages so neat, with such an air of snugness about the houses, that we might often fancy ourselves transported to Holland. But where else shall we meet with such an absence of poverty, such an "*aurea mediocritas*?" certainly, nowhere in the Old World; and, though *thriftiness* is apparent, I do not see amongst the rural population those evidences of a grasping spirit, which Hamilton perceives in the Yankees generally, and which their town inhabitants certainly seem infected with. We breakfasted at Cheshire, a very neat village, whose houses encircle a large green, with a handsome church facing the road. Every one of them is of wood, usually painted white, had verandahs, and the windows are supplied with Venetian blinds. There was not a mean dwelling in the whole place. The country was pleasingly undulated, but without any considerable elevation occurring. The prevailing rock was the red sandstone, as at Newhaven.

About one o'clock I arrived at Hartford, a city somewhat larger than Newhaven, and equally neat in the style of its houses. Perhaps, within its precincts, or in its immediate neighbourhood, there may be more houses of the first class than at Newhaven, but there is no square like that which the latter has to boast of.

Several public institutions are connected with this city, said to be worthy of a visit; such as the Episcopal seminary, called Washington College; the Retreat for the Insane; and the Deaf and Dumb Asylum. I had only time, however, to visit the last, and was much pleased with what I saw there. The senior class were able, not only to write, (often in a very neat hand,) on a slate, a complicated series of sentences, imparted to them through signs by their teacher, but even to illustrate out of their own head the meaning of a particular word, by composing a sentence in which the latter occurred. Thus they wrote a sentence in which the word *implore* occurred, shewing that they attached the right meaning to it. They were then informed by signs, who I was, and in the course of two or three minutes had written on their slates these words, or what were equivalent to them—"The gentleman, in the spectacles, is Professor Daubeny, who teaches chemistry and botany in Oxford. He has visited the United States to observe our institutions, but has never seen a School for Deaf and Dumb in his own country." Some few made blunders, and in none were the expressions precisely identical, shewing that they had seized the ideas as well as the words. They were usually very intelligent-looking, and one girl, who was probably the best scholar, possessed a strikingly interesting and sensible physiognomy. The other school-rooms were

occupied by scholars of a less advanced grade. In the lowest they were learning words implying sensible objects, by copying them from their master, whilst the object, or a drawing of it, was presented to them. Three of the tutors were themselves deaf and dumb. The number of both sexes are about one hundred and thirty; the charge for board and instruction, 100 dollars yearly, the friends of the charity supplying the rest. They were from all parts of the Union, sent in many cases by the State Legislatures. Amongst them was an unfortunate object, a young woman, at once deaf, dumb, and blind. She had been in the asylum twelve years, and was now thirty years old. There was of course in her a vacant expression of countenance, but she appeared to know the value of money, which, when put in her hand, she carried away into a place at some distance off, and deposited in a box kept for the purpose of receiving it. She seemed pleased with feeling the person and dress of children. Her history may be seen in the Report of the Institution for 1837.

Tuesday, Nov. 7th.—This morning, at four o'clock, I proceeded by the stage to Northampton, passing through a very pleasing portion of New England, where the many neat and thriving cottages, and the number of houses, suited to persons of moderate fortunes, shewed the absence of poverty from all, and the possession of competency in very many. The village of Northampton is, perhaps, the most delightful I had seen. The houses are scattered over a considerable space on the slope of a hill; and though some of the more ambitious erections are absurd enough (especially a Lady's seminary, built in imitation of a Gothic abbey, with high lancet windows, &c.), yet the general effect cannot be otherwise than pleasing. The number of churches in New England is remarkable; here, where the houses are said not to exceed three hundred and fifty, I counted ten Presbyterian, one Baptist, one Methodist church, and, I believe, one other. Every thing in these villages bespeaks order, strict morality, and attendance to religious duties.

The valley in which Northampton stands must be most beautiful in summer, and shews a more perfect degree of cultivation, as well as a greater luxuriance of soil, than any other I have seen. The forests are here limited to the mountains, of which two principal ones present themselves, Mount Holyoak, on the east of the River Connecticut, Mount Tom on the west. The road on either side of the village passes through unenclosed meadows, with fine trees scattered over it, singly, or in patches, like an English park. This grouping of the trees, dotted about in small patches, instead of being collected into large masses, seems peculiar to this part of the Union, and reminds one, more

than any other circumstance could do, of the Old Country. In the evening I proceeded through the valley to the village of Amherst, where an Institution has been formed by members of the Presbyterian community, in rivalry to that of Cambridge, near Boston, in consequence of the latter having fallen almost exclusively into the hands of Unitarians. It consists of three large, ugly, staring, red, brick buildings, and of a chapel in the centre.

On my arrival I called on Professor Hitchcock*, who proposed to shew me the bird tracks he had discovered in the sandstone formation which exists in his immediate neighbourhood. The tracks were of various sizes, and the largest could not be less than sixteen inches from one extremity to the other, being broader as well as longer than the foot of an ostrich. In these cases the footsteps were nearly six feet apart. There was generally a space behind the heel, extending to a considerable distance. In one instance there were markings, that resembled the corrugations of the skin connecting the talons, seeming to prove that the animal was web-footed. In some cases the impression made in the sandstone was oblique, as if the animal had *slid* in walking from having to tread on soft mud. There were also other impressions of footsteps that did not appear to have been made by birds, possessing too many toes. Sometimes the steps were alternately twisted to the right and left. In other instances we could make out several acute talons affixed to the extremity of the toes.

Such were the most remarkable circumstances which I noted in going over the specimens contained in Professor Hitchcock's museum; after visiting which, he took me to the opposite side of the river Connecticut, about ten miles from Amherst, where, on a shelving ledge of rock, projecting from the water, we observed numerous impressions of the same kind, which, being partially effaced, we should not have recognised as such, except from having previously examined the specimens in his museum. As it was, I could have no doubt upon the matter. The sandstone was a fine grained micaceous rock, splitting into thin and distinct layers.

On the opposite side of the river, near the ferry, the greenstone exhibits a very distinct columnar arrangement, the columns near the river being broken off, so that only the tops of them appear. These form a sort of mosaic pavement, inclined towards the river, exhibiting, on a minute scale, a resemblance to the Giant's Causeway; and, what is remarkable, the sandstone here seen beneath it, not many feet above the level of the river, is

* The learned Professor of Chemistry and Natural History, and author of the Report of the Geology of Massachusetts.

in some places *columnar* likewise. The latter is generally indurated, and sometimes near the junction is converted into quartz rock.

This greenstone, which, Professor Hitchcock says, may be traced near Newhaven, is seen at the contiguous mountain, Holyoke, interposed between two beds of sandstone. The lower bed is observed at the level of the river, a little above which the greenstone appears, and from thence continues to the summit of Mount Holyoke. At the back of this mountain, however, another bed of sandstone seems to rest upon it, though this latter rises only to a slight elevation. Just about one third of the way up Mount Holyoke, the greenstone is found in distinct columns, about ten feet in height, and of great regularity. Owing to the disintegration of the columns on the face of the rock having taken place below more than above, the upper portions of some of the columns project beyond the lower row, and are suspended over the head of the observer, when standing close to the rock. These projecting portions are convex, or lenticular, and are compared by Hitchcock to a number of iron kettles hanging from the rock; they exhibit, likewise, a number of cracks in all imaginable directions, as if, instead of being each an entire column, they had been severally made up of a cluster of minor ones, confusedly packed together. And such I believe to be the true theory, though the Professor, in p. 400, of his work, explains this latter circumstance differently. I observed something similar at Castello d'Aci, near Catania.

From this point we ascended Mount Holyoke, and enjoyed from its summit one of the most extensive prospects I ever recollect seeing spread before me. The windings of the beautiful River Connecticut—the fine meadow land on its banks—the numerous and thriving villages scattered over the country on either side—the distant hills of New Hampshire on the one side, of Hartford on the other—an horizon embracing an area, I am told, of 160 miles—all united to give an interest to the scene. The day, though cold, was remarkably clear and bright.

We returned to Amherst about sunset, after passing through the village of Hadley, where Goffe and Whalley, King Charles's Judges, were for a long time secreted. It is said, that on one occasion, when the people were desperately attacked by the Indians, Goffe, whose person was known only to a few, rushed in amongst the combatants, with streaming white hair, flowing robes, and a drawn sword in his hand; the cry was raised amongst the whites, that the angel Gabriel had come to their assistance, and his countrymen, cheered on by the thought, renewed the fight with fresh vigour, and put the savages to the rout. So rigorous, however, was at this time the search after the regicides made by the emissaries of government, that Goffe, immediately after the

battle was over, retreated into his former concealment, and was never again seen at large*. In the evening I drank tea with the Professor, and met several of the staff of the College; amongst others, President Humphrey, who appeared a very agreeable man. The cakes and sugar were handed about in the primitive style by the Professor's children.

I have not time to do more at present than refer to Professor Hitchcock's remarks, in his Report, with respect to the evidence that Mount Tom and Mount Holyoke were severed asunder by some cause distinct from the mere action of the river which now divides them, or concerning the slight valleys, which traverse the summit of Mount Holyoke from north to south (not varying in direction with the bend of the mountain itself), and coincide in their course with that of certain markings or streaks, seen on the surface of the trap where it is exposed, which he attributes to the friction of the heavy masses that passed over the summit.† On some parts of the ridge on the top of the mountain, the Professor finds large boulders of granite, and loose masses of sandstone are seen strewn on its sides to a considerable height above the place from which they must have been brought.

Thursday, November 9th.—This morning I proceeded in the stage to Worcester, and passed a more hilly and less populous district than before, in order to arrive at that place. We reached it about two o'clock, and after dinner I went over the Lunatic Asylum, which stands on an eminence above the town, and is imposing, both from its size and situation. It contains about 170 patients, distributed over twelve wards, the inmates of which take their meals together. Connected with a gallery, in which they can walk by day, is a series of cells, eight by ten feet each, intended as their dormitories. Each gallery leads into an open space, surrounded by bars, but having on all sides a free access to air, in which the patients can walk in fine weather. This is preferred to yards for exercise, but I should think it a bad substitute, unless where the patients are taken out into the fields frequently.

I saw likewise the house of the Antiquarian Society located at Worcester. It contains a library of 12,000 volumes, chiefly on American history, biography, and antiquities. The Society has published two volumes of Transactions, which contain some interesting and learned papers, especially with respect

* See Miss Martineau's "Society in America," vol. i. p. 268.

† These observations of Professor Hitchcock's derive additional interest from the new views respecting glaciers, which have been since propounded by Agassiz.

to those curious mounds of earth which exist in the Western States; and, likewise, with regard to the languages of the Aborigines.

Worcester is a clean, neat place, of about 7000 inhabitants, much resembling in appearance the other New England towns. The inn, Worcester House, is respectable, and is the first place of public entertainment I have seen, belonging to the higher class of hotels, which proclaims itself a "Temperance House."

Friday, November 10th.—This morning I proceeded by the railroad to Boston, and reached that city in three hours, the distance being forty-two miles. I lodged there at the Tremont House, a splendid establishment of the kind; the dinners more luxurious than I have met with anywhere else in America, and consequently not dispatched at the same railway pace; the bedrooms and private sitting-rooms also comfortable.

In the evening went to Faneuil Hall, to hear Daniel Webster, and the other Whig orators, who had come to harangue the good people of Boston, hold forth on the state of the country. The Hall was crowded.

Mr. Webster opened the business of the meeting, but spoke but little. His action, however, struck me as rather ungraceful, though his countenance, and particularly his eye, is imposing. He has a powerful voice, and what he said was at least in good taste, and delivered in a manly, unpretending way.

Mr. Bell of Tennessee followed, and began his discourse with such fulsome compliments, to the patriotism of Boston, the excellence of its government, the superiority of the United States to all other countries in *arts*, as well as in industry, intelligence, and virtue, that an English audience so flattered would have been sickened; but the applause which followed, shewed that the Bostonians have a capacious swallow, and are *gluttons* rather than *epicures* with respect to this kind of food.

His best hit was an appeal to the audience, as to whether the Government had or had not forfeited their confidence; and upon the cry from all parts of the Hall that it had—"This," said he, "is not the first time that the voice which issued from this Hall has vibrated through the land—it sounded heretofore the knell of a foreign despotism, and I trust it will now do the same to a domestic one." The above allusion to the meetings held in this Hall at the commencement of the struggle for independence, was happy and well timed; but here the orator should have stopped, for, by detaining us for half-an-hour longer, with the same topics which he had before dilated upon, he spoiled the effect of the whole, and would have wearied out a less patient audience.

To believe him, the corruption practised by General Jackson, and his successor, had spread like a leprosy over the nation, and

had banished liberty from the land. He should despair of his countrymen, if he did not see symptoms of a reaction taking place. The orator seemed in himself no great acquisition to the cause he supported; but, coming as he did from the head-quarters of the enemy, the very State in which General Jackson resides, his accession was hailed as a happy augury.

A deputy, from Kentucky, followed, who spoke in a straightforward manner, and put home-truths in a strong and clear light. His colleague, from the same State, clipped "the king's English" *considerable*, but did not detain us long. Then followed Mr. Hoffman, of New York, who passes, I understand, for a *fine* orator, but to my taste is far from an impressive one—he is too flowery, too studied, too ambitious by half, and his comparison of the victory gained over the *loco-focos* at New York, to the battle of Marathon, was in the worst style of schoolboy declamation. Nevertheless, it seemed to please vastly; and, judging from what I could overhear, this fustian stood much higher in the estimation of the audience than the simple diction of Mr. Webster. The meeting, large as it was, went off very quietly—an American *mob* is in truth different from an English one.

Saturday, November 11th.—Called on the celebrated Dr. Channing, with whom I had some interesting conversation. He reminded me a little, in manner and appearance, of what I recollect of Davison or Oriel, but I should think he possessed more suavity of temper. Afterwards went over to Cambridge, saw my friend and former fellow student, Dr. Webster, the Professor of Chemistry, and made some other calls. Drank tea with Mr. Jonathan Phillips, a gentleman, who, after filling various public posts with credit, and amassing considerable wealth, has now retired into private life, and being a widower, lives *en garçon* at the Tremont Hotel, to save the trouble of housekeeping; with him I discussed various political topics, with advantage to myself, and without acrimony on either side.

Sunday.—In the morning, went to hear Dr. Channing. His sermon was on the death of a Dr. Worcester, an almost self-educated man, who, from a shoemaker, became a minister of the Unitarian sect, and was distinguished as the founder of the Peace Society. In listening to a man of Dr. Channing's reputation, we are naturally led to think rather of the literary eminence of the man, than of the peculiar tenets of the preacher; in him the character of the Unitarian minister is merged in that of the eloquent writer, and the vindicator of the common rights of humanity; and if I may judge by what I have heard from him to-day, and by the few printed sermons of his composition

which I had perused before, I should conceive, that one might listen to him for several successive Sundays, without being reminded of the wide differences between his views on important doctrinal points, and those of the church to which we ourselves belong. He has also a mild, and at the same time an highly impressive manner—his language is always well-chosen, though sometimes too highly wrought—and he above all excels in first setting forth some great general truth, and afterwards illustrating it by reference to the case immediately before him. Thus he began by stating, that the essential characteristic of Christianity was, that it inculcated a respect for man, considered as an individual, not merely as a member of a community. It thus tended to loose the bonds of slavery, and to bring about an aversion to war. These remarks led him to eulogize the character of Dr. Worcester, whose principal exertions were directed towards the accomplishment of this latter object.

After church, I went over to Cambridge, dined with Dr. Webster, and proceeded to the College Chapel, where I heard a sermon from Dr. Palfrey. It was clear, rational, and well-arranged, but evidently adapted rather for the lecture-room than the pulpit. The preacher dwelt particularly on the duty of meekness, and shewed how much it added a charm to other virtues—how useful it was in the conduct of life, &c., but referred but very little to higher considerations. It would be unfair to attribute such defects altogether to the Unitarian creed, for Dr. Channing's manner is more devotional, and the general tone of his discourse is of a more spiritual character; still, it is very conceivable that the peculiar doctrines of that school may contribute somewhat to this manner of preaching.

Monday.—Witnessed the mode of polling at State Elections. The names of persons entitled to vote in each ward are registered, and each voter puts into a common reservoir a list containing the names of the candidates he supports. These are generally the same as have been agreed upon by the party to which he belongs, and which are printed on a list he receives at the place, but he has the privilege of striking out any that may displease him, and of substituting others. The printed list is termed either the Whig or the Democratic Ticket, according to the party that have drawn it up.

Dined at Mr. Greene's the Botanist; he is first cousin to Lord Lyndhurst, and a man of very pleasing address. Mrs. Greene, also, who is daughter to President Quincy, appears a charming woman. Met there Mr. Jonathan Phillips, Dr. Webster, Mr. Quincy, Mr. Sayres, Dr. Bigelow, and others. There was very little to distinguish this from a pleasant English dinner party, except, perhaps, a greater profusion of dishes, the want of

ladies, and the departure of the guests from the dinner table without going in to tea.

Tuesday, November 14th.—A heavy fall of snow commenced, but I was, nevertheless, induced to fulfil my intention of visiting Lowell. The badness of the weather prevented my forming the slightest idea of the country or the place, but I saw a Cotton Factory, one for Carpets, and the Machine Shop. The processes for carding, spinning, weaving, and dyeing the material, are, probably, much the same as in England, but the condition of the operatives seems superior. The persons most employed in the cotton factory are females, who receive, besides their board and lodging, about one dollar and a half a week, the whole equivalent to nearly twelve shillings weekly. They are, for the most part, dressed very neatly, without caps, and with their hair nicely combed, some of them not more than seventeen years of age, and possessing considerable personal attractions. Their conduct is said to be so correct, that in a community consisting of more than two thousand persons scarcely a *faux pas* is recorded to have taken place. Any flagrant breach of morality, indeed, would be followed by inevitable expulsion; for if the master were disposed to pass over the offence, the operatives would refuse to work until their frail sister was dismissed. All the machinery, I believe, is made in the workshop of the same village; the iron and brass in the lower story, the wood work in the upper ones.

Occupied three hours in returning by the railroad, instead of one hour and a half, which is the usual time, owing to the obstruction caused by the snow.

Wednesday, November 15th.—This morning, after making some calls, I went to the Literary Institution, called the Athenæum, and read three reviews on Miss Martineau's work on America, viz., in the North American Review, Boston; in the American Quarterly, Philadelphia; and in the Christian Examiner, Boston. Only the last of these was at all favourable; the two former evincing great bitterness in their remarks. The North American, however, assailed her in a gentlemanlike style, and shewed considerable dexterity in bringing together the real or apparent contradictions which her work contains; whilst the American Quarterly exposed the low and vulgar feelings of the reviewer much more than it did the defects of the authoress. I am no particular admirer of Miss Martineau, but, really, were I an American, I should find more to please than to offend me in her narrative. It must be confessed, however, that the Yankees have an unfortunate aptitude for selecting from the remarks of foreigners all that grates upon their national feelings, and taking

as their due, and therefore with indifference, whatever is complimentary.

I also went to dine at Mr. Otis', and met there one of the most aristocratical families in Boston. The elder Mr. Otis is a thorough English gentleman of the old school, and, in addition to considerable talents, which he has displayed in public life, possesses great suavity of manners. His predilections seem all anti-democratical, yet, such is the charm of eloquence, that he is said to have had great influence, even over the *mob* at Boston. This family are the most English I have seen—I wonder whether the inhabitants of Grosvenor Square would detect any Yankeeism—it would be affectation in me to pretend that I could.

The party was small, but there were more ladies than I had seen on previous occasions. The dinner service was of plate, the servants smart and active, and the whole establishment had as little of a republican character as could well be imagined. Went in the evening to a Gentlemen's Club, consisting of twenty members; five of them, clergymen; five, lawyers; five, physicians; and five, merchants who had enjoyed a liberal education. There was little general conversation, and none connected with literature or science that is worth recording.

Thursday, 16th.—In the morning went with Dr. Jackson, one of the principal physicians in Boston, over the General Hospital. It contains only fifty beds—a small number for so large a city—but we must recollect, the general diffusion of competency, and that there is a House of Industry for the indigent poor. The rooms wore every appearance of cleanliness and comfort, and their inmates were almost all decent, respectable looking people. There is one peculiar feature in this institution, namely, that persons of easy circumstances sometimes take up their abode in it, when their cases require medical or surgical aid. By paying a higher sum, they are allowed a room to themselves, and other indulgences.

After twelve o'clock went with Dr. Webster to Cambridge, and saw the Library and Lecture Rooms of the University. The Library certainly looks small at present—but the law books are in another building, and the rest are much crowded together. A new edifice is to be raised next spring, the plan of which is said to be taken from that of Christ Church, Oxford. It has been the growth of only sixty years, the original library having been burnt. After hearing the latter fact, I was surprised at their carelessness in allowing the present room to be warmed by two stoves, until reminded, that the cold of New England would render it uninhabitable for five months in the year, without this resource.

There is in the college one room containing a pretty good mineralogical collection, and another for instruments of physics. The Dining Hall was like that at Newhaven—the Students' Rooms rather superior; as good, indeed, or better, than the average of those which Oxford undergraduates have, but each set designed for two persons. The College Buildings are all of red brick, plain and unornamented, except the one which contains the Refectory and Chapel, which is whitewashed, and has a row of pillars in front. In its general effect it of course will not bear any comparison with our own colleges, but it has one advantage over Newhaven, in being placed in the midst of a lawn. There is nothing to prevent the young men from leaving their rooms by day or night, except that a tutor lives on each staircase.

This College is the oldest and the best endowed in the United States. To the immortal honour of the *Pilgrims* who first peopled the shores of New England, it was founded, in the midst of foreign wars and intestine struggles, within ten years after the little flock had first landed at Salem. It has gone through sundry vicissitudes, and passed successively into the hands of several religious denominations, but since Unitarianism has become the prevailing creed in Boston, that sect has predominated also amongst the professors of Cambridge. It is, however, but fair to add—that the governors of the College seem fully aware of the impropriety, as well as the inexpediency, of imparting to an institution, which they wish to be regarded as a national one, anything of a sectarian character—that their present Head is selected from the ranks of the laity—and that members of other persuasions, as for example the Episcopalian, are often placed on the list of Examiners or Visitors of the College.*

Dined at Dr. Webster's, and met there, President Quincy; Mr. Appleton, formerly Envoy at Stockholm, and other European capitals; Professor Palfrey, Editor of the North American Review; Mr. Treadwell, a clever mechanic, Professor of Practical Geometry at the College; Mr. Pierce; Mr. Lovering, &c. Mr. Jared Sparks, Editor of the Life of Washington; Mr. Longfellow, Author of *Outremer*, &c. Slept at Dr. Webster's.

Friday, 17th.—This morning Dr. Webster took me over to see the Ice-houses, near a little lake, at a short distance from Cambridge. Mr. Tudor, the proprietor, first hit upon the plan of sending ice to hot climates, and succeeded in supplying the

* A very elaborate and complete "History of Harvard University," in two volumes, octavo, has just been published by President Quincy, which is printed in a style that would do honour to our Clarendon Press.

Southern cities, the West Indies, and at last even the East Indies, with ice obtained from this lake. The houses which receive the ice are of wood, with double boards, about six inches apart, and having the intervening space filled with charcoal. The floor is covered with snow and wood shavings mixed; the ice is sawn into thick but regular blocks, which are packed closely one upon the other; after which, water is poured in to fill up the interstices, which freezing unites the whole into one solid mass. The ice-house I examined, and it was only one of many, must have been nearly eighty feet long, more than forty wide, and forty high.

Went afterwards to the Cemetery, Mount Auburn, which is certainly the most picturesque place of the kind I have ever seen. It is less artificial than Père la Chaise, at Paris—less stiff and formal than that at Newhaven. The natural variety of ground, and the remnant of the aboriginal forest still left standing, must make it a most delightful retreat in summer. Saw there, Spurzheim's tomb, and several neat, but few handsome monuments. Visited afterwards the house and conservatories of a Mr. Cushing, a kind of Indian nabob, immensely rich, who preserves the tastes and habits which he had acquired in the East. He has three Chinese servants to wait upon him, and gives enormous wages, so as to avoid, as much as possible, the discomforts of American housekeeping. He breakfasts at ten, and dines at eight, a most unusual thing in this country, is served on plate, and astonishes the neighbours by his anti-republican magnificence. The conservatories are certainly very handsome, though they do not contain many tropical productions considering their extent. His is the first vinery I have seen in America. The garden is stiff, and in the Chinese style; but the house and grounds command a most beautiful view of Boston and its vicinity.

On our return, Dr. Webster and myself dressed, and went to dine at Mr. Quincy's, where I met, besides the family of the Quincy's, and his son-in-law, and married daughter, Mr. and Mrs. Greene, Professor Beck, Mr. Palfrey, Mr. Sparkes, editor of the *Life of Washington*, &c. The party was very agreeable, and the prosperity of Oxford was drank with much cordiality and good feeling.

In the evening accompanied Dr. Webster and his family to the Tremont Theatre, where we saw Miss Ellen Tree as Rosalind in "*As You Like It*," and as Clara, in the *Maid of Milan*. She acted admirably in both, but was not well supported; yet I think the general cast of actors was rather above that of the Park Theatre in New York. The audience too, was much more brilliant, better dressed, and with a fair proportion of ladies. The theatre is prettily decorated; for the scenery much cannot

be said. Theatricals probably do not meet with much success here, since, even with the attraction of Miss Tree's acting, the upper boxes were untenanted. Observed no *Trollopisms*, and thought the manners and appearance of the audience quite English.

Saturday, 18th.—Went with Dr. Webster to see the Medical School, which is small, the number of pupils this year being about eighty. Proceeded afterwards to the Natural History Collection, which contains a little of everything—minerals, rocks, birds, insects, shells, and fossil remains. Here is the collection of rocks made by Professor Hitchcock, at the expence of the State. The institution has only been begun within five or six years, and the progress it has made shews considerable activity on the part of the naturalists of the place. Saw also the Markets built during Mr. Quincy's mayoralty, on ground redeemed from the sea. They are handsome and commodious; the ground story constitutes one room, supported on pillars, five hundred feet long, with a gangway in the centre, and a series of stalls on either side, which are well supplied with meat, vegetables, fruit, &c. I observe that the meat is superior to what I had met with in Canada, and in the other parts of the States yet visited.

In the evening went to Dr. Jackson's, one of the leading physicians of Boston, a man of great urbanity, and, I am told, of superior skill. Met there his relative, Dr. C. Jackson, who has made a geological survey of Nova Scotia, and of the State of Maine; Dr. Lodge; Dr. Channing, brother of the great preacher; Dr. Warren, jun.; Dr. Bigelow; Dr. Putnam; Rev. Dr. Kirkland, late President of Cambridge, and others.

I have now been rather more than a week at Boston, and have seen most of its *lions*. They are, I believe, all noticed above, except the Navy Yard, to which Mr. Boott took me on Monday. There were two ships of the line completed, and three on the stocks. The Dry Docks are very fine, and are deep enough to float a ninety gun vessel. The Live Oak (*quercus sempervirens*), is the material employed for ship-building.

Went also to the State House, which commands a fine view of the city and neighbourhood; its cupola on the summit enables us to trace, as on a map, all the points of most interest: on the ground floor, in a recess, is Chantry's statue of Washington, which I was not so much struck with as I have been with other of the productions of that great sculptor; there seemed, indeed, a deficiency of expression in the countenance.

Upon the whole, there is not a great deal in Boston, except its society, to detain a traveller. It contains, however, a number of men, possessed, either of sufficient leisure to devote them-

selves to literature and science, or of taste enough to respect and appreciate such objects. There is, also, a large amount of wealth, and, consequently, there are many substantial houses, handsomely furnished, and the scene of a great deal of hospitality.

Sunday, 19th.—Went in the morning to hear Dr. Wainwright, at the Episcopal Church. He gave us a very good practical discourse, delivered in an impressive manner, but without any display of theological learning. Walked afterwards across the bridge to Charlestown, where a Roman Catholic convent was pulled to the ground by the fanaticism of the Bostonians (I am glad to be assured not by the gentlemen of Boston). Such an occurrence might have taken place in any country, but the misfortune is, that in this no redress could be afterwards obtained. Saw the monument now erecting on Bunker's Hill, in honour of that battle; it is at present only half completed, and consequently looks ugly. Crossed a second bridge to Chelsea, where I found a steamer, which took me to Boston, giving me on the way a fine view of the Bay. Nothing could be more calm and beautiful than its appearance in this mild November weather. Dined at the house of my fellow-passenger, Mr. Motley, and met a very pleasant family party. Discussed the Federal constitution. Mr. Motley does not acknowledge the right of any one state to separate itself from the Union; but on this point I find that doctors disagree: it is a question, indeed, of as delicate a nature as the right of resistance in a monarchy—a privilege not to be acknowledged until the emergency which requires its exercise has arrived, and which is then best vindicated by the success which has attended the experiment:

That treason never prospers—what's the reason?

Why, when it prospers, none dare call it treason!

Supped with Dr. Wainwright, who discussed with me very candidly the different condition of England and the United States.

He admitted, without reserve, that the inhabitants of the latter enjoyed much less freedom of speech and of action than those of the former, and that aristocratical feelings were nowhere of ranker growth than in the democratical soil of America; but he was clear upon one point, that the descendant of the most distinguished, or of the most high-born person in the country, would enjoy no advantage over the son of the most obscure or abject, if a candidate for public offices. Indeed, he conceived, and I imagine justly, that his *chance* would be less, from the very circumstance of his parentage. Nevertheless, there was, in his opinion, one crowning merit in the United States, which might serve to

atone for a multitude of other defects, namely, that however large might be his family, a father need not be under any solicitude, as in the Old Country, with respect to his children's success in life, provided only their conduct and abilities were respectable. Hence, although a bachelor might reasonably enough prefer the resources of a London life—a married man must admit the more substantial advantages of his position in a less thickly peopled country. Dr. Wainwright spoke sanguinely as to the prospects of the Episcopal Church in America; it is making progress even in Boston, the head quarters of Unitarianism: and it is remarkable that here, in one of the congregations of this latter sect, the Prayer Book has been adopted as the basis of the church service.

Monday 20th.—Saw this day some good specimens of wild Indians from the Rocky Mountains. They were *Pawnees*, and evidently untamed as yet by civilisation. Most of them had on no covering but a skin or a blanket, which they threw off, when seated at table, so far as to expose their bust and the upper part of their person. Their head was decorated with feathers, and various kinds of finery, such as lace or muslin, which they had received as presents. Their faces were painted with vermilion, and they had altogether a very savage aspect. They were, in general, finely made men, with broad muscular shoulders, which were fully exposed to view. It is the policy of the American government to take them round to visit the larger cities of the Union, in order to circulate amongst the native tribes a knowledge of the might of the nation. This is the second set that has visited Boston during the present autumn. I was invited to meet them at Governor Everett's the same evening, but arrived just as they were on the point of departing. Thermometer this day and yesterday 65°; temperature delightful; atmosphere hazy; sunset brilliant.

Tuesday, 21st.—A still finer and milder day than that preceding it. Dr. Lodge came after breakfast, and volunteered to drive me to Nahant. He had a fine specimen of an American horse in his gig; and without a touch of the whip we accomplished the first twelve miles in one hour. This brought us to the cheerful and clean-looking village of Lynn, tenanted by shoemakers. After a ride of three miles more along the sea-beach we reached Nahant, a watering-place much frequented for bathing in summer. The rock here is syenite, intersected by numerous greenstone dykes, which vary from thirteen feet to two inches in breadth, ramify curiously through the rock, portions of which they often enclose, and at the line of junction are rendered of a bright olive-green, from the presence of epidote. In

other cases the crystals of hornblend and felspar seem larger and more distinct than usual near the line of junction between the syenite and the dyke.

Returning home by another route we saw at Saugus a large mass of porphyry, including pieces of jasper. This Dr. C. Jackson regards as a great dyke; it is about 100 feet wide.

After dinner, was taken by Dr. W. Channing, a physician, and brother of the celebrated preacher, to see the gaol. It is on the Auburn plan; differing, however, from it in a few respects. Thus, though the culprits, whilst in their workshops, are not allowed to converse, there were no side passages through which *espionage* could be carried on. The gallery leading into the cells was not so well ventilated as at Auburn. Corporal punishments were not inflicted *off-hand*, but only after due sentence had been passed, and when other penalties, such as short allowance, and confinement during the day, had been tried in vain. The chaplain, who conducted us around, seemed a sensible and humane man.

Wednesday, 22nd.—This was the first day that resembled those we have in England during November—it was damp, foggy, and greasy under foot; two or three times we had showers: yet with all this the thermometer in my bedroom, without a fire, kept up to 65° .

In the morning I went to see the Blind Asylum, which is under the care and direction of Dr. Howe. There are about sixty persons in it, many of whom were engaged in various trades, such as making hair-rugs, and hearth-rugs, spinning yarn, sewing, making chair-cushions, door-mats, &c. Two of the little girls read with nearly as much fluency, from a book printed in relief, as a common person usually can do, and that in French as well as in English. One also pointed out on a map the situation of various towns in England, Ireland, and Scotland. The maps were, of course, like the books, in raised characters. Some, as might be expected, played well. There was amongst them, as at Hartford, a girl blind, deaf, and dumb, yet quick and intelligent. Dr. Howe has all his life been intent on philanthropic projects; he formerly busied himself in the cause of the Greeks, then in that of the Poles, lastly in improving the condition of the blind, and this establishment is a standing monument of his care and activity.

Thursday, 23rd.—This morning I went to Salem, having a curiosity to see a town, which in former days was so famous for witchcraft. The appearance of the place at present is by no means in harmony with its pristine character. Like most New England towns, it is an assemblage of neat houses, made up of

boards painted white, which have nothing either sombre or picturesque about them. Indeed, the adoption of wood as a material for houses deprives even those towns which, like Salem, were amongst the first settled, of any appearance of antiquity; for they require renewal so continually, that no vestige of the original edifices remains after the lapse of half a century.

There were but few ships at the time in the harbour, but at certain seasons Salem sends out a numerous fleet of Whalers and East Indiamen. The captains and supercargoes have co-operated so as to form a very respectable Museum, with specimens of curiosities, both of nature and art, drawn from all parts of the world, and especially from the East. It is a pity there is no attempt at arrangement, the specimens being put into cases just as they arrive. I saw there a nautilus shell, containing an apparently perfect specimen of the animal, which is a rarity.

After dining at the only decent-looking inn that Salem affords, and that but an indifferent one, I returned to Boston, and went to drink tea with Dr. Channing, where I met Dr. Kirkland, late President of Harvard College, and Dr. Tuckerman. Dr. Channing's conversation is good, but not striking. I have certainly not met as yet with one individual very remarkable for conversational powers during my stay in America. Of those with whom I have been thrown into contact, Dr. Jackson is, perhaps, the most agreeable in his deportment; Mr. Otis the elder unites great urbanity with the air of a thorough-bred English country gentleman; Dr. Palfrey is clear-sighted and intelligent, but cold and precise; President Quincy has a pleasant warmth of manner, unusual in a New Englander; and Mr. Jonathan Phillips, though rather prosy, is candid, shrewd, and well-informed. But though I have formed several valuable acquaintances, it has not been my lot to fall in with any one who was calculated, or disposed, to hold forth before a party in such a manner as to arrest the attention of the rest by his brilliant powers, like one or two gifted individuals whom I could mention in the Old Country. It would take some time to develop the causes of this difference, so that I will proceed.

A party at Mr. Otis's wound up the evening; it was not numerous, but *distingue*, and embraced a very *fair sample* of Bostonian beauty. Waltzes were the order of the evening; the dresses exceeded in smartness those seen in an English ball-room—whether they were at all inferior in style and elegance, I do not profess myself enough of a connoisseur in such matters to determine. Wind to-day cold, and a little snow began to fall.

Friday, 24th.—A cold, but towards evening, a bright day. After making some calls, and seeing Colonel Perkins's pictures, one of which, by Alston, "The Witch of Endor," is a fine spe-

cimen of art, I took a drive with Dr. Webster to view some of the rocks in the immediate neighbourhood of Boston.

Going out by Charlestown and Bunker's Hill, and pursuing the road which leads to Cambridge, we find the prevailing rock to be clay slate. It is penetrated by frequent dykes of greenstone, in general compact and uniform in texture, which rock appeared also in one spot to constitute an *overlying* mass, and in another to be interstratified with the slate; the latter seeming to lie both above and beneath it. In another quarry, I observed that the clay-slate itself was so much altered as scarcely to be recognizable, being converted into a kind of hornstone, and that it is also tilted up to an high angle. In the midst of it lies a bed of a material which much resembles trap. Its basis, indeed, differs but little from this *altered* form of the slate, but it contains dark crystals which look like hornblende. Independently, however, of these intrusive masses of trap, occurs an extensive formation of syenite, seen at Powder Hill and at other places between Cambridge and Boston, which I suspect, however, to be protruded through the clay-slate, though at an earlier epoch, and in larger masses. It consists of large grains of felspar and hornblende, and from the presence of iron decomposes readily into a dark coloured sand. It contains veins of prehnite, and I believe, of other minerals, running through it, and I suspect it must be a continuation of the syenite already noticed at Nahant.

Sunday, November 26th.—Day fine and bright, but cold, thermometer standing at 23° about twelve p. m. Heard Mr. Clarke preach at the Episcopal Church; he seems a young man of a clear and masculine understanding, but his enunciation has a *nasal twang*, as is the case with many Yankees. The Episcopalians address themselves more to the reason than to the feelings. I suspect there are no distinct classes of evangelical and high church episcopal clergy, as with us; the more enthusiastic probably drop off to the Methodist or Presbyterian persuasions, the undervaluers of church authority to the Independents.*

Monday, November 27.—The morning was fine and clear. I proceeded by the rail-road as far as Providence, the capital of Rhode Island, which we reached by about twelve o'clock. During the few hours I spent in that city I paid a visit to Brown University, where there is a small collection of rocks and minerals, but nothing very remarkable in the building

* I find, however, that Bishop Macilwain of Ohio, the most eloquent Episcopalian preacher in the United States, is considered to belong to the evangelical class of clergymen.

or its contents. The College is in the hands of the Baptists, and the Principal, Dr. Wayland, is of that persuasion. He is a man of some literary eminence, being the author of a work on Moral Philosophy, which is in considerable repute. Providence, itself, is a large town, but does not possess any remarkable buildings.

After dinner I proceeded by the steamer to New York, and arrived there the next morning by five o'clock, having performed a voyage through Long Island Sound, calculated at two hundred and twenty miles, in fourteen hours, averaging nearly sixteen miles an hour.

At New York I resumed, for a few days, my old quarters, chiefly occupied in arranging and packing up the various collections I had made.

On the evening of my arrival I went, by invitation, to a large dinner given at that splendid hotel, the "Astor House," to the leading members of the Whig party, and, I must say, that I never sat down to an entertainment of that kind and magnitude better served, or conducted on a more liberal scale. Here I heard the several orators, of that side in politics, who were present, successively hold forth, but was, I confess, but little prepossessed in their favor, finding them in general too diffuse, too long-winded, and too laudatory of every thing American, to accord with my taste. *Blarney* is the best term by which I can express the style of eloquence which seemed to prevail most amongst them.

Having slept in the steam-boat but imperfectly the night before, I felt the more overcome by the succession of tedious harangues which I was compelled to listen to; but about two o'clock in the morning, Daniel Webster rose, and continued on his legs till half-past three o'clock, during the whole of which time every symptom of fatigue vanished, and I continued thoroughly wrapped up in the orator, and unconscious of the length of his discourse.

Daniel Webster is remarkable for the sound general views which he contrives to condense within a small compass, whilst discussing points of local or temporary interest. He seems to look beyond the present, and to expound maxims of policy which are applicable to every state of society, as well as to that to which they are immediately addressed. In general he is cold and unimpassioned; but occasionally, as was the case at the close of this evening's speech, he introduces touches of pathos, which tell all the more from their contrast with the severe and chastened tone of his general manner.

"Gentlemen," he said, in conclusion, "many of you have been in foreign lands—but who, when he thought of his country, did not thank God, that he was born a free citizen,

and was likely to die a free citizen, of these United States? Who, whether he sojourned in that great emporium of the commerce of the world, the City of London, or among the vine-clad hills of France, or in the eternal city of the Romans, although he had the grandeur of antiquity to bewilder him, and the beauty of the present day to dazzle him, would not be apt to exclaim—

“ ‘ My visit oft, but never for my home!’ ”

“ Who, no matter where he is, when he finds the Atlantic waves rolling between him and his own native land, does not feel the throbbing impulse of—

“ ‘ I love thee still, my country?’ ”

“ Who, if sickness overtakes him, or death meets him in his path, does not turn his eyes homeward, and—

“ ‘ *Moriens, dulces reminiscitur Argos.*’ ”*

* As is the case with most other great orators—Sheridan, for instance—Daniel Webster’s happiest hits are said to be the result of long premeditation. An American friend of mine who was in the Senate with him some years ago, repeated to me a sentence in one of his speeches, which created a great sensation at the time it was delivered, and which passed off as flowing naturally and directly from the subject under discussion.

In allusion to some question or other in which the dictates of honour and justice stood opposed to the course which expediency might suggest, he remarked:—“ On a matter of principle such as this our ancestors went to war with a nation, to whose power for the purposes of military conquest, Rome at the height of her dominion could not be compared—a nation, which has studded the earth with her possessions—whose morning drum-beat, following the sun, and keeping pace with the hours, encircles the earth daily with one continuous and unbroken strain of the martial airs of England.”

After the debate was over, my informant went up to the orator, and said to him, “ Webster, your concluding sentence told capitally with the house, but you must not pass it off on an old soldier like myself as though it were struck off at a heat—pray let me into the secret of its concoction.”

“ Why,” replied Webster, “ to tell you the candid truth, the allusion to the morning drum-beat of England first came into my head during a visit to Quebec, when I chanced to attend the parade on Fort Diamond, one fine morning at sunrise. It then occurred to me, that, half-an-hour hence, the same beat of the drum would summon together the soldiers of the same sovereign, at Jamaica; that it would reach in about three hours and a half at the mouth of the Columbia River; that it would be heard in about seven hours time at New Zealand; in about nine hours at Sydney; at Canton, in rather more than eleven hours; in Calcutta, in thirteen; at the Mauritius, in fifteen; at the Cape of Good Hope, in less than seventeen; at Corfu, in eighteen;

Tuesday, December 5th.—I proceeded by the steam-boat to Bordertown, thence by rail-road to Amboy, and afterwards by another steamer up the Delaware to Philadelphia.

I first took up my quarters at Head's Hotel, the "Mansion House," which certainly deserves the reputation it enjoys, for good living and luxurious fare. Here there is no bolting of the food—no confusion at table—no getting up as soon as a certain amount of solid provision has been thrown in—but the presence, example, and appearance of the presiding host, all promote conviviality.

With this, however, my praise must end, for the empyreumatic savor proceeding upwards from the kitchen into the bed-rooms, did not, like that of the sacrifices prepared for the immortal gods in Homer, prove grateful to my olfactory organs during the morning, notwithstanding the consciousness I enjoyed that it was the prelude of good things to come; so that after enduring the annoyance for two nights, I gladly availed myself of a friend's recommendation to a boarding-house, kept by a highly respectable Quaker lady, Mrs. Allabone, where I found cleanliness and comfort.

Saturday, December 23rd.—Were I to note down the various invitations of all kinds which I have received, during my three weeks' stay at Philadelphia, I should present a most ample idea of the hospitality, with which an Englishman, travelling, like myself from motives of curiosity or liberal inquiry, is sure to meet in the great cities of America.

Dr. Hare, the Professor of Chemistry; Mr. Nicolas Biddle, the great Banker,* and others of his family; Mr. Duponceau, the President of the Philosophical Society, and Mr. Vaughan, its Secretary; Dr. Elwin;† Mr. Camac; Mr. Lea, the Concho-

and at London itself, in nineteen hours; so that scarcely had the sound ceased at one of the possessions or dependencies of Great Britain, than it would be renewed at another. Since that time I have been waiting for an opportunity to deliver myself of the sentence to which your inquiry related, but could never, till this day, find a peg to hang it upon."

* Then in the height of his prosperity, and distinguished as the great antagonist of General Jackson, on the "Bank Question." He appeared a very remarkable man, with that quiet suavity of manners, which it is pleasing to observe in one who has gone through so many trials and met with such determined opposition. His financial talents I cannot pretend to estimate, but that he is a man of refined taste and literary attainments, is sufficiently erinced, by an Address, of his composition, delivered before the *alumni* of Nassau College, which he presented to me.

† At Dr. Elwin's I met his relation by marriage, Mrs. Pierce Butler, now resident in the neighbourhood of Philadelphia. She dis-

logist;* and, above all, my old friend Mr. Nicklin, whose general good feeling towards Englishmen was enhanced by a regard to a member of the church of England, for which he entertains a firm attachment,† did all they could to render my stay at Philadelphia as agreeable as possible, and contrived to make my appearance at the table of the boarding-house really a matter of very rare occurrence.

But it will be more interesting for future perusal, for me to note down my general impressions as to the city and its inhabitants. In the first place, then, Philadelphia, for cleanliness and regularity, assuredly bears away the palm from every city, either of the Old or New World. I could not help wishing, as I rambled over its methodically arranged streets, which may be traversed on one's first arrival with as much confidence of finding the right direction as if one had always resided there, that glorious old William Penn could come to life again, just to see the strides, which the city, founded under his auspices, and regulated in accordance to his principles, has made since he handed it over to his successors. To be sure, he might at first be a little scandal-

coursed on the subject of Slavery with a freedom, which argued more of her right principle than sound discretion. Though she has been viewed as self-willed and capricious, she evinces in conversation a power of language and high tone of moral feeling, that ought to make one forget her foibles.

* Mr. Lea has, probably, the most complete cabinet of recent American shells, that belongs to any private individual. His collection of *unios* is superb. He has also published a very beautiful volume, with plates, on this genus, in the Transactions of the American Philosophical Society, and made other valuable contributions to the same branch of Natural History.

† This worthy man, who, under the *sobriquet* of "Peregrine Prolix," was the author of a facetious description of the Springs of Virginia, and of the route by rail-road to Pittsburg, and, likewise, published under his own name a sensible pamphlet on "International Copyright," paid a visit to Oxford in 1833, and was admitted an honorary member of the Ashmolean Society.

He took an active part in advocating the States' rights principle as asserted by the Southern States, and the abolition of restrictions on trade, combining the greatest liberality in political matters, with strong and decided views on church questions. I was sorry to receive, a few months ago, (August, 1842), through a Philadelphia newspaper, an account of his sudden death. The announcement was followed with some well merited commendations of his activity and usefulness in all matters of a benevolent character, and more especially in those more immediately relating to the Episcopal Church, of which he was so zealous a communicant. He married the daughter of Bishop White, known as one of the most distinguished prelates of the American Church since the period of the Revolution.

ized at the splendour and luxury at present here and there displayed; but he would be reconciled, perhaps, by observing the same general sobriety of demeanour, the same love of peace and order, the same pervading principle of benevolence and brotherly love, predominant, which he had instilled into his people, and exemplified in his own transactions with the Indians.*

Philadelphia, to do it justice, is in many points of view a very comfortable place of abode, and contains a larger amount of wealth than I had imagined to exist anywhere out of England. It is true, the equipages are not numerous, and those we see are not in general gay and dashing enough to figure in the streets of London with any *eclat*—nor are there many, I suspect, who can secure a truly English *menage*, with their motley establishments of Irish and Coloured Domestics.†

But the houses of the better class are substantial and roomy; the apartments lofty and spacious; the furniture solid and handsome, though perhaps to an English eye somewhat scanty. It is curious to observe how nearly they all appear to be on the same plan, the difference betwixt them consisting chiefly in the greater or less size of the rooms.

There is almost always on the ground floor a suite of two apartments, opening by folding doors one into the other, the first serving for a dining, the second for a drawing-room. Were dinner parties as common, and as much attended by ladies, as in England, the inconveniences of such an arrangement could not

* It is very creditable to the Philadelphians, that with no trials for blasphemy hanging *in terrorem* over their heads, no legislative means of checking the expression of opinions, they yet keep so clear of those mischievous societies that abound in all the large cities of the Old World, by which the foundations of religion are sapped and overturned. I could hear of only one infidel club existing in Philadelphia, and it was said to be ill attended, being almost exclusively frequented by recent emigrants from Europe.

† Those who value comfort, contrive, as much as lies in their power, to recruit their establishments out of one or other of these classes of domestics, to the exclusion of the other.

The admixture of the two races, on the common footing of menials, is sure to give rise to endless bickerings and jealousies.

The natives of the Emerald Isle, for instance, soon learn to acquire those prejudices of caste which prevail so strongly in their adopted country, and refuse even to take their meals at the same table with the coloured servants; whilst on the other hand a respectable Mulatto may naturally think it rather hard, that a slight infusion of African blood should place him in so inferior a grade of society to that occupied by a raw Irishman, who, when recently imported from the wilds of Connamara, might appear to him more deficient in the essentials of civilization than himself.

but be felt; but here the plan has its recommendations, as it provides ample space for a large evening party, and at the same time saves the servants the trouble of carrying the refreshments upstairs. Accordingly at New York and Philadelphia this rule seemed to prevail universally, though at Boston it is less common; as I visited at several houses which were arranged differently.

The marble steps by which you ascend to the houses give to them something of an air of magnificence, especially when, as in many of the streets, the whole of the first story is faced with this beautiful material, and a portico of the same stands in front of the mansion.

The streets, however, considering their enormous length, stretching as they do in many cases the whole distance between the Delaware and the Schuylkill Rivers, which is not less than two miles, are too narrow for effect.

The finest buildings are the Exchange and the Bank of the United States. The former is said to be taken from the "Lantern of Demosthenes," and is an elegant and chaste edifice. The latter is an imitation of the "Parthenon," excepting that the triglyphs are omitted. It is a very beautiful specimen of architecture in itself, but does not groupe well with the brick houses that stand nearly close to it. An unfortunate result of the monotonous plan on which the streets are laid out, is, that public edifices, such as these, cannot be placed where they would be well seen, and produce upon the eye the impression which would result from them in other cities.

Other buildings of pretension are, the Bank of Philadelphia, which stands next to the United States Bank above mentioned, the Girard Bank, the Mint, the Episcopal Church, &c. But the most noble and extensive structure is the Girard College, at a short distance from the city to the north-west. It is at present but half completed. The centre is surrounded by a magnificent colonnade of Corinthian pillars, and one wing consists of two massive square edifices, for the professors and students, plain and destitute of embellishments. The other wing as yet only exists on paper.

The whole establishment flows from the munificence of the wealthy banker, Girard, who left in all 3,000,000 dollars to the city of Philadelphia, for this and other public purposes. For the erection of the building itself, indeed, only 300,000 dollars were specially appropriated, but it is certain that the whole of the intended range will cost many times that sum. Though the College was intended by its founder specially for orphans, we may hope the large funds at its disposal may be the means of creating what is so much wanted in the United States, namely, a body of men, sufficiently independent in point of circumstances, to devote a part of their time to the advancement, as well as the mere

dissemination of learning, which might be effected by rendering the duties of the professors at once less onerous and more lucrative than those they have to fulfil in other less wealthy institutions.

In this attempt the directors have made a good beginning, by affording to Professor Bache, the future principal of the College, the means of visiting Europe during the time the building is in progress, in order to collect as large a fund of information as possible, concerning the methods of education adopted in the most civilised countries of the Old World, before they organize a plan for their own Institution.*

I was also much pleased with a visit to the works which supply the city with an abundant and constant stock of pure water. For the purpose of effecting this, the river Schuylkill is dammed across, the water being thus made to flow into a lock which discharges it into the river below, by means of a canal made to open and shut at pleasure. As it descends through this canal, it turns a series of water-wheels, which, acting upon a corresponding number of forcing pumps, drive up a portion of it into a reservoir, situated on a hill about ninety feet above the river. From this reservoir the water is distributed by means of pipes over every part of the city.

The projectors of this establishment have here contrived to combine ornament with utility. Fairmount, on which the reservoir stands, is surrounded with gravel walks, and ornamented with statues. A terrace beneath commands a fine view of the river at the point where the dam has been constructed, and a flight of steps conducts to the summit on which the reservoir is placed.

Near the Waterworks is the Eastern Penitentiary, famous for its system of prison discipline. The peculiarity of the plan here adopted consists in the substitution of moral for physical discipline, in keeping the criminal apart from every species of contamination, and in inflicting no punishment that can in any way contribute to brutalize or degrade his character.

This it is proposed to effect by means of solitary confinement, which, though a punishment of sufficient severity to answer its

* The testator attached to his bequest the singular condition, that no minister of any religious denomination whatsoever should hold office in his College; a clause, which appeared at first so objectionable, that some were even averse to accepting the donation at all on such terms. The regulation, however, will at least have the good effect of preventing the Institution from becoming monopolized by any one of the predominant sects to the exclusion of the rest, whilst, so long as Philadelphia retains its present religious character, the education given at the College, though imparted by laymen, may be expected to keep free from any taint of infidelity.

purpose of deterring others from crime, is said not to be followed with hurtful consequences to the mind or body, provided it be only combined with labour and occupation.

In comparing the principles on which the Philadelphian institution proceeds, with those of the Penitentiary at Auburn before described, few would have any hesitation in giving the preference to the former, but the practical consideration is, whether these principles can be carried fully into effect.

An objection, for instance, has been made, as to the practicability of cutting off so completely, as is professed to be done, all communication between the prisoners; and, perhaps, in the rigid sense of the term, this must be admitted—but how extremely difficult and imperfect the intercourse between them must be, is sufficiently apparent from the particulars given with respect to the modes by which the voice of any one prisoner can be rendered audible to another. One of these channels of communication consists of the tubes through which the apartments are ventilated and warmed; another, of those which run through the whole range of cells for carrying off filth, and which are emptied once a day, at which time it is admitted that sound might pass through them.

It must be granted, however, that channels such as these can serve the purpose of communication but very imperfectly, especially when we consider that the prisoners are unknown to each other, and have no previous opportunities of concert; whilst the constant superintendence of their keepers must operate as an additional impediment to any intercourse between them.

Upon the whole, after examining the cells, and making inquiries both of the culprits themselves and of the officers of the institution, I arrived at the conclusion, that the correspondence between the prisoners must be too rare to do away with the good effects likely to accrue from the general discipline of the prison, or to deprive it of that superiority which it would, in other respects, claim over the plan pursued at Auburn.

In the Philadelphia Penitentiary every prisoner has the choice either of a double cell, or of a single one, coupled with the privilege of walking once a day, for an hour, in a little yard attached. Confined as the space is, the desire to enjoy the open air, and to stand immediately under the canopy of heaven, induces most of the convicts to prefer the latter alternative.

Work is supplied to those who desire it, shoemaking and weaving being the principal trades pursued, and it is rare for them to remain many days without spontaneously soliciting employment, to escape from the horrors of *ennui*. The cells are arranged in two stories along the sides of the corridors, of which there are seven, diverging from a common centre. They are heated by means of warm water.

I conversed for some time with a culprit, who had been for ten years in the gaol at Auburn before he was sentenced to this. He was a man of intelligence, and spoke of his situation with composure, and without any appearance of excessive dejection. "In Auburn," he said, "there was no chance of reform, such was the degrading influence exercised upon the minds of the prisoners by the system of espionage practised, and by the corporal punishments inflicted. The only feeling engendered by such a regime was that of deadly hatred against the keepers. Here, on the contrary, solitude produced a softening influence, and the prisoner was taught by it to look upon the punishment as a step towards his reformation."

Another prisoner, who had also had experience of Auburn, whilst he affirmed that the punishment he was here undergoing proved the severer of the two, admitted it, at the same time, to be the more salutary in its effects.

Private religious instruction is sometimes (I believe rarely), given by the chaplain. He, however, on Sundays reads divine service in the corridors, in a position, from which, as the cells are then open, his voice will reach to all parts of the gallery. The food served is wholesome and sufficient, though coarse.

With regard to the rate of mortality here, it is admitted to be somewhat, though not greatly, more considerable than that in other prisons—but the excess was explained by the number of the convicts who are negroes, they being in Pennsylvania an exotic race, and therefore the more exposed to disease, especially of a glandular nature.

During my visit, I witnessed the manner in which a prisoner is conducted into the prison. Blindfolded, he is first taken into a room where he is stripped of all his clothes—he then goes into a second, where he is thoroughly washed—and, afterwards into a third, where he is clad in the prison dress. He is then blindfolded again, and marched into the cell assigned for his abode, so that he continues throughout perfectly unacquainted with the topography of the prison, as well as with its inmates. It is, therefore, impossible for him to identify after his liberation those who had been his fellow prisoners—and thus one great cause of a return to vicious habits, namely, a recognition by those who had suffered a similar disgrace, is prevented. On being let loose again upon society, no individual but himself, need be aware that he had ever rendered himself amenable to the laws of his country, and the facility with which employment may be procured in America, removes from him the temptation of returning to his old courses from actual want.

I went, another day, to see the Almshouse, which, if it were in Italy, would have obtained the title, which in fact it deserves, of *Palazzo dei Poveri*. It is, indeed, a most imposing edifice,

erected on a rising ground above the Schuylkill, which it proudly overlooks, holding out a sort of invitation, to all who dislike labour, and do not value independence, to come and be fed and clothed at the public expense. It accommodates at present about sixteen hundred paupers, who are lodged very comfortably, each having a little room to himself, opening into a large and lofty hall which they enjoy in common.

Certain trades, such as weaving, shoemaking, and spinning, are carried on within the premises, a certain amount of work being enjoined, and the surplus, if any, paid for. The paupers, however, appeared to me, for the most part, to be taking the matter quite easily; and, as in some of the workshops the sexes were intermixed, and there was no superintendent present, much abuse must, I should suspect, arise.

Several of the men, as well as of the women, were able-bodied—and it appears to be the custom with many, to take up their quarters there during the winter, and to emerge from thence so soon as summer comes on.

It appears from the returns, that more than half were aliens—the numbers admitted in 1834, being 1668 Americans, and 1895 foreigners.

Of the American paupers, there were—

	Males.	Females.
Born in Philadelphia	512	371
In the rest of Pennsylvania	149	93
In other States of the Union	316	227

Of the foreign paupers—

There were from the British dominions	1150	457
And of these were from Ireland	937	366

This document is in itself a striking proof both of the comparative comfort enjoyed by the people of Philadelphia, and of their expansive benevolence.

I was told that the building itself cost altogether about a million of dollars. It forms an extensive quadrangle, comprehending, a hospital for the sick and infirm; an almshouse for children; and houses or apartments for the various officers, including four resident physicians.

I cannot tell what the management may be, but I suspect it to be loose and negligent. At any rate the principle is a bad one, and the only security against the evil consequences arising from the existence of such an institution, resides in the spirit of independence, which at present animates the lower class of citizens. Even here, I observed a separation to exist between white and coloured persons. Why should not this be broken down? Its removal would operate more forcibly than any other measure, to prevent the charity from being abused.

The only other building of great interest in Philadelphia owes its celebrity to historical recollections, rather than to any architectural beauty belonging to it. It is the State House, in one apartment of which, the celebrated "Declaration of Independence" was agreed upon; I could not get admission to the room itself, which is, I was told, dismantled.

The building is a plain brick structure, with a kind of steeple in the centre, on which is a clock, illuminated by night. It forms one of the sides of Independence Square, which, with the adjacent one, called after Washington, is the favourite abode of the more wealthy citizens, both of them spacious, and planted with trees.

In the department of Natural History the only public collections are the following:—

First.—That at the Academy of Sciences, a circular building, in which the Society of Natural History holds its meetings.

Second.—Peale's Museum, which is, however, a private speculation, kept up by shares bought by individuals. The two greatest curiosities it contains are, an almost perfect specimen of the American Mastodon, considerably more gigantic than any existing elephant; and that of the rare animal found in the Alleghanies belonging to the Armadillo family, called by Dr. Harlan, *Chamyphorus*.

Third.—The Philosophical Society, which likewise contains a small collection of specimens; the most valuable part of its possessions, however, is a series of the Transactions of most of the Learned Societies in Europe. Mr. Vaughan, the librarian, a wonderfully active man for his age, which is eighty-one, renders these and the other works in the library very accessible. He is the most kind hearted and obliging of men, universally beloved for his urbanity of manners and benevolence of character, and distinguished for his unwearied zeal for science and scientific men.*

The President of the Society, Mr. Duponceau, himself seventy-eight years of age, is, likewise, a very extraordinary person. Though nearly blind and deaf, he is engaged in editing a work on the language of Cochin China, which, though written in hieroglyphic characters, like the Chinese, differs nevertheless in the meaning of the signs which enter into its composition.

From the explanation he was kind enough to give me of his views, I collect, that he admits three distinct kinds of writing:—first, that in which signs are significant of words; secondly, that in which they are significant of syllables; thirdly, that in which they express only letters. Each kind is perfect in its way,

* He died in the course of the present year, 1842.

and adapted to the genius of the language it expresses. The Chinese symbols indicate whole words; the Sanscrit and Cherokee, whole syllables; the European languages, in which alphabetical writing exists, only letters.

The Chinese symbols are employed also in Cochinchina, and express there the same sounds, but the latter may, or may not, indicate the same ideas. Sometimes, indeed, they do, but often the sense attached is different in the two countries. Thus the same symbol indicates a metal in the one, and a needle in the other, although the word is identical in both languages.

Mr. Duponceau is a native of the Isle of Rhé in France. From his knowledge of languages he was appointed secretary to Baron Steuben when he came over on a mission to America. Since that time he acquired an independence as a lawyer, and for the last twenty years of his life has devoted himself to Oriental literature. He is a singular man, very absent, very forgetful, but has a spice of French vivacity and *politesse* about him, like an abbé of the old regime.

The University of Pennsylvania, another institution connected with learning, consists of two buildings, neat and plain in their external appearance; the first apparently appropriated entirely to lecture-rooms, the other to halls for examinations and other public purposes.

In the former, I saw the lecture-room of Dr. Hare, the Professor of Chemistry, which is very spacious and commodious. In his apparatus the Doctor spares neither expense nor labour, and his experiments are all on a magnificent scale. His contrivance for plunging the galvanic battery into the cells, and removing it from the same, by a single movement which could be effected in an instant, was an highly convenient one, and would have come into general use, had not the new inventions for rendering the action constant, and dependent on the connection between the poles, rendered it of minor importance to take out the plates at the moment when they cease to be required. I counted at his lecture nearly three hundred students, and the room, it is said, will hold five hundred.

I also attended on two occasions the public examinations, which take place at the end of each term. From what I there observed, as well as from the accounts I obtained from others, I may venture to set down the following as an outline of the scheme of instruction pursued in this Institution.

The students are divided into four classes, corresponding with the four years supposed to be spent in study at the University. They are called respectively—Seniors, Sophomores, Juniors, and Freshmen.

The Seniors are examined in—

The Elements of Criticism, Tacitus, History of United States,	Chemistry, Differential Calculus, Optics.
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The Sophomores in—

Technology, Epistles of Horace,	History of England, Geometry.
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The Juniors in—

Logic. Chemistry, Odyssey,	Evidences of Christianity, Mechanics.
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The Freshmen in—

Antient History, Herodotus and Valpy's Ex- ercises,	Algebra. Physical Geography.
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Before the students in medicine begin their professional studies, it is necessary for them to have gone through the foregoing list, so that they cannot obtain a license to practice before their twenty-first year. The discipline is, in some respects, laxer, in others stricter than with us. Thus the students live in the town, and, consequently, have no restrictions imposed upon them at night; but, on the other hand, they are forbidden by statute, from entering a tavern, from drinking wine, and from riding on horseback, although the latter two prohibitions are not rigidly enforced.

They are obliged to attend chapel once a day, and to be present at the professional lectures.

With regard to expense, it would appear, that the strictly necessary charges are nearly equal to those at our own Universities, the fees for instruction amounting to 25*l.* per annum; the board and lodging to about 50*l.*; but then the style of living enables them to get on with a much smaller income than can well be done at Oxford. The whole number of students in all the three faculties, and in arts, together taken, amounts nearly to eight hundred, more than half of whom are medical. They enter usually between the age of fourteen and fifteen, and, consequently, may obtain the degree of Bachelor of Arts between seventeen and eighteen. If, at the expiration of the year, the student, on being examined, does not come up to the mark, he must either leave the University, or continue for a longer period in the same class as before.

Emulation is encouraged by singling out the ten best scholars, and noticing them at the end of each half year, in the order of merit. As a concession to the prevailing spirit of the times,

classics and the modern sciences are placed, as much as possible, on a par in the estimate of the student's proficiency.

After attending one of the public examinations, I came away with the impression, that the difference between the Englishman and American, consists, not so much in his proficiency at the age of eighteen, which is, perhaps, not very different, but in his subsequent progress; the American considering his studies then completed, and plunging at once into active life; the Englishman proceeding on in his, till at least twenty-one or twenty-two.

The Philosophical Society, at the time of my visit, seemed to be thinly attended. It is too true, that Americans in general interest themselves but little in anything but politics, and what science there is seems broken up into little knots and cabals. Yet there are some good names; Bache, indeed, is absent in Europe; but Hare and Mitchell are respectable and laborious chemists; Rogers and Nuttall, the one in geology, the other in botany, hold a distinguished place. Harlan ranks high in comparative anatomy; Lea is eminent in conchology; and Monsieur Duponceau, as a philologist, would do honour to any European capital. These are men who have risen to eminence without favour or aid from the state, which has no idea of encouraging any kind of knowledge not possessing some immediate practical bearing.

I was amused, however, at finding that the legislature had been induced on utilitarian principles to grant a sum for the improvement of meteorology, having been persuaded that the farmer might be enabled, by means of this science, to prognosticate the kind of weather likely to ensue, and thus to provide against many of the perils by which his crops are menaced.

Mr. Espy, the individual who has been principally intrusted with this commission, is an enthusiast in this branch of knowledge, and I have no doubt it is in perfect good faith, that he asserts,—“That any careful observer will be able to tell when any great storm comes within four hundred miles of him, as also the direction of the storm from the place of observation,” and also that he professes to shew, “how a system of simultaneous observations over our wide extended country will probably enable us to tell, whether a storm, whose direction from us we already know, will reach us, or move in some other direction.”*

I do not, indeed, doubt, that by means of the observations set on foot, a mass of facts will eventually be got together, calculated to assist us towards the true theory of the changes that take place in the atmosphere; but it requires but a smattering of science to feel, that such knowledge can be acquired only by slow degrees,

* In a Letter printed in the Saturday Courier of March 16, 1837.

and that the practical benefits anticipated from a grant of money for the above purpose, are reserved for distant posterity, and not for the generation which has furnished the outlay.

Mr. Espy was obliging enough to call on me one day, and to expound the theory by which he attempts to account for that motion, at once gyratory and progressive, which certain storms are found to affect, and which he believes to be more or less characteristic of all gales of wind. His theory, if I understand it rightly, is as follows:—

It is well known, that the radiation of heat from the earth's surface must tend to rarify the strata of air nearest to it, in a greater degree than those above. This air, holding in solution a certain amount of aqueous vapour, will, consequently, from its greater levity, ascend, and thus produce an *upward current*. But in proportion as it rises, it becomes cooler, and therefore, at a certain distance from the earth, which will be greater or less according to the proportion of moisture present, a condensation of vapour will ensue, or in other words, a cloud will be produced.*

Now, this condensation of moisture will have the effect of causing latent heat to be evolved, and this becoming sensible, will still further expand the column of air, and cause it to ascend to a still higher point, so that the above process may go on, until the whole of the moisture, which it had carried up from the surface, has been deposited from it in the form of vesicular vapour. Hence, he says, there is in certain places a continual ascending current, and it is in these that storms are apt to take place.

The objection which strikes me to the latter part of the theory is, that in proportion to the amount of latent heat rendered sensible, the capacity of the air for moisture is increased, and, consequently, the aqueous vapour will be redissolved—and in proportion to the amount of the latter taken up, the sensible heat will be again rendered latent, so that one effect ought to counteract the other, and consequently, no tendency to ascend can result from this cause. Mr. Espy did not clearly make out to me how this objection is to be got over, and, consequently, took his leave without making me a convert to his theory. Its soundness, indeed, does not affect the truth of the observations he has made as to the progressive course of storms, but here he has been anticipated by Mr. Redfield of New York, who has the

* Mr. Espy, therefore, contends, that by determining the dew-point, which is an indication of the amount of moisture present in the atmosphere on the surface, we may deduce the height of the lower margin of any cloud immediately above us.

merit of first clearly establishing the law regulating their course, which has since received so many striking confirmations.*

The society at Philadelphia is of a more varied character than that of any other city of the Union, and though somewhat less literary than that of Boston, would be, I conceive, generally considered more varied and agreeable.

The entertainments to which I was invited were as luxurious as those I am accustomed to see in England, and, perhaps, even exhibited a more profuse style of hospitality. They were conducted very much in the European fashion, except with respect to the absence of the fair sex; for it certainly is not common for any ladies, except the mistress of the house, to make their appearance at the dinner table; and even at the few evening parties to which I was admitted, in which young ladies abounded, the mammas seemed to occupy the back ground. I believe, there is no part of the world, not even England, where conjugal infidelity is so rare as at Philadelphia, and it is, therefore, but fair to give the ladies credit for the more sterling qualities which befit their station as wives and mothers; but it must be confessed, that from all I have seen, here and elsewhere, there does appear on their part an inferiority to Europeans of the same rank, in powers of conversation and in the graces of life. This, too, is the more remarkable, because the young ladies are less embarrassed in company, than those of a similar age in the Old World, and certainly assume a more prominent part in the society into which they enter; nor is their education, I believe, conducted with less care, or with a less studious attention to external accomplishments.

With respect to personal charms, I doubt whether any European capital, of the same size, would produce an equal number of elegant and sylph-like forms; but the very delicacy of shape and feature which distinguishes the fair Philadelphians, is a sure indication of premature decay; and I have been surprised at being told, in how short a period the wearing effects of an excessive climate, and probably the unvaried monotony of domestic cares, have caused the torch of Hymen to be succeeded by the wrinkles of age.

The pleasantest evening parties I attended were those given every Saturday by the Wistar Society, originally a club intended for the reception of men of science, but since thrown open to a much more numerous class of persons, and sure to bring together all the respectable strangers that happen to be in the place. These and other small *soirees* of the same description, seem, at this time of the year, to be very frequent in Philadel-

* See note, page 12.

phia, and one cause of their prevalence has been stated to me to be, a wish on the part of the leading citizens to reconcile aristocratic predilections with the exigencies growing out of republican institutions. Thus they find it convenient to invite numbers of persons who would not be admissible to the coteries at which their ladies are present—such for instance, as county members of the Convention, men of business, and even actors. Of the latter stamp there was a gentleman present at one of their parties, who, though highly respectable as an individual, could not, I was told, have procured an *entré* into society for his family, so strictly is the line of demarcation drawn.

The parties are conducted on a very liberal scale—plenty of terrapin soup, and oysters, with ice, lemonade, champagne, and other wines in profusion, are always introduced, but the assemblage is often very numerous with reference to the size of the rooms.

During my stay at Philadelphia, the Convention, which had been called together to amend the Constitution of Pennsylvania, was holding its sittings. It is certainly a proof of the conservative feelings which are engendered by the general possession of competency, and by an equal distribution of power, that after suffering nearly a century to elapse, the sovereign people should at length proceed, with so much deliberation, and after so many delays, to amend defects which they perceive to exist in some parts of their original system of government. The Convention has now been for some time convened, and when its labours shall be concluded, their proposed reforms will be submitted to the State Legislatures for public consideration, and if then approved, must be finally brought before the people collectively for their sanction. The question then under discussion related to State Banks, an Institution, to which all the orators who were holding forth, during the time I stood in the room, appeared vehemently hostile.

Their style of speaking struck me as vague, declamatory, and inconclusive, defects arising from the necessity of appealing to the passions, and bringing themselves down to the capacity, of the multitude, or rather, I should say, of the sovereign people, who, with their hats on, were seated in the gallery, whilst their servants, the members of the Convention, debated the points at issue, bareheaded in their presence. It must be admitted, however, that the public speakers, on this side of the Atlantic, are more generally, than with us, fluent and unembarrassed, qualities, which I attribute to the early and frequent exercise of their powers in this respect.

On a subsequent occasion I was more fortunate, Mr. Sergeant, the President of the Convention, being on his legs, who proved

a very superior orator to those I had before heard. There was no attempt, indeed, on his part to enter into the profound questions which the subject of banks involves—such a line would have been ill adapted to the character of the audience, I mean the gods of the gallery: but he turned with much adroitness the arguments of the former speakers against themselves, and shewed that the United States Bank savoured more of a democratical institution than of one calculated to favour the aristocracy, and that the outcry raised against it as an instrument against popular government was unfounded and absurd.

Sunday, December, 24th.—Went to the Episcopal Church, with my friend Nicklin, and heard Bishop Onderdonk preach. He afterwards confirmed about thirty persons, and delivered a short charge.

In the afternoon, had the curiosity, and, if I were a Philadelphian, I should have added, the boldness, to attend the *Nigger* Church, and to hear a parson, about whose colour there could be *no mistake*, hold forth before a congregation, amongst which myself and my servant were the only whites present.

I confess, I came away agreeably disappointed—the service was performed with the utmost propriety, and without any extravagance of manner—the sermon quite as good as the average of those I have generally heard, and delivered with great correctness of tone and pronunciation—the congregation respectably dressed and decently behaved.*

Monday, December 25.—This being Christmas Day, I heard Dr. Lancey in the morning, and was much pleased with his sermon. He is decidedly the most impressive preacher I have yet met with, and is exempt from all sins against good taste. His diction, indeed, is refined and classical, calculated to be very effective in England.

Observed an unusual crowd walking in the streets, and every one I met was dressed at least as well as our London apprentices. This, indeed, is the pride of America, and may well serve to cover a multitude of other defects. But travellers are too apt in their estimate of a people, to look up at the Corinthian capital of society, rather than at the solid shaft.

Dined with Dr. Hare, the Professor of Chemistry, who had

* I recollect asking Bishop Onderdonk, a day or two afterwards, whether he thought this black Preacher made his own sermons. He told me he had no doubt of it, and referred me to some letters which he had printed in a newspaper on some question affecting the negro race, as a sufficient proof of his capacity.

invited a large party of his friends and pupils. Heard from Dr. Mitchell, who was one of the guests, a very candid *exposé* of the humbug of animal magnetism, now running its career in the United States. He is a believer in the power of producing magnetic sleep, and of suspending it by certain manipulations, and even thinks, that by particular motions, performed during the slumber of his patient, the operator can arouse him before the natural time, even though a board or screen be interposed. Here, however, his belief ended, for with regard to the professed power of *clairvoyance* he was an entire sceptic, and explained to us how it might be possible, by a certain train of questions put during the state of reverie or somnambulism, to lead on the patient to entertain any sort of images or dreams at the pleasure of the magnetiser. From his account, Colonel Stone, who has made so much noise at New York, must have been a mere dupe.

Tuesday, December 26th.—Colonel Biddle took me over, in company with Professor Rogers and Mr. M'Ilvaine, to see the Quaker College at Haverford, distant about seven miles from Philadelphia. The house was neat and plain, and the arrangements for sleeping very convenient, each boy having to himself a little bed-room, which opened into a gallery well lighted and ventilated. This plan has the advantage of affording privacy, without occupying much more space than a common dormitory would have done.

The boys were from ten to eighteen years of age. They are all instructed in the rudiments of learning, and many in Latin and Greek, Natural Philosophy, Chemistry, &c. To obtain a diploma or certificate, all the above branches must have been attended to.

It is professed to exclude emulation as a motive of action, and corporal punishments are never allowed. I doubt, however, whether the former rule is strictly maintained. There are four preceptors, and about seventy pupils. A botanic garden is laying out for them, a small philosophical apparatus has been purchased, and a museum of natural history is to be collected, as the institution advances.

In the evening, went to a meeting of the Colonization Society. Dr. Fisher, President of the Methodist College in Connecticut, addressed the assembly. His discourse was conciliatory, and his reasoning plausible. He argued, that little as the society he advocated may seem to have done towards the emancipation of the blacks, the Abolitionists had effected still less. The Colonizationists had at least sent out two thousand coloured persons to Liberia, there to enjoy the blessings of freedom, whilst the

Abolitionists had only aggravated the evils of the slaves at home by exciting suspicions in the minds of their masters against them.

He then alluded to the late agitation on this subject in Congress, and said, "that the very coldness of the North acted like so much additional fuel to feed the angry passions of the South. In this case, it might be said, in the words of Milton, that—

"Cold performs the part of heat."

The general impression which his discourse left on my mind, was, that the Colonization Society may accomplish a certain amount of good, provided only it does not act as a *salvo* on the consciences of its members, by persuading them that they have done all that lays in their power towards removing this tremendous injustice, by merely subscribing a small sum for the purpose of sending out a few of the free blacks to a distant colony. It is on the latter ground that the Abolitionists are averse to it.

Thursday, December 28th.—This morning I had intended to have taken my departure for Baltimore, but such was the punctuality with which the steamer started, that a trifling difference in clocks cost me my passage. I therefore filled up my time by visiting the City Library, which was founded about a century ago, and is the largest in the country, though containing only 43,000 volumes. Saw Gilbert Stuart's picture of Washington, an admirable and vivid delineation of character, though it must be confessed, there is somewhat prosaic in the expression of the countenance, considered as the portraiture of so great a man—

"Nature designed thee for a hero's mould,
But, ere she cast thee, let the stuff grow cold."

In the evening, went to a party at Mr. Dunn's, a very liberal and hospitable Quaker, who has amassed a large fortune, as a China merchant, and has come home laden with curiosities from that country. Met a large party who did justice to a very excellent supper.*

Friday, December 29th.—Started at half past seven o'clock by the steamer to Wilmington, and on landing there, was forwarded without delay from thence to Baltimore by rail-road. We had to cross several estuaries of the Bay of Chesapeake, constituting the mouths of the large rivers which flow into it.

* I little thought at that time, that I should ever meet my friend and his Museum of Curiosities in London, as I had the satisfaction of doing this year, 1842.

Of these the most considerable was the Susquehanna, which took the steam-vessel ten minutes to traverse. On the opposite side we found another train of cars in readiness to carry us forward, so that in spite of all the impediments caused by changing conveyances, crossing rivers, &c. the whole distance occupied us no more than six hours.

The accommodations both in the steamer and carriages were of the most comfortable description. The latter contained stoves in full operation.

The sun rose in great splendour, like a red ball of uncommon brightness, with its image reflected on the waters with equal intensity, nor did it belie the promise of the morning, for it favoured us with its cheering influence throughout the day, which, though cold, was therefore agreeable to the feelings. The view of the Susquehanna River, and that of Patasko Creek, on the borders of which Baltimore stands, were strikingly beautiful. Found decent accommodations at Barnum's hotel.

Saturday, December 30th.—Dr. Macauley (the gentleman to whom I was introduced yesterday) called, and devoted the morning to shewing me the lions of the place.

Its literary and scientific institutions are not very remarkable, but a geological examination of the state by Dr. Ducarel is proceeding, and even a trigonometrical survey has been undertaken under the auspices of Mr. Alexander.

Called also on Dr. Eccleshall, the Roman Catholic Archbishop of Baltimore, a young looking man for such an exalted post, but with the manners of a polished gentleman, and possessing, it is said, considerable talents. He received us with great urbanity, and recommended us to visit the seminary over which he presides, which seems rather a school than a college, as the pupils are not allowed to enter after the age of fourteen, and are admissible at nine. The plan of education seemed remarkable for its strictness, the lads not being suffered to go beyond the play ground, excepting once a month, when their friends have the privilege of inviting them. They sleep apart in little alcoves, not unlike those at the Quaker seminary, already described in this Journal, and into these they are bolted at night.

I met at the College a Mons. Nicollet, a Frenchman, just returned from a journey of five years into the remoter parts of the American Continent, sixteen months of which time he had spent amongst the Indian tribes near the sources of the Mississippi, the position of which he considers himself to have found with certainty, having determined their latitude and longitude, and at the same time ascertained the magnetic intensity and dip in most of the spots he visited.

I had a pleasant chat with him in the evening. He seems to

be no enemy to lynch law as a substitute for that more regular administration of justice, which is unattainable in the wild regions of the West.*

Sunday, December 31st.—Went to the Episcopal Church, which was numerously attended by a very well-dressed congregation, evidently composed of the *élite* of the place. Looked in afterwards at the Catholic Cathedral, which was more crowded, but contained a smaller proportion of the better orders.

The Cathedral is an extremely ugly looking pile, and the dome which surmounts it is the most untasteful I have ever seen. I know not what to compare it to, except it be to a huge coal-heaver's hat clapped upon the centre of the building. The interior of the Church is more commendable, but appears rather naked, from the absence of those statues and shrines which decorate most Romish places of worship. The choir was excellent.

As to the city of Baltimore itself, it is irregularly built, but

* Perhaps his partiality for this rough practice may have been enhanced by an adventure which occurred to him in the Wisconsin territory.

Arriving at an inn, in a spot which he intended to make his headquarters for a few days, he applied for beds for himself and two companions or attendants. The landlord however replied, that of the eight which were contained in the only bedroom of which the house could boast, seven were already occupied, but that he might make the most of the remaining one. He recommended him however to keep a sharp look out after it when bed time approached, or it might perchance be seized upon by some new comer, whom he would find it difficult to dislodge.

Mons. Nicollet accordingly kept a vigilant watch the first evening; but on the second, tempted by the brightness of the night, he strolled out to look at the stars, and on his return found his bed in full possession of a stranger, who doggedly refused to turn out.

After employing other arguments in vain, Mons. Nicollet advanced one which he flattered himself would be decisive, informing him, that he, the prior occupant of the bed, was labouring at the time under the itch. But the imperturbable Yankee dexterously turned this weapon of attack against himself, by replying, with much *sang-froid*, "Well, I aint mighty particular, for I have had that there a precious long spell, I reckon."

The poor Frenchman after this felt no further inclination to contest his right to the bed, and accordingly resigned himself to his fate—no however unrevenged, for the strangers who occupied the other seven beds, on talking the matter over the next morning, agreed that it was a disgrace to the country to treat a foreigner in this manner, and accordingly held a trial over the offender, and sentenced him to a good flogging, which, after tying him to the next tree, they administered in good earnest.

not deficient in handsome houses. They are in general perhaps in better taste than those of Philadelphia.

It is somewhat *grandiloquently* termed "the City of Monuments," but I only recollect two of any note which it possesses. One of these is a pillar in commemoration of the repulse of the British troops when they made a dash at the city in 1814, styled the Battle Monument, which is not sufficiently lofty to bear a very imposing air, and is too much frittered into compartments to appear in good taste. The other is a column surmounted by a figure of Washington, very handsome in itself, and rendered still more so by its simplicity and by the grandeur of its proportions.

I dined with Dr. Macauley, who gave us a capital dinner, including, amongst other good things, that luxury of the United States, the canvas-back duck, only met with in perfection near Baltimore, for the sake of which an Apicius, I am sure, would have felt less scruple in traversing the Atlantic, than he is reported to have had in crossing the Mediterranean in order to taste the African lobsters.

Monday, New-year's day, 1838.—I started in the morning for Washington by the railroad, and reached that city about midday. The weather was even more genial and bright than that of the days preceding it, the sun shining brightly in at the windows of the carriage, which, being heated by a stove, felt almost oppressively hot.

We passed a very fine and wide bridge over the Patuxent river, which flows to Baltimore, and met with much unreclaimed forest on our road. The Capitol looked very imposing from a distance. On my arrival went to the annual *Levee*, given by the President to usher in the new year, but felt myself rather awkwardly circumstanced from the want of some one to present me.

Doubtless there is a motley assemblage of people collected on such an occasion, but by far the greater number were well-dressed, and the shabbily attired artisans, I observed, more commonly contented themselves with standing in the lobbies, gaping at the smart people who were going to and fro.

Persons of a very wild and uncouth exterior here and there presented themselves to the chief magistrate, and walked, as it were in *bravado*, through the apartments, but they were few in number, and seemed rather out of their element. The rooms are of handsome proportions, but fitted up in a style of extreme plainness. When Captain Hall was at Washington they appear to have been entirely unfurnished.

Our minister Mr. Fox did violence on this occasion to his usual habits of late rising, and actually made his appearance at

the Levee by one o'clock, an effort on his part, which, they told me afterwards, was regarded by the *quidnuncs* of Washington, as portending something important, either for good or for evil, in the diplomatic relations between England and America.

Being myself rather a delinquent in the same way, I am pleased to record this trait in the character of our worthy representative, inasmuch as it proves that late hours are not incompatible with activity and attention; for the estimation he is held in at Washington, his excellent diplomatic notes, and his continuance in office under two administrations, shew, that at least he has not *slumbered* at his post.

As to Mr. Van Buren, he seemed to have put on his best smiles and his most condescending nods of recognition for the occasion, and his supple air brought to my recollection Major Downing's ludicrous description of him, and of his adventure at Downingville*, when he was jerked from his horse, and described a somerset in the air, but in spite of all this, contrived to *alight on his legs*, and "made as handsome a bow to the folks, as if nothing on earth had happened to him." In fact, though the "General's coat," as the Major says, "may be too long for him," he contrives to wear it with ease and dignity.

After the Levee was over, I took a stroll over this straggling city—

"The famed metropolis, where fancy sees
Squares in morasses, obelisks in trees"—

in truth a most bewildering sort of place for a stranger, being a tract as large perhaps as the whole of London, dotted over at uncertain intervals with detached buildings, between which no imaginable connexion can be traced.

But it is needless to dwell upon defects, which have been so often pointed out, and are in themselves palpable enough at first sight.

The absence of good inns, and the difficulty of finding out one's friends, are, it must be confessed, great drawbacks to the comforts of a residence at Washington.

In the evening I went to the theatre, and heard Vandenhoff in Cato. It was a chaste and classical performance, in perfectly good keeping throughout. He was, as might be expected, but indifferently supported. All parts of the house were fully thronged.

Tuesday, January 2nd.—Called on my former geological friend, Mr. Featherstonehaugh,† whom I was glad to find hold-

* See Major Downing's letters, Letter 2nd.

† He has been since employed by our own government, conjointly with Colonel Mudge, in surveying the disputed territory, between Canada and the State of Maine, and has presented an elaborate Report on this subject.

ing some government appointment in this city, having been selected to examine into the mineral wealth of those remote portions of the United States, which are regarded as the common property of the Confederacy. He was obliging enough to accompany me to the Capitol, where he shewed me over its various parts, and introduced me to several of the members of Congress whom we happened to fall in with. I have already remarked, that the general effect of the building itself is imposing and grand, but when you come to analyse its parts, defects begin to be perceived, as in the disproportionate size of the dome. Seen from within, the rotunda has a noble effect, though it is injured by the nakedness of the walls, half of which is occupied merely by the frames of pictures intended hereafter to be placed there, the other half by four specimens of Col. Trumbull's pencil relating to the revolutionary war. They are the fac-similes of those paintings of his I saw at Newhaven, only on an enlarged scale. Though with many defects, they possess an interest, as reminiscences of scenes glorious in the annals of the United States, and as faithful portraits of the men who figured at the stirring period of their revolution. I greatly preferred however the Cabinet Pictures, which I saw in the Newhaven gallery. The four other compartments on the walls are left vacant, owing to disputes as to the subjects to be represented. Jackson's friends wished the exploits of their hero to be there commemorated—his opponents would hear of no such thing, and so the spaces remain unoccupied. Perhaps in these matters the rule of the Romish church is a good one—not to *canonize* a saint till a century has elapsed since his death. Unless peace-principles should happily predominate to a greater degree than past experience justifies us in anticipating, a century can hardly pass away without furnishing the Americans with better subjects for their pencil, than such a victory as that of New Orleans.

The House of Representatives is a handsome semi-circular room, in the area of which the members sit, whilst the gallery is reserved for strangers. It does not appear to be well adapted for hearing. The Senate House is about one half its size, also semi-circular, and very elegant, as it appeared to me, in its proportions. The Library is a comfortable room, containing a good collection of modern books. I afterwards called on Mr. Fox, our minister, at four o'clock, and not finding him up, proceeded to Mr. Featherstonehaugh's, with whom I dined, at half-past five, a late hour for this country.

Wednesday, 3rd.—In the morning called and presented my letter to Mr. Van Buren, who received me politely. He is a man of gentlemanlike and mild manners, but in no respect striking in

his physiognomy or conversation. You see nothing in either which would mark him out at first sight as a fit person to be selected for the first magistrate of the United States. I afterwards walked to the Capitol, took the place, which had been kindly given me through the good offices of Mr. Featherstonehaugh, in the Senate House, and heard Mr. Calhoun bring forward his resolutions respecting the anti-slavery petitions*.

* These resolutions seem worth noting down, as being so characteristic of the feelings of the Southern people respecting the institution of slavery—they are as follows:—

RESOLVED :—That in the adoption of the Federal constitution, the states adopting the same, acted, severally, as free, independent, and sovereign states, and that each, for itself, by its own voluntary assent, entered the Union with the view to its increased security against all dangers, domestic as well as foreign, and the more perfect and secure enjoyment of its advantages, natural, political, and social.

RESOLVED :—That in delegating a portion of their powers to be exercised by the Federal government, the states retained severally, the exclusive and sole right over their own domestic institutions and police, and are alone responsible for them, and that any intermeddling of any one or more states, or a combination of their citizens, with the domestic institutions and police of the others, on any one or more grounds, or under any pretext whatever, political, moral, or religious, with the view to their alteration, or subversion, is an assumption of superiority not warranted by the constitution, insulting to the states interfered with, tending to endanger their domestic peace and tranquillity, subversive of the objects for which the constitution was formed, and by necessary consequence, tending to weaken and destroy the union itself.

RESOLVED :—That this government was instituted and adopted by the several states of the union, as a common agent, in order to carry into effect the powers which they had delegated by the constitution for their mutual security and prosperity; and that, in fulfilment of this high and sacred trust, this government is bound so to exercise its powers, as to give, as far as may be practicable, increased stability and security to the domestic institutions of the states that compose the union; and that it is the solemn duty of the government, to resist all attempts by one portion of the union, to use it as an instrument to attack the domestic institutions of another, or to weaken or destroy such institutions, instead of strengthening and upholding them, as it is in duty bound to do.

RESOLVED :—That domestic slavery, as it exists in the southern and western states of this union, composes one important part of their domestic institutions inherited from their ancestors, and existing at the adoption of the constitution, by which it is recognised as constituting an essential element in the distribution of its powers among the states; and that no change of opinion, or feel-

His speech was concise, as he carefully guarded himself against entering into the general merits of the question—he is evidently however a clear and powerful speaker, *apparently* straightforward, and *certainly* very decided. There was indeed something not a little dictatorial in his manner, together with a kind of impatience at opposition, a look of defiance and authority, savouring of Southern manners and education. Mr. Morris of Ohio followed. I approved of his views respecting the right of petition, but cannot praise his oratory.

Thursday, 4th.—In the morning called on Mr. Legaré of South Carolina, a man of information, talent, and good sense; afterwards went over to Georgetown, a large, straggling, and dirty suburb; and then attended the meeting at the Senate House, where the same question as that of yesterday was still under deliberation. The senate had arrived at the third of Mr. Calhoun's resolutions, and was discussing, whether it would do right in pledging itself to endeavour to give in-

ing, on the part of the other states of the union in relation to it, can justify them or their citizens in open and systematic attacks thereon, with a view to its overthrow, and that all such attacks are in manifest violation of the mutual and solemn pledge to protect and defend each other, given by the states respectively, on entering into the constitutional compact, which formed the union, and as such is a manifest breach of faith, and a violation of the most solemn obligations, moral and religious.

RESOLVED:—That the intermeddling of any state or states, or their citizens, to abolish slavery in this district, or any of the territories, on the ground, or under the pretext, that it is immoral or sinful, or the passage of any act or measure of Congress, with that view, would be a direct and dangerous attack on the institutions of all the slaveholding states.

RESOLVED:—That the union of these states rests on an equality of rights and advantages among its members; and that whatever destroys that equality, tends to destroy the union itself; and that it is the solemn duty of all, and more especially of this body, which represents the states in their corporate capacity, to resist all attempts to discriminate between the states in extending the benefits of the government to the several portions of the union; and that to refuse to extend to the southern and western states any advantage which would tend to strengthen or render them more secure, or increase their limits or population by the annexation of new territory or states, on the assumption or the pretext that the institution of slavery, as it exists among them, is immoral or sinful, or otherwise obnoxious, would be contrary to that equality of rights and advantages which the constitution was intended to secure alike to all the members of the union, and would, in effect, disfranchise the slaveholding states, withholding from them the advantages, while it subjected them to the burthens of the government.

created stability and security to such a domestic institution as that of slavery. This the member for Ohio objected to, though he was willing to stand neuter on such a question. Another amendment was then proposed, which seemed only calculated to pass a bitter sarcasm upon the institution of slavery in a country calling itself free. It was to the effect, that the portion of their Declaration of Independence, which sets forth "that all men were born equal," should be tacked on to the Resolution engaging to *uphold* slavery. To this Mr. Calhoun was willing (as I understood him) to accede, but then the debate branched out, as is the custom, into many collateral discussions, which prevented any settlement of the main point at the time I left the house. The question seemed to be, "has Congress under any circumstances the right to interfere in the domestic institutions of a state?" The orator contended that it has—for example, it can and does decree, that a slaveholder may recover his runaway negro in a free state, and on the other hand, that if a slave-state were to attempt to punish an abolitionist for sentiments uttered in a free state, Congress should afford him redress. To my unutterable surprise, this latter position was denied by Mr. Preston, the senator from South Carolina, who affirmed the right of a state to make such a law, and thus by implication justified the lawless proceedings of the Lynchers towards the abolitionists*. The same orator threw down the gauntlet of defiance to the North in no very measured terms. He told the senate, that if justice was not done to the Southern States, the latter were ready and able to take care of themselves, for that they scorned the idea of receiving *protection* from the Union. Mr. Preston is a powerful and impassioned orator, and one of the most gentlemanlike looking men in the house.

Friday, 5th.—There was a little rain in the morning, but afterwards the day became as beautiful as that preceding it. I went to the senate in time to hear Mr. Calhoun and Mr. Clay express themselves on the Canadian question, which was brought before the house by a message from the president, praying that laws should be enacted of a more stringent nature, to prevent the interference of the people with the concerns of other nations. Mr. Clay is a remarkably pleasing speaker, pleasing I mean in his manner and utterance; his speech was not long enough to enable me to estimate his other merits.

After this, the Resolutions were again brought up for discussion, but the remarks they elicited were of a less interesting character than on the day preceding, and were only important as evincing the very strong feeling prevailing against slavery in

* By parity of reasoning, the emperor of Russia would have the right to punish an Englishman visiting his dominions for sentiments reflecting on absolute monarchy uttered when at home.

the North—a feeling to which the senators from that quarter of the Union feel themselves unable to run counter. As yet, no one in that assembly avows himself an abolitionist, yet the tone of the members from Ohio evidently implies, either that they are inclined to be so, or that they feel it prudent not to offend those who are embued with such sentiments.

Saturday, 6th. What splendid weather! bright, genial, and mild. Actinometer at 12 o'clock mounted up to 13 deg., the highest point yet noted. Went as usual to the senate, and heard a continuation of the same discussions with respect to Calhoun's resolutions. Mr. Morris of Ohio, in a lengthy and rambling speech, replete with furious gesticulations, made at least one good hit in noticing Mr. Preston's startling declaration mentioned above, asking whether or not he had rightly understood him. No answer was returned, from which it may, I hope, be inferred, that the proposition was regarded even by its author as indefensible. Mr. Calhoun spoke as usual *to the point*. Mr. Niles of Connecticut got up and addressed the house for half an hour. He is a low, mean-looking person, who owes his position purely to his radicalism. How singular, that the electors of the enlightened state of Connecticut should appoint a senator of his calibre to represent them! How humiliating it must be to them, to see the miserable figure he cuts by the side of such men as Webster and Calhoun! The best speech of the day was that of Mr. Davis of Massachusetts—it was lucid and ingenious, and shewed very plainly the inexpediency of agitating a question of this exciting character, as has been done by introducing the Resolutions. It appeared from the statement of members, that abolition societies were increasing in number rapidly. At present about 1500 exist, and they average perhaps one hundred members each. The third resolution was at length carried.

Dined with Mr. Legarè, and met there Colonel Preston, Kendall the Postmaster General, and three or four more persons of distinction. A superior tone of manners prevailed, and for the first time since I have been in America I heard Mrs. Trollope's work commended. These Southerners evidently regard themselves a different class of people from the New Englanders who have peopled Cincinnati, and therefore feel in no degree personally aggrieved by the satirical remarks which this lady has made on the manners of such a remote region.

One remarkable feature in the United States, I may remark, is the absence of that class of novelists, who assume the office of satirizing the follies, and holding up to ridicule the peculiarities, of the nation to which their works relate*. It would seem, as

* Miss Sedgwick, in her admirable little tales, Mrs. Lee of Boston, in her *Three Experiments on Living*, Mrs. Gilman, in her *Portraiture*

if public opinion, more despotic than law, exercised a most rigid censorship over such matters. Hence the demand for that description of writings, which must exist in every civilized community, is supplied by writers from the Old Country, who have executed for brother Jonathan a useful, though I fear rather a thankless office, and are perhaps read with the greatest avidity by the very persons who are most eager to abuse them.

Sunday, 7th.—Day still warmer and brighter than the preceding. Went to the Capitol at eleven, and heard in the House of Representatives the service performed by a New England Methodist, who gave us a sermon, which some might call impressive, but which was so full of sins against taste, so disfigured by the vulgarity of the preacher's manner and by the violence of his gesticulations, that whatever it might contain of good, lost all its effect upon my mind. The points which appeared to me rather unusual from a pulpit were: 1st, the quotations from profane poets; 2ndly, the frequent allusions to modern discoveries and men of science, to astronomy, chemistry, electromagnetism, Newton, Sir H. Davy, &c.; 3rdly, the almost personal addresses to his auditors—*to you sir—and to you madam*.

Dined with Mr. Fox, our minister, and met there Mr. Poinsett, the Secretary of War, Mr. Featherstonehaugh, and Mr. Macintosh. Glad to find so good a disposition expressed by Americans of weight and influence with respect to Canada. Mr. Poinsett did not hesitate to designate the people assembled at Navy Island as pirates, and to wish them treated as such.

Monday, 8th.—In the morning went to the House of Representatives, where a very warm debate on the subject of Canada was going on. One orator, after threatening war to vindicate the national honor, and descanting in vehement terms on the atrocity of the steam-boat capture, ended by admitting that they had as yet no facts to build upon. Came away with no wish to exchange my seat in the senate-house for one in this assembly. In the former, I have seen nothing like disorderly conduct, or want of decorum, in the midst of all the vehemence called forth by the slavery discussion, and in one respect am sensible of a superior-

of Southern manners, have touched with a gentle hand upon some of the vices and foibles incident to those states of society which exist in the several portions of the United States, but their general aim seems to be to reform the national character, rather by exhibiting models of what is good, than by holding up to ridicule that which requires reform, as is attempted to be done in the class of publications to which I have referred in the text.

ity in its proceedings over those of our own Houses of Parliament; namely, in the patience with which the assembly endures the endless repetitions of the orators. In the House of Representatives, on the other hand, I have seen enough during my short visit to convince me, that the complaints made against the personality and blackguardism exhibited by some of its members are not exaggerated.

Dined at Col. Abert's, and met there Judge Garland, a Virginian, Gen. Macolm, a jolly, good-tempered, and intelligent officer, Mr. Featherstonehaugh, and Mr. Wyse. Went afterwards to a party at Mrs. Woodbury's, which proved a grand squeeze. It was well enough for a little time to see the various persons assembled, as Mr. Woodbury, being Secretary to the Treasury, invites everybody. The men greatly predominated, but there were young ladies enough for quadriles, the latter in the extreme of European fashion, and, in spite of American prudery, exhibiting quite as great an exposure of the person. For those who were not dancers, the party, after a short time, presented no particular interest, so that at eleven o'clock I took my leave, having resisted the invitation given me to go to a similar gathering of the fashion of Washington at Mr. Forsyth's.

Tuesday, 9th.—Went to the senate, and heard a very interesting debate on the subject of Mr. Calhoun's fourth resolution, respecting the abolition of slavery in the district of Columbia. This day all the speakers were good, viz. Mr. Pierce of N. Hampshire, Mr. Crittenden of Kentucky, Mr. Calhoun, and above all Mr. Clay. Let no one say that the Americans are destitute of orators, till he has heard the latter, who possesses an urbanity of manner, an appearance of warm and expansive philanthropy, a frankness and persuasiveness, which combine to render the effect of his reasoning almost irresistible. His diction is well-chosen, his voice musical, his flow of words easy and unembarrassed, and, what is unusual in the American senate, a dash of pleasantry here and there is thrown in to relieve the dryness of the discussions into which he enters. Above all, there was an air of candour, a mildness and deference towards his opponents, which formed a very pleasing contrast to the brow-beating and dictatorial manner of Mr. Calhoun. It was altogether the highest treat I have experienced since reaching Washington.

Dined at Mr. Featherstonehaugh's, and met Gen. Macolm, Col. Abert, Mr. Nicollet, and Mr. Macintosh. In the evening went to Mr. Gilpin's, the Secretary of the Treasury, whose wife and sister I found very agreeable people, and much more conversible than most of the ladies I have met. Animal magnetism is, I find from them, called in by the saints in this country to support the doctrine of the immateriality of the soul, and is even

supposed by them to be a *providential* gift specially imparted, in order to dispel the doubts of a sceptical age on this subject!!

Wednesday, 10th.—Day bright and fine, though rather colder than the preceding one. Spent the morning in the senate, listening to the debates relative to Calhoun's fourth resolution. Clay proposed an amendment, which he regarded as more conciliatory than the original motion, and he maintained his superiority in argument, as on the day preceding. Mr. Hubbard of New Hampshire, and Mr. King of Alabama spoke well, Calhoun with his usual directness and vehemence. Webster contended against that part of the resolution, which asserted that the abolition of slavery in the district of Columbia would be a breach of faith to the states that ceded it to Congress. I did not think however that he was happy in the line he chose. Mr. Buchanan of Pennsylvania spoke better than from the heaviness of his appearance I had supposed him capable of doing. Calhoun indulged in a kind of *elope* on slavery, as *one of the very best of* civil institutions, benefiting both the White and the African, but chiefly the latter. It is surprising to see the complacency with which the members from non-slave-holding states listen to these monstrous propositions. They seemed to be afraid to enter on this topic, for the question having been opened, it would, I conceive, have been quite in order for a northern member to have spoken on the opposite side. At length, after several divisions and much verbal dispute, the senate agreed to accept Clay's amendment, and to throw out Calhoun's original proposition.

Dined at Mr. Poinsett's, the Secretary of War, and met the minister of Cuba, Monsr. Tacon, Mr. Featherstonehaugh, Mr. Legaré, and others. Young Tacon is just on the point of being married to a young and beautiful American lady, to the great annoyance nevertheless of his aristocratical father, the governor of Cuba.

Thursday, 11th.—Went to the senate, and heard a long discussion on the subject of Mr. Clay's amendment to Calhoun's fourth resolution respecting the territories. The best speaker of the day was Mr. Rives of Virginia, who was clear, logical, and straightforward. Col. Preston, as before, hinted at ulterior measures being requisite, the present resolutions being likely to lead to nothing. Mr. Clay as usual preached conciliation. Calhoun would hear of no compromise. Mr. Buchanan of Pennsylvania represented, that the resolutions were framed to meet the interests of the South, a ground which Calhoun rejected with indignation. At length the Resolution as amended by Clay passed, if I am rightly informed, by a large majority.

And here terminate my notes on the proceedings in the senate house during my short stay at Washington. Unlike what might be expected from so practical a people, they bear more resemblance, if I may judge by this specimen of them, to the discussions of a debating club, than to the deliberations of the council of a great nation, relating to abstract general propositions, which have no immediate or direct influence upon the conduct of affairs.

This peculiarity arises in great measure from the circumstance, that Congress has its powers in fact greatly abridged by the state-legislatures, and I may add, is doubtless promoted by the practice of remunerating the Members of both Houses, not by an yearly stipend, but by a certain sum for each day that the session lasts. Accordingly, the work gone through seemed at this time not to be very onerous, commencing about twelve, and being brought to a close always before their dinner hour, which is usually four.

Without waiting the termination of these lengthy debates on Mr. Calhoun's resolutions, which had continued with little intermission during my whole stay at Washington, I packed up my portmanteau, having carefully extracted from its contents all the works relating to slavery which I had brought thus far, and amongst the rest Miss Martineau's volumes—for although the gallantry of the Southern people prevented them from *lynching* the authoress herself, I did not know how it might fare with the hapless wight who should carry with him her lucubrations. This done, I took my leave of Washington, carrying with me many pleasant recollections of its residents, but a very confused one of its plan and outline, and embarking on the night of Thursday, the 11th of January, on board the steamer which was to convey me down the river as far as Potomac creek. Landing there at nine o'clock, I proceeded by a stage to Frederickburg, over eleven miles of an execrable road, and then by a railroad, for a distance of about sixty miles, to Richmond. The road lay chiefly through a "pine barren," and presented little of interest. The country was thinly peopled, and the houses, such as they were, slovenly and dilapidated. At Richmond I found the legislature sitting, and with some difficulty got a bedroom at "Virginia House."

Saturday morning, 13th.—Called on bishop Moore, a fine old gentleman, with long white hair, like another Latimer, who of his own accord introduced the subject of abolition. I was, I confess, anxious to hear what would be said on such a topic by one, who is, I know, highly respectable, and I fully believe to be benevolent and religious. His mode of dealing with it, shewed how long habit reconciles to things, which seem irreconcilable with the first principles of the doctrine, which by virtue of his

sacred office, he inculcates. The bishop dwelt upon the physical comfort and happiness which the negroes of Virginia according to him enjoy, without one word of regret with respect to their moral degradation; he spoke of the certainty of an abolitionist in the South being lynched, not indeed as a thing he approved, but without any expression of moral indignation.

Went afterward to take a view of the town, which stands in an imposing position, on an eminence above James' River, which is of great breadth, but very shallow, and obstructed by stones. A little island lies in the centre of the stream, which is thickly wooded. This is the most northern city, in the neighbourhood of which I have recognised evergreen shrubs occurring in abundance as in England, a striking proof of the rigour of the American winter even to a low latitude. From a French gentleman, Monsr. Chevalier, who has resided many years in Richmond, I obtained the copy of a meteorological journal kept by him, of which the following are the results:

Average of fourteen years, viz. from 1824 to 1837:—

Winter	.. ..	41.18
Spring	.. ..	64.54
Summer	.. ..	73.38
Autumn	.. ..	48.27
Whole year	.. ..	56.84

The neighbourhood seems to be interesting and picturesque, so far as I could judge by the *coup d'œil* obtained from the Capitol. This building is the state-house, containing rooms for the legislature to assemble in, and for various other uses. It is in the Grecian style, with an Ionic portico in front, the entablature and cornice of which are of wood. The building looks mean when we are close to it, being of brick, covered with plaster, but at a distance the general effect is good. In it is a statue of Washington, by Gaudon, a Frenchman; it is said to be a good likeness, but did not impress me very favourably—I believe I took exception to his dress,—the coat, hat, and Hessians. The building being placed on the brow of the hill on which the city is built, is seen conspicuously at a distance, and is the first object that prominently strikes the eye. As for the town itself, it is the place of the greatest consequence in Virginia, and contains some good houses, but the meanness of those in the smaller streets and in the suburbs tells us, that we are now in a slave state. There is an air of negligence about the people and all that belongs to them, which reminds me rather of Italy than of free America. But what freedom! where half the population are slaves, and the other half dare not express their sentiments except in conformity to the opinion of the majority*. Dined

* My servant mentioned to me a fact which startled his English feelings considerably. Amongst the persons assembled in the room

in company with Mr. Vandenhoff the actor, and met some Virginians; they reminded me of rough English country gentlemen, of the old school, good tempered, fond of good living, and not particularly intellectual.

Drank tea with bishop Moore, who appeared to me, on further acquaintance, a very agreeable, as well as a very venerable old man, with his hearing and all his faculties entire, notwithstanding his advanced age. He told me, that he regarded himself in some sense as a British subject, having resided at New York at the time of the breaking out of the rebellion. He spoke with great affection of Old England, and mentioned the great concern he entertained at the time of Napoleon, lest it should be crushed, contemplating it, not merely with a sentiment of filial regard, but with a still deeper feeling of interest, as the main stay of Christianity.

I asked him about the state of the episcopal church in his diocese. He told me, that when he first came there only two churches existed, but that there are now fifty, and one hundred and fifty congregations, which, if we reckon three hundred persons to each, would imply, that between forty and fifty thousand episcopalians were to be found in Virginia alone.

I am surprised, that amongst the many writers on America, no one has undertaken to furnish us in detail with the statistics of the episcopalian church, as has been done by Mattheson and Reed with regard to those of other denominations. The progress episcopacy has made since the revolution in the United States is certainly highly satisfactory, when one considers the disadvantages against which it had to contend, from the connexion supposed to subsist between an attachment to the church and to the sovereign of the mother country. Owing to this circumstance, it seemed to be virtually extinguished at the time of the revolution, and was adhered to, with almost as much secrecy and hazard, as prelacy was in the time of the commonwealth.

Its resuscitation is a proof of, what might before have appeared problematical, namely, the compatibility of episcopal government with republican institutions, and thus, so far as it goes, tends to shew, that the primitive form of church government was designed for perpetuity.

where he dined was a very pretty girl, the waiting-maid, as he understood, to one of the ladies at the boarding house, with blue eyes, and a complexion almost perfectly fair. To his surprise, she dined by herself at a separate table. On inquiring the reason, he was told she was a slave. As slavery is transmitted from the mother, it is very possible that in three or four generations the traces of black blood may be almost obliterated, whilst the right of the master over the progeny remains unimpaired.

Another circumstance, which may be viewed with satisfaction by a member of an *endowed* church, is, that the respectability and apparent effectiveness of the episcopal church in different parts of the union, seemed, even by the confession of the Americans themselves, to bear some proportion to the emoluments received by the ministers, and the degree of their independence on their congregations. Nowhere is the episcopal ministry so efficient as at New York, and nowhere is it so well endowed—indeed an American friend once observed to me, “We have no objection to an *endowed* church, however much we may protest against an *established* one.”

I think too, that a more extended intercourse with the American clergy, would in some respects be calculated to operate beneficially upon those of our own country.

They would at least see amongst their brethren in the New World, (it may be said, indeed, from the peculiarities of their position,) high church views, united with tolerant sentiments towards other communions—a just sense of their own privileges, without any want of charity towards Christians of a different creed—an uncompromising adherence to their own principles on matters of religion, without any repugnance to cordial and friendly intercourse with those beyond their own pale.

These impressions, as to the members of the American church, have been suggested, indeed, by my conversation with bishop Moore, but were taken up before, in consequence of my intercourse with other clergymen, as for instance, Dr. Wainwright of Boston, Professor Mac Vickar of New York, Dr. Delancey of Philadelphia, and amongst laymen, by what I saw of my worthy friend Mr. Nicklin.

Sunday, Jan. 14th.—Went to the episcopal church, built on the site formerly occupied by the theatre, which was burnt down in 1811, with the loss of seventy-two lives. It is called in consequence the Monumental Church.

I there heard the bishop read prayers, and another clergyman preach. The latter was not wanting in argumentative powers, but sadly deficient in grace of manner; he was the first *extempore* episcopalian I had heard in America, and certainly the want of method in his sermon evinced that such was the case. Yet he was far from a ranter. Dined with a Dr. Trent, whom I had met casually at the bishop's on the preceding evening. We talked about the right of primogeniture—it exists to this extent in Virginia, namely, that the eldest son will have the mansion-house which his father occupied left to him, over and above his share in the rest of the property, and that the daughters have a smaller portion of it than the sons. The assurances of attachment to England, which I so often receive, surprise as

well as gratify me, seeming to shew, that although the jacobinical party under Jefferson might have turned the tide of feeling for a while in the contrary direction, it now has reverted to its old channel. The very sensitiveness to British criticism proves that such is the case. Mrs. Trollope seems to enjoy a sort of immortality in the breasts of the Americans. She may indeed have written over her tomb, like old Ennius:—

Nemo me lachrymis decoret, nec funera fletu
Faxit: cur? volito vivus per ora virum.

Had a dispute with a gentleman at the boarding-house on the subject of slavery. He contended, that Mr. Calhoun's propositions, which I quoted to him, were defensible; the negroes, he said, were happier than the whites would be, if they undertook the same menial offices, which, by their degrading effect upon the mind, would render the latter unfit to exercise the functions of free men. He maintained, that this was in some degree the case in the north, but that in a republican government it would be impossible to exclude any whites from an equal share of power, and that for this reason it was improper that any of them should act as menials. Hence the use of the negro*. He assured me, that public feeling generally stepped in to prevent the separation of families in Virginia, except where the effects of an estate were sold to pay the debts of the owner. Then, to be sure, the husband must be separated from his wife, if the latter happened to belong to another property, and *vice versa*. I need not record my arguments on the contrary side.

He spoke of the Union as of little importance to the South, and contemplated its dissolution as an event neither distant nor greatly to be deprecated. It would not necessarily lead to civil war, and would benefit the South, by throwing the people more on their own resources. I have sometimes thought, that ambitious men in the South are making the most of this abolition excitement, in order to wean the people from their attachment to the Union, and thus to place themselves at the head of an independent Republic. Time will shew.

In the same spirit, Mr. Rhett of South Carolina, in a speech

* I now begin to understand the reason of the facility with which the manufacturers in the North obtain on such moderate terms a supply of operatives, from a class of persons who would disdain such drudgery in England. A farmer's daughter, who would feel herself degraded by entering into service even in a respectable family, submits to employment of a ten-times more irksome nature at a mill, and thus contributes to bring about the anomalous state of things, of a thinly peopled country with plenty of good land, attaching more importance to manufactures than to agriculture.

of his on the subject of abolition, which I have lately seen, remarks as follows:

"In the South, the labourer does not control the destinies of the country. Every white man is there a privileged being.

"Selfishness and honour alike compel him to ally himself with his race, and (whether he possesses property or not) to uphold the institutions in which, in fact, chiefly exists the property of the country, whilst the very existence of slavery around him, gives him a loftier tone of independence, and a higher estimate of liberty.

"Let it be remembered," he continues, "that no republic has ever yet been long maintained without the institution of slavery.

"Nor are these United States a clear exception to this great fact. Slavery does not exist, it is true, in the northern states; but those states have been ever in intimate alliance with the southern states, through whom its salutary influence has been experienced. The South has been from its origin the balance-wheel of the confederacy."

Again he remarks, "The southern states are destined to no common fate in the history of nations—they will be amongst the greatest and freest, or the most abject of nations."

"History presents no such combination for republican liberty as that which exists amongst them; the African for the labourer, the Anglo-Saxon for the master and ruler. Both races will be exalted and benefited by the relation."

Monday morning, 15th.—I walked for some distance up James' River, to see the rapids, which prevent its being navigated for some distance above the city. The views of the water

* These sentiments, which were hinted by bishop Moore in mild and cautious phraseology, I have heard from the lips of laymen, avowed in a more vehement and offensive manner. Even the high reputation and the purity of motive, which must be conceded to Dr. Channing, would not exempt him from insult in the Southern States, and I have no doubt that there are many places south of the Potomac, where he would be torn to pieces, if he were to venture to shew himself. All this is very bad, but still more trying perhaps to a sensitive mind, is the reception which such sentiments meet with from the society in which he has hitherto moved, and the estrangement which they are said to occasion between himself and many of his former intimates and admirers.

Without being aware of the despotism of public opinion in America, no one can duly estimate the merit of the sacrifices which Dr. Channing has made, in declaring himself an abolitionist, and in writing those admirable pamphlets, which he has put forth, on the Annexation of Texas, and on the subject of Slavery.

roaring and foaming in its passage over its rocky bottom, and interrupted in its course by a number of finely wooded islands, were beautiful even in the winter season, and must be much more attractive in summer.

In the evening I started in the stage for Petersburg ; in which there were six passengers, besides a little negro boy who had been just purchased. At the door of the stage stood the mother with an infant in her arms, crying and sobbing with all her might at the parting, for, as the boy was to go at least a hundred miles off, the separation was likely to be for ever, and of course no tidings from one to the other could well be received, where neither party could read nor write. The master of the little boy, who was a sharp intelligent looking lad about twelve years old, told me he had given 500 dollars for him, but that if he had been put up to auction he would have fetched 600. He seemed, judging from his countenance and appearance, not likely to be a very severe master, and made out that the boy was quite pleased to go with him. I confess no signs of sorrow were apparent on the boy's face, except just when he parted with his mother, and then they were more on her side than on his. We arrived at 10 o'clock at our destination, and for the first time since my arrival in America I found some difficulty in getting a separate room, but at length succeeded in doing so. The inn was slovenly enough, and the provisions not over good. I had an instance by the by of the light in which the negro race is held. In the dark a person in the coach asked how many passengers there were. Another answered six. I corrected him, stating the number to be seven. "Oh!" rejoined the same who had just spoken, "you mean six men, and a little *black snake*," alluding to the negro lad whom I had before mentioned, "but we do'n't reckon him in the number."

Tuesday morning, 16th.—Started at nine o'clock by the rail-road to Halifax, a distance of about sixty miles. This, at the common rate of rail-road travelling, ought to have occupied no more than four hours, but so slowly did we proceed, and so dilatory was the whole management, that we had not arrived at our place of destination till the evening. Here, after a short pause for dinner, we were transferred, nine precious souls, into the stage, which was to carry us 160 miles further to the south. The party was upon the whole agreeable, beyond the usual average of American coach passengers. It consisted of an elderly man from New Jersey, whose symmetry was a little impaired by a protuberance of his back and shoulders, compensated by a stooping forwards of his neck and head, but who had a game eye and a shrewd and rather droll expression of countenance, which shewed that he was not a careless observer

of men and manners. There was then a gay and lively Frenchman with *moustache*, proceeding to set up a cotton concern at Charleston, for which he seemed not more fitted than the man in the moon. He knew scarce a word of English, but was quite at home in Italian operas and French vaudevilles, the last sort of knowledge which will avail him here. There was a friend of his from Georgia, evidently of French extraction, and just returned from a visit to Paris, but with more of a business-like character about him. There was an intelligent and gentlemanlike merchant, from Norfolk, Virginia, on his way to New Orleans, who spoke French with perfect fluency, and entered *con amore* into the Frenchman's views and feelings. There was a navy officer of the U. S. service, blunt and strong built, like a John Bull, with handsome features, though with a rather heavy expression of countenance. There was a young man, who said not a word the whole way, and of whom therefore I have the less to report. There was myself, and my servant, exalted *pro tempore* into the character of *my son*, as I learnt from my fellow passengers afterwards. And lastly there was a Yankee engineer or tradesman, who might have passed for the very personification of the New Englander. He knew every thing and every body; could tell us the exact weight of ball which their great ship, the Pennsylvania, projected at a single broadside: was present at her launching; knew what fish and fowl the rivers we passed contained, having fished and gunned in them all; knew the history and merits of all the cabinet ministers at Washington; knew exactly what ought to be done when a coach was overturned. At the first stage, the habitual carelessness of the drivers in neglecting to stand by their horses might have led to a terrible accident: a coach with five passengers in it which met us, being upset, owing to the horses which were harnessed to it galloping through a narrow gate into a stable-yard, where the vehicle was turned over upon a heap of luggage. We heard the noise occasioned by the event, but before we could understand its nature, our Yankee companion had disappeared. With the quickness of lightning he opened the door of our stage, and jumped out,—first satisfied himself, as he said, that our own horses had some one to look after them—then ran up to the one that had been upset, and arrived in time to extricate a lady, who was lying in the carriage motionless, though more incapacitated, I believe, by fright, than actual injury. The Yankee was the first to assist the husband in carrying her into the inn, where he felt her pulse, and having satisfied himself that she had met with no serious blow, returned to tell us the result of all these adventures. We were sorry to part with him a stage or two beyond, though so cramped for space, that as a general

principle the room of a ninth passenger was felt to be far preferable to his company.

We journeyed on the whole of the night, and all the following day, but about ten o'clock on the second night were permitted to get some rest at the village of South Washington in North Carolina. Here, though the landlord said he had beds enough for all the party, five only could be mustered in all the house; this however, as it was expected that we should sleep two and two, was considered ample accommodation. But, as Moore sings—

. "Some cavillers
Object to sleep with fellow travellers,"

so I preferred a sofa which I found in the parlour, and contrived to pass the night there in tolerable comfort alone. The rest managed as they could, and I believe something like a separate bed apiece was at length prepared for them, they not being, as it happened, partial to the old American plan of *bundling*. The heat of the day was very great, and it was not much mitigated at night; the close quarters therefore in which my fellow passengers were packed proved very dissuasive of sleep. For myself I fared better, having a large room down stairs, with *only* two fellows in it besides, who were stretched upon a *shake-down* made up for them extemporaneously on the floor.

In the morning we proceeded by the stage about twenty miles farther, and then took advantage of the rail-road from Wilmington to Halifax, which was completed to a distance of about twelve miles from the former place. We proceeded on it with great rapidity, though, as I conceived, not without some risk. In one part a causeway had been constructed over a morass to a height of thirty or forty feet, and there was no parapet of any kind to prevent the cars from being precipitated into the depth below, if any obstacle had chanced to throw them off the rail. We arrived at Wilmington about two o'clock.

With respect to the country through which we passed, from Richmond, and indeed even from Washington, to Wilmington, the same character will apply to it all. The road was cut through the midst of a pine forest, or *pine barren*, as it may well be termed, since the soil consisted of a loose unproductive sand, and the prevailing trees were, the *Pinus tæda* (loblolly pine), and afterwards the *Pinus australis*, or *palustris*, (the long leaved pine.) From the latter, turpentine is extracted by peeling off a portion of the bark, and cutting away so much of the wood at bottom, as will produce a cavity large enough to contain two or three pints. Into this hollow the turpentine flows from the parts above, leaving however a crust covering the exposed surface, which must from time to time be removed, in order that the process may go on. The turpentine is taken out of the cavities or boxes into which it has flowed, and placed in barrels.

The trees certainly presented rather a forlorn aspect from being thus denuded of their bark, and, I should think, must suffer in consequence.

As we proceeded south, the ground became more swampy, and consequently more and more adapted for Magnolias, Azaleas,* and other evergreen shrubs. Between South Washington and Wilmington especially they appeared in great luxuriance, and in the spring must afford a rich harvest to the botanist. Here also the trees were shaded with festoons of the Carolina Moss, as it is improperly termed, the *Tillandsia usnoides*. Its ashen colour, and delicately reticulated structure gave it the appearance of bunches of grey hair streaming down from the branches. We find it wherever the country is humid and marshy. The route we passed along had the appearance of great unhealthiness, yet hundreds of negroes were hired of their masters to complete the rail-road, which traverses this country, and is to connect Richmond with Wilmington. Whites cannot stand the climate. The road was in general heavy, lying through sand, but otherwise did not seem bad, except in a few places, where there certainly were holes deep enough to have upset the stage.

On Thursday, 18th, at three o'clock, we embarked in the steam-packet from Wilmington to Charleston. It was a new and elegant vessel, strongly built, as I was assured, and capable of moving through the water very rapidly. Nevertheless I was not pleased with its construction for a sea-boat. Like those which ply on the Hudson, it had a long cabin with a row of windows on either side of it, erected above the upper deck, so that in the latter the whole space was occupied by it, except about three feet from the sides of the vessel. This cabin, one should suppose, was too much exposed to the waves of the sea for perfect security. The vessel was also made more *straight* than is the case with our English steamers, which navigate the Mediterranean. We met with some very rough weather at night, and two or three times the sea struck the vessel, of which one of the spars was broken. Owing to this circumstance we did not reach Charleston till ten the next morning. Thermometer plunged into the sea rose to 57°; whereas in the river below Wilmington it stood at 55°; and at Charleston at 54°, shewing the influence of the gulf stream upon the ocean temperature.

On arriving at Charleston I seemed to have skipped over all the intermediate months of winter, and to have reached at once the freshness and genial warmth of the month of May. The sun, on Friday, Jan. 19th, was shining bright, the air was

* *Cerasus Carolinensis* is one of the most common.

mild and elastic, the grass growing in the streets, the birds singing in the contiguous woods. But this delightful weather was not to continue. Saturday was cold and bleak, Sunday resembled a raw wet day in an English winter, and accordingly the thermometer, which on Friday was 70°, had sunk on Sunday to 40°.*

Charleston itself is a respectable looking city, with indications of wealth and refinement. The streets are in general straight and of great length, meeting each other at right angles; and the want of uniformity in the architecture of the houses, in some of which the porticos project in front, and extend into the street, gives a relief to the eye, when wandering along so extensive a line of buildings, which is wanting in Philadelphia. The mansions of the better class of inhabitants are generally surrounded by a garden, occupied for the most part by evergreen shrubs and trees—and in almost every street is an avenue of the Pride of India, *Melia Azederach*, which at present indeed offers nothing to the eye except bunches of yellow berries, but which when in leaf and blossom is one of the most beautiful of trees.

An estuary divides the commercial part of the city from that suburb in which most of the principal inhabitants reside. The former at low water is merely a mass of mud, filthy and offensive, but being overflowed by the tide, does not, it is said, produce injurious effects on the health of the inhabitants. Nor is Charleston itself an unwholesome place, if we believe the natives, at any period of the year, except when visited by yellow fever, and this only attacks new comers. After a man has resided one entire year he is considered comparatively safe, even if the disorder should visit the city. But the neighbourhood, for thirty miles round, is universally ad-

* I could not obtain a register of the weather for many consecutive years, but may give the following summary as the average of each month during the years 1795, 1796, 1797, 1798, 1799, 1800, 1801; part of 1802 and 1828; the whole of 1829, 1830, 1831, and to November 1832:—

December, mean of 11 years	52.3.
November 12	59.6.
October 12	68.0.
September 12	75.8.
August 12	80.3.
July 12	81.1.
June 12	79.0.
May 12	74.0.
April 12	66.5.
March 12	59.3.
February 12	54.5.
January 12	32.2.

mitted to be highly deleterious after the month of May; and if a citizen of Charleston sleeps a single night in that region, or even travels through it after dark, he is liable to a fever, which more generally terminates fatally. The most curious part of the story is, that if a resident of Charleston sleeps a night in the country, and then returns to the city, the fever is likely to be more malignant, than it would have been, if he had continued to reside out of town, in the same unhealthy spot where he had contracted the seeds of his complaint.

Charleston possesses a small Museum and a small Library, neither of which however appeared well kept up. The Medical College is on a respectable footing, about 140 students resorting to it, and one or two distinguished names appearing in the list of Professors. Dr. Shepherd is regarded as a good mineralogist, and he lectures on chemistry with clearness, though, from the sample I had, he would seem to dwell too much on details, to the neglect of general principles. Dr. Houlbrook, though rather lazy and unmethodical, is evidently a superior man, and his work on the Reptiles of North America is much praised. I have not yet seen anything else very remarkable at Charleston, resembling, as it does, most shipping ports in that portion which is devoted to business, and containing no very striking public buildings in other parts. Its winter climate, though subject to great vicissitudes, is often most agreeable—Sunday and Monday indeed were rainy and cold, and the houses, it must be confessed, are ill-constructed for keeping out damp and frost, but several of the days, during my stay, have been of a very delightful temperature.

Wednesday, Jan. 25th.—I went out with Dr. Bachman, the father-in-law to Audubon, and himself a good naturalist, on an excursion to the neighbourhood of the city. About three miles off we came to a wood, consisting chiefly of evergreen trees and shrubs. The live oak, (*quercus virens*), wax myrtle (*myrica cerifera*), loblolly pine (*pinus tæda*), the American holly (*Ilex opaca*), the sweet gum (*Hopea tinctoria*), were the most common, whilst more than one species of *Smilax*, and the American jasmine twined round the trunks and branches. Of the deciduous trees, one of the largest and most common is *Liquidambar styraciflua*, commonly called the *gum-tree*. But the most interesting thing was to see the American mistletoe (*viscum verticillatum*), luxuriating upon the higher branches of the live oak, a tree which it seems to prefer, whereas the English mistletoe is seen upon our oaks more rarely than upon any other species of tree. Its berries are white, but smaller than ours; in other respects it does not seem to differ from it.

Conversed with one of my acquaintances on the subject of

duelling. He informed me of a fact, of which I was not before aware, namely, that those who enrol themselves as *communicants* of a church, of whatever denomination, are regarded in the same light as the clergy are with us, that is, as renouncing the practice of duelling, so that no one would think of sending them a challenge. Accordingly, one of their statesmen, Mr. Pinckney, was accused of cowardice, merely because he had become a communicant, it being said by his enemies, that he had made that profession, in order in an indirect manner to exempt himself from the consequences of being brought into hostile collision with persons of the opposite side.

If this rule generally prevails, I doubt whether it does not do more harm than good to the cause of religion and morality. No one indeed can doubt, that a person who shall out of revenge kill his opponent in a duel, is guilty of murder; but it may be possible for a man to be placed, without any fault of his own, under such circumstances, as to be driven to accept, and even to send a challenge, simply to defend his honor, as another may be led to take away a highwayman's life, to defend his property. If the latter act is justifiable, the former would seem to be so also, and even granting that it were not, every one, engaged in public life, in a country like America, must feel, that he may be placed in a position, in which the provocation would be too great to be resisted. To say therefore that no one is to be admitted to communion, unless he has made up his mind, that he will under no circumstances accept a duel, must do more injury to the cause of religion by limiting the number of communicants, than good by decreasing that of duellists. My remarks however are only applicable to duelling, as it is commonly practised. In the South, it appears from all accounts, to be often carried on in a different way from what prevails in other countries, including even the northern parts of the Union. If the rifle fails in bringing down one of the combatants, they both set to with their bowie knives, and hack and mangle each other about in a most barbarous manner. My informant added, that Southern men are in general not much burdened with religion;* they contribute indeed to Churches, but do not much attend them.

* The religious principle in America seems to be weakest, where slavery is most inveterate. There is something in Christianity which silently and unobtrusively undermines the existence of this institution, by inculcating man's original and natural equality, and by requiring duties, which involve and elicit higher intellectual faculties and aspirations, than are compatible with that purely animal state of existence within which the life of a slave is circumscribed. A secret consciousness of this fact renders a slave-holder naturally, although

On Tuesday, I dined with Bishop Bowen, and met some of the clergy, viz. Dr. Adams, Dr. Gadsden, Dr. Buchanan, together with Dr. Holbrook, Dr. Gibbes, and others. The Bishop is an agreeable, amiable man, though perhaps not very eminent in point of talent, considering the high station he holds. Indeed I begin to find, that the Episcopal clergy, though highly respectable, very useful in their vocation, and extremely well conducted, have not that range of acquirements, or the same elevated talents which belong to *some* of the same body in England. Dr. Macvicar of New York, Dr. De Lancey of Philadelphia, and Dr. Wainright of Boston, are the best specimens of this class of men I have fallen in with. I must on the other hand admit, that I have seen or heard of none so little clerical, as some of the sporting clergy in England, or so little informed, as a few of the worst of those who manage to pass through our Universities, and slip into Orders. A general character of respectable mediocrity seems to belong to the members of the clerical profession in America.

On Friday, Jan. 26th. I dined with Dr. Tydman, a very obliging and intelligent man, who, though educated for medicine, has inherited a paternal estate large enough to enable him to live independent of a profession. I met there General Hayne, the Prussian and French Consuls, and several more whose names I forget. We had a plate of *green peas*, a fact worth notice as happening on the 26th of January.

On Monday, Jan. 29th, having at length solved the difficult question as to the choice of a packet to Cuba, and made my arrangements accordingly, I started, together with Dr. Shepherd and two other gentlemen, to Sullivan's Island, on the opposite side of the River Ashley, a distance of about five miles. The island, though nothing but a low flat sandy tract, is in summer much frequented, being salubrious, and possessing the advantage of the sea breezes. There is a small fort on the island, where the Indians, captured, or rather *entrapped* by the United States army in Florida, are to be kept under safe custody, until they are transported into the wilds beyond the Arkansas. We were admitted to see these warriors, of whom there were about 150, besides a large number of squaws and children. Many of them were a fine fierce set of persons, tall, stout, and well grown, with a sullen and rather dejected expression, whenever any expression at all appeared amidst the general apathy which characterizes the race. Some few were clothed rather handsomely in

perhaps unconsciously, prejudiced against the reception, as well as the propagation of Christianity, as militating against his supposed interests.

leggings, bound just below the knee with garters composed of porcupine quills and beads, and in moccasins, together with a tunic covered by a sort of mantle. Others were nearly naked up to the middle of their thighs, having nothing but a coarse sheet thrown over them. A few possessed in addition a blanket. Most of these savages were stretched indolently on the ground doing nothing; their squaws, the majority of whom were hideous, employed in the meantime in pounding Indian corn in the hollow of a wooden mortar, in cooking, and in attending to their children. The latter seemed to have acquired already the apathy which characterised their parents. Many of them were stark naked, and one little urchin was undergoing the process of ablution by his mamma, under a pump in the open court, with a patience which no European infant of the same age would have evinced. After being washed over and over again, till we thought he must have been starved with cold, the poor *piccanniny* was turned adrift, all wet and stark naked, to dry himself, as best he could, in the sun—and this, be it observed, in the month of February. Amongst the great people here assembled, they pointed out to us “King Philip,” the second in order of rank, Mekanope being the first or principal. He was stretched on the ground, very poorly clad, and without any external mark of distinction. Osceola, the celebrated warrior, was ill of the quinsy, and, as the physician said, without hope of recovery. We succeeded however in obtaining admission to his presence. He was stretched on the floor on a mattress covered over with a blanket; his two wives being in the same apartment. He is a fine swarthy muscular man, and, being a half-breed, is somewhat less Indian in his physiognomy than his companions. For some time he would take no other remedies than those directed by his own medicine-man, a circumstance not to be wondered at, when we consider the perfidy shewn towards him by the people in whose hands he now is. At present, they say, he is more tractable, but the time for physic, according to the doctor who is appointed to attend him, has already passed.*

* He died the following day, having, when he felt himself going, made signs to his wives to go and bring his full dress which he wore in time of war; which having been brought in, he rose up in his bed, which was on the floor, and put on his shirt, leggings and moccasins; girded on his war-belt, his bullet-pouch and powder-horn, and laid his knife by the side of him on the floor. He then called for his red paint and his looking-glass, which was held before him, when he deliberately painted one half of his face red with vermilion; a custom practised when the irrevocable oath of war and destruction is taken. His knife he then placed in its sheath under his belt, and he carefully arranged his turban on his head, and his three ostrich plumes that he was in the habit of wearing on it. He then extended his

After this interesting but mournful spectacle, we rambled over the island in search of the Palmetto trees which occur there. They give to the scenery a sort of tropical aspect, though they do not yet attain their full dimensions. The beach for more than a mile is firm and good. I collected on it several shells, which I am told are rare in Europe. A species of *Croton* with pubescent leaves grows abundantly on the island.

Tuesday, Jan. 30th.—Made some calls preparatory to my departure. Conversed with Bishop Bowen on the state of the Episcopal Church. He told me that it was increasing, but not in proportion to the increase of the population. The better classes indeed belong to it, but they do not in general consent to pay enough to invite a due supply of efficient ministers; and the duties and calls of various sorts made upon the time of the clergy are such, as to preclude the possibility of those literary efforts being made, which give a lustre to the Church in England. Even in Virginia, where Episcopacy was at one time so rapidly on the increase, it is now nearly stationary. Its most palmy condition is at New York, where there are considerable endowments still belonging to the Church by which the revenue of the clergy is augmented.

Dined with General Hamilton, and met Mr. Petigru and Mr. King. Lawyers, Major Rutledge of Georgia, and some others. The General seems to live in good style, and is a gentlemanlike man. The conversation turned upon the consequences of a war with England, which one of the party believed would bring about a dissolution of the Union, and did not think that this would be much to be regretted. The Southerners, he said, are the losers, whilst the Northerners are the exclusive gainers, by this national compact. It is surprising how much more fond they seem of talking on English politics than on their own; Brougham, Canning, Melbourne, and the little Queen, were the principal themes of our after dinner conversation, and I must say, seemed as familiar to them as they are to us.

Thursday, Feb. 1st.—Saw Professor Ravenel's collection of shells, many of course from South Carolina, and afterwards visited the new steamer, just arrived from New York in three days and nights, which is no less than 220 feet long, and

hand to the officers present, and also to his wives and three little children; and having shaken hands with them in dead silence, made signal for them to lower him down on his bed, and when he was placed upon it, drew out his scalping knife in his right hand, laid it across his breast, and in a moment smiled away his last breath without a struggle or groan.—See Catlin's *Letters*, vol. ii. p. 221, where there is a portrait of this warrior.

splendidly fitted up. One thing struck me in going over the vessel, I mean the ostentatious display of safety belts, and all other imaginable contrivances against drowning in case of shipwreck, shewing the degree of risk considered to belong to the transit. Indeed the fatal accident that occurred in the summer off Cape Hatteras, when nearly all the passengers perished, including many members of the best families in Charleston, must be present in the minds of those who undertake the voyage for some time to come.

Friday.—The day being cold and wet, I attended a lecture of Dr. Dickson's, the Professor of Medicine, which impressed me favourably. It was on Cholera, and espoused the theory of contagion with reference to this disease very ably. Though pretty well accustomed by this time to the practice of spitting, I could not see without disgust the pools of saliva ejected on the ground by the students.

Saturday was also a bleak disagreeable English winter day. I dined with Dr. Tidyman a second time, and received from him a whole shoal of pamphlets, chiefly respecting the Tariff. It must be allowed, that the people of South Carolina acted with much spirit on the occasion alluded to, and certainly were the means, both of removing from the community an odious tax, imposed for the sole benefit of the manufacturers of the North, and of paving the way to a due recognition of the principles of free trade. Dr. Tidyman told me, that he and all the gentlemen of Charleston had expressed their readiness to lay down their lives at this crisis, and such was the threatening aspect of affairs at one time, from the refusal of the Legislature of North Carolina to exact the duties on foreign goods which Congress had enacted, and from the resolute character of General Jackson who was preparing to march an army into the country to compel submission, that it seemed not unlikely the patriots in this State might have been driven to carry out their resolutions, had not Mr. Clay suggested a compromise. Nevertheless the South Carolinians seem even now to pay a dear price for their union with the North, since they are still forced to impose heavy duties upon the commodities of their best customer, England, for the sake of favouring a people nearly 1000 miles distant, with whom, it must be confessed, they have little in common.

On Sunday morning, Feb. 4, I at length received a summons to embark, and took my leave of Stuart's Hotel at ten o'clock. I cannot praise that establishment, though conducted by a man who, I am told, was formerly in one of the first hotels in London.

The bed-rooms are pretty good, cold indeed in such weather as we have had, but not unsuited to the ordinary climate of Charleston. The attendance however is bad, and the table dirty and slovenly. But what can be expected, when we are waited upon by none but negro slaves? I heard Mr. Stuart frequently threaten them with the lash, but this *stimulus* is not exactly calculated to make good waiters. Nothing can be more ordinary, and indeed shabby, than the knives and forks and other furniture for the table. In short there is a manifest falling off in most respects on getting to a slave state, though there may be somewhat greater obsequiousness on the part of the negro servants, than on that of the *helps* of the North.

The brig Elm in which I embarked appeared a compact little vessel, and was commanded by an excellent and experienced captain. The crew indeed when I came on board seemed drunken and disorderly, but I was assured that this was generally the case on setting out, and that a few hours work in getting the vessel into trim would do wonders in restoring sobriety. On reaching the open sea we found a fine breeze from the South, and thus proceeded rapidly on our course. The weather, however, during the two first days, felt bitterly cold, the thermometer on Sunday being only 37°, and on Monday 45°, nor did the cabin afford us much protection. During Monday and Tuesday we went on prosperously, meeting, as we advanced south, with more moderate breezes, and more genial weather.

On Tuesday, Feb. 6, at two p. m. I have noted down my sitting near the prow of the vessel, basking in the sun, as in England during the month of June, a breeze just sufficient to fill the sails carrying us smoothly and gently towards our destination. On that day we had accomplished one half of the journey, being in the latitude of Cape Canaveral, on the coast of Florida, having sailed 240 miles since five p. m. on Sunday.

In the evening however the wind died away, and a most splendid sunset took place, the prelude to a strong south eastern, which sprung up in the night. With this we were baffled the whole of Wednesday and Thursday, tacking about continually, but making no progress. On Wednesday morning we observed a little fleet of vessels, two of them steamers, near the Florida coast, which then became distinctly visible. It probably was connected with some expedition carrying on against the Seminoles, and, from the latitude we were in, it would seem to be at the mouth of Indian River, where, if I mistake not, took place the last unfortunate encounter with the savages, in which Dr. Leitner lost his life.

About eleven o'clock on the morning of Thursday, Feb. 8th, a lamentable accident occurred. Captain Croft, who would do everything himself, fell from the jib-boom, where he had been seated in order to arrange some part of the rigging, and was precipitated into the sea, which at that time happened to be running high. The mate and one of the crew hesitated not a moment in lowering the boat, and hastening to his assistance, but before the latter could be disengaged from its fastenings, and got to the place to which the captain had been carried by the current, all consciousness on his part was gone. His body nevertheless still floated on the water, and, being heaved into the boat, was soon placed upon deck. We were baffled however in all our attempts to restore animation, and compelled to rest at last under the reluctant persuasion, that the vital spark was gone for ever.

The impression which this accident left on my mind, in common, I believe, with most persons on board, was far from being effaced during the rest of the voyage. I shall long remember the dreadful pause during the time the boat was being lowered and manned, when the captain was distinctly seen at no great distance, at first battling with the waves successfully, but afterwards falling back, suffocated probably by a large billow that had dashed over him. There was also no slight danger incurred by the mariners, in rowing in a small boat through such a sea as they had to encounter; and, again, when the body was brought on deck, there was the painful period of suspense whilst we were striving ineffectually to revive animation. The loss of the captain too affected us from more selfish considerations, for we were now to trust our lives during the most dangerous part of the voyage to the mate, who, from his conduct the first day, had appeared a hair-brained sort of fellow, and confessedly had never had charge of a vessel on this voyage before. Moreover to have been shipwrecked on the coast of Florida at this particular period, would have been no trifling disaster—since, even if we had escaped drowning, we should have fallen into the hands of the Seminoles, who, taking us all for Yankees, with whom they were engaged in deadly warfare, would have probably scalped and eaten us.

The next morning, viz. Friday, Feb. 9th, we were compelled to consign the body of the captain to the deep, from which it had been too tardily rescued, but not until the Burial Service of the English church had been read over the corpse, in which ceremony, under circumstances which even a Puseyite would admit as an extenuation, I officiated as chaplain.

The body then, being wrapped and tied up in a blanket, was consigned to its watery grave, and, as a large stone had been

attached to it, all the precaution necessary for its submergence seemed to have been taken.

In the evening however a fellow-passenger beckoned me to the side of the vessel, and pointed out an object floating at a little distance, the nature of which to my less acute vision was not altogether distinguishable. To him however it appeared to be the head of a man just elevated above the surface, and, as there had been a dead calm throughout the day, so that the vessel had scarcely moved from its position, there seemed much probability in his conjecture, that it was our poor captain, disengaged from his moorings, and again become buoyant on the waters.

I could not help thinking of the corpse of the unfortunate Prince Caraccioli, executed by Nelson's order at Naples, and seen afterwards floating with his head upright in the bay. I beseeched my companion however, that we should keep the secret to ourselves, for I knew not in what degree such a sight might affect the crew, and how much, in the event of a storm, the vision of their former captain, whom, whether dead or alive, nothing seemed capable of keeping under water, might unnerve their courage, and tend to paralyse their exertions.

The next morning, viz. on Saturday, February 10th, a breeze fortunately had sprung up, and this ominous object was no longer visible.

After the death of the captain, I had taken the mate aside, and remonstrated with him seriously on the responsibility of his new position, promising, if he behaved well, to report favourably of him to his employers, on my arrival at Cuba.*

Both he and the crew seemed somewhat impressed with the awful fate which had befallen their captain, and have since behaved themselves steadily, abstaining altogether from liquor.

A nice breeze too, which sprung up on Saturday, piloted us safely along the edge of the great Florida bank, which used to be the terror of the early navigators. By midday on Sunday we had cleared that coast, and were within two degrees of the Island of Cuba.

During Sunday night the wind, though still fair, was only just strong enough to withstand the force of the Gulf-stream,

* I am sorry to say, that his self-control lasted him only till he got on shore. The day following our arrival, just as I had penned a letter to his employers at Charleston testifying to his good behaviour, and recommending him as a fit person to command the vessel which he had guided so well into port, I was told, that he had got drunk the night before, had kicked up a row in the streets, and been consigned to the watch-house, thus forfeiting all his chance of promotion by his inconsiderate behaviour.

which ran at the rate of four miles an hour, in a direction quite opposite to that in which we were steering. On Monday however it became brisker, and at one p. m. we faintly discerned the coast of Cuba. About sunset the hill called the Pan of Matanzas lay directly opposite to us, and at sunrise on Tuesday morning we found ourselves close to the harbour of Havanna. The entrance to this port is so narrow, and the channel so contracted, that it is only when the breeze blows towards the land that it is possible to sail up it. We therefore were obliged, after frequent tacking, to anchor just within the Castle of Moro, which guards the entrance to the haven, and, in consequence of the delays caused by the strict custom-house regulations, had to remain another night on board. The evening however being calm, the crew warped the vessel into port, and thus concluded a voyage, which, owing to various untoward accidents, had extended to the duration of ten days.

On Wednesday the 14th of February, having, with some difficulty, and as a matter of favour, obtained a permit, I first landed at Havanna. The bay or arm of the sea, which encircles the city, affords the finest harbour in the world, and the perfect manner in which its entrance is commanded, by the strong fortress of the Moro, and the battery opposite, seems to render it one of the most secure. A vast number of ships lay along its extensive wharfs, and the flags of all nations might be seen floating in different parts of the harbour.

At the Mansion-house Hotel in Obra Pia Street, kept by Madame Martiniere, a French creole, of somewhat equivocal character, and, as I afterwards found, very apt to impose upon the guests in her charges, when she had an opportunity, I obtained quarters, which, so far as living was concerned, were comfortable enough, but were defective in respect to sleeping accommodations, her bed-rooms being, either very small, or, if larger, containing two beds in each, so that it was difficult to secure exclusive possession of a bed-room of suitable dimensions—a great inconvenience in so hot a climate. Independently of this annoyance, the transition from the depth of winter to a tropical sun, was rather trying to one's health, and I found myself obliged to alter my habits of going out during the middle of the day, and to confine myself for exercise to the early hours of morning, or to those after sunset.

The hotel formed a little quadrangle in itself with a courtyard in the centre; and contained a wide corridor, running round three sides of the square, and forming a communication between the dining-room and the private apartments.

The former was spacious and lofty, furnished with some elegance and taste, and inviting from its comparative coolness,

which was provided for, as much as possible, by having wide and lofty openings, opposite each other, both on the side fronting the street, and on that opening into the corridor, so that the wind could blow freely through them. The same arrangement was adopted in most of the bed-rooms, but mine was less advantageously situated, and hence, though I slept with my window and door open, I found the heat extremely oppressive.

The most unpleasant circumstance attending this inn, and others frequented by foreigners in Cuba, is, that the majority of their inmates are consumptive patients, sent over to escape the rigour of the winter experienced in the Northern States of the Union. Many were in the last stage of this insidious disorder, and their wan and ghastly appearance gave to the hotel the aspect of an hospital.

With regard to the houses in general, there is this peculiarity in their arrangement, that even genteel people sit in the entrance-hall, opening directly upon the street by a large window, without glass, and protected only by strong iron bars. Thus in passing along, you see a great deal into the interior of a family circle, and may observe ladies pursuing their various occupations, drawing, reading, or playing, just as if you were in the room with them. The same apartment, in which they sit, usually accommodates the volante or family carriage, and the way to the stable is through the same. In other cases a partition divides this entrance from the sitting rooms, and there is also, communicating by an open archway with the apartment in front, one at the back, to which the members of the family may retire when greater privacy is desired.

I was indeed reminded by the very plan of the houses, that the climate was one where winter was unknown. Windows appeared to be almost entirely banished, and the openings, through which light and air found entrance, might be closed by folding doors or Venetian blinds at pleasure.

The streets of Havanna are extremely narrow and ill-paved; after wet indeed intolerable, and in dirty weather very annoying. The present energetic Governor Tacon has insisted on the removal of that accumulation of filth which formerly rendered them so offensive, but it is mortifying to be told, that the city was, in spite of this, more unhealthy last year, than it had been ever known to be before.

I believe however his endeavours to cleanse away the *moral filth* which formerly polluted the city, have been attended with happier results. The public gambling houses have been closed—family connections and wealth are no longer a passport to impunity from crime—and the streets, which were formerly dangerous after sunset, may now be traversed without fear of the stiletto at all hours of the night.

The Governor indeed, mindful of the Horatian maxim, "Segnius irritant, &c." has taken care to make known to more senses than one the wholesome severity he has been obliged to practise, namely, by the ingenious device of elevating on lamp-posts in glass cases, like curious specimens of natural history, properly *set up and* labelled, along the roads most frequented, the heads of the malefactors he has caused to be executed, as I had occasion to notice, before I left the island, near the entrance to the town of Matanzas.

With all the drawbacks arising from its imperfect civilisation and slave population, the general appearance of Havanna interested me greatly more, than the prosaic utilitarian character of the cities in the United States. Many of the houses have about them an air of sombre magnificence; their architecture is often in the Moorish style; and the evidences of antiquity and decay which they bear upon their exterior give a picturesque effect to the whole, and strike one as in singular contrast with the general face of things in the New World.

The Cathedral is a Gothic building with a plain exterior, but of handsome proportions within. It is rather dingy, and the most interesting monument it possesses is that to Columbus, which consists of a bust placed in a niche in the wall, having near it a silver urn containing all that now remains of the great Discoverer of a new Hemisphere.

The present Governor has also introduced sundry embellishments. The square in which his palace stands is laid out very beautifully, with fountains, orange trees, cycases, and various tropical plants, placed at regular distances from each other. The Passao or public walk has been extended and adorned, and several large buildings in progress shew, that some degree of activity has been infused into the Spanish character.

I have already remarked upon the strength of the fortifications, that line the narrow strait, through which vessels have to pass in order to arrive at the city. The latter is also fortified by a wall and ditch, beyond which are some very extensive suburbs. The present population is reckoned at about 176,000, nearly half of which consists of negroes. The latter seem to luxuriate in this warm climate, and finer specimens of the race may be met with here than in more northern latitudes. The men are often naked to below their middle, having on merely a loose pair of linen trousers. Others possess in addition a shirt, through the rents of which their athletic forms may be distinctly enough discerned. But the negro drivers of the volantes, or one horse carriages, are often very smart fellows, and glory in a pair of jack-boots, that would not disgrace a French postilion.

The Yankees, the Scotchmen of the New World, have here contrived to obtain a footing, as the leading merchants and most

enterprising planters in the island, as indeed they have done, and are doing, in most cities of the American continent, where there is any opportunity for *going a head*.

That they will by degrees gain an ascendancy over the old settlers derived from other nations of Europe, and become in the end their lords and masters, which has already happened in the case of Louisiana and Texas, will not be questioned by any one, who is aware of the superior energy of the Anglo-Saxon race, and I, for one, should be disposed to send them "God speed" with the most unhesitating good-will, if I did not recollect, that the progress they have hitherto made in their onward course has been the means of rivetting the chains of slavery in both the countries above referred to.

The languor and listlessness brought on by a sudden transition from the cold of winter to a temperature not sinking below 78° at night, and sometimes rising to 84° in the course of the day, induced me to shorten my sojourn at Havanna. I found time however to pay two visits to the Botanic Garden, which, though not well kept, is nevertheless interesting to a person unused to tropical vegetation. I saw a noble avenue of palms of the species called "palma reale," the oreodoxa regia of Humboldt.* It is perfectly bare to the top, where it sends out a most graceful tuft of large fan-shaped leaves. The trunk continues of the same size up to a certain height, where it swells out, but still higher it contracts again, and this latter portion, which is the spathe enclosing the parts of fructification, is distinguished by its lively bottle-green colour, whilst the lower portions of the trunk are ash grey. The entire trunk is sometimes one hundred feet in height, and a series of these trees looks like a range of colossal pillars. There are likewise specimens of the Cocoa-nut palm, and of the Corypha Miraguama, a lower and more bushy description of tree than the two former. One of the most beautiful shrubs at present in blossom was the *Clusia alba*, with its round fleshy leaves and large milk-white flowers. Another curious tree is the *Eriodendron anfractuosum*, which sends out during its growth a number of hard strong spines, dropping off, as the size and age of the tree advances, but forming a most terrific protection to the weaker portions, which retain them.

Both these are to be seen in stoves in Great Britain, but it is doubly interesting to observe them expanded to their natural proportions under the tropical sky of Cuba.

Both species of bread-fruit were growing in great beauty in the garden, several fine pandanus, the mahogany tree, the *ficus elastica* of India, the cocoa plant, &c. A beautiful avenue

* *Nova genera plant. Equin. tom. i. p. 244.*

of Casuarinas, as lofty as the Larch in this climate, occurs near the entrance.

Mr. Schenley, one of the commissioners appointed to watch over the smuggling of slaves into Havannah, took me to Count Fernandino's country residence, and showed me a garden laid out in the English style, remarkable for the beauty and luxuriance of the plants it contains. At a later season the spot must be a perfect paradise; when I visited it, several hibiscuses, bignonias, melias, and jatrophas were in flower, but the majority of the plants were only in leaf. A negro climbed for us to the top of a cocoa tree, and brought down nuts enough in their green state, to give us a good draught of the cool and refreshing milk they contain. From the top of the house we had a fine view of Havanna and its neighbourhood.

On Saturday morning, Feb. 17th, I started in the steamer to Matanzas, but as the day was overcast had only an imperfect glimpse of the coast, which seemed however to be much wooded. About two o'clock we landed at the harbour, after a rough but refreshing sail.

Matanzas I found so full of strangers, that it was with much difficulty I could procure a room for myself and servant. The hotel however, though mean and shabby enough, was rendered tolerable by the civility of the landlord, who did what he could to make me comfortable, and even went out on horseback with me on Sunday evening, in order to give me a view of the country. The ride was a beautiful one. We first ascended the range of hills at the back of Matanzas, and enjoyed from thence a view of the rich valley of Humarè. The sides of the hills were covered with shrubs and trees—amongst the former a species of hibiscus with large round leaves and ovate lanceolate bractæ, and amongst the latter the *oreodoxa regia*, was the most conspicuous. Almost every tree, excepting this palm, had its tribes of parasites, its wild pine (*tillandsia*), cactuses, and creepers peopling it, whilst numerous lianas were twisted round the trunk and branches, in some cases so as altogether to enclose them.

The valley itself, seen from this eminence, seemed of a brilliant green, the fields of sugar cane which occupied it being for the most part standing. On descending however into it, we found the negroes in the act of cutting down the canes, whilst a black overseer, with a cart-whip in his hand, was superintending the work. The negro huts were wretched looking things, scarcely so good indeed as the worst habitations of the Irish peasantry. They were roofed with the leaves of the palm.

Having again ascended the crest of the hill, we returned through the notch in the range of hills, which is so conspicuous at Matanzas. The limestone rock on either side of us rose in-

to nearly vertical cliffs. It appeared to be highly cellular, and in some places contains large caves, one of which, near Matanzas, is said to be a mile or two in extent.

Matanzas is surrounded by wood on all sides, and its environs must in the season afford a rich field for the botanist. Even in February a species of *vernonia* forming a bushy shrub, two or three species of *convolvulus*, and a few other plants were in full flower. But the town itself is dirty and irregular, presenting little that is in any sense inviting. I fell in however with a masquerade at the theatre, which afforded me an hour's entertainment. There was not much attempt indeed at comic humour, except on the part of some men who imitated the negro costumes and dance, and mimicked both very well. The unmasked ladies exhibited but little beauty. They have indeed fine hair and in general fair complexions, being studiously protected from the heat of the sun, but they evince no signs of animation, nor are their countenances expressive of intellect.

On Monday, 19th, I hired a boat to take me to Madame Escheverie's boarding-house, near the banks of the Canamar river. The price charged was six dollars, a pretty round sum, as it seemed to me, for a distance, not exceeding eight miles, and not occupying the time of two men for more than three hours, making with the return a very short and easy day.* I was assured however, that the usual charge was eight dollars; such is the extravagant price of labour at Cuba. We passed up the bay till we came to the mouth of the river, and fell in with several craft rowed by negroes, one or two of whom were stark naked. On entering the Canamar river, a scene of great beauty presented itself, from the luxuriance of the woods which covered the rocks on either side of the stream, and the solemn silence and solitude that seemed to reign in this secluded spot. Even the birds moved about with an air of security, and a pelican allowed our boat to approach within ten yards without taking the least notice of us. He fell a victim however to his temerity, and will, I hope, adorn the shelves of our museum at Oxford. After rowing about five miles up the river, we landed, and ascended a pretty steep path which led to the boarding-house above mentioned, a small coffee plantation kept by a widow from New England, who combines, with the care of this estate, the management of an hotel for the reception of invalids.

The approach is through an avenue of palms, mango trees,

* The same exorbitant prices were asked on other occasions. Thus for three horses and a guide to go from Matanzas to Havanna, a distance of sixty-six miles, or two days' journey, and to return to Matanzas again, I was asked sixty-six dollars, or thirteen pounds sterling.

and alligator pears, the borders being occupied by a range of pine-apples. On either side of this avenue is a shrubbery of coffee plants, which attain the height of our Portugal laurels. Beyond is an enclosure containing plantains. One is surprised in coming from a northern climate, at seeing a *grass* here expanded to the size of a tree; as is the case with the bamboo, which forms several picturesque clumps at a short distance from the house. A few orange and lemon trees in full fruit are scattered around the premises, near which is the coffee barn, with a place for drying the berries in front, and the negroes' huts scattered around.* The temperature here was cool and agreeable compared to that of the town. At sunrise during the two first nights it did not exceed 64° or 65° , and though at mid-day it might rise to 81° , 82° , or even 84° , yet there was a refreshing breeze, which rendered the heat to my feelings greatly more tolerable than it had been in the towns.

On Tuesday, Feb. 20th, I procured horses, and rode to a fine sugar estate on the opposite side of the river, where the people were employed in cutting and grinding the sugar-cane, and in boiling to a consistency the extracted syrup. The hardest toil would seem to be that of *cutting* the crop, which is a labour of the same description as that of reaping in Europe. The grinding is performed in rolling mills, worked by horses, and the only portion of the work performed by the negro is that of feeding the mill, which crushes the stalk, and thus expels the juice. The latter is collected into a reservoir, and then boiled with a portion of lime, a negro attending each vat to remove the skum.

The avenues by which the mansion was approached consisted as usual of palms, mangoes, and orange trees, from the latter of which the ripe fruit had tumbled off, and was lying in heaps on the ground. The mammey of St. Domingo, with fruit like a small melon, and leaves like a mangolia, was also found. The house itself had no pretensions, considered as the residence of a wealthy planter, but it was cool and pleasant. I was invited to the breakfast-table by the inmates, and after my ride did justice to a good meal. In the course of this and an evening's stroll through the woods which bound the estate, I collected the following plants; viz. the common castor oil plant, here forming a tree with spreading leaves—the alligator pear tree—the anacardium—a mimosa—an indigofera—two species of piper—den-

* Say what the defenders of slavery choose, these negro huts are wretched holes. In Mrs. Echeverie's plantation they consisted of a low dark building, with a passage running through the middle, and on either side were the rooms in which the negroes resided. The latter could have but little light or air, and afforded only one apartment to each family.

drobium alatum—and another orchideous epiphyte—a very large plant of the arum kind, the *Caladium pinnatifidum*—a *banisteria*—two species of *bombax*—and others quite new to me. My servant shot several birds. One of them proved to be the rare *Trogon Temnurus*, now in the Ashmolean Museum.

The next day I strolled on foot through the same woods. The capsicum plant, that affording the arrow root (*maranta arundinacea*), the cotton plant, here growing to a considerable height for a shrub, and others*, were the fruit of my rambles. In the evening went to the borders of the river, and remarked again the extraordinarily cellular character of the limestone. It is full of caves of various sizes.

The heat on Wednesday was very oppressive, the thermometer mounting up to 85° or 86°, and the actinometer at midday measuring 20½ degrees.

On Thursday the 22nd, however, a heavy rain came on, accompanied with a strong north wind, and the atmosphere was cooled down to 71° at midday. On Friday at sunrise it felt positively chilly, the thermometer standing only at 65°. I rode this morning into Matanzas, and found the air accordingly of a very agreeable temperature. In the evening I examined the rocks near the town, which seem to afford a fair sample of the limestone formation so generally distributed over the southern portion of this island. The abundance of corallines, and the occurrence of shells, which, if my little knowledge of the subject does not deceive me, are similar to those now existing, persuade me, that this rock is not, as Humboldt states, the *Jura* limestone, but a coral formation of very modern date, heaved up from the depths of the sea. Granting such to be the case, I conceive it would well deserve the examination of the Geologist, being probably one of the most remarkable cases of modern elevation to be found any where; as the rocks rise to a considerable height above the sea level, and stretch over a very wide range, along the northern coast of this extensive island.

On Saturday February 24th, I returned by the steamer to Havana, and resumed my former quarters at the Mansion House. In the evening I went to the Opera, which appeared to me surprisingly well got up. The house, though plain, is spacious and respectable, and the *prima donna*, Mademoiselle

* Humboldt's researches in this island being very imperfect, as may be seen from the "Flora of Cuba," appended to Kunth's *Nova Genera et Species*, I had intended giving a correct list of those I had myself collected, but was prevented by the appearance of Ramon de la Sagra's work on the Natural History of Cuba, which may be referred to, as a much more complete account of the Botany than I could offer.

Rossi, is a delightful singer. The principal male singer, Pellegrini, has likewise a fine voice. It is plain that the Havana people take great pride in this amusement, and spend considerable sums upon it. The house was thinly attended, but some of the ladies were stylish in their appearance, and dressed with much elegance. The general drawback to their beauty is that blanched character of complexion, which arises from a too studious avoidance of the heat of the sun—they look, as it were, *etiolated*, pale and watery, as may be expected, when we know, that many of them never walk at all, and take exercise, even in their volantes, only after sunset.

On Sunday I saw the Governor's garden on the Passao, a small but delightful inclosure. The trees and shrubs are such as we rear with difficulty and in a stunted form in our stove-houses. I brought away specimens of a few of them.

On Monday 26th, I went with Mons. Chapy, an intelligent and obliging French gardener, to herborize on the opposite side of the bay, between Regla and Guanamacoa. We met with a few fresh plants; but that which most struck me was a new description of Palm of a most elegant and graceful form. It is much lower than either the *Oreodoxa*, or the *Coccoloba*, but the leaves encircle the trunk, or rather the central shoot, in whorls, rising upwards almost vertically. According to Mons. Chapy the species of Palm found at Cuba are much more numerous than Humboldt supposed. That traveller enumerates only five; viz. 1. *Oreodoxa regia*; 2. *Cocos nucifera*; 3. *Cocos crispa*; 4. *Corypha miraguama*; 5. *Corypha maritima*—to which Chapy adds, 6. the Palm just described; 7, 8. dwarf species belonging to the genus *Thrynax*; and two others. Mons. Auber, the Curator of the Botanic Garden at Havana, reckons, I understand, no less than eighteen species. The soil at Guanamacoa appears to be a kind of serpentine, so that the coralline limestone would seem only to form a *belt* along the coast.

On Tuesday I drove out to the pleasant village of Cerro, where are many country houses of the Havana nobles. Some of them, with their gardens ornamented with fountains and statues, and filled with a profusion of tropical flowers and shrubs, had a most inviting appearance. The Cerro stands on a little eminence, and is distant enough from the city to be exempt from fever. It contains a boarding house kept by a Mrs. Lyons, which, though said not to have much to boast of in point of comfort, would, on account of its situation, secure my preference, were I again to visit Havana. There is moreover this objection to a residence in the city, that the suburbs

around it are so extensive, that it is impossible to get out far beyond them in the course of a morning's ride. Hence, if one wished to herborize, it would be necessary to encounter the heat of the meridian sun before one could return.

I am not aware of any other rambles worth noticing which I made during my stay on the island. The great expanse of going to a distance from the city with the accompaniment of a guide, which my ignorance of Spanish would have rendered indispensable, together with the short time remaining before the period fixed upon for my return to England, induced me very reluctantly to avail myself of the steamer, the *Cuba*, which sailed for New Orleans on Wednesday the 28th of February. This was one of the largest and finest vessels of the kind I had ever been in, being 220 feet long, very strongly built, and well constructed for sea service. Amongst my fellow-passengers I may mention, an intelligent and agreeable Englishman, Mr. Wylie, settled in a mercantile capacity at New Orleans, and a gentleman of Louisiana, by the name of Porter, and his daughter, now on their return home, after a sojourn of some weeks on the island on account of the health of the latter, which had been threatened with pulmonary symptoms. The title of *Judge* by which Mr. Porter was designated is, in America, too common to be any sure evidence of distinction; but I soon found, on making his acquaintance, that he was a man of superior attainments, and of a high cast of mind.*

The weather, during the whole of our voyage till we reached the mouths of the Mississippi, was as delightful as could be desired—the sea calm, the wind slight but favourable, and the temperature mild and equable. We sailed on Wednesday evening at five o'clock, and on Saturday, March 3rd, about sunset, were within a few miles of the bar at the mouth of the Mississippi. So dense a fog however had come on, that the captain dared not shift his ground, till eleven o'clock the next

* Judge Porter, whom I had afterwards the pleasure of knowing more intimately, had raised himself by his abilities to the highest post at the bar in Louisiana, being for fourteen years Judge of the Supreme Court, and afterwards Senator of the State in Congress. Miss Martineau in her *Retrospect of Western Travel* describes him as follows:—

“He was Irish by birth. His father was vindictively executed, under martial law, in the Irish Rebellion; and the sons were sent by their noble-minded mother to America, where Alexander, the eldest, has thus raised himself to a station of high honour. Judge Porter's warmth, sincerity, generosity, knowledge, and wit, are the pride of his constituents, and very ornamental to the bench. What their charm is by the fire-side may be imagined.”

day; at which time the weather had cleared sufficiently to allow of our proceeding. We accordingly crossed the bar, and pursued our course up the mighty river, which drains so large a portion of this immense continent, but which to my great surprise was here so contracted, as to appear of about the same dimensions as the Thames above Woolwich. It is stated to be wider 1000 miles up than it is at its mouth, and the Ohio, a tributary stream, exhibits, it is said, a greater apparent volume of waters than the Mississippi itself. This is accounted for by the evaporation carrying off more water than enters it, during the latter part of its course, few large streams, except the Arkansas and Red Rivers, pouring into it south of its confluence with the Ohio.

But what a singular spectacle do the banks on either side of the Mississippi present!—low alluvial tracts, made up of mud and drift timber, just emerging from the sea, and answering most completely to Milton's description of the Serbonian bog, to which neither Neptune nor Jove could establish a claim. For some miles from its mouth not a shrub or a blade of grass grew upon this half submerged swamp; but as we advanced higher up the stream, we saw, first a little brushwood, and then a coarse description of reed or sedge, till at length a human dwelling, with a cow or sheep grazing upon the meagre pasturage, evinced, that man had begun to exert his jurisdiction, and to establish himself upon the banks of the river. Dreary however, and unhealthy in the extreme, must be the whole tract on either side of the river, till we reach New Orleans; nor is there anything in the country which immediately surrounds that city, indicative of improvement in the character of the soil.

We arrived at our destination by day-break on Monday morning, and met there with no obstructions to landing, as was the case at Havanna. In the city itself there is little to interest any but the commercial traveller; it is for the most part, like too many of those in America, in an embryo state; the streets unpaved, and almost impassable for mud; houses in the outskirts dotted about here and there, and straggling to a great distance on all sides of the central portion, which, like most French cities, is compact and crowded enough.

With all its commercial advantages, it must be frankly confessed, no one, whose mind was not altogether engrossed by the *auri sacra fames*, would select for his residence so ill-favoured, so pestilential a city—one situated in the midst of swamps—with scarcely any other practicable road than the river—exposed to excessive heat and mosquitoes in summer—and to alternate damp, cold, and sultry warmth in winter. The first day I landed was bright, clear and cool; at night we had heavy rains, but the following morning proved warm, and dry over-

head. Last week a fog continued for three successive days, and so the changes proceed.*

In noticing the fine buildings which it contains, I must begin with the Exchange Hotel, a most imposing structure, capable of lodging 500 guests, ornamented with Corinthian columns, and with a cupola which forms the most conspicuous object throughout the place. Next to it is a low mean brick building, which I found to be one of the few Churches which this ungodly city supports; and the contrast between the two constitutes a very significant commentary on the prevailing tastes of its inhabitants. The Protestant Episcopal Church in Canal Street is however a handsome Grecian structure; but the principal embellishments of the town are the Banks, of which there are several, possessing some pretensions to grandeur, though none equal to Mr. Biddle's at Philadelphia. The Theatre of St. Charles, in the American part of the city, is the handsomest, as well as internally the largest, that I have observed in the United States. I saw there Miss Ellen Tree and Mr. Bartlett perform in Sheridan Knowles' new Comedy of the Love Chace. The audience consisted as usual of a great preponderance of males; but, as the ladies all go to the lower tier of boxes, whilst the other sex resort to the pit, of which the price is the same, the disproportion is not so striking as it otherwise would appear.

It is however as a spot exclusively dedicated to the worship of Mammon, that New Orleans stands conspicuous. It is surprising, what advances have been made in its *material* prosperity, since the province was ceded to the Yankees. The French population are every day losing, the British gaining ground, and I know no better commentary on what would happen, were Lower Canada to fraternize with the United States, than the present condition and the future prospects of Louisiana. I should have been delighted to bring Papineau here for a few days—it would have cured him of his zeal for amalgamation with a people with whom the poor French *habitans* of the New World are so ill calculated to compete.

Indeed as a place of commerce New Orleans stands almost unrivalled; and the crowd of vessels that lines its quays affords the most interesting, I might say the only interesting spectacle, which a stranger, like myself, in this city of cotton and yellow fever has to contemplate. Here are those gigantic steamers, which communicate with the whole of that great western coun-

* It is a pity, that there is no regular meteorological register kept at New Orleans. Though situated in the latitude of 29°, the same as that of Barbary, the orange and lemon trees were all cut off a few winters ago. Such are the vicissitudes of the climate.

try, extending to the Rocky Mountains on the one side, and nearly to Canada on the other—here are trading vessels from every civilised country under heaven—and here arks, which bring down the produce of the interior, from the very sources of this great vein of the Western world, to its termination in the Gulf of Mexico.

Whilst contemplating all these unrivalled facilities for commerce, I could not help reverting to the magnificent schemes of Louis XIV., who had designed this city for the *embouchure* of the products of that vast colonial empire, extending from Quebec through the whole valley of the Mississippi to Louisiana, which was to circumscribe the tide of British Emigration within the country east of the Alleghanies.

What mighty consequences flow from events which appear at the time of only local importance! Had Wolfe been frustrated in his bold attempt on Fort Diamond in 1759, the whole of this immense continent might still have been in the hands of France; the British settlers checked in their movements westward by the existence there of an independent European nation, would have become more stationary in their habits; the fear of invasion from the West would have induced them to lean upon Great Britain for protection, instead of desiring a separation from her; or if, on the other hand, as Bancroft observes, the two great powers which divided between them the American continent, could have consented to have been partners, instead of rivals, the supremacy of the mother countries might have been maintained to this day on both sides of the Alleghanies.

It would lead me too far to speculate on the influence which such a posture of the American continent would have had on European affairs—how far, for instance, it might have prevented the breaking out of the French Revolution, and the momentous events which followed in its train—but one cannot help marvelling at the short-sightedness of the ministers who governed France during the Regency, and the reign of Louis XV., in allowing those splendid possessions, which their predecessors had laboured to secure by a long chain of forts, extending from the mouth of the St. Laurence to Niagara, and from Pittsburg to the mouths of the Mississippi, to be taken from them piecemeal, and transferred to a rival power, without a struggle.

On Wednesday morning I went over the John Randolph, one of the largest of those floating palaces which steam navigation has created. Besides the hold, comprehending the greater part of the space within the vessel which lies below the level of the water, there is, in the first place, a story above water, in which are placed the engine, the fuel, and a large portion of the cargo. Over this is another designed for the

passengers, containing, in its centre, a suite of three rooms elegantly furnished, with a range of state rooms for sleeping apartments on both sides. The furthest of the three rooms is exclusively set apart for ladies; the second is the general dining-room; the third the gentlemen's sitting-room; beyond are the servants' offices. The state rooms, or sleeping apartments, have windows or doors opening externally, so that they can be kept sweet and clean, and there are in each two beds. Above this second story is the hurricane deck, on which the passengers may take the air, obtaining from this elevated position a good view of the country. There is thus, if I mistake not, one additional story in these boats beyond what the steamers on the Hudson possess; and the whole, when properly tenanted, must constitute in itself a little world.

I then made an excursion in the train to Lake Pontchartrain, five miles distant from the city. The rail-road passes along a swamp more dreary and more impracticable than any of those which I had seen in Carolina, and one can well understand the sacrifice of life, which attended the construction of a causeway, across such a country, during the summer months. The Irish were, I am told, as usual, the chief volunteers on this service of danger, and 5000 of them fell victims. At the termination of the rail-road, on the borders of the Lake, are a few cafés and hotels, but no other houses, nor does the nature of the ground admit of one's exploring the neighbourhood, at least at this part. I therefore availed myself of the next car, and returned speedily to the city, without seeing anything but a wide expanse of water, the termination of which the eye was unable to reach.

The steamers from Mobile to New Orleans proceed across the Lake to the point at which the rail-road terminates, and are, by means of the latter, brought into direct communication with the city. Thus its construction has contributed greatly to the advantages of this great emporium of commerce.

On my return, I looked into the Exchange buildings, which have been erected by the American and French part of the population in a spirit of mutual rivalry. Both are handsome edifices, but the French is by far the most so. The principal room is a rotundo, the roof of which is divided into compartments, each embellished with some emblematical figure painted in fresco. A gallery supported by pillars encircles the interior of the building. The proportions are elegant and harmonious.

Dined to-day at the house of a lawyer, and met there a New England party, which therefore gave me but little idea of New Orleans society. I was told that few days pass here without a duel—there was one yesterday, there is to be one this evening,—

the time of their occurrence is a matter of perfect notoriety, no concealment being attempted, as the police never think of interfering. Not only are duels more frequent than in England, but also more generally fatal.

Saw one of those arks, as they are called, in which the people from the North bring down their produce for sale to New Orleans, and the other southern ports on the Mississippi. It was 75 feet long, flat-bottomed, and roofed over with boards, leaving a covered cabin, extending the whole length of the vessel, about five feet in height. A portion of this was partitioned off for a kitchen and bed-room, and seemed a snug enough birth for the owners during their long stay at each port. The rest of the cabin was a receptacle for the freight, which consisted of hams, bacon, barrels of flour, &c. Before steamboats were established, these arks formed the only medium of communication between the upper and lower portions of the river. At present their use for conveying passengers is entirely superseded, but much merchandise is still transported in them. The owners of this ark had been about seven weeks in drifting down the stream from Cincinnati, touching at the different villages, and selling their freight as they went along. When arrived at New Orleans, they break up their boat, and return home with their earnings by steam. The price of such a barge as the one I saw is about 150 dollars, of which they get back for the materials about thirty. There was a manly independence, united with a courtesy and frankness of manner, about these people, which prepossessed me in their favour.

On Thursday, March 8th, I accepted Judge Porter's kind invitation, and embarked in the steamboat Ajax, bound to the district of Attakapas, in which the Judge's domain is situated. The first day we proceeded prosperously up the Mississippi, the borders of which seemed for the most part in a state of cultivation. Several sugar plantations lay to the right and left. These somewhat relieved the monotony of the voyage, which nevertheless was dull enough, the coasts being flat and often swampy, and the trees and shrubs which covered their surface not yet in leaf.

On Friday, at about three o'clock in the morning, we reached the village of Plaquemine, about 116 miles from New Orleans. At this point a Bayou, or arm of the Mississippi, flows westward, communicating by a series of lakes with the rich settlements of Attakapas and Opelousas.

We were here, on getting up, saluted by the disagreeable intelligence, that the water in the Bayou was too low to admit of our vessel's passing. We were therefore compelled

to remain all day opposite the village. A little steamer, bound for Texas, came up in the course of the evening, and, as it drew less water, proceeded by the same route without obstruction. The Judge however did not relish the idea of trusting himself in so rickety a concern, especially as it would not bring him within twenty miles of home. We therefore waited a second night and morning in the same spot.

Fell in with a good specimen of a village lawyer, dignified by the name of *Judge* Dutton, an intelligent man, who knew a little of botany, geology, and nearly all the *ologies*. He presented me with two specimens of snakes, and one of an horned lizard from Texas, which has been called the horned frog, from its outward resemblance to that animal.

The whole of Saturday, the 10th, we spent on board, in the vain hope that the captain would run the risk of entering the Bayou, but he was a French creole, and not a Yankee, and therefore not adventurous enough to attempt it.

Accordingly by Sunday morning the Judge was fairly tired out, and, having made up his mind to take an open boat, engaged two free negroes to row us to his plantation. One of these was the sharpest fellow I have seen of that colour, though with a somewhat roguish expression, and having already worked out his own freedom, was in the way, I should think, of acquiring a competency. The distance was nearly fifty miles, owing to the circuit we were compelled to make; first proceeding for about twenty-five miles along an outlet of the Mississippi, called Bayou Sorel, which joins the Atchafalaya river, and then emerging into Lake Chicou, a pretty large tract of water, which communicates by a narrow channel with another much more considerable one, called Le Grand Lac, or the Lake of Chetimaches. On the border of this connecting channel is a sawmill, the proprietor of which, an acquaintance of the Judge's, gave us supper and beds, though I may mention, as an amusing proof of the simplicity of manners in this district, that he had at first prepared only one for the Judge and myself.

The Judge indeed had sufficient sympathy with English feelings on these matters, to petition our host to accommodate us with a bed apiece, but he told me afterwards, that his own original prejudices against this kind of partnership in sheets and blankets had been to a considerable extent got over, by the necessity to which, as a barrister on the circuit in these wild parts, he had continually to submit, of tumbling into the first bed of sufficient capacity that offered, no matter how many persons might be its occupants already—a custom absurdly attributed to the grossness of American manners, but in reality

arising out of the exigences of the occasion, which brings together at such times a crowd of people, to spots often possessing very inadequate accommodations. In these cases it may truly be said, that 'Misfortune makes people acquainted with strange bedfellows.' *

Early the following morning we proceeded on the lake, traversed it, and on landing found ourselves not more than three miles from the Judge's house, from which however we were separated by a swampy wood, not very pleasant to cross, and by a navigable river, the Teche. The Judge and myself however, together with his housekeeper, who had accompanied us from New Orleans, waded on foot through the slough, and arrived about the middle of the day opposite his plantation, quite bespattered with mud.

The Judge possesses a fine and fertile tract of land, extending for nearly a mile on either side of the river Teche, which consists for the most part of what was originally prairie, but is now converted into sugar-fields. A belt of wood however bounds the plantation on either side, and near the borders of the river is an almost regular line of some of the finest Live Oaks I have ever seen. He has brought nearly 2000 acres into cultivation, and has a stock of about 160 negroes, 40 horses, and a variety of other cattle. He is at present lodged in a small cottage, but is erecting a handsome and commodious mansion. I should not call it in England very spacious, considered as the residence of one of the largest proprietors in the country, but in Louisiana it is remarkable enough to attract curious persons from considerable distances, so rare is it for the planters to aspire to anything beyond a cottage on their country estates. I had indeed frequent proofs of their indifference to such kind of conveniences, in the mean dwelling-houses that occur on the borders of the Mississippi, associated with such large assemblages of negro huts, and such expensive buildings for grinding and preserving their sugars.

I spent eight days very pleasantly at the Judge's, whose good temper, wit, powers of memory, and conversational talents, made the time pass off rapidly enough. He had a good library of English books, and it was gratifying to meet with, Buckland's Bridgewater, and Whately's logic, within fifty miles of the bor-

* Yet some progress has been made since Mons. Chateaubriand's visit to America in 1791. I never saw, even in Arkansas, one of those singular beds, which he describes as existing at an inn between Albany and Niagara, constructed in a circular form round a post, in which each traveller was expected to take his place with his feet towards the post in the centre, and his head at the circumference of the circle.

ders of Texas, and to hear Shakespear, Scott, and Byron quoted familiarly amongst the wilds of Louisiana.

Nor was I left to his society alone, for we dined at the houses of two of his neighbours, and met several of them at his hospitable table. One or two proved to be very intelligent men, the rest respectable and hearty country gentlemen. From such people the treatment of the negroes, so far as physical comforts are concerned, is doubtless good. The Judge, I should think, must be beloved by his own dependants, with whom, on reaching his estate, he shook hands, like a Feudal Lord amongst his Serfs, receiving their congratulations on his return, and inquiring with interest into their family concerns. His slaves are, I am sure, liberally and kindly treated, but I cannot say that there were any indications, either on the part of him or of others, that they regarded them much in the light of morally responsible beings, or made any efforts to instruct or enlighten them. I own, however, that my inquiries on such subjects were limited, for I did not think it fair to avail myself of my opportunities for secretly investigating matters, which, I can see, all slave-holders avoid as much as possible to discuss.

The practice of dirt-eating, I hear, prevails to a considerable extent among the slaves in some of the neighbouring plantations, and often proves an unsuspected source of disease, producing disinclination for food, listlessness, and marasmus. The medical attendants sometimes are able to detect the existence of this propensity, by examining, whether the walls of the hut, in which the sick negro lives, bear any marks of having had their plaster picked off, as if by the hand—for the morbid appetite seems in these parts to be, not for unctuous kinds of earth, as is the case with the savages whom Humboldt describes, but for those of a gritty and loose consistence, such as mortar, limestone, &c.

There appears to be a rooted impression among the planters, that the negro race is not only inferior, but distinct—an idea, which receives the more countenance, as it seems to palliate the injustice of continuing to hold them in bondage. They say however, with some truth, that *we* should act as they do, if placed under the same circumstances, for that it cannot be expected, that the people of the South should be willing alone to make the sacrifice, or that the great body of landed proprietors should be prepared to give up every thing, for the sake of a principle, and that, too, one of doubtful application.*

* It is with pain and regret that I see such a writer as Mr. Dickens imprecating a curse upon the land of Virginia for fostering slavery; for when I recollect that the institution was kept up a century ago by the government at home, when the colonists wished to abolish it, I do not think that an Englishman is exactly the person to raise an outcry

The abolition of slavery has hitherto been brought about in one of two ways: either by a general sense of the superior advantage of free labour over that of slaves, as in the northern states of America; or by physical compulsion, as in the case of the English West India colonies. Neither of these methods, it is to be feared, can be put into operation with respect to the southern states, so that the prospect of emancipation in their case would seem to be very distant.

Alligators abound in the Bayous bordering on the Judge's property. Taking a boat one evening, we killed one about three feet in length, which, though shot twice through the head, continued to live for at least an hour. I afterwards saw several much larger ones, in an inlet or creek of the Great Lake already mentioned. They appeared very timid and harmless.

Adjoining this inlet is an Indian burial ground, to which, until lately, the Chetimache tribe were accustomed to remove the bones of their deceased relations, after the body had become decomposed. The bones had been packed in little open oblong boxes, which were piled one above the other on the summit of a small artificial mound, shaded by a venerable live oak. Together with these bones were some utensils belonging to the deceased—the piroque or canoe, the iron-pot, and even some coarse pottery. Of late however they have begun to bury under ground, so that the skulls which remained in the boxes were of rather old standing, and consequently decayed. I nevertheless carried away three of them as trophies*.

The mocking bird is very common in this country, and sings delightfully, but it appears to be the only bird possessing much sweetness of note. Parroquets, cardinal birds, woodpeckers, and others possessing a fine plumage, abound.

against the slaveholders of America, for not following directly in the wake of the mother country, when it has at last had its eyes opened to the iniquity of the practice, which it had before encouraged. I allude to the passage which occurs in vol. ii. p. 16 of his late work, which meets my disapproval, not so much on account of the statement made, which, I fear, cannot well be controverted, but on account of the *sentiment* conveyed, which is one I cannot too strongly deprecate. "Dreary and uninteresting," he remarks, "as the aspect from Fredericksburg to Richmond in Virginia is, I was glad to the heart to find anything on which one of the curses of this horrible institution had fallen, and had greater pleasure in contemplating the withered ground, than the richest and most thriving cultivation on the same place could possibly have afforded me. In this district, where slavery sits brooding, there is an air of ruin and decay, which is inseparable from the system."

* I presented one of them to my friend Dr. Prichard of Bristol, who has introduced an engraving of it in his work on the Natural History of Man.

It is, I doubt not, rich in plants, but the season was too backward to afford an opportunity of collecting them. The prairies are said to be covered with a profusion of wild flowers in summer. These prairies, when of moderate extent, as is the case here, have much the appearance of an English park, clumps of timber being scattered over them, as if by art, and a belt of wood bounding them on all sides.

The district not being advanced enough in civilisation to take advantage of such spots for country residences, they are either left deserted, or are converted into sugar plantations. We cannot indeed expect much taste to be evinced in selecting picturesque spots for habitations, when we find the proprietors of extensive estates often housed in cottages which an English bailiff would despise.

On Wednesday, March 21st, I took leave with much regret of my hospitable friend Judge Porter, whose undiminished love for the Old Country leads me to cherish a hope, that he will some day or other fulfil his intention of beating up my quarters at Oxford, and of renewing in the Old World those pleasant hours, which I have spent in his company in the New.*

The Swan steamer, on its way to New Orleans, took me on board, but it was not long before it gave me a specimen of the interminable delays attendant on this mode of travelling.† In the night we grounded in the lake, and it was late the next day before we were got off. Then the taking in of cargo detained us three or four times a day, and when we entered the Bayou, we were continually stopt by the abundance of drift timber carried down by the stream. At last, as we approached Plaquemine, the rapidity of the current became such, that the utmost power of the steam scarcely sufficed to battle against it, and in one place the greater part of the crew and passengers were obliged to land, and tow the boat along. Thus we scarcely made one mile in the hour, and did not reach the Mississippi till Saturday morning. Another day was required to bring us down to New Orleans, and in the night, about three miles from the city, the pilot contrived to ground us again, so that we had to walk into town. A

* To my great mortification he came unexpectedly to Oxford, in the dead of the long vacation of 1840, just a fortnight after I had started for Paris.

† Yet a lady who was on board descanted upon the facilities afforded for going to New Orleans at present, compared to the period which she recollected prior to the introduction of steam-vessels, when the whole of this long voyage was accomplished in the little canoes of the country, and accordingly occupied several weeks.

part of this detention must, I think, be attributed to the irregular habits and insubordination of the crew. The captain was himself a decent man, but the pilots, engineers, stewards, &c. seemed to be commonly playing cards when not at work. The general character of the company was but so so, gambling was their principal occupation, and their discourse sugars and cottons.

Indeed, I must at once admit, that Mrs. Trollope's and Captain Hamilton's accounts of steam travelling on the Western waters have but too much foundation in fact, nor is the character of the people at New Orleans itself calculated to remove the unfavourable expressions which the voyage to it leaves upon the mind. I have already remarked on some of the features that present themselves, the reckless thirst after gain, the absence of religious feeling, the coarse obtrusiveness of manner, and the indifference to those little attentions, which in other countries serve to disguise the real selfishness of the individual. I know not whether Moore visited this part of the United States, but to no other city in the Union do these lines of his so well apply, in none would there be so little cause to accuse him of a poet's license and exaggeration:—

Where every ill the Antient World could view,
Is mixed with every grossness of the New,
Where all corrupts, though little can entice,
And nothing's known of luxury, but vice.

On Sunday evening I went to the French theatre, it being the only opportunity I was likely to have for seeing it. If not so handsome, it is more tasteful and elegant than the one in the American quarter of the city, and there was certainly more attention to dress and decorum—less *Trollopism* in short—than is observable in other American theatres. This arises, from the higher price of the boxes, which thus are set apart for a better dressed description of people, and also from a relic of French politeness among the Creoles. The price of the pit was a dollar, that of the boxes a dollar and a half. The ladies were principally of French extraction. They were for the most part plain, at least I did not remark amongst the whole number more than three or four pretty faces. The performances consisted of French Vandevilles, very tolerably acted.

On Monday I went out with Mr. Wylie to see the Race-ground, which, unlike those in England, is inclosed by a high wooden fence, so that no one can even get a sight of the sport without paying the entrance fee of a dollar. I am told, that in spite of this high price, the area is commonly crowded, so little do the New Orleans people think of money. The course is

circular, and nearly a mile round. There is a capital drive leading to it, of about two miles, which seems the only one which the citizens possess for taking the air, so entirely cooped up is the town by woods and swamps. In this quarter is the favourite duelling ground, and as no secrecy is here thought necessary, the friends of both parties, and even indifferent persons, collect, as in the tournaments of old, to witness the spectacle. The number of duels throughout the year is said to average at least one per diem. The willows, which abound here, were already in full leaf.

On Tuesday I called on a Dr. Barton, and obtained from him portions of the meteorological register, which he has kept for several years past at New Orleans, and in other parts of Louisiana. In the evening I embarked on board the *Cinderella*, a steamer bound for the Arkansas River, and thus took my leave of New Orleans. I never left a large city with less regret, for there is nothing either in the character of the place or of its neighbourhood, to prepossess one favourably. Science and literature seem almost unknown, schools are very rare, and, it is said, extremely bad, and the manner in which the people are crowded together in their houses must prevent anything like privacy. A spare bedroom can hardly be obtained, and in general, at the inns, two, three, and even four persons, are billeted in an apartment hardly larger than is sufficient to contain as many beds. In the country it is even worse, for I have seen cottages, belonging to wealthy planters, which could scarcely consist of more than three or four rooms.

On Wednesday, March 28th, I started on board the steamer *Cinderella*, bound to Little Rock and Port Gibson, on the Arkansas river. The choice of a steamer is one of grave consideration, for the various accidents that one is liable to render it important to have a steady captain. The distance up the Mississippi, to the point at which the former river enters it, is about 628 miles, and afterwards it is about 300 up the river, to the town, or city, as it is grandiloquently termed, of Little Rock. This the captain told me would take *about* six days, within which time, I believe, in favourable seasons the voyage has been effected. We however were not destined to have such good luck, for, owing to the heavy freight with which the vessel was itself laden, together with its having a large keel boat full of merchandise in tow from the mouth of the Arkansas, and being moreover impeded by the lowness of the water in that river, I did not arrive at my destination till the eleventh day. This interval, on recollection, appears to me extremely barren in incident, for nothing can be more monotonous than the banks of the Mississippi, after

we have once passed the rich sugar-estates of the planters of Louisiana, which extend for the first hundred miles at intervals along the western bank principally of the river. The company on board was but *so so*, not indeed obtrusive, and in general civil, but comprising some rough, and a preponderance of taciturn and reserved individuals. I think my experience bears me out in asserting, that the Americans are generally less communicative than the English. Not indeed that they have the same delicacy in asking questions of a stranger, when curiosity or interest prompts them to do so, which an Englishman commonly feels, but that a longer time elapses, than would be the case with the generality of my own countrymen, before they begin to converse on any thing like a sociable footing. The meals were swallowed down with a rapidity that quite baffled all my powers of competition. Literally within *ten minutes* many had bolted down their food, and had risen from table, and after a quarter of an hour I found myself alone, except that the steward was clearing away the dishes and plates all about me, by way of giving me a broad hint to retire. Of course not a word could be uttered during so critical a period, and there was no time for helping others, or selecting what you would eat—an attempt at either serving to distance you irrecoverably in the race which was going on. It was altogether the most uncomfortable affair that I have met with in any of the countries over which I have ever travelled. There was however no gambling, little card-playing, and scarcely any drinking going forwards, so that I may regard myself in some respects lucky in the boat I had selected. I had also a room for myself and servant, and therefore possessed the means of retiring whenever I pleased. One poor solitary female occupied the ladies' cabin, and to judge by our English feelings, a miserable time she must have had of it. Only at meal-times did she ever make her appearance, and then it was to eat, and not to speak, so that in fifteen minutes time she was gone again to her *Zenadah*, for the ladies' cabin is held so sacred from male intrusion, except perhaps from that of the husband, that it really deserves this name. The two last days she was rendered less lonely, by the accession of a second female passenger, a very pretty young married woman, with whose presence however we were only greeted at meal-times.

As to the men—they consisted of traders from New Orleans to Port Gibson and other places on the river Arkansas, of agents to the Indian nations beyond, of planters holding property in the state, and of lawyers, as I conjecture, proceeding to do business on the circuit. The most gentlemanlike looking were two or three New Englanders, but they were not particularly agreeable, and I thought there was more disposition to be civil and communicative on the part of the Southerners. I

pitied much a poor Liverpool clerk, who had got a situation, as agent to a commercial house, at one of the remote ports on the river. He seemed out of spirits at the thoughts of returning, cut off as he would be from all society, excepting that of the greatest blackguards and black-legs that the United States can turn out. I observed a greater propensity to laud and magnify things at home, in proportion to the ignorance of the individuals with respect to the concerns of other countries. One vulgar fellow, who resided in a remote part of the state, vaunted to me the superlative richness of the land in Arkansas, which happened, at the spot to which he appealed, to be covered with wood, and without a vestige of cultivation for miles round, and ended by asking triumphantly whether we had any such in England? I contented myself with replying, that I really could not answer his inquiry, until the ground he alluded to had been cleared and brought into cultivation. Another passenger, who had come from New York state, and was a man of intelligence, and quiet gentlemanlike demeanour, told rather a different tale with respect to Arkansas. He assured me, that the existence of slave labour was the very bane of the country, and deterred all but capitalists who could afford to buy negroes from settling there. White men would never work where slaves existed, and accordingly Arkansas has fallen far behind Michigan and other newer states in the progress of its population, and is resorted to by some of the worst and most desperate characters that the country affords. Hence the frequency of duels and murders, the latter continually occurring without any notice being taken of them. Yet the flagrant case, of which all the papers were full, where the President of the House of Representatives slaughtered a Member in the midst of the whole assembly, could not, he thought, be passed over altogether. It is expected to come to a trial, though an Arkansas jury will with difficulty be brought to convict a fellow citizen of a crime, which so many have themselves committed. The murderer, one of the wealthiest men in the state, is bailed for only 3000 dollars.

I here found, for the first time, the discomfort of having a white servant. The very stokers, who submitted to all the heat and drudgery of their laborious occupation, the wood-men at the stations, who doomed themselves to a fatiguing service in the midst of swamps and mosquitoes, affected astonishment, at seeing a man of their own colour condescend to brush the clothes, and answer the call of an Englishman. I have no doubt, from what I overheard, that he was looked upon as the most degraded of beings, and I the most tyrannical of aristocrats; and as this feeling was likely to become stronger in proportion as we proceeded farther into the West, I resolved at once to drop the names of master and servant, and to place my faithful

attendant on a footing of perfect equality until we got back to the great cities of the East.

On looking over the Diary of each day's progress, I notice few particulars worth recounting.

On the 28th we reached Plaquemine.

29th, Proceeded along an unsettled, thickly wooded, and swampy country.

30th, Late at night we reached Natchez, which I therefore lost the opportunity of seeing, for before morning we were many miles away.

31st, In the night we reached Vicksburg, of which therefore I also did not get a glimpse. By this time a change had taken place in the character of the vegetation. There were no longer any live oaks, nor were the trees covered as heretofore with festoons of Carolina moss (*Tillandsia usnoides*). A little of this latter was however seen occasionally still higher up the stream.

April 1st, Reached a neat little village called Providence, the first I had seen since leaving Plaquemine, Natchez and Vicksburg having been passed in the night.

2nd, Thick forests of cotton wood (*Populus canadensis*) cover the face of the country on either side of the river. A few log-huts, in which reside the woodmen, who supply the steamboats with fuel, are the only vestiges seen of human habitation. Though from the situations in which it is carried on, the employment of woodcutting is necessarily an unhealthy one, it is nevertheless profitable. A good labourer may chop two chords of wood per day, and each chord sells for two or two and a half dollars. The timber may often be had for nothing, so that it is nearly all gain. On this evening we reached the mouth of the Arkansas river.

April 3rd, Detained the whole day, in consequence of a large quantity of freight being to be put on board, and some repairs required by the keel-boat we were to take in tow. Inspected the site of a projected city—which looks very grand on paper, and boasts of the name of Napoleon, but at present is embodied in two houses and as many log-huts, scattered over a piece of ground partially cleared, near the point of junction between the two rivers. The spot must be unhealthy from the swamps which surround it, but nevertheless an hospital is projected, to receive patients who may chance to be taken ill on their voyage—

an institution much called for. Saw a bear at a distance in my ramble through the woods.

4th, Proceeded up the Arkansas river, which meanders in a remarkable manner, making continually beautiful bends. Very few settlements occur on this part of the river, which is lined by thick forests of cotton-wood.

5th, Scenery still wilder, though not wanting in beauty. As indications of the scantiness of human habitations, we saw a bald eagle, and several wild turkies and cranes.

6th, A few mean and scanty settlements occur, before reaching Pine Bluff, where there is a little village. Banks now are become higher, and below the alluvial soil of the Mississippi is seen what appears to be a red marly sandstone rock.

7th, Scenery much the same. The white dogwood (*Cornus alba*) and red-bud (*Cercis canadensis*), now in very beautiful and full bloom, appear on the banks. Retarded by the lowness of the river.

At length, early on Sunday the 8th, I concluded my long voyage by arriving at Little Rock—a village of about 1500 inhabitants, built on the top of a little eminence which overhangs the river. It is the capital of the state.

Little Rock is a straggling new looking place, containing however a few respectable houses, and shewing some indications of improvement. It stands well on a bluff overlooking the river, and the country on the opposite bank for some distance is sufficiently cleared of timber, and reduced to cultivation, to exhibit a rural appearance. The inn I went to was said to be the best in the place, but proved slovenly and indifferent. The custom of sleeping two in a bed seems to prevail, but I succeeded in obtaining a room with two beds in it for myself and my man. I here had to pay just the same for him as for myself, so that my expences were as high as they would have been at an English hotel. Nothing could be more slovenly or worse supplied than the table, and the beds were dirty in the extreme, and filled with bugs. I was however deterred from leaving my quarters, as I had heard a still more unfavourable character of the other inns, and as the landlord, to give him his due, was, in his rough and independent way, civil and obliging enough.

There are three churches in Little Rock, viz. a Methodist, a Baptist, and a Presbyterian; I went to the first, which was reported to be the most numerously attended, but should guess, that there were not 100 persons at the service. Allowing how-

ever that to be the number, and calculating the other two at the same amount, we can reckon only 300 church-going people out of a population of 1500 in the town, to which must be added that of the neighbourhood, there being no places of worship at all elsewhere for miles round. The preacher was indifferent, not a ranter, if I may judge by what I heard, but a man of very moderate attainments.

One of my first cares on getting to Little Rock, was to obtain a conveyance to the Hot Springs, and, as I did not fancy the stage, I at length decided on hiring a carriage and two horses to convey me there and back. For this I was obliged to pay fifty dollars (more than ten pounds), which, as I was to be back in seven days, seemed a pretty handsome price. There appeared however to be no alternative, if I wished to have the command of my time, and to convey the necessary apparatus for examining the waters.

Accordingly, after dinner, on Monday the 9th of April, I started for the springs, and passed over an indifferent road cut through a forest chiefly consisting of fir, with here and there a thriving plantation in the midst of the wood, in which a portion of land had been cleared and cultivated with Indian corn, or converted into an orchard. By sunset we had gone only about sixteen miles, and as a little village was before us, the driver recommended the expediency of begging a night's lodging of some of its inmates, there being only a miserable inn to be had some miles beyond. He succeeded accordingly in persuading a very decent family to take us in, and we sat down to a plentiful supper of coffee, corn-bread, bacon, wild turkey, and venison. The sleeping accommodations were somewhat less ample, but I succeeded in securing a separate berth to myself, whilst James, whose English prejudices revolted at the idea of sharing the other bed which the room contained with the driver, stretched himself on the floor. The family had recently emigrated from Alabama, and had no great supply of furniture, but they evidently lived better than persons of the same condition in England.

The next morning, after a breakfast much of the same substantial character as the supper, we again started. The landlady made no charge, but was well satisfied when I put into her hand three dollars for myself and man. The expense of the driver and horses, with which I had nothing to do, was one dollar and a half. We proceeded by what was called the short road to the springs, which however proved the longest; for bad as was that of the day preceding, it proved vastly superior to the one which we were now, in consequence of the advice of a

man we met, induced to make trial of. It was a forest the whole way, but the trees had been partially cleared along the line which was intended for the road. Every pace we took, a huge stump of a dissevered tree thrust itself up in the middle of the track, rendering it impossible for the horses to proceed faster than a walk. The direction too in which we were to go was such, as obliged us to cross all the little hills which intervene between the Arkansas and Washita rivers, the district intermediate being, as they say in America, a rolling country. Accordingly, although we started at seven in the morning, and proceeded uninterruptedly without bating the horses, all day, yet at sunset we had only gained about twenty-eight miles; and finding the road too bad to travel on in the dusk, we were driven to beg a lodging at a farm-house. Here the accommodations were even inferior to those of the day before. The farmer had but a single apartment for parlour, kitchen, bed-room, and all, containing three beds, out of one of which he and his wife had emerged on our arrival. A supper of coffee, eggs and bacon, was however speedily prepared; and, by dint of close packing, the farmer contrived to accommodate the driver and a Yankee, whom I had allowed to sit on the box, with a share in one of the three beds, which harboured already himself, his wife, two children, and a boy.

As for myself, and my man, we took up our quarters by preference on the floor. The free ventilation, which took place through the logs, prevented the room from feeling close with so many people sleeping in it. The farmer, though rough, was a very civil, and an intelligent man, and his charge was so moderate, that I chose to give him more than he demanded. I should guess him, from various circumstances, to be far above want; yet he contented himself with a log hut, such as none but a common labourer would be contented to occupy in Europe.

On Wednesday morning, April 11th, after a substantial breakfast, we accompanied our host in a chase after a wild turkey, which I had a great ambition to kill and stuff for our Museum at Oxford. The females are decoyed by imitating the gobble of the turkey-cock, in which the back settlers are very expert, but on this occasion the stratagem was tried unsuccessfully; for though we saw several, and chased them through the wood, we never got within gunshot of any one. My man made several other attempts, but always in vain.

After this little excursion we proceeded on our journey to the Hot Springs, and arrived there about the middle of the day, without any accident, notwithstanding the badness of the road. The accommodations there are wretched enough, consisting of

a few log huts through which the wind passed at every cranny. On the first night of my arrival, the thermometer sunk to the freezing point; and all the great coats I could pile over me, did not prevent the cold from reaching me most sensibly whilst I lay in bed.

The hot springs all issue from the side of the hill which bounds the valley on the east, with the exception of one which flows from the western side close at its base. The ridge is, on both sides, pretty steep, and may be about 300 or 400 feet high. It consists of the same quartzose or cherty rocks which extend nearly from Little Rock, and which I saw for the first time, alternating with clay-slate, in the cliff on which that city is erected. The base of the rock however consists of a dark coloured clay-slate, which appears to dip under the other. For 50, and in some places even for 100 feet from the rivulet which flows at the bottom of the valley, the rock is covered over with a coating of calcareous tuff tinged with iron, and of a dark colour, which the water of the various hot springs has from time to time deposited on the rock which they flowed over. It is remarkable that the stalactite now forming is perfectly white: so that some change seems to have taken place in the course of time with respect to the character of the waters, if we may judge from the nature of the incrustations they have left behind.

The highest temperature I obtained from any one of the springs (of which I examined fifteen), was 148° , the lowest 118° . There was a ferruginous deposit from one or two, but the quantity of iron present in the water was scarcely appreciable by any test. Calcareous carbonate and sulphate seemed to be the chief ingredients, and about 1.9 grains of solid matter were obtained from a pint.

The general appearance of the neighbourhood seemed picturesque; and when the forests are somewhat cleared, and a portion of the land has been brought into cultivation, there will be many beautiful rides and walks within a few miles. At present the country on all sides is so completely embosomed in wood, that there is no getting an extensive prospect, even from an eminence.

Most of the springs emitted bubbles of gas, which I examined in the usual manner, namely with potass for carbonic acid, and with phosphorus for oxygen, and which I thus determined to consist of

Carbonic acid	-	-	4. 0
Nitrogen	-	-	92. 4
Oxygen	-	-	7. 6

104. 0

shewing, that in this, as in other instances of the same kind

which have fallen under my observation, the atmospheric air had been deprived of a part of its oxygen by some process going on in the interior of the earth, connected probably with the cause that produces the high temperature of the waters.

On Saturday, April 14th, I again started on my return to Little Rock, taking another and rather more circuitous route, which was somewhat less difficult than the former. The character of the rock was, as before, quartzose, until we drew near the Magnet Cove, a hollow between two hills, so called from being composed of magnetic ironstone, strongly attracting the needle. The hills, which enclose, as it were, this formation, are granitic, the only ones of that description I have seen in the neighbourhood. The limits of the ironstone appear to be defined by the red character of the soil, and, judging by that criterion, I consider that it extends for about half a mile in the direction in which our road lay. We afterwards found ourselves on the same quartzose rock as before, and this I continued to trace till we reached Little Rock. The first twenty miles from the springs were so difficult from the badness of the roads, that it was nearly sunset before we had accomplished this distance. We then entered the high-road from Little Rock to the Hell River, which was considerably better; but the night being dark, thought it advisable to seek a lodging at the house of a preacher, a Mr. Cornelius, who appeared a respectable person of the Methodist persuasion. His accommodations were of the same description as those we had before met with, consisting, besides the kitchen, of a single bedroom, with a couple of beds in each. One of these was already occupied by a stranger, the other was designed for James and myself; but as I declined adopting the manners of the country in that particular, a third bed was made up for him on the floor, and, in a fourth, two other persons were accommodated. The room therefore was tolerably well tenanted; but as it was a log hut, with the interstices not filled up, there was ventilation enough. I should not forget, that Mr. Cornelius read us a lesson from the New Testament, sung two hymns, and delivered an extempore prayer before we retired to bed.

The next morning, early after breakfast, we proceeded towards Little Rock; and as the road was now better, accomplished the remaining thirty-five miles before eight o'clock in the evening. We crossed several rivulets, the most considerable of which was the Saline, which, from the width of its bed, must, in wet seasons, be a considerable stream, but which I scarcely found deep enough for bathing, at the time we crossed it. The general character of the country much resembled what we had before passed through, being a forest chiefly of fir and oak, with a few beautiful spring flowers interspersed, of which the May-apple (*Podophyllum peltatum*) was the most common.

The Buckeye (*F. sculpus pavia*) was in full flower. From the time we reached the main road, the country began to look more settled. We saw two wild turkies on Saturday, but at too great a distance to give us a chance of shooting either.

Our return to Little Rock took place just at the commencement of the Sessions, which were of peculiar interest this time in consequence of two trials for murder which were expected to come on. The first was that atrocious case above noticed, in which the President of the House of Representatives, in a paroxysm of rage at some remark, made in the heat of debate by a Member of the name of Anthony, which he considered personal, rose from his seat, descended into the area, brandishing his bowie knife, and dared him to mortal combat. I was told, the duel took place in the presence of all the members of the Legislature, at that time assembled; and that it continued until poor Anthony, having dropped his knife, or having had it wrested from him by some of the bystanders, lay at the mercy of his antagonist. Then it was that Wilson, not on the sudden impulse of passion, but after a few moments pause, which ought to have given him time for reflection, rushed up to his opponent, and plunged his bowie knife into his heart. It is indeed a remarkable proof of the indifference with which bloodshedding is regarded in this State, that, under such circumstances, the offender should have been bailed for 3000 dollars. He is at present awaiting his trial, but it is not expected that he will be found guilty.

The other case is also very characteristic of the country in which it occurred. A Dr. Howell, it seems, insulted, some time ago, an old man by the name of Fulton, for which affront his relations swore they would have revenge. One day his son, Dr. Fulton, entered Dr. Howell's shop on purpose to chastise him, or perhaps to do him some more serious mischief. In the scuffle however he got wounded in the hand, and was then turned out of the house very unceremoniously. This irritated the family still more; and a grandson of the old gentleman, by the name of Douglas, now took up the quarrel. Howell, who, it seems, being aware of the danger he was in, never went from home without firearms, one day, in the streets of Little Rock, met his antagonist. Douglas at once discharged his rifle at him, and Howell at the same moment returned the fire. Both shots were deadly; but Howell's killed a poor little negro girl who was passing, whilst Douglas's so wounded Howell that he died shortly afterwards. For this offence Douglas was not bailed; but it is impossible, one should suppose, that *he* can be executed, if Col. Wilson goes *scot-free*.

It is curious, how men's views of particular crimes are influenced by the state of society in which their lot is cast. In Arkansas I have been astonished at the coolness with which

quiet orderly men talk of such a man *killing* another; for the word *murder* is never employed.

The assizes thronged the inn at Little Rock to such a degree, that it was with difficulty I could get a bed at all, and that bed harboured such a host of domestic enemies, that I scarcely closed my eyes the whole night. I literally never yet met with a place so infested with bugs as Little Rock. But I must submit to my fate, for there is here little choice of accommodations, especially at such a period as the present. The lowness of the river has in a great measure prevented the steamers from plying as usual; and one that attempted it sunk, a day or two ago, by striking a snag. My chance therefore of proceeding by water seems rather remote.

The uncertainty as to whether I should obtain a water conveyance to the mouth of the river, within a reasonable time, led me to adopt the expedient of purchasing horses, and pursuing my journey to St. Louis by land, leaving my luggage to follow by water. The horses were not obtained without difficulty, and purchased at a price exceeding considerably their real value. One of them, for which I gave sixty-five dollars, would not have been amiss, had it not been for an unfortunate trick of stumbling which he had acquired; but the other, a pony, was so slow and heavy in his gait, that it required a constant exertion to urge him forwards. He had also another defect which I shall allude to presently, and consequently was dear at the price I gave for him, which was fifty-five dollars. I had also to provide myself with saddles, bridles, saddle-bags, and the other paraphernalia requisite, which were only to be had of a very inferior description, at a place like Little Rock. The obtaining of these occupied the whole of two days, so that it was not till half-past three on Wednesday afternoon that I was enabled to take a final leave of the inn, which I did with no small degree of satisfaction; for the slovenly habits of its conductors, and the rough, not to say ruffianly, demeanour of those who frequented it, had given me a disgust to every thing connected with the place.

Accordingly on the afternoon of Wednesday, April 18th, I and my man James—no longer to pass as my servant, but to be metamorphosed at each place we came to, either into my son, my nephew, or my friend, as the fancy might direct—mounted on our respective Rosinantes, and sallied forth from Little Rock.*

* In consequence of this new arrangement, he was designated, most commonly by the people we met, as the *young gentleman*, in

We first were ferried across the Arkansas, still a considerable, though somewhat shallow river, and then journeyed on through a continued forest, uninterrupted by any vestiges of human habitation, till we reached a farm-house, kept by a person of the name of Kellog, ten miles from Little Rock. The country over which we had passed was what is called *rolling*, that is, uneven without any considerable hills; and the substratum consisted, like that on the southern side of the river, of sandstone and quartz rock. We had here no very favourable specimen of Arkansas fare and accommodation, or, if the landlord was not belied, of the morals of the country. With regard to the fare, it consisted, for supper, of coffee, greasy bacon fried in its own fat, Indian corn-bread, and doughy cakes, baked without yeast in an iron vessel, heavy and indigestible.

The party at the inn consisted of two young Arkansas farmers, going to Little Rock; of a lodger, whose sister occupied a very equivocal post as housekeeper to the holder of the farm; and of a drunken, uproarious Texian, who, unfortunately for our repose, was too well *seasoned*, to be reduced to a state of insensibility by the liberal draughts of liquor which he imbibed, and who, therefore, kept us awake during a considerable part of the night. There was only one sleeping room for the whole party, in number six, and it contained but two beds; a third however being added, by the expedient of laying a mattress upon the floor with a blanket or two stretched over it. One of these beds was appropriated by the two young Arkansas farmers who were travelling together, another was occupied by the lodger, and the third by myself, whilst the drunken Texian and my servant still remained unaccommodated. It seemed therefore plain to me, that I must submit to having a bedfellow, of one kind or another, on this occasion; and my principal apprehension was, lest that person should be the stranger whose whole demeanour and appearance was anything but attractive. I therefore became by comparison reconciled to the idea of sleeping with my own servant, who was at least cleanly, sober, and well conducted; whilst the drunken Texian, after he had wearied and disgusted us for a sufficient time with a great deal of ribaldry and grossness, tumbled into the bed of which the lodger had already possessed himself. It was altogether a *rare* sample of what I should have to encounter for a fortnight to come in travelling through this wild country—an effectual cure for any remnant of European fastidiousness, or *aristocratical hauteur*, that might still linger in my constitution.

contradistinction to myself, who went by the name of the *old man*—an impeachment on my juvenility, which I bore, I trust, with a better grace, than Mrs. Trollope appears to have done the corresponding title so mortally offensive in her ears.

At five o'clock the next morning we were roused by the entrance of our landlord into the bedroom, and, though but little refreshed, I was not sorry to leave my berth, and perform my ablutions, according to custom, in the open passage between the two rooms composing this *respectable* house of entertainment. A breakfast, of much the same character as the supper of the day preceding, followed; after which we each mounted our respective steeds, and I found to my horror, that the Texian, who seemed none the worse for his night's debauch, was jogging on by the same road with myself, and was bound to the same haven, namely to St. Louis in Missouri. To have proceeded long with such a rollicking, roystering sort of companion would not have suited me; but after a few miles' ride, he saved me the trouble of parting company with him, by turning into a farm-house, where it seemed he had some acquaintances, and we lost sight of him, I am happy to say, for ever. He was a good specimen however of that loose, reckless, dare-devil class of adventurers, who hover on the borders of civilisation, dividing their time between the prairies of the west and the newly settled portions of the United States, at home everywhere, careless of difficulties and privations, ever ready for a lark, rough and familiar in their manners, with an iron constitution, and willing and able to engage in anything except what might demand steady and settled habits of industry.

By midday my servant and myself had accomplished sixteen miles of a rough and stony road, through an uninterrupted forest. We there found a log house of very humble pretensions, perfectly open at top, and admitting air at every cranny—no inconvenience this in such weather as we were favoured with, but by no means agreeable, one should think, during the winter months, even in this southern latitude. We found however somewhat better fare, wild turkey forming the staple of our dinner, an article far preferable to the bacon of the day preceding.

After dinner we pursued our way through a similar rolling country, and arrived before sunset at a really comfortable farm-house, belonging to a person of great respectability and pretty large possessions, named Walker. We found there one of the best specimens of an American yeoman, with somewhat of a Presbyterian cast about him, it is true, and without the heartiness of an English farmer, but yet civil and obliging. His wife and daughters were of a superior cast; and there were two young men, one his son, the other a visitor, who seemed to belong to a higher grade of society than the persons we had hitherto met. No spirits were allowed to enter the house, a little circumstance alone sufficient to denote the difference between the Arkansas and the English farmer, particularly as

there were no substitutes, in the way of wine, beer, or cider, to be found.

Mr. Walker informed me, that when he first established himself in this farm, he had no neighbour nearer than Little Rock, which is from 40 to 50 miles distant. Since that time other settlers have taken land in places intermediate, but there is still of course a great dearth of society. Indeed, the few opportunities these backwoodmen enjoy for learning much on any matters beyond the sphere of their own pursuits, will account for the scanty stock of conversation they seem in general to possess. Intelligent and shrewd as they are in their own transactions, they are a taciturn, and certainly not a joyous people.

Were it not for these drawbacks, and others arising out of the lawless habits of the people, the situation of an Arkansas farmer, of respectability and substance, like Mr. Walker, would be not an unenviable one. Where the negroes are chiefly employed in farming concerns, and are not numerous, the institution of slavery assumes something of a patriarchal character, and each proprietor may be regarded in the light of a *country squire*, having much time at his disposal, and exerting a species of feudal sway over his dependants.

What land he cultivates yields abundant returns, without manure or previous preparation, but his chief support is derived from his hogs, which find subsistence mainly in the woods, and from his herds, which at one season are sent to fatten in the rich marshes near the Mississippi, and at another are brought back to the pastures nearer home. As to the sheep, a stock is seldom kept in this country, on account of the losses sustained from wolves, which still abound in the forests.

James and myself had here no difficulty in getting *separate* beds, and even a room to ourselves; and the supper was, comparatively speaking, excellent. The only un hospitable treatment I met with was from the *dogs*, who, in a country so infested with wolves as this, are necessarily of a savage breed, or, to use the queer expression of the country, *very severe*. On going a few paces from the house in the morning I was assailed by half a dozen of these ferocious brutes, and if my landlord had not come to the rescue, might have been torn to pieces. In another farm-house, where the same breed was kept, a traveller, I was told, confined to his bed from illness, was actually attacked in his very room by one of them, who, on entering it, set up a most furious howl, and thus fortunately brought the family to his assistance before any serious damage was perpetrated. In consequence of the savage propensities of these animals, it is usual for a stranger, when he comes up to a house which he hopes to make his quarters for the night, not to enter the courtyard, which commonly stands in front, until he has shouted out

to the inmates his wishes. So long as he remains outside of the enclosure, the dogs in general content themselves with setting up a howl of defiance, but, should he enter the court-yard uninvited, the consequences might be serious. This day we accomplished about thirty miles, the weather being excellent for travelling; the sun bright, but the air still somewhat chilly.

Friday, 20th, we started at half past six from Mr. Walker's comfortable dwelling, where the charges for bed and board were as reasonable as they had been at the former wretched quarters, namely, about a dollar and a half (6s. 6d.) for two men and two horses.

We had scarcely however journeyed on four miles when a disagreeable adventure befel us. Whilst James was using the fowling piece, and taking aim at a bird—I in the mean time being in charge of both the horses—my own, who had but recently been caught in the prairies, and cherished, I presume, a fond recollection of his days of liberty, seized an opportunity to wrest the bridle from my grasp, and darted off. I know not how it was, but his companion contrived to follow his example, and in the twinkling of an eye both of our steeds darted off helter-skelter into the wood, kicking and prancing, as if the devil was at their heels, until they had utterly dispossessed themselves of saddles, saddle-bags, and all the various trappings which could remind them of their state of servitude. To collect these several articles, and to pile them in a mass, was my own humble and vexatious office; but James pursued the fugitive steeds, until his strength and breath failed him, and after having had the mortification of witnessing more than once his own more quiet hack, when he had nearly got up to him, enticed away by his companion, who, every time he shewed a disposition to stop, began to bite him in the flanks, and played various tricks to incline him to proceed.

It was nearly two hours that I remained, like Patience on a Monument, seated on the pile of baggage which I had contrived to collect, ruminating on my misfortune, calculating the many hundred miles in all directions through which the emancipated hacks might range unimpeded, and puzzling myself as to what possible course I should pursue, in order to reach my intended destination, or even to return to the point from whence I started, when behold, to my infinite delight, James appeared in sight, accompanied by one of the inmates of the farm house, in which I had slept the night before, and leading in triumph the two captive horses by their broken bridles. "I reckon, stranger," said my friend, as he approached me, "you found yourself in rather an *unhandsome fix to-day*,"—a proposition which certainly did not admit of being controverted. The horses, it seems, had been

turned into the road by James, before exhaustion compelled him to abandon the pursuit, and finding themselves once in it, they, like wise creatures, trotted back towards the spot they had left in the morning. At length they reached Mr. Walker's premises, and there, as luck would have it, the farmer, or one of his sons, recognised the fugitives, as the property of the stranger who had lodged with them the night before, and intercepted their further progress. Thus, by the merest good fortune in the world, I was enabled to proceed on my journey, though with my paraphernalia much dilapidated by the rough treatment they had met with, and the horses themselves not the fresher for having scampered so many miles over the country.

Accordingly, after this mishap, I could get only nine miles to dinner, and nine more by night-fall. I there fell in with another farm house, of dimensions as ample, and with comforts nearly as great, as those of the night preceding. The proprietor, Mr. Magnus, well deserved the name he bore. He was an opulent farmer, of portly dimensions, and not indisposed to good living, with more of a John Bull, and with less of a Presbyterian, cut, than his neighbour Mr. Walker. The fare was here substantial and good, but as usual the provision for sleeping was scanty. A single room was allotted to the guests, of whom there were six, including James and myself, and of beds there were only three. The other four persons, however, having settled themselves in two of these, I had this time no fear of a strange bed-fellow, and consequently secured a bed to myself, by getting a mattress spread for my servant on the floor—a proceeding, which excited the wonder of the rest, who could not understand what objection there could be to our sleeping together, or why my young companion, instead of sharing my berth, should prefer to stretch himself upon the floor. One of the party indeed said, that for his part he had rather be quartered with any number under half a dozen, in a good bed, than lay on the bare boards; and that from constant habit he could hardly sleep with any comfort by himself.

There was a manly air of independence about Mr. Magnus, arising from the utter unconsciousness on his part of any inferiority in rank to his guests. It was, however, by no means peculiar to him, but in a greater or less degree characterises the whole of the western population, and certainly imparts to their language and demeanour a more gentleman-like tone than belongs to the yeomanry of aristocratic countries, notwithstanding the greater roughness of their exterior.

Saturday morning, 21st, after paying Mr. Magnus's bill, which was no more than a dollar for all—for he did not wish, he said, to get a bad name by charging travellers high—we proceeded to

breakfast, a distance of nine long miles, to the borders of the Little Red River.

No travelling could be more delightful than that through the forests, during the early hours of morning, at this fresh though genial period of the year. With our appetites sharpened by exercise, it was disappointing enough to meet with no better entertainment at the close of a long ride, than was afforded by a miserable log hut, in which coffee and milk, without even sugar to qualify it, together with bad bacon and some shreds of smoke-dried venison, constituted the sum total of our breakfast. The day becoming hot, the thermometer mounting up to 84° in the shade, I was induced to bathe in the Red River, instead of proceeding at once on our journey, and afterwards strolled into the neighbouring woods, where I saw the cypripedium pubescens growing under the shade of the trees in great abundance.

I afterwards dined on an old stringy fowl, and then proceeded, cursing, as I went, the parsimony of the proprietor of this miserable dwelling, who is, I am told, a rich German farmer, well able to provide the common comforts of life to his guests, especially as they are made to pay a higher price for the scanty fare they obtain, than is demanded at the other farm houses on the way.

We crossed the Little Red River, which at this season was fordable, but which at certain times of the year seems, from the height of its banks, to be a considerable stream, and owes its name to the red nature of the soil, which communicates its colour to the waters. The rock is here a friable, red, marly sandstone, in which no traces of organic life are perceptible. Our road then lay over a pretty high hill, commanding an extensive prospect; and I ascended it with some sort of glee; for the passing through such extensive forests, as those which had environed us for the last few days, left on my mind an occasional sense of oppression, somewhat like what we should experience in being shut up in a close confined place. The case, however, was not much mended, when I found myself on the summit of the range; for in whatever direction the eye ranged, still the same unbroken mass of forest was seen to overspread the country, and it was at first almost difficult to dispossess oneself of the illusion, that we were alone in the midst of an untenanted wilderness of wood. Nevertheless, a ride of about ten long miles, which the extreme heat of the day rendered somewhat fatiguing, brought us to a respectable farm house, occupied by a Mr. Pates, where the question, "Can we be accommodated with a night's lodging?" brought the usual reply, which our experience now enabled us to interpret (as it was meant) favourably: "I

don't know, I reckon you can." Upon which we dismounted, and consigned our horses to the stable.

The rocks during this day's journey were generally hard, grey, and quartzous; on the slopes of the hill which we ascended they were seen exposed in horizontal strata, and it appeared evident, that, except in the immediate vicinity of Little Red River, the same formation prevailed as that we had travelled along in Arkansas.

At Mr. Pates' we obtained a comfortable meal, and a decent sleeping place, in a newly built and spacious apartment, which was intended to make part of a better dwelling house than that which the family at the time occupied. It had but one trifling defect—there was no window—an inconvenience, which at night did not much matter, as we slept with the door wide open, but which must rather interfere with the utility of the room for day-work. However I understand that a window is to be cut as soon as glass can be obtained—an article, it seems, rather scarce in these parts.

In the morning, farmer Pates made me an offer, which I was but too glad to accede to, namely, to *swap* my pony with one of his horses. It is true, the steed offered in exchange was rather the worse for his years, went heavily in hand, and was not in the best condition. But the adventure in the wood had completely estranged my affection from my own, who moreover, though he could gallop fast enough when at liberty, went very heavily in hand, and required continual urging when I was on his back. I therefore agreed to the farmer's terms of exchange, though not without suspecting, what I afterwards became satisfied upon, that I had a *Yankee* to deal with. In fact the money which I paid over to Mr. Pates amounted to within a trifle to the sum I received for his horse, when I afterwards disposed of him, so that the money he got in addition was all so much clear gain. But though my friend was rather sharp when a bargain was concerned, I must do him the justice to say, that, like all my other hosts on the road, his charges for board and lodging were as reasonable as well could be. A dollar and a half for the breakfast, bed, and supper of two persons, and for the keep of two horses, could not be considered immoderate, and it is much to the credit of the people, that in no one instance, during a journey of more than 300 miles, did I find it much exceeded.

This morning, 22d, after completing this bargain, I proceeded on my way, and had a beautiful ride through the forest, which then appeared dressed in all the early freshness of the vernal foliage, and carpeted with a profusion of flowers.

About nine miles from Mr. Pates' we reached a little creek,

which gave me an opportunity for bathing ; and I there saw, for the first time since leaving Little Rock, a limestone bed interstratified with the sandstone rock. This limestone is blue, and contains encrinites. The sandstone just before had imbedded in it nodules or geodes of ochreous red ironstone, the exterior portions of which were hard and dark brown, whilst the inner ones were soft and red. Having crossed the creek, we ascended a rather steep hill, and then descended the other side of the acclivity, bringing us into a valley through which flows the White River.

This is one of the principal tributaries of the Mississippi, into which it disembogues itself just above the point at which the Arkansas River flows in, inosculating with the latter by a bayou not far from its mouth.

After crossing the ferry over the river, a mile's ride brought us to the town of Batesville, which seems to be a kind of rival to Little Rock, standing in nearly the same relation to the White River which the latter does to the Arkansas. There was however no tolerable inn in the place, but we obtained comfortable quarters at a boarding house kept by a Mr. Byers, a lawyer from Ohio. Here we met with a clean and well-appointed table ; but it is remarkable, that even in this comparatively large place, no butcher's meat was to be obtained. Bacon, eggs, and fish constituted the whole of our supper ; and the very same articles made their appearance the next day, both at breakfast and at dinner.

The rocks in White River are, like those previously observed, of sandstone, but beds of limestone occur interstratified with them. The colour of the soil in general reveals the character of the substratum, that on the limestone being black or dark-coloured, on the sandstone, red. The strata are generally horizontal, or very slightly inclined.

Monday, April 23d.—The day was pretty far advanced before we could get repaired the saddles, saddle-bags, &c., which had been damaged by my adventure in the wood. We however started in the afternoon, and proceeded along a country presenting, in a great degree, the same features as those of the preceding days. Occasionally there were hard stony bits, especially on going down or up a hill, but more commonly the road was soft and sandy. Found in the bottoms traces of various rivulets now dried up.

Jogged on till nightfall, when, finding no house at hand where we could get a lodging, we proceeded to make preparations for *camping out*. Accordingly we first tied up our horses with long halters to two separate trees, at a short distance from the proposed spot of our encampment. We next collected and

chopped up all the dead wood we could find roundabouts. After this we succeeded in striking a light, and in kindling a brisk fire. We then boiled some water in our tea kettle, made some coffee, and, with the help of a little ham and corn bread which we had brought with us, contrived to make a very satisfactory meal, which was appropriately concluded by some warm brandy punch. Thus fortified, we stretched ourselves on our blankets, covered ourselves with our great coats, and slept comfortably under the open canopy of heaven. The air indeed was warm and dry enough to render it safe to pass the night out of doors, and in the morning I felt myself quite refreshed, and indeed in much better case, than after rising from the crowded dormitories with which I had often before fallen in. So, after breakfasting upon the remnants of our evening's repast, we proceeded onwards towards our destination.

About ten in the morning we reached a farm house, nearly eight miles distant, where we got some dinner, and baited our horses. I there met with the first specimen, that had fallen in my way, of that peculiar class of gospel preachers called *circuit riders*, whose office it is to ride from place to place, within a certain district, whenever a demand for spiritual aid exists, sufficient to induce some one of the resident families to offer him bed and board for the day, in return for his services. This one was of the Baptist persuasion, humble in his appearance and attire, and with a puritanical expression of countenance. The poor man, I observed, did not dine with, but after us. He was no doubt a kind of eleemosynary guest of the farmer's.

After dinner we got on about twelve miles, and reached at night a little *city*, as, in anticipation of its future destinies, it may perhaps be called, which is springing up in the midst of the wilderness. It is called Smithville, and was begun last year. At present it consists of about a dozen log huts, erected round a sort of square, two of them stores, one of which comprehended a tavern for strangers. I here got a tolerable supper, and obtained a night's lodging in a loft provided with half a dozen beds, in which the landlord and one or two others, together with myself and servant, took up their quarters. After we had retired, a tremendous thunder storm came on, accompanied with torrents of rain, which lasted till morning, and left the atmosphere cool and pleasant.

On Wednesday, April 25th, owing to the rain, we started at rather a late hour, but nevertheless succeeded in reaching Jackson by two o'clock p.m.

This is another of those embryo cities, which are met with so frequently in a new country like this, somewhat larger than Smithville, but even less inviting in its aspect. Ascending the

hill on the other side, I observed a considerable deposit of red hematitic ironstone, but the prevailing rock was either a bluish limestone, which became white when it was weathered, or else a hornstone, which probably belongs to the quartzous formation above described. The ride was in general as beautiful as any forest scenery I have ever seen, and the cottage of Mr. Black, the farmer with whom I took up my quarters for the night, was perhaps one of the most comfortable that I had met with. It was situated on a bend of the Eleven Points River, and commanded a very agreeable prospect both of the river and woods around. There was also a greater degree of cordiality in the manners of my host than I had before met with, and I believe he was deservedly a great favourite with travellers on the road.

In the room where we slept, one of the beds was occupied by two persons on their return from Little Rock, where they had been to attend the trial of Colonel Wilson. One of them was the brother of Anthony, for whose murder the Colonel had been tried; and from him I learnt the little chance, that existed in such a country as Arkansas, of obtaining justice even for so heinous an offence. It appeared from him, that the friends of Wilson had had the address to transfer the trial into another county, where it was supposed the jury would be more disposed to favour the culprit, and from this it seemed pretty clear that he would escape. Mr. Anthony spoke to me in bitter terms of the administration of criminal law in these Western States, and protested that he had rather live under an absolute prince than in such a democracy.

Our conversation reminded me of a question I once asked a person conversant with this country, as to whether he knew of any instance in which a man had been executed for murder in the state of Arkansas, and of his characteristic reply, that he was not certain, but that he believed, some one had been *lynched* for it.

After a stroll in the woods, which occupied us till dinner, we proceeded a distance of about twelve miles, and lodged at the house of a proprietor called squire Jarrett, a man of more knowledge of the world than the generality of those I had met with in these parts, and possessing an extensive grazing farm. From Mr. Black's farm, and even from Smithville, to this place, I conceive a more advanced state of society to exist than in other parts of the road. Settlements are more frequent, houses somewhat of a superior cast, and, if I mistake not, the manners of the people more civilised.

We were now arrived at the parallel of New Madrid, the focus of that tremendous earthquake, which affected a large tract of country on the west of the Mississippi in the year 1809. I was anxious to learn what traces of its effects might still remain, and was assured by my host, that between the high land on which

he lived and the Mississippi, a large submerged tract still exists—which had sunk to the depth of many feet at the time of this catastrophe—and that it has continued ever since permanently flooded, leaving nothing but the summits of the trees visible above the waters. Hence there is no direct road from the West, to New Madrid, and this town can only be reached from the above quarter by a very circuitous route.

The only evidence of existing volcanic action in the neighbourhood, that I could hear of, consists in the occurrence of a slightly thermal spring within fifteen miles of the house of my host. It is at a place called Mud-Creek, and is situated on the eastern slope of the ridge along which I had been travelling, where it sinks beneath the alluvial soil of the Mississippi.

Friday, April 27th, we proceeded after breakfast to Pitnam's Ferry, as it is called, from the name of the proprietor of the land in its neighbourhood, and arrived there by 11 o'clock. The day was intensely hot, but tempered by a fine breeze. Dr. Pitnam's Ferry crosses the Current River, a stream of some magnitude. The house was rather better furnished than is common in these parts, and the lady of the house, who, in the absence of her husband, did the honors, made some pretensions to gentility, but there was a forbidding coldness of manner about her, and the fare she put before us was in no respect better than we had met with in inferior houses. The rocks were of limestone or sandstone, belonging to the quartz rock previously observed.

After dinner we crossed the ferry and entered the state of Missouri, proceeding before night about 10 miles to a farm house, kept by a Mr. Branham, who gave us but a poor sample of the accommodations we were to meet with in our future progress through this new state. The bed-room provided for us was a loft, with only one bed, and no window. In the room beneath slept the whole family, 12 in number, including two grown girls, and two strapping lads. In such a place, the heat was, as might be expected, most oppressive, but a violent thunderstorm came on in the course of the night, and relieved us by cooling the atmosphere.

Saturday, 28th. We had a delightful ride this morning to Mr. Epps', a distance of about 15 miles. The woods consist chiefly of oak, with but little underwood, so that one might roam for miles unobstructed under the trees, and see at a great distance the deer ranging freely through the glades. The numerous rivulets that intersected our path, the bright verdure of the trees now in full leaf, and the perfect stillness and repose of the scene, interrupted only by the feathered songsters around us, produce a very

pleasing effect upon the mind of the traveller, and compensate him for many hardships and inconveniences.

Having got some dinner at Mr. Epps', we proceeded on our route, and arrived at a farmhouse, belonging to one named John Bulner, before night. I discussed with our host the Canadian question. He seemed to think it quite out of all rule, that any part of the American Continent should be in the hands of Europeans. Such no doubt is the prevailing feeling, but it is not one of a sufficiently *active* character to induce any large number of the people of the United States to take part in our quarrels. I told him, that according to his own principles, Upper Canada at least should belong to England, as the people themselves desired it.

We met with tolerable accommodation at Mr. Bulner's, and proceeded early the following morning to Greenville, in company with a traveller, who had gone on horseback all the way from the north of the state of Missouri to the Red River, and was now on his return to his home. He had averaged more than 30 miles each day, and when one horse was knocked up, provided himself directly with another; his plan being to jog on without stopping from morning till night, at a rate of about three miles an hour, which he found to answer better than baiting in the middle of the day, both horse and rider being inured to fasting. I parted with him at Greenville, which we reached at midday, as he preferred going on till nightfall, whilst it was my intention to rest during the remainder of the day.

Greenville itself is a little town situated on the borders of the St. Francis River, a considerable stream after rains, but shallow enough at this time to be easily forded. By the by, travelling in this country must be in a manner suspended during winter and after floods, for only two out of the many rivers we crossed, were provided with ferries, and there was not a single bridge the whole way.

I found at Greenville accommodations of a very superior kind at the house of Mr. Flynn, a respectable shopkeeper, who appeared to be driving a flourishing trade. I made some inquiries of him respecting the state of religious feeling at this place, and his report may apply to the majority of the small towns in this newly settled and thinly peopled district. It seems there is no service on the sabbath, but at irregular intervals a *Circuit Rider* of the Methodist persuasion attends and preaches. This poor man proffers his services, wherever an individual can be found willing to afford him *free* quarters. He is constantly going about from place to place, and having about twenty stations to visit, can only renew his rounds once in about three

weeks. The pay being very small, and the duties very arduous, it is to be feared, that the officiating minister must be often of an inferior description.

On the morning of Monday, April 30th, I started from Greenville for the Iron Mountain, and till 12 o'clock had fine genial weather. After this time the sky became overcast, and about four o'clock rain set in, which continued till we reached our destination, namely, a farm house, kept by one George Miller, about 30 miles from Greenville. The whole of this day's journey lay through one of the most solitary and least peopled lines of country I had encountered since starting from Little Rock. Ten miles from Greenville was the first farm house, having near it a small settlement—eight miles farther occurred another, and afterwards there appeared no vestige of humanity till we approached farmer Miller's. We there indeed found a shelter from the elements, but it was little more. The house consisted of a single room, which served both as a kitchen and as the bedroom for the whole family. In this there were but three beds, two of which were well filled by the farmer, his wife, and eight children, whilst the third was allotted to James and myself. I passed a very uncomfortable night, annoyed by bugs, and feverish from the nature of the accommodations, as well as from the closeness of the room. This was upon the whole the worst specimen of backwood living I had met with. Yet the family was decent and respectable in their deportment, and there was exactly the same independence of manner amongst them that I had met with elsewhere.

Tuesday, May 1st. It rained pretty hard all night and through the morning, but we nevertheless proceeded on our way to the Iron Mountain. The sugar maple abounds in this district, and most of the trees are tapped for the sake of collecting the juice, which trickles, from the wound made through the bark, into troughs set on the ground underneath.

The principal article of produce is Indian corn, with occasionally a little cotton for home consumption. About 16 miles from farmer Miller's was Mr. Brown's, where I determined to spend the night. He had a respectable farm house, and possessed a considerable tract of land. We dined there upon squirrel, an article which the people looked upon as not inferior to chicken, but which I did not much relish.

Near Brown's, is the house and establishment of the *great* Mr. Van Doren, the head of a company which has bought up the Iron Mountain, with the view of erecting furnaces, and establishing a city in these wilds.

Wednesday, 2nd. After sleeping comfortably in a bed on the floor of a loft at Mr. Brown's, I proceeded in the morning towards the Iron Mountain, the rain having in a great degree ceased. The road, as before, was solitary, and lay entirely through wood, till at length we suddenly came upon a portion of cleared ground, where the Missouri company have erected one solitary dwelling for the accommodation of a New Yorker, whom they have induced to settle there in order to make bricks for their projected city. This city looks indeed magnificent—*on paper*—comprising within its compass, parks, colleges, churches, squares, &c., laid out with mathematical regularity, and what is more, the plan represents the whole, as though it were fully matured, and had been already carried out in all its details.

"Missouri city," the prospectus says, "is situated on a beautiful plain at the base of the Iron Mountain, 90 miles south of St. Louis, and 40 west of the Mississippi river. It is the central point of all the chartered and contemplated rail-roads in South Missouri. Climate remarkably bland, as healthy as any part of the Eastern States. Winters mild. Scenery mountainous, and beautiful as that of the North river. Springs of the best water, abundant, and clear as crystal. Pine timber abundant, at one cent a foot. Brick, limestone, marbles, and granite building stones, abundant, of the best quality, and near by. Farming lands in the vicinity equal to the best in the West. Rich mines of *lead, zinc, copper, tin, &c.*, also two Iron Mountains in the neighbourhood. The Missouri Iron Company, with a chartered capital of 5,000,000 dollars, will make this place the seat of a part of their iron works. The Missouri City University, with an endowment of an 75,000 dollars a year for 45 years, will be located as represented in the City plot. *Education in this University gratuitous to citizens.* The proprietors have given to the university 1000 acres of land near the city for a manual labour and experimental farm; also to the city, grounds for 62 public parks, eight churches, two markets, six asylums, one city hall, one city lyceum, two hotels, all the university buildings, one young ladies' institute, four public schools, a city burying ground, and a city flower garden. No dram shop, lottery, gambling office, or house of ill fame, ever to be allowed in the city, or on the lands within three miles. No slaughter, butcher shop or yard, or tan-yard; no glue, starch, candle, soap, turpentine, powder, or oil manufactory, or any other kind of manufactory tending to infect the air, or annoy the neighbourhood, to be allowed in the city limits.

Communications, post-paid, directed to Missouri City, St. Francis Co., Mo.

"J. L. Van Doren, } Proprietors."
 "Henry Pease, }

Another city is also projected on the Mississippi River, at a distance of 40 miles, which a rail-road is to connect with the "great central point," viz. Missouri City. This however is not all—for one is likewise proposed to St. Louis, another to Jefferson City, and a third—will it be believed?—to Santa Fe in Mexico, a distance of some 700 miles, through an unreclaimed desert. But alas! these splendid designs exist only in the imaginations of the projectors; and the whole country, with the exception of the little farm house above alluded to, is still in as untamed a condition, as it could ever have been, when the red Indian roamed freely through its recesses.

The Iron Mountain itself stands covered with its primæval timber; and it is somewhat remarkable, that on this, the very site of the projected city, the only living rattlesnake that I had met with in the west country lay stretched across my path. Another step would have brought my foot directly upon the body of the reptile, but I perceived him just in time to make a hasty retreat, and thus to get beyond his reach. James immediately lodged the contents of the fowlingpiece he carried in his head, and thus enabled us to approach without danger, and cut off his rattles, seven in number, as a trophy of the event.

The Iron Mountain is so called from its consisting of one entire mass of magnetic iron ore. It is about 500 feet in height, and its cubic contents are certainly considerable enough to supply the whole world with iron for centuries to come. There is also another contiguous hill, still more elevated, called the Pilot Knob, which consists of a similar material. It is said to be 700 feet high, and is a conspicuous object from its elevation and conical shape. Till we reached the Iron Mountain, the rock from Mr. Brown's house appeared to be felspar porphyry, to which, I presume, this vast mass of iron is subordinate.

Unfortunately for Mr. Van Doren's speculations, iron ore is abundant enough in Kentucky, Pennsylvania, and other States, where labour is more plentiful, and coal close at hand; so that there must be a decided superiority in the raw material, to enable the Missouri company to undersell its rivals in states more favourably situated. I own, therefore, the project appears to me altogether a *bubble*; and I doubt whether there is any country in the world, but America, where a speculation so immature would have been put forward with such unblushing assurance, as one already realized.

After rambling over the Iron Mountain, and dining at the house of the New York brickmaker, in which was to be remarked an air of greater neatness and comfort, than in the cottages of the western people in general, we proceeded through the forest to a settlement called Caledonia; on approaching which, we found the country more generally cleared, and the dwellinghouses

more thickly sprinkled, than had been the case hitherto. The evening was bright, and the leaves seemed freshened up by the rain that had fallen on the preceding days. From a little eminence called Bellevue Hill, there was one of the prettiest prospects that had met my eye, since I had been in the west country; but its principal charm consisted in the various bright tints that mark the vernal foliage. But for this, the scene would have been monotonous, owing to the country being so overspread with timber. The rock first seen was a magnesian looking limestone, but afterwards sandstone in horizontal layers made its appearance. At Caledonia, I met with the first inn which had come across my road since leaving Little Rock. It had indeed no great pretensions to comfort; but its existence indicated a somewhat more advanced state of society here, than was to be found in the other parts I had visited. Rode to-day from eighteen to twenty miles.

Thursday, 3rd.—The rain returned in the night, and continued more or less all day. I proceeded from Caledonia in the morning, and reached Potosi by eleven o'clock, after crossing several hills, of which the substratum was usually quartz. The name of the place is derived from the mines of lead and copper which abound in its neighbourhood, and affords an amusing illustration of American grandiloquence. It is a mean, straggling place, built on the slope of a hill, occupied chiefly by miners. Here too I met with a tavern, which was kept by a Pole, and afforded me for dinner the unaccustomed luxury of bean-soup and French bread. After dinner I proceeded on my road towards the Mississippi, passed several holes where trials for ore had been made, but saw no mines at present in operation. The ores obtained, if I may judge from the specimens observed at Potosi, are chiefly galena, carbonate of copper, and tungsten. The rock over which we passed, after leaving this place, was in general a deep red marl in the valleys, but a hard quartzose material on the hills. The country was now more settled, and towards the close of the day's ride I came upon a small prairie. The rain prevented my going out of my way to visit the Old Mine, one of the principal workings at the present time, and compelled us to take refuge for the night in a farm house, where we found clean and comfortable beds.

Friday morning, May 4th, we proceeded on our journey towards Selma, where I expected to meet a steamer to take us to St. Louis. On my way I diverged a little to see two of the lead mines, namely those called Perry's and Vallee's. Both of them are worked at the depth of 100 or 120 feet. The galena occurs in veins varying in thickness from one to ten feet, and

lies in quartz rock. After baiting our horses near Vallee's mine, where we could get nothing for ourselves but bacon and milk, we proceeded over a tract more barren and more hilly than before, encountering a very bleak wind from the north, which made this country appear to us quite the Siberia of the State of Missouri. In the valleys the land seems good, a deep rich red marl being found in the bottoms; but on the hills horizontal strata of limestone alternate with soft sandstone.

Saw on the road to Selma one or two thriving plantations; especially one belonging to a Mr. M'Cormick. Here we ought to have spent the night; but being anxious to reach Selma, I pushed on, and, on arriving here, found a tavern miserably provided with eatables, as well as with sleeping accommodations. The dormitory here contained four beds; one of which was occupied by the two farm servants (or *hands* as they are termed) of the landlord, the second by a traveller, the third by James, the fourth by myself. Several of the window-frames had lost their glass, and a space of an inch at least intervened between the window-sill and the frame, so that there was not much protection against the cold, which proved at night very severe.

Saturday, 5th.—Finding no steamer to take us to St. Louis that night, I decided the next morning on proceeding by land, and started by a road running nearly parallel with the Mississippi, on the borders of which Selma stands. About five miles from the place of starting, our course was interrupted by a creek or rivulet, which receives some of the back waters of that river, at this time much augmented by the rains that had lately fallen. Finding, that after advancing only a few feet from the bank, the horses sunk nearly up to their bellies, and not having any ground of assurance that the stream was in fact fordable, I judged it most prudent to return; not a little provoked at the indifference of the people at the inn, who had given us no intimation that we should have such an obstacle to encounter. The only other plan of proceeding was to cross the river, and proceed through the State of Illinois, but this was rendered impracticable by the violence of the wind, and I therefore decided on waiting the rest of the day at Selma. The time was filled up by strolling to the top of some picturesque and elevated rocks which overhang the river; a castellated-looking building here crowns the precipice, which, in the *old country*, might have been taken for a vestige of feudality—it proved to be a shot-tower. Found growing on the rocks the *Aquilegia canadensis*, and in the woods the *Trillium grandiflorum*. The rocks at Selma are of white limestone disposed in horizontal strata, in which I discovered no petrifactions.

Sunday morning, May 6th, at sunrise, we hailed the ferryman, who resides on the Illinois side of the river. Finding no attention paid to the summons, we repeated our signal again and again, but it was not till eight o'clock that we saw any symptoms of movement. The fact was, that this independant gentleman had no idea of crossing without his breakfast, as indeed the inn-keeper warned us would be the case; so that, what with the preparations for starting, and the time employed in stemming the force of the current, when the boat was actually launched, ten o'clock came, before the boatmen were ready to take us back, and twelve, before they fairly landed us on the opposite side of the river. Although indeed the width of the stream at this point may not exceed half a mile, yet it was necessary to take the boat a mile or two up the river along the bank, in order to prevent its being carried down too far, when we attempted to cross over. So that, in one way or other, nearly two hours were consumed; nor was there the slightest excuse made by the boatman for his unpunctuality; on the contrary, he received my complaints with true Yankee phlegm.

Having at length crossed over, we proceeded through a beautiful forest for about six miles, when, having joined the main road, we found ourselves, for the first time since leaving Little Rock, in a prairie. We took our dinner at a farm house, and remarked a greater degree of comfort and tidiness in the family arrangements, than in Missouri. The housewife was more neatly dressed, the children cleaner and fresher looking. After dinner we proceeded through a country agreeably diversified with wood and pasture, and towards evening reached a large open expanse, which gave me for the first time a good idea of a western prairie; for the one I had seen in the morning (and the same may be said of those which I had fallen in with on former occasions) more resembled in its character an European landscape. On its borders were several houses, to one of which I had been directed, as likely to afford comfortable quarters for the night; but I overshot the mark, and rather than return, went on after nightfall to a village called Prairie du Pau, where I found a public house which received us.

This tavern consisted of only two rooms, a kitchen and a bar, the former of which served as a bedroom for the landlord, his wife, and numerous children; the latter contained two beds for strangers, one of which was already occupied by a lodger, whilst the other was appropriated by myself, James sleeping on the floor. The whole household had retired to rest, but we nevertheless contrived to rouse them, and to get a tolerable supper, served somewhat in French style, the family being one of the old French settlers, who still possess certain villages round about St. Louis. We were roused at night by a drunken

fellow, who demanded and obtained admittance, but was a length forcibly expelled by our landlord after a good deal of trouble and altercation. On the whole, my experience leads me to consider the little taverns in this country very inferior, in point of comfort, to the farm houses in which I had been generally before accommodated.

Monday, May 7th.—I proceeded in the morning to St. Louis, a distance of six miles, passing through the French village of Cahokia, where is a Catholic church, the first of any kind I had seen since leaving Little Rock, and crossing the Mississippi in a steamboat—thus having brought to a close my equestrian rambles, through the border country, as it may be termed, between savage and civilised life. And in taking leave of these wild regions, through which I have passed with so much security, and without any personal annoyance, except what might be considered inseparable from the nature of the country, and from the state of civilisation, I ought not to omit my testimony in favour of its inhabitants, who appear to have established, throughout the wide tracts over which they are scattered, that pervading principle of honour and good faith, which not only exempts the stranger from risk to his person and property, but guarantees to him, wherever he goes, all essential accommodations, without fear of extortion, or chance of insult.*

* Having informed my friend Judge Porter of the route I had taken, I received the following reply, which I here insert, as it embodies my own views with respect to the difference between the back-settlers and the town population of the Western and Southern States.

"I think I see you," he says, "winding your way through the country, between the warm springs of Arkansas and St. Louis. When I had health and strength, such travelling afforded me a great deal of pleasure. But you must have *roughed* it, as they say here, with a vengeance, and at times felt severely the want of, what our habits make, and the world calls, comforts.

"Still there was a charm to me in the solitude of our woods, and in the originality of character you so frequently meet with in these remote regions, which I cannot describe.

"I am glad you took the route, and I can confirm the truth of your remark, that the population of the distant settlements is superior to the lower classes you meet with in our towns, and lines of water communication.

"The worst population of every country, I believe, is to be found on its seashores and navigable rivers. You may ride thousands of miles through the remotest and most thinly settled parts of a western country, with as complete a sense of security, as you would enjoy, in traversing the streets of London, under the eyes of half a dozen police officers; and this fact, which is undoubted, speaks, I think, volumes in favour of the people."

The city of St. Louis is considerable, and, after my long stay in the wilds, looked to me rather imposing from the opposite bank of the river. It stretches a long way parallel to it, and one of the principal streets contains some respectable houses and shops. I took up my quarters at the Missouri Hotel, where I found the rooms slovenly, and the attendance bad. After making several purchases, called for by the dilapidated state of my dress, I went to see some of those curious mounds, which have excited so much speculation. North of the city, there are two, both of a quadrangular, and somewhat oblong form; the longest faces in each being parallel to the river. Judging from the size and appearance of these, I should conceive that they were erected for an encampment. I had observed two others on the opposite side of the river, on the prairie, which we reached late on the preceding evening. They abound also in the state of Ohio, and are described in the Transactions of the American Antiquarian Society.

The rock at St. Louis is a white limestone with seams of chert or flint running through it. The latter do not seem continuous, but the siliceous matter lies isolated, so as to resemble a little the flints in chalk. This limestone sometimes contains shells, and corals, principally flustra. Coal occurs on the opposite side of the river, as well as at a little distance to the N.W. The weather, though fine, continued cold up to this time, and the vegetation near St. Louis seemed more backward than in the south.

Tuesday, 10th.—I rode out to see some coal pits, occurring in a valley, seven miles to the west of St. Louis. The coal was bituminous, and lay at no great depth beneath the surface. On my return I fell in with Mons. Nicollet, who had just arrived from Washington, and was on his way to the St. Peter's River, with the intention of exploring the country intervening between the sources of the Mississippi and Missouri Rivers, five or six hundred miles to the west of St. Louis. In this enterprise he had obtained the aid of the American government, but it was feared, that the dreadful ravages made by the small-pox amongst the savages in that quarter would have exasperated them against the Americans, and that poor Nicollet's mission in such a quarter would therefore prove a dangerous one. Should it succeed, he will have completed his intended survey of the physical geography of the valley of the Mississippi, the most important work of the kind probably as yet executed with respect to the New World.

Wednesday 9th.—Being desirous of seeing the junction of the two rivers, the Mississippi and the Missouri, I embarked in the

little steam-boat, the *Eagle*, for Alton, in the state of Illinois. Opposite to that town the Missouri flows into the Mississippi, but the junction is concealed by an island, which stands at its mouth, and divides it into two parts. The most remarkable circumstance, is the distinct separation between the two rivers for many miles below the point at which they inoculate. The Missouri is muddy, the Mississippi comparatively clear, so that all the way from St. Louis one side of the Mississippi appears thick, and the other transparent; nor is there any apparent intermixture between the two. Gradually indeed, but many miles below St. Louis, the entire stream assumes the character of the Missouri, becoming cloudy throughout, but even so low as Selma the two rivers were in a degree distinguishable.

Alton is a small straggling place, built upon a rising ground, overlooking the river. It is divided into the *lower* and *upper* town, the latter standing two miles above the former. It was at Lower Alton that Lovejoy's tragedy was enacted*. I saw

* It may be worth while to record, that poor Lovejoy was one of those persons, who, with the self-devotion of martyrs, but with a zeal, it is to be feared, not always tempered with discretion, devote their lives to the cause of the abolition of slavery. Driven from the slave-state of Missouri, he established a newspaper designed to propagate his doctrines, on the opposite side of the river, in the free state of Illinois. Three times his printing press had been destroyed; on the fourth occasion the proprietor determined on resistance, and fired upon the people, who were surrounding his dwelling with the avowed intention of repeating the same outrage as before. The exasperated mob then set fire to the house, fired upon its inmates, killed Lovejoy himself, and wounded two others, till at length the doors were thrown open to the assailants, who rushed in and destroyed the obnoxious press. Such an event might have occurred in any country; but the most deplorable part of the affair is, that in free intellectual Boston, at a distance of many hundred miles from the scene of the murder, and in a state which has long abolished slavery within its precincts, the celebrated Dr. Channing, and other distinguished citizens, should have been refused the use of a place of assembly, for the purpose of expressing publicly their sentiments on such an occasion.

The letter of Dr. Channing to the Mayor of Boston, upon the latter announcing to him that the hall would be refused, is written with his usual force and eloquence:

"My single aim," he says, "was to frame such resolutions, as might pledge all, who should concur in them, to the exertion of their whole influence, for the suppression of mobs, for the discouragement of violence, for the vindication of the supremacy of the laws, and especially for the assertion and defence of the freedom of the press. My intention was, to exclude all reference to parties, all topics, about which there could be a division amongst the friends of liberty.

"It is this view of the rejection of the petition which deeply moves

there at a bookshop a little work giving his biography, together with an introduction by Quincy Adams, which shews that the interest felt in the event still continues. There was nothing very striking in the views along the river, of which the banks were flat and wooded.

In the evening, on my return to St. Louis, I embarked in the steamer Girard for Louisville, taking with me my horses, for which I could meet with no purchaser at St. Louis.

Thursday, 10th.—By nine o'clock this morning we had reached Cape Girardeau, and about one the junction of the Mississippi with the Ohio. So long as we were on the former, there was nothing novel or remarkable in the scenery. The same wooded banks occurred as before, with a few scanty settlements, Cape

me. That a petition bearing my name should be denied, would not excite a moment's thought or feeling; but that this city, which I have been proud to call my home, should be so exhibited to the world, and should exert this disastrous influence on the country, this I cannot meet with indifference."

But what shall we say of the vindication of the mayor's conduct, put forth by a Rev. Mr. Winslow, in a sermon preached at Boudoin-street Chapel, "which," says the Boston Atlas, "we commend to the attention of those persons who have been alarmed by the recent outrage at Alton."

"The advocates," says the preacher, "for such objectionable principles and measures"—those relating to the abolition of slavery—"are crying aloud for the liberty of the press. They ought to consider, that they are taking the most effectual means to bring the press into bondage. We have no sovereign power, no magic means, superior to the voice and arm of the people, to protect this instrument. Mobs are an evil incident to all but despotic governments, and it is the part of every good citizen to guard against exciting them. The unmolested opportunity to speak our sentiments through the press, and our liberty in other respects, have been much encroached upon within a few years, and it has been effected by the very means of which I am complaining."

"In all republican governments, where the power resides in the people, if you either do or publish any thing, right or wrong, so far in advance of, or aside from, their views, as strongly to excite their indignation, a mob is the natural consequence."

"It is in vain that you then call upon civil magistrates to protect you. What can they do without the people? They have no standing army to interfere between you and the mob which you have excited. By pressing too severely upon public sentiment, and thus occasioning frequent excitements and deeds of violence, you at length prostrate the laws, render every thing unsafe, and introduce the most tyrannical of all slavery. It is in vain that you call on the civil magistrates to protect you, when you have taken from them all power to do it, by turning the popular sentiment against them."

Girardeau being the only place resembling a village that presented itself on the banks. The Ohio too, for a certain distance from its confluence, had the same character of monotony; but as we proceeded up this river, we began to find a change for the better in the cultivation of the land near its banks.

We passed Paducah, a village situated at the mouth of the Tennessee river, the first great stream which empties itself into the Ohio. One half of its houses had been burnt down about ten days; and, what was remarkable, the portion of the town which was of brick had fallen a victim to the flames, whilst the wooden houses, being separated from the former by a wide road, had all escaped. The fire was supposed to be the work of an incendiary; and suspicion having fallen on a baker, the newspaper stated that lynch law was to be dealt out to him*.

The second village we came to was Smithland, a neat thriving little place, situated at the mouth of Cumberland River. In spite of the abundance of drift timber which beset us, the steamer proceeded swiftly and well upon her course. The cold north wind still continued, but the sky was bright, and the air dry. In proportion as we ascended the Ohio, the country became more peopled, and the banks more elevated. Hence the scenery is interesting, compared to that on the Mississippi, though even here there is a monotony arising from the enormous preponderance of forest over cultivated land.

Friday, 11th.—The Girard continued to push forward with great expedition, and by nightfall had brought us within 100 miles of Louisville. The weather was much like that of the day preceding, being unusually cold for the season. As for the passengers, they may be described in general as rough uncouth persons. In this, as well as in the Arkansas boat, I was struck at the apathy, the phlegm, the poverty of ideas, the jejuneness of conversation, which characterised the greater proportion of the people I met. They seem indeed to have no resources in themselves to fill up the weary hours; for card-playing, which, it is said, is commonly resorted to in these boats to kill time, happily did not prevail in ours to any great excess.

* The newspaper editor *hopes* that the people will be prevailed upon not to do so, but does not hint at any force being exerted to prevent them, if so disposed.

The same paper mentions, that the black cook of a steamer, *suspected* of violating the person of a deaf and dumb girl, was thrown into the river by the passengers, the Captain protesting against it, but not able to make any effectual opposition.

Saturday, May 12th.—About sunrise we had arrived within forty miles of Louisville. The banks of the river had now become remarkably beautiful, from the height of the hills, and the rich verdure of the trees which covered them. Below this town the stream is remarkably rapid, and a canal has therefore been cut by the side of it. But when the water is high, as at present, steamers stem the torrent, and thus avoid the expense of using the canal.

I reached Louisville about one, p. m. and took up my quarters at the Galt Hotel, the best I have met with for some time.

Louisville is a city of about 30,000 inhabitants, regularly built, with wide straight streets, running parallel with the river for a mile or more, and others intersecting them at right angles, containing a number of respectable, but few first-rate houses. It has improved principally within the last twenty years, since steam navigation has become general, and is now the rival of Cincinnati. At the distance of about two miles from the town is a handsome stone bridge, with three arches, thrown over the canal, and of a sufficient height to allow steamers to pass under it.

Sunday, May 13th.—Went in the morning to the Episcopal Church, where there was a genteel, but not a very large congregation. An impressive sermon was given by the Bishop of Kentucky, a very young looking man, who afterwards confirmed about twenty persons, most of whom were grown up, and some, middle-aged persons. I afterwards called on Judge Bibb, to whom I had brought a letter from Judge Porter. He had an elegantly furnished house, but one or two little circumstances in it reminded me of being in a new country. There were for instance no pullies to the windows, so that when the Judge wanted air, he was obliged to prop up the window frame with the poker. He accounted for this defect from the difficulty of getting a job completed, in a place where there was such a demand for work. Hence they usually *stopped short* at what was absolutely essential.

The Judge took me a drive in the environs, but had nothing very remarkable to shew me. The whole way from the town to the canal there was a succession of houses dotted about at intervals.

Monday, May 14th.—The morning being fine, I started on horseback at ten o'clock for Lexington, and proceeded along a rich and cultivated country. For the first time since I had been in the West, I observed the whole district to be enclosed, and had a good turnpike road all the way. Tolls were established on the

English plan, and proved tolerably frequent. The country was in gentle undulations, but there were no lofty hills. The rock exposed by the road was red sandstone, but the existence of encriñal limestone near was rendered probable by the use made of that material for mending the road. For twelve miles, as far as the village of Middleton, we met with a succession of good substantial farm houses, with a few of a superior description; the whole reminding me, more than any portion of the United States I had seen, of some of the thriving agricultural districts in England. At Middleton I found at the inn a very good plain dinner, consisting of pork, beef, chicken, ham, potatoes, asparagus, and pudding, for which I paid rather more than half a dollar for two persons. Kentucky seems indeed the land of plenty, and is at the same time far enough advanced to possess some of the comforts of civilised life. The guests too were respectable in appearance and manners. After dinner proceeded to Shelbyville, a long straggling village, which I reached by nightfall, having accomplished 30 miles since the morning.

Tuesday, May 15th.—My slumbers were disturbed by the attacks of the bugs, which were so abundant in the bed-clothes, as to drive me to sleep on the floor. Proceeded this day to Frankfort, and from thence to Lexington, through a country, which wore throughout the same character of luxuriance, and (speaking comparatively) of high cultivation. Nearly the whole is enclosed, and farm houses are almost as frequent as in the best parts of England, to which indeed this part of Kentucky bears a great resemblance.

Besides the general charm in early spring belonging to a country so well clothed with timber, there were in particular spots scenes of more especial beauty and interest. Amongst these I may particularize Frankfort, which stands in a rich valley irrigated by the Kentucky river, whilst the slopes above are occupied by a number of superior country houses, with gardens and orchards. I have rarely seen in America a more inviting situation. There were likewise, on approaching Lexington, some pleasing spots; and I have nowhere in the United States observed so large a proportion of the country laid down in wheat as in this part of the state of Kentucky. In the people themselves I also observe some prepossessing traits. There is a frankness and raciness of manner about them, a greater kindness in their deportment towards strangers, which make amends for a somewhat rude and rough exterior, and render travelling in this country agreeable. Crimes against property are, I conceive, rare, except indeed cases of trespass, where public opinion countenances the offender; but on the other hand there would seem to be a sad recklessness of human life, judg-

ing, both from all I hear of the murders committed and passed over with impunity, and from the language that drops from the people on such subjects. The innkeeper, for example, at whose house I stopped on the road to-day, who appeared in common parlance a respectable man, talked with the utmost coolness of taking the law into his own hands, and shooting a particular person when he next came across him, as a punishment for a shabby trick he had on two or three occasions been guilty of towards him, in travelling by his coach, which act of delinquency was nothing more than that of tearing up the way-bill usually deposited in a tin can inside, by which expedient he evaded paying the fare when it was demanded of him at the end of the journey. Though probably said in bravado, it seemed strange to me, that so murderous a threat excited no astonishment amongst the bystanders. A little anecdote of this kind shews at once the feebleness of the law, and the still existing feeling amongst the people, that they are yet living in some measure in a state of nature, and therefore are free to avail themselves of those means of redress, which such a condition of society is supposed to authorize.

Wednesday, May 16th.—Lexington is one of those few American towns which for a long time past have continued nearly stationary. Its population is about 6000, and has not materially varied from this amount since the memory of the oldest inhabitants, viz. for thirty or forty years. It therefore has rather an old settled appearance, like that of an English market town, the streets being clean and spacious, but without much of an air of business.

I called in the morning on Dr. Dudley, a courteous old physician, who introduced me to Dr. Peters, the professor of chemistry. This gentleman has a taste for botany, and took me out to some meadows in the neighbourhood, where I collected a few new plants. I remarked the extraordinary size of the specimens of every species I saw, arising probably from the richness of the soil.

Lexington is the site of the original Kentucky University, called the Transylvanian, and there is a rather handsome building devoted to its purposes. But its fame is now eclipsed by the establishment of a rival medical school at Louisville, caused by some jealousies and disputes amongst the professors. Dr. Peters, however, the professor of chemistry, has still nearly 200 pupils, but it does not appear that any lectures, save those connected with medicine, are much frequented.

There is a city library, containing about 7000 volumes, but of these a large number are novels.

I drank tea this evening with the Rev. Mr. Ward, to whom

I had brought a letter. He is a very intelligent Episcopalian clergyman, and with his wife (an Englishwoman by the name of Dowell, of a respectable family from Bristol) carries on a small seminary for young ladies.

We talked a good deal about the institution of slavery, as it exists in Kentucky, a subject which he discussed with candour. It is against the law to teach slaves to read; but this nevertheless in Kentucky is frequently done, and Mr. Ward himself had at one time a Sunday school for blacks. The injunction, however, against teaching them writing, or other branches of knowledge, is never violated. Mrs. Ward strongly denied, that there was any natural inferiority in the negro race as to intellect, all circumstances being taken into account. In Kentucky, household slaves are treated in general much in the same manner as they would be if free. Nevertheless the existence of slavery exercises a most prejudicial influence upon the people; and this alone, in Mr. Ward's opinion, prevents Kentucky from placing itself at the head of the Western States, instead of permitting Ohio, as at present, to get the start of it. The recklessness with regard to human life is such, that fifty murders a year are a common average, and yet scarcely an execution for that crime is recollected. The same state of things indeed prevails generally in the Southern and Western States, but it is worse in proportion to the newness of the country. This and slavery are the chief drawbacks to a residence in Kentucky, which would otherwise be very desirable on many accounts. Thus ague is unknown in this State, mosquitoes never appear, and crimes against *property* are rare, though those against the *person* are so frequent. Beef is only five cents ($2\frac{1}{2}d.$) a pound, flour not more than one quarter of the price it obtains in the south, and other commodities in proportion.

Thursday, May 17th.—The night preceding had been exceedingly sultry, but the morning was dull. At ten a. m. I started in a gig for the Kentucky River, where I was told I should meet with some new plants. The road was stony, and it was troublesome to drive along it, owing to the number of logs of wood which were thrown across in order to prevent carriages from going in one track. After a ride of fourteen miles, we came to a very respectable farm house, or rather country mansion, where some dinner was to be had, which however did not correspond in goodness with the promise held out by the superior appearance of the house itself, for we got nothing but bacon, wheat cakes, and coffee. The widow who owned the property presided, but the white farm-servants, or *hands* (as they are called) sat at the same table. Yet the lady went about in her own carriage, drawn by two fine looking horses, and her son had

received an university education. Naturally enough, under the circumstances I mention, there could be no conversation at table, and in fact the meal passed off in almost entire silence. It is remarkable indeed, that the white servants should be such sticklers for a privilege, which seems to embarrass themselves, as well as their employers; yet I have heard of cases, where such offence was taken with the farmer and his family for dining at a separate hour, on the occasion merely of some friends visiting him, that all the *hands* he had engaged left the premises in consequence.

After dinner I started off in the direction of the river, and descended a pretty steep ravine, now nearly dry, but down which after rain a considerable body of water descends, forming a series of cascades. I hunted for plants till the evening had set in, and as the logs that were thrown across the road rendered it dangerous to travel in a gig after dusk, passed the night at the farm, and started very early next morning for Lexington. About a mile on this side of the town is Mr. Clay's country house and grounds; the latter have more of a parkish look about them than any I had seen in the country.

The rest of the day was in great measure taken up in getting rid of the two Rosinantes, which had brought myself and servant safely, though slowly, from Little Rock, and for which, with all their accoutrements, I could only obtain a fifty dollar note in return for one hundred and seventy, which they had cost me, including the loss sustained by swapping my poney against the farmer's horse in Arkansas. However the difficulty I had experienced at other places in disposing of the horses at all, and the unusual number of gigs and hacks I observed for hire, which evinced, that horses in this town must be a cheap commodity, determined me in closing with this very shabby offer. After settling this business, I looked over the strata in the neighbourhood, which I found to consist of shelly limestone, in which encrinites, corallines, &c. abounded.

Saturday, 19th.—We proceeded by the stage to Maysville through a rich and generally cultivated country. The roads comparatively speaking were excellent, excepting that they were too narrow for safety, especially considering the habit of racing, which seems to prevail to a dangerous extent amongst the stage drivers. The mode of driving here was much after the manner of England, and almost equally fast. I find indeed that there is quite an equal disposition to rapid travelling here as with us, wherever the roads admit of it. The danger arising from the struggle between our stage and an opposition one as to which should be first, induced me to desert the outside, and shelter myself in the comparative security of the interior. Here,

so long as the stage remained only half full, the travelling was agreeable enough; but before we arrived at our journey's end, the vehicle had obtained its full complement of passengers, and we were then painfully squeezed.

We passed Blue Lick, where there is a salt spring discharging sulphuretted hydrogen, and afterwards Mays Lick, which is merely saline. The scenery round these places is very interesting. On approaching Maysville, which stands on the Ohio river, we descend a pretty steep slope, and from its summit commands a very beautiful view of the river, which, curiously enough, appears to have cut its way through some of the highest hills in Ohio. We arrived at Maysville just in time to proceed to Cincinnati by steam, and reached the latter city about sunset. On board were several Indians, on their way, I believe, to the West country, whither their tribe had been expatriated—a cruel expedient, always attended with great misery and distress, not only from the actual amount of privation incurred by the sufferers, but from the attachment to home which is felt with so much force by all savages. In this instance we learnt, on our arrival at Cincinnati, that one of the chiefs was found to have hung himself in his state cabin.

The river scenery from Maysville to Cincinnati is the most agreeable I had yet passed; and, upon recollection, I know no part of the Ohio that pleased me so much. The hills were either clothed with wood to the water's edge, or, if cleared of timber, were cultivated to their very summits. The surface of the country was undulating, and the vegetation fresh and luxuriant.

Sunday, 20th.—I took up my quarters at the Broadway Hotel, which far surpassed in its accommodations the expectations I had formed of it. Hitherto, Cincinnati has had a bad name for inns; but it seems now to be redeeming its character. The fare was decidedly better than that at Louisville, and the waiters more attentive. As for the city itself, there is nothing in all the Union so fine as its situation, with reference to the noble river which it commands. It well deserves the name of the Queen of the West, from its position, as well as from the substantial advantages it enjoys, and may one day or other become the Metropolis of the Union, when the gradual extension of this great Confederacy to the westward renders Washington too remote. The streets are built upon a slope rising gently from the river, and are wide as well as handsome. Other streets running parallel to the river intersect the former at right angles, but these are in general narrower and meaner. Many of the private houses are good, and no less than thirty Churches of different denominations are scattered over the place. What a

contrast in this respect to New Orleans, which, with a larger population, can boast of only three Protestant places of worship! I here attended one of the Episcopalian, at which a Mr. Brooke, an eloquent and impressive preacher, officiated, and saw there a respectable and well-dressed congregation. The church itself has a handsome Gothic front, and its interior is neat and appropriate.

There is indeed a better taste displayed by the people of Cincinnati in their architecture than by those elsewhere; and it is remarkable, that the only building which would be singled out for its unsightliness, was erected by the lady, who has so distinguished herself by vilifying every thing belonging to the city and its inhabitants. This strange nondescript edifice, erected by Mrs. Trollope, goes by the name of the Bazaar; it is a far-farago of Gothic, Egyptian, and Moorish architecture; and, if it had been a native production, would have been cited as a fine illustration of the deficiencies attributed to the Yankees in all matters of refinement.

Mr. Buchanan, a merchant of the place, who is attached to natural history, made me dine with him, and, in the evening, accompanied me to the hills adjoining the city. These we found to be made up of horizontal beds of limestone alternating with marl. The limestone contains abundance of fossils, especially corallines, encrinites, trilobites, bivalves of various kinds, such as spirifers, productæ, and the strophomene of Rafanesque. I never saw a locality more rich than this in the shells which it furnishes. It lies underneath the coal formation of the neighbourhood, and, therefore perhaps, may be regarded as the carboniferous limestone.

From the summit of the hill we enjoyed a noble view of the city, and afterwards proceeded to a little glen, a mile or two further, where I collected some plants, as, for instance, specimens of Bartram's oak, and that pretty flower, the *Collinsia verna*.

Monday, 21st, was a wet day; and the want I was in of a wardrobe, owing to the non-arrival of my luggage, induced me to devote the morning to fitting myself up with certain necessary articles. These were more readily procured, than they would have been at such short notice in most places, for the high price of labour renders the charges of tailors in the West so exorbitant, that people in general are content to purchase clothes imported from the great cities of the East, which can afford to supply them on more reasonable terms. Hence it is not very common to see a well cut coat in the Western country; but, as I had no wish to appear smarter than my neighbours, I was easily reconciled to the idea of wearing a

ready made suit, though it might not fit over well. In the afternoon I called on Mr. Bullock, formerly the proprietor of the Egyptian Hall, in Piccadilly, whom I found in declining health, but still lively and conversible. He had got together an immense assemblage of fossil bones from Big Bone Lick, but, lamentable to relate, they were all destroyed by a fire which broke out in his museum. The loss is irreparable, as he had in a manner ransacked the contents of the entire locality. He had also made a collection which no one certainly would have expected to have been acquired in the West: it was one of paintings by the old Italian masters. How they got to those remote parts is to me a mystery. In the evening I went to the theatre, to see Miss Tree who acted in the *Love Chase*; and, on my return, met with much difficulty in piloting my way through the streets, the night being pitchy dark, and not a single lamp existing in any part of the town.

Tuesday, 22d.—It was gratifying, after having been so long in the wilds, to meet at Cincinnati with a few people who take an interest in natural history.* I have already mentioned Mr. Buchanan as one of these, a second was a brother of Mr. Lea of Philadelphia, and an excellent practical botanist I conceive him to be. An old Scotchman of plain manners, long settled in the city, was another with whom I got acquainted, and in company with these gentlemen I took a drive in the neighbourhood to a glen where we collected some good plants. Dr. Muirhead, an Irish physician, settled at Cincinnati, invited me to tea; and there I was agreeably surprised at seeing my friend Dr. Locke, with whom I had made acquaintance in Oxford, drop in fresh from Ohio, where he had been carrying on his portion of the State Survey.

* I had frequent occasion, in my rambles, to notice the difference between the American backwoodsman and the European peasant, with respect to the degree of attention they respectively appear to bestow upon the features of external nature—the various productions of the animal and vegetable kingdom—with which they are constantly surrounded.

The former, sharp-sighted and vigilant as he shews himself to be, in making himself fully acquainted with whatever he can in any way turn to account, seems often wholly unobservant of those objects from which he does not expect to derive some personal advantage, and is therefore unable to afford us information with respect to the names and qualities of the commonest plants and animals that occur in his neighbourhood—whilst the most ignorant hind in the Old Country, in consequence of being stationary in a spot which his family has inhabited for many generations, often possesses a sort of traditional knowledge on such matters, which is highly useful to the stranger.

Wednesday, 23d.—I started in the morning on a botanical ramble, in company with Dr. Locke, Mr. Lea, and a Mr. Clerke. The day however proved unpropitious, and rain coming on, we were driven back without collecting much.

Thursday 24th.—The same disagreeable weather as on the day preceding. In the afternoon, however, Dr. Locke drove me out along the banks of the Ohio, and shewed me a vineyard, the first I had met with in America, belonging to a Mr. Longworth, a gentleman of fortune in Cincinnati. It is worth noticing, that the vines in winter are covered up, to shield them from frost: a precaution rendered necessary by the severity of the cold.* The views commanded by Mr. Longworth's grounds, of what are termed the Prairie bottom, are rich and beautiful. I saw here a quickset hedge—a rarity in this country, though the shrub, or one very like it, abounds in the State of Missouri. The vines, under the management of a Scotch gardener, seemed to be thriving; and a sample of the wine made from it, which I tasted in the evening, was not to be despised. It had much the taste of the Muscat grape, having a richness, as well as sweetness of flavour, which was very agreeable.

Friday, 25th.—Dined with Dr. Muirhead, where I met two Episcopalian clergymen. One of them expressed himself in very strong terms on the subject of the Girard College. He considered, that the State of Pennsylvania ought to have rejected the donation altogether, as the conditions imposed by the testator excluded all classes of the clergy from a share in the management of the institution. It was on this ground that Bishop White memorialized the Legislature on the subject, but without success. In conversing on slavery, he, though professing himself not to be an abolitionist, contended for the original equality of the negro and white race, in an intellectual point of view. In childhood, he observed, he could trace no difference in capacity between the two; and that there should be such in after years,

* The absence of vineyards in the United States is a problem of some interest with respect to the geographical distribution of plants. It is not to be expected indeed, that they would be generally cultivated for making of wine, in a country where labour is so dear, but here and there we should meet with vines grown for the sake of the fruit, were there not something unpropitious in the character of the climate. I believe the extreme vicissitudes of the spring in the midland States, and the excessive cold of winter in the more northerly ones, to be the main cause.

is but a natural consequence of the different circumstances under which they are then placed.

Saturday, 26th.—Looked over Dr. Locke's laboratory, which is small, but contains several very ingenious contrivances of his own connected with electro-magnetism. It is gratifying to see energy and talent like his exercised on scientific subjects in a city west of the Alleghanies, and following up, as it were, the researches of the American Franklin, in a spot which that philosopher could have known only as the abode of the wild Indian.

The Doctor gave me an account of the lamentable catastrophe which befell the steambot Moselle, close to Cincinnati, on the 21st of last April. It arose purely from the desperate rashness of the Captain, who, resolving to exhibit the fastness of his boat, as he passed the city, loaded the safety valve, until the boiler burst with the immense pressure. Out of 280 passengers, probably nearly 125, including the Captain, who was the cause of the explosion, were hurried into eternity. A large portion of the boiler was carried over a house to the distance of 200 yards from the vessel.

It seems at first surprising, that public opinion should not put down with a strong hand such recklessness on the part of the captains of steamers; but it must be recollected, that the lives of a large proportion of the passengers in these vessels, namely those from the southern cities, is one series of hazards, in which the contingency of travelling in an unsafe vessel forms but an insignificant item. A man, who is exposed daily to the risks of yellow fever and other epidemics, to say nothing of those arising from the frequent duels, and from the intemperate habits, incident to such a state of society, is not likely to be very circumspect, as to the kind of vessel he selects, or the captain to whom he confides his life.

After dinner, I took a botanical ramble with Mr. Lea, on the Kentucky side of the Ohio river. A remarkable change in the state of cultivation is observed on passing from one to the other side. In Ohio the banks of the river are mostly reduced to culture, on the Kentucky side a great part remains in its primeval condition. Observed *Orchis spectabilis*, and *Dentaria diphylla* amongst the plants.

I had now completed my week's sojourn in Cincinnati, and must say, that I think Mrs. Trollope has done it great injustice. The people have, no doubt, the peculiarities which belong to the Americans in general, but they are more refined, more literary, and more conversational than in most other cities of the West. If indeed this difference in the impression left upon her mind and upon mine, arose simply from the progress

which the people of Cincinnati have made during the short interval which has elapsed between our respective visits, the alteration may serve as a lesson to others, how cautious they should be, in setting down as permanent characteristics of a whole people, defects which may only arise from the stage of society which they may have reached at one particular period.

But the fact is, that the Americans have not met with justice, either from the extreme Tories or from the extreme Radicals who have gone amongst them. The former are eager to exaggerate any defects which may exist in the character of a democratic people, as an argument against democracy itself; the latter, rather than bring their favourite scheme of government into disrepute, labour to make it appear that the Americans are not worthy of their institutions.

Both parties might have saved themselves much trouble and much misrepresentation, if they had only reflected, that the democratical character of the institutions is a consequence of the condition of society in America, not the condition of society a consequence of the institutions; that, as the genius of the people, and the general tone of their system of government, (with one lamentable exception at least,) are essentially the same throughout the Union, whilst society differs according to local circumstances, such peculiarities as are not universal ought in fairness to be attributed to the latter cause, rather than to either of the two former. And lastly, that whilst it would be extremely difficult, to imagine an independent people so circumstanced as that of the United States, continuing long under any other form of government than a republican one, it would be equally difficult, to point out any remarkable alterations in character and habits, which would be likely to grow out of one of a different kind established amongst them, so long as the other conditions continued as at present.

The main source in fact of the annoyances which an European experiences in travelling through the United States, consists in the circumstance, that the relations subsisting in the Old World between the *employer* and the *employed* are here in a manner reversed, the demand for *labourers* being greater than that for *labour*. Hence the paucity and badness of domestic servants—hence the tone of equality assumed by the lower class towards the higher—and in short that independence of the poor upon the rich, or rather, I should say, the dependence in some cases of the rich upon the *poor*, which is so apparent. Other peculiarities of no very agreeable kind, which strike us in travelling through the wilds of America, arise chiefly, from the rare intercourse of the people we meet with general society, and from the uniformity of the pursuits that alone engage the attention of the backwoodsman—such is the cold indifference of his

manner—his inquisitiveness respecting the concerns of his neighbours—the limited range of his ideas—and above all, the want of that flexibility of mind, which seems necessary for keeping up the ball of conversation amongst persons who are strangers to each other.

As to the habits which most shock the fastidiousness of an Englishman—the practice, for instance, of bundling two or three into the same bed—the best proof that they are incidental to the state of society is, that they exist only in the more remote and newly settled parts. Indeed I recollect a west country farmer remarking, that he was sure, that two young men who had settled in his neighbourhood must have come from New England, because they had insisted on having a bed apiece.

But to proceed.—On Sunday, May 27th, I started in the morning, in the steamer Columbus, for Pittsburgh, and proceeded up the river at the rate of about six miles an hour.

Though it was so late in the month of May, the weather was still remarkably cool and bleak, thermometer at sunrise being 54°, at night 58°, at 2 p. m. only 68°.

For the next three days and nights, and a portion of the fourth day, we proceeded up the stream, passing Guyandot and Gallipolis on Monday, Marietta and Wheeling on Tuesday, and reaching Pittsburgh on Wednesday. The features of the river scenery during the whole of the way were generally much alike. There is probably no one point between Cincinnati and Pittsburgh, where the stranger, if he were suddenly to light upon it, would not feel charmed with the beauty of the landscape; nevertheless, in a newly settled country like this, where art has done so little to modify the natural features of the scenery, we require something more bold and striking in the latter, to secure us from a feeling of satiety, after having had three or four days to familiarize us with the aspect of boundless woods and round-backed and gentle elevations. There was indeed a freshness and brilliancy in the foliage seen just at the opening of spring, and, when we observe the graceful contour of the hills, sometimes descending in one gentle slope to the very water's edge, and at other times leaving a foreground of greater or less extent, which, where cleared, is covered at this time of year with the brightest verdure, we cannot deny to the banks of the Ohio the elements of picturesque beauty.

The eye is also gratified with the numerous wooded islands standing up in the midst of the stream, one of which, called Blenherhassett's island, was famous as the residence of an Irishman by that name, who assisted Colonel Burr in his conspiracy.

The Ohio side, as usual, is generally the best cultivated and

peopled; but even here, miles are sometimes passed without our coming in sight of a house. Upon the whole, he who has seen the views between Maysville and Cincinnati, may well console himself for missing the remaining portion of the voyage, at least if he travels only in search of the picturesque; for he will meet with no other part so beautiful, and with very little of a novel character to interest him afterwards.

My fellow-passengers were as usual an uncommunicative set of persons. I was amused at one of them pronouncing the Ohio to be the most beautiful river in the world. I asked him if he had seen the Rhine? O no! he had never been in Europe. Had he been on the Hudson? No! he had never been east of the Alleghanies. I then assured him, that if he would not allow the palm of superiority to our European rivers, he had not to go farther than the state of New York to find scenes possessing a much higher character of beauty than he would meet with on the Ohio.

The only estate on the borders of the river which possessed the appearance of an European farm belonged to Rapp's Establishment, at Harmony, 19 miles above Pittsburgh. The neatness of the fences, and fine condition of the ground, which was sufficiently cleared, without being divested of timber, afforded a pleasing contrast to the slovenly and neglected state of other lands in its vicinity. The Establishment is a kind of Protestant monastery, enjoining celibacy, and enforcing a strict community of property. It is said to be flourishing, and to have amassed large funds.

Pittsburgh itself, which we reached about the middle of the day, has indeed a most uninviting appearance from the water. It is enveloped in smoke, and consists of an assemblage of closely packed, mean looking houses. There are numerous manufactories,* but they are not, as at Birmingham or Manchester, on that grand scale which imposes on the imagination, though the enormous developement of the Coal Formation, which we are reminded of on entering this place, and which extends from hence into the Western States, so as to cover an area equal to that of Great Britain, is, it must be confessed, well calculated to do so.

* The following is a summary of the trade, &c. of Pittsburgh :—

	<i>Dollars.</i>
Iron founderies, manufactures in iron, steam-engines, glass, white lead, cotton, &c.	11,606,350
Mercantile business	13,100,000
Commission	5,875,000
Coal trade	585,200

Total 31,146,550

Thursday, 31st, I spent at Pittsburgh, taking up my quarters at the Exchange Hotel, which was moderately good. In the evening, I took a drive along the country included between the Mononghehala and Alleghany rivers, at the confluence of which two streams Pittsburgh is built. The land is in general in a high state of cultivation, as might be expected to be the case in the vicinity of so populous a city. The ground rises gradually as we recede from the latter, and exposes good views of it. I afterwards crossed the long wooden bridge over the Mononghehala river, 500 yards long, and strolled along the opposite bank, which is steep and lofty. It consists of beds belonging to the Coal Formation, and coal is obtained in several places where it crops out from the side of the rock, by working horizontal galleries into it. It is said however to have a slight dip towards the South. The accompanying beds of slate and sandstone seemed to contain but few vegetable impressions.

In the evening walked with Mr. Bakewell to his father's country house, distant only about a couple of miles from the city. It was prettily situated on a little eminence overlooking the river. Nearly opposite, but divided from this house by the river, was one of the salt-pits, which are frequent in this neighbourhood. It is understood, that these springs rise up invariably from underneath, or at least from the lower part of, the coal formation, the pits usually requiring to be sunk to a depth of 60 or 80 feet.

Pittsburgh certainly exhibits more appearance of business than I have hitherto seen west of the Alleghanies, except perhaps in Cincinnati, and there it is not so concentrated. The city is connected with the rest of Pennsylvania by two bridges, one over the Alleghany, the other over the Mononghehala river, both of great length, of wood, and covered over. They are consequently dark, and the larger one looks like the cavern at Pausilippo. There are many respectable dwelling-houses in the vicinity of the town, which is recommended by the beauty of the surrounding scenery, and by the salubrity of the air. Ague is said to be never known there.

At nine o'clock in the evening of Thursday I started on board the canal boat for Philadelphia, in which the passengers had to sleep, as in that on the Erie canal, on three tiers of mattresses suspended to the sides of the cabin. As however they were not very numerous, no extra berths in the middle of the room, as on the former occasion, were required, so that we fared somewhat better.

In the morning we found ourselves in a formation of coal sandstone, lying horizontally. The canal runs nearly parallel to the river Alleghany, but in one place a tunnel 500 feet in length

is cut through the rock, in order to avoid a bend which the river here makes. Between Pittsburgh and Johnstone the canal rises by a succession of locks 451 feet, the former place being 705, the latter 1151 feet above the level of the sea. The boats are conveyed with great expedition through these locks, and, including the time lost in passing them, our rate of travelling by the canal averaged four miles an hour.

The rain fell almost without ceasing the first day, so that little opportunity was afforded me of enjoying the scenery. It was evident however, that in fine weather some of the glens we passed, when lighted up by a bright sun, would be very striking. Unfortunately there is no point from which an extensive view can be obtained, the canal being generally inclosed between ranges of hills, which are round-backed, and covered with timber and brushwood. Amongst the latter the Rhododendron abounds, and this, when in flower, must greatly add to the attractions of the scenery.

Saturday, June 3rd, at sunrise, we left the canal-boat, and started from Johnstone by the rail-car. We passed first through a tunnel, and then up four inclined planes, having between them a certain extent of level ground. The fourth inclined plane brought us to the summit level, which is calculated as being 2293 feet above the sea. Thus we had ascended no less than 1142 feet by inclined planes, up which we were drawn by endless ropes, set in motion by stationary steam-engines placed at the summits of each plane. This wonderful work was completed about six years ago, and is the first attempt that has yet been made to carry a rail-road over a lofty chain of mountains. How far the expense of so many stationary engines may be compensated for, I know not, but the traffic, as well as the passengers that traverse it, are both surprisingly great.

I took up my quarters at the Hotel on the summit, which was certainly not so good as it might be expected to be on such a thoroughfare, but it appears that few travellers tarry on their journey. There is indeed no view whatever from the top, and the only interest I had in staying there, consisted in gaining a little more time to inspect the rail-road, and the means employed for drawing up the cars.

During the rest of the day I rambled over the flat plane of about three miles in length, which forms the summit of the mountain, and looked about for plants, of which I found but few. The air was very elastic and bracing, and as the day happened to be fine, the sudden transition from the heat of an American summer to the genial temperature of spring, which still lingered on this elevated spot, was very delightful to one's feelings.

Sunday, June 3rd. Proceeded this morning by the rail-road down the inclined planes to Holidaysburgh, where the canal-boat carries us on. The canal runs parallel to the course of the river Juniata, and passes through some very beautiful and romantic, though perhaps not very bold scenery. Slept that night as before, in the canal-boat, but without being so much crowded.

Monday, 4th. The morning was at first bright, but afterwards became overcast, and slight showers succeeded. On getting up I found we had reached Waynesburgh, more than 70 miles from Holidaysburgh.

The canal still pursued its course through the valley of the Juniata, which was often inclosed by high and nearly precipitous rocks, apparently all calcareous. They were covered over with timber, partly of oak, and partly of fir, except where its growth was prevented by the debris, which had fallen from above, and had collected in patches extending from the summit, and at the bottom is usually spread out into a sort of talus. This debris consisted of dark-colored blocks of an undecomposable limestone, and the contrast between the sombre hue of the latter, the bright green of the oak, and the graver foliage of the pine, by which the face of the hills was diversified, had a pleasing effect. The mountains are steep, but in general have an even summit, extending along in a series of parallel ridges, with valleys intervening. There is little outward sign of an uplifted chain, but the impression conveyed to the mind, is that of an extended table-land, with valleys of denudation cutting deeply into it. The Alleghanies indeed bear the same relation to the Alps, which the Derbyshire hills do to those of North Wales. There are many sweet spots for residences, but these are merely taken possession of by farm houses—not a single rural villa being seen in the whole country. Upon the whole, the tract travelled over on this day, and the one preceding it, strikes me as surpassing anything I have seen in America, excepting the banks of the Hudson; and as the charm consists in its pastoral character, rather than in its sublimity and grandeur, the beauties it possesses will be more developed in proportion as the country becomes more settled.

Passed the Juniata by an ingenious and simple ferry, consisting merely of an endless rope thrown across the river, and worked by water power. A cord attached, to the boat on the one hand, and to the endless rope on the other, drags it along.

The most attractive scenery however is said to lie near the junction of the Juniata and Susquehanna rivers, but it was dusk when we approached it, and night when we were ferried across

the latter river. In the morning Harrisburgh, the metropolis in one sense of Pennsylvania, appeared in view, and from thence we were conveyed by rail-road to Philadelphia, where we arrived at half past five, on Tuesday evening, June 5th, after having traversed a well cultivated country, pleasing in its natural features, but less mountainous and bold than that presented to us on the day preceding.

On approaching Philadelphia, we descended another inclined plane. The verdure and foliage round about this city were very striking, particularly in the neighbourhood of the Schuylkyl. I here resumed my former quarters at Mrs. Allabone's, which, after all I had since seen in America, struck me as the cleanest and most respectable boarding-house I had fallen in with. I stayed there till Saturday, doing little, except calling upon my various friends, and making preparations for my departure.

On Friday evening, June 8th, the weather being now settled, and the heat that of a genuine American summer, viz. 84° in the shade at noon, I strolled out to see the waterworks on the Schuylkyl, which do great credit to the taste of the Philadelphians, in having converted into an embellishment to their city, an undertaking designed originally merely for purposes of utility. There are several fountains spouting water, but no elaborate ornaments, and indeed the simplicity of the whole constitutes its great merit. We get a fine view from the top round the margin of the bason which receives the water.

I had the curiosity likewise to visit the ruins of Pennsylvania Hall, the building, which a few days ago, as the newspapers relate, fell a victim to the rage of the mob, in consequence of its having been used as a place of meeting for the Abolitionists.

The shell of this fine structure, which was valued at about 40,000 dollars, now alone remains. The complete preservation of the houses on either side of it, which were only scorched, although one of them consisted merely of wood, shews, how entirely it was in the power of the firemen to have put out the conflagration of the obnoxious edifice, if they had so pleased, and confirms the account given of the transaction in the public papers, in which they are represented, as having refused to let a single engine play upon the building in question—and this in sober-minded and law-respecting Philadelphia! Verily, the state of feeling on these points would seem to be much the same in the Eastern as in the Western states, and Judge Lynch, if he may not pass such bloody sentences in the Atlantic cities, as he does in the wilds of Mississippi and Arkansas, reigns nevertheless almost equally supreme in both. It is a fearful reflexion to a rich man in Philadelphia, that if he happens to be unpopular, his house and property may be burnt down, without a single fire-

man stirring a finger in his behalf. Observed likewise that the Anti-slavery Depot in Arch Street was shut up.

Saturday, June 9th.—Being loath to quit America without my luggage, of which no tidings had yet arrived, I determined on taking a trip to the Virginia Springs, and for this purpose proceeded to Baltimore, by the steam-boat as far as Newcastle, thence by the rail-road 16 miles, and afterwards again by steam, the whole distance being 115 miles, which we accomplished in seven hours. After resting three hours, I went on by rail-road to Washington, and arrived there by about six o'clock.

Sunday, June 10th. The extreme heat of the weather, which had now reached the culminating point of an American summer, rather curtailed my operations. Had an interview with Mr. Clay, who in private society possesses all that suavity of manner which so wins upon you in his public speaking. Chatted with him on West Indian affairs. He did not conceal his opinion, that the emancipation of our blacks would exert a powerful influence over the state of slavery in the United States. It was stated by a gentleman present, that cotton had never been successfully grown but by slave labour. I forgot to remind him of the East Indies.

Monday, June 11th.—Remained at Washington; attended the House of Representatives, and heard some indifferent speaking. Then saw the Patent Office, which contains a few curious models. Dined with Featherstonehaugh, and in the evening took my passage in the steamer which conveys passengers to the mouth of the Potomac Creek, within nine miles of Fredericksburgh. The heat all day was intense, but I felt relieved by the briskness of the air.

Tuesday, June 12th.—By two o'clock in the morning we had reached our destination, Potomac Creek, and met there with stages in readiness to convey us on to Fredericksburgh. We found the rail cars to Richmond awaiting us, and by them proceeded to Hanover Court House, where we breakfasted. We then turned off by another railroad, which extends at present 25 miles, after which a stage conveyed us to Charlottesville, a distance of 45 miles.

The road lay at first through wood, but the country, as we approached Charlottesville, had been cleared, and was comparatively in a fine state of cultivation. *Castanea pumila* was here in full blossom, and very abundant on the road side. As we approached our destination the country became beautiful. Near the town the surface was undulating, but considerable hills

bounded the horizon. Monticello, the seat of the celebrated Mr. Jefferson, and other country houses, were seen scattered about. Wheat, oats, rye, and Indian corn abounded. Arrived at Charlottesville in the evening, after a very hot ride; thermometer at two p. m. mounting up to 89½ in the shade. Found a decent inn there, kept by an Englishman.

Wednesday, 13th.—Visited the University, situated about a mile from the town. The buildings were planned by Jefferson, and, though with nothing grand about them, are convenient and elegant. They constitute a sort of oblong square, with one end open, another closed in by a building with a dome, called the Rotundo, which serves as a library and an incipient museum, and the two longer sides, composed alternately of houses for the professors and rooms for the students, which lie detached one from the other. The form of the rotundo is inconvenient for hearing, it being an almost perfect whispering gallery. It is however the only room wherein the public exercises of the University are conducted. The professors have separate lecture rooms. Those I saw were, Bonnycastle, who appears a superior man, Griffith, and Emmett.

The University of Virginia was founded by the influence of President Jefferson, on the same principles, and with the same motives, as those which influenced the founders of University College in the London University—namely, the exclusion of all theological instruction, with the view to bring together, on a footing of perfect equality, persons of all religious creeds and denominations; so that it bore somewhat the same relation to the older universities of the United States, which ~~the latter~~, when first established, did to Oxford and Cambridge. Within the last few years, however, public feeling has operated so far, as to induce the authorities to modify their system in the above respect, and, if I am rightly informed, lectures on theology are delivered, and religious service on Sunday given, within the precincts of the college, at the instance of the young men themselves.

In another respect also a departure from the original plan of the institution has been found necessary. According to Jefferson's own favorite scheme, the education of the students was to be conducted, solely by appeals to their reason, their hopes, and their generous feelings, and not by the fear of punishment, or the dread of disgrace. This Utopian system was soon found to fail, disturbances arose, the professors were defied, and Mr. Jefferson was himself obliged to come down to restore something like order. Since that time, I believe this University has been conducted, in respect to discipline, much on the same plan as the other seminaries of the United States.

Professor Rogers, who holds the chair of natural philosophy,

accompanied me over the College, and afterwards proposed my joining him in an expedition among the mountains, which I willingly agreed to do, especially as Mr. C. Bonnycastle, now residing with his brother the Professor, who was one of my fellow passengers in the Mediator, promised to be of the party.

Accordingly after dinner we proceeded to a village near the foot of the Blue Ridge, where we slept at a farm house, and in the morning joined the rest of the party at a tavern, six miles further, situated at the entrance of a glen called Turk's Gap, which cuts across the first ridge of mountains running from north to south through Virginia. After breakfast the party, consisting of Professor Rogers, his younger brother, Dr. Boyd, Mr. C. Bonnycastle, and myself, proceeded through this glen, traversing by its means the first of the chains which collectively bear the name of the Alleghanies.

The rocks composing it may be regarded as primary, and dip east at a considerable angle. They consist of mica slate, often talcose; of chlorite slate; of a conglomerate, in which rounded masses of the chloritic slate are imbedded in a kind of felspathic cement, highly indurated, and containing grains and cemented fragments of quartz; and of a very hard, silicious, indurated, and glossy sandstone. These rocks continue to the summit of the glen.

Having reached the crest of the ridge, and commenced our descent on the opposite side, we came upon the first of the rocks enumerated in Professor Rogers' table*, and designated by him as No. 1. It rested upon the primary slates, and dipped in a direction opposite to them, namely, to the west. It was a quartzous sandstone, sometimes highly indurated, and uniform in its texture, and at other times more friable. It contained cylindrical tubes at right angles to the stratification of the rock, which Rogers regards as the holes bored by certain marine animals at the time when the sandstone constituted the bed of the sea, a theory, in which I understand he has been anticipated by some person in England. In other cases the rock was modified by the infiltration of a felspathic paste, and contained rounded or angular fragments of quartz.

Descending into the valley, we next came upon bed No. 2, a limestone, often silicious, and containing veins and nodules of chert. Beds of hornstone lie in it, in which I hear that ammonites have been found, but the rock appears in general to be destitute of organic remains. This rock dipped at first to the west, but its strike, as we proceeded, was changed to the reverse direction, though it afterwards resumed its original west-

* See Professor Rogers' 1st Report on the Geology of Virginia, published at the expense of the State.

erly inclination. It was found to be succeeded by a schistose rock, called by the Professor No. 3, which was sometimes of a sandy character, and at other times much resembled clay slate.

Having descended the opposite side of the ridge, we entered upon the valley of Virginia, a wide, fertile, and extensive tract, intervening between this, the most easterly chain, called the Blue Ridge, and the next, designated by the name of the Great North West Mountain.

We dined at the house of a minister of the Methodist persuasion, an intelligent man, living in a beautiful spot under the Blue Ridge, who entertained us gratuitously with true Virginian hospitality. After dinner we proceeded along the valley towards Weyer's Cave. About ten o'clock at night we visited the cavern, and found it both lofty and extensive. Stalactites, as is usual in such places, cover its roof and sides, assuming various fantastic forms. One apartment was 250 feet long and 90 high. The rock is of course calcareous, and occurs in almost vertical strata. No bones have been discovered in it. It was past midnight before we returned to the public house, where we had to sleep, and the fatigues of the day secured us a good night's repose.

With respect to the vegetation, I may observe, that the *kalnia latifolia* abounds on the slopes of the Blue Ridge, and is of uncommon beauty. The *azalea viscosa* and *vaccinium frondosum* or whortleberry, are also common. The *liriodendron* likewise abounds. The views from the summits and sides of the Blue Ridge are extremely beautiful, extending to Charlottesville on the one side, and comprehending the whole width of the valley of Virginia on the other.

Friday, June 15th.—This morning after breakfast I parted with my companions, Professor Rogers and Mr. Bonnycastle, and proceeded under the guidance of Dr. Rogers, of Cincinnati, to Staunton, passing through the valley of Virginia, over a series of limestone strata. The valley was fertile and well cultivated, but presented none of those striking views, which the passage of the Blue Ridge offered us on the preceding day. Staunton itself is a little town, situated between two hills, containing two churches, and many neat houses. At a short distance is a very respectable and cleanly Lunatic Asylum for females, containing at present eighty patients. It is remarkable, that there was in it only one coloured woman, and she, poor creature, was in a state of absolute solitude, a perfect *Paria* in the midst of her companions in misfortune, for none of the white patients would either eat or sit with her. It was a consolation to be told by the Curator, that negroes are little subject to insanity. The want of intellectual excitement, arising

from the monotonous condition of their existence, and the state of ignorance in which they are maintained, may account for their comparative exemption from this calamity. The most highly toned instruments are most liable to get out of order.

The rotundo on the summit of the building commands a fine view of the neighbouring country, which is undulating, but not mountainous.

Saturday, June 16th.—Having parted with my friends, Dr. Rogers and his colleague, the preceding night, I started from Staunton at four in the morning by the stage, and proceeded along the valley of Virginia over a rough road to Lexington.

The views were often very pleasing, presenting a waving undulating foreground, dotted about with trees, and occupied by fine crops of wheat and Indian corn, and a mountainous background, generally thickly clothed with wood. I arrived at Lexington about two p. m. and after dinner was conveyed by the same stage within two miles of that singular curiosity, the Natural Bridge, the nearest point to it which can be reached in a carriage. We got to our destination about seven in the evening, and took up our lodging for the night at a farm house, where travellers are received.

Sunday morning, June 17th, I went to see this great natural wonder. It is an immense arch of limestone, said to be 210 feet high, and 90 in span at its broadest part, the rocks which cover it being 45 feet in thickness.

A rivulet called Cedar Creek flows under the bridge, and a road passes over it. The hollow in question forms part of a deep and in some places perpendicular chasm, which extends to a considerable distance on either side.

The view of the bridge from below, especially at a short distance from it, is singularly grand and imposing. In spite of the great thickness of the arch, there is a lightness and airiness in its appearance, which I should by no means have expected. It forms too a noble frame to the picture beyond, setting off, by the aid of contrast, the beautiful foliage of the trees that grow in the bed of the river, or on the summit and sides of the precipice above. Though apparently almost vertical, the walls of this precipice are yet sufficiently inclined, to have enabled one or two adventurous individuals to climb half way up the sides of the arch, and there to inscribe their names.

The formation of this arch is vaguely attributed to the previous existence of a cavern, which the stream now flowing underneath it has at length exposed to view, by a gradual removal of the contiguous rocks. But why the material which rests upon the hollow should have remained standing, when all

below and above it had been removed, is, I own, difficult of explanation; for we must suppose, that there was a time, when the rivulet itself stood higher than the summit of the arch, and when therefore it would have exerted an action upon the very limestone rock, which stretches across the chasm, and constitutes the natural bridge. How therefore came the latter to resist the corrosive influence of a current, which has worn away the rocks on either side of it?

After contemplating for a sufficient time this extraordinary natural phenomenon, I returned to Lexington on foot, having missed the coach; and as the day was hot, reached the inn a good deal fatigued.

Monday, June 18th.—Staid the whole day at Lexington, and took a botanical ramble, but saw nothing remarkable.

Tuesday, 19th, at two in the morning, we started for the White Sulphur Springs; and, soon after leaving Lexington, began to ascend the chain which bounds the valley of Virginia on the west, and which is the same as that noticed by me before under the name of the North West Mountain. The view from its summit, which must be extensive, was unfortunately obscured by clouds. We descended on the other side into a valley in which Jackson river flows, and observed, along the precipitous bank of that river, two arches in the rock of a very well marked character. The formation, I believe, was calcareous, and the curvature of the arches from east to west. About midday we reached the little town of Covington, which is beautifully situated. Indeed from the time the sun broke out, the whole of the ride presented us with the finest prospects.

We proceeded through a glen hemmed in by lofty mountains till we reached Callaghan's inn, where the valley swells out into ampler dimensions, forming a kind of basin encompassed by rocks. Here is the junction of three roads, one being that which we had travelled on from Lexington; another leading to the White Sulphur Springs and the town of Louisburg; and a third that to the Warm Springs. From Callaghan's we ascended the Alleghany mountain (as it is termed) to the White Sulphur Spring. On the sides of the road were the most beautiful azalias and rhododendrons that I had yet seen. The red and yellow species of rhododendron abound, but the blue,* so common in the first mountain I ascended before reaching Covington, was here absent. The liriiodendron was partly out in

* *Rhododendron maximum* var. *purpureum*.

flower. I reached the White Sulphur Spring about sunset, and took up my quarters at the inn kept by the proprietor.

Wednesday, June 20th.—Spent the day at the White Sulphur Spring. The guests are accommodated in little wooden cabins ranged along the sides of a parallelogram, which, being painted, and decorated with galleries, supported in front on little wooden pillars, have a cheerful and picturesque appearance, perhaps all the more from their irregularity. The ground inclosed within these buildings slopes upwards to the north, and contains some fine trees. In the midst stands a circular temple, from which the spring issues. It smells strongly of sulphuretted hydrogen, blackens lead, and has a disagreeable saltish and bitter taste. The name of White Sulphur is given it from the white colour of the confervæ that grow upon its surface. The view of the valley, and of the mountains that surround it, is extremely beautiful. In the afternoon I strolled out in the direction of Louisburg, but met with few plants.

Thursday, 21st.—The White Sulphur Spring did not offer any great inducement to a prolonged stay; the place indeed, though far from containing its usual complement of guests, was filling rapidly, but there was not much going on, except a snug little gambling establishment, conducted under some trees at a modest distance from the other parts of the Concern. No horses or carriages were to be obtained; and there seemed therefore to be but few resources for a solitary traveller like myself. I was also anxious to get on to the Warm Springs, in order to verify the observations, made with respect to the position of the rocks in that locality by professor Rogers, which promised to afford an important confirmation of my own preconceived views, with respect to the connexion, between the existence of thermal waters, and that of great physical convulsions in the surrounding country.

Professor Rogers had shewn, that these Thermal Waters gush out exactly at the point at which the rocks of the Alleghany chain appear to have been upheaved, the strata on the east of the springs dipping at an high angle to the east, those on the west of them to the west, and the same members of the series being repeated on either side of this anticlinal axis.

Now, although we could build but little upon the existence of a warm spring in connexion with an ordinary fault, knowing how often cold springs appear under similar circumstances; yet when we discover one of the former kind in a position, which an independent observer has fixed upon, as exactly coinciding with the line along which an entire range of mountains has been upheaved, we may fairly, I think, regard the correspondence between the two phenomena, as a proof of an identity, subsisting,

between the cause which has disturbed the one, and that which communicated the increased temperature to the other.*

At day-break therefore I started for the Warm Springs, returning for a considerable part of the way by the same road that had brought me on Tuesday to my starting-place. We reached Callaghan's inn to breakfast, afterwards proceeded up a pretty considerable hill in a mountain defile, and then descended as far on the opposite side. The same kind of scenery prevailed, only that the views were more circumscribed in consequence of the density of the forest, a very small proportion of the country we travelled over having been reclaimed.

After a ride of about forty miles we reached about one o'clock the Hot Spring, which is situated in a narrow valley bounded by lofty and wooded hills. Its situation certainly does not strike one so much as that of the White Sulphur, but it is nevertheless pleasing and romantic. The accommodations which the place affords are somewhat of the same character as the former, but inferior in style and pretensions. They consist of an hotel, which is a long building with a piazza in front, and of a number of detached wooden cabins dotted about the grounds without much attention to symmetry. I collected the gas which issues in bubbles from the swimming bath, the temperature of which I found to be 102°. I could detect in it but little carbonic acid, probably not more than one per cent., but phosphorus caused an absorption of four per cent., taking the mean of three experiments which corresponded very nearly. Hence I set down the composition of the gas as being 6 oxygen, 94 nitrogen. The water is destitute of taste, and perfectly pure and limpid, but some travertine, seen on its borders, shews the presence in it of calcareous matter. I next examined for about a mile the rocks to the west of the spring. They were nearly vertical, with a slight inclination to the west, and consisted of a ferruginous sandstone, a white sandstone, a shale, and a fossiliferous limestone.

In the morning of Friday the 22d, I walked to and from the Spa, called, in contradistinction to the Hot Spring before alluded to, the "Warm Spring," in consequence of its somewhat lower temperature. Though both gush out of, what may be termed, in an enlarged sense, the same valley, still there are several inequalities of ground intervening between the two places, and a considerable hill to be surmounted in crossing from one to the

* See a Memoir of mine "On Thermal Springs, and their connexion with Volcanos," in Jameson's Journal for April, 1832, and my "Report on Mineral Waters," in the Transactions of the British Association for the advancement of Science, for 1836.

other, not to speak of minor depressions and elevations. In one of these bottoms, nearly midway between the two springs, I had an opportunity of observing the stratification of the rock, which was a blue limestone, destitute of organic remains, and dipping at a high angle towards the west. The same remark applies to the strata of shale, sandstone and limestone, which are found on the hill beyond the Warm Springs; for here too we observe a westerly dip, and a degree of inclination in the beds so great as to approach to verticality.

The Warm Springs themselves (for there are two issuing from the ground very near to each other) possess a temperature of 96° Fahr., and copiously evolve gas, which, according to my analysis, consists, of carbonic acid 6 per cent., oxygen 4, and nitrogen 96. The water is not abundant enough to supply separate baths for the two sexes, but it is used at one period of the day by men, and at another by women. The place itself is a pretty sequestered spot in the midst of mountains, and contains an hotel, which seemed well kept, and afforded me the best fare I had met with in Virginia—a State, it must be confessed, not over famous for the goodness of its inns.

On Saturday, the 23d, the manager of the bath was obliging enough to drive me out with him, to see a cascade called the Falling Spring, situated about twelve miles to the south. The way to it was along a most terribly jolting road, with numerous short ascents and descents, lying, as usual, through an almost continuous wood, in one of the breaks of which was the most beautiful bed of kalmias in full blossom, spreading over a field of many acres, which I have ever seen. The Falling Spring, as it is called, is a cascade, which, as it descends a precipice nearly 100 feet in height, must have a fine effect when there is plenty of water, but at the time we visited it there was so little, that it afforded to those persons, who found a shower bath grateful in the sultry weather we were experiencing, no more water than was necessary for that purpose. The rock is of sandstone, presenting an abrupt perpendicular escarpment; but the surface, over which the water of the cascade flows after its descent, is thickly incrustated with tuff. There were but few plants, except *Oenothera fruticosa*, *Gillenia trifoliata*, (extremely common everywhere), *Sedum ternatum*, an *Orchis*, probably a *Neottia*, and *Triosteum perfoliatum*. The rocks are principally calcareous, lying in nearly vertical strata.

Sunday, June 24th.—Strolled about in the neighbourhood of the Hot Spring, as far as a sulphur spring, two and a half miles distant, the temperature of which was 62°. The stratification

of the rocks on this side of the Warm Springs I have noticed elsewhere.

Monday, 25th.—Examined, in the morning, the gas issuing from the Spring, called the ladies' sweating bath from its higher temperature. The gas contained about eleven per cent. of carbonic acid, (mean of three experiments), with phosphorus there was no absorption, but on the other hand there appeared to be no increase of volume after this body had been heated in it. I suppose therefore I must reckon two per cent of oxygen as being present in the gas evolved, setting down the remainder as nitrogen.

Being desirous of observing the structure of the rocks on the west of the Hot Springs, I started for Cow Pasture Valley, and, after being conveyed by the stage, to the Warm Spring, and about seven miles beyond that place, proceeded the rest of the way on foot, traversing a very pretty country, sequestered, pastoral, and apparently fertile. It was not however much indebted to art; for we arrived about sunset at a stream, the only bridge over which had been washed away some time back, and no attempt made to supply its place. Here, as we were on foot, there was no alternative but that of taking off our clothes, tying them up in a bundle, carrying them on our heads, and wading through water nearly chin deep. Fortunately the warmth of the weather rendered the expedient by no means a disagreeable one.

We slept at a public house near to a sulphur spring called Millborough, which is occasionally frequented by invalids. It was cold, and seemed to be but weakly impregnated. We supped on venison, which here costs only six cents per pound, beef being about the same, and mutton still cheaper. In fact a fat sheep is sold for three and a half dollars.

Tuesday, 26th.—After an early breakfast, we set off on our walk, back to the Hot Springs, and had to wade the river, in the same style as on the evening preceding.

The valley of Cow Pasture River is quiet, luxuriant, and picturesque, though with no grandeur of mountain scenery to boast of. In the limestone rocks which here make their appearance there is a cave, through which a stream of cold air is continually rushing. It is hence called the Blowing Cave. The air, traversing a mass of rock which retains the mean temperature of the climate—a low one from the elevated position of the locality, comes out considerably cooled, and there will be a constant current in that direction in which the temperature of the external air is highest, as the cold air near the

mouth of the cave will there undergo the greatest degree of rarefaction, and consequently possess the strongest tendency to issue forth. After following the course of this valley, we proceeded up the Warm Spring mountain, and had more than three miles of constant ascent to encounter. On the summit however we were rewarded by a most extensive view. A descent of a mile and a half brought us to the Springs, and on the way I had the satisfaction of tracing the succession of rocks described in Professor Rogers' plan, and of observing, that as we approach Warm Spring mountain, they dip at a higher and a higher angle, till at length they become nearly vertical. We notice the same rocks, as in the valley west of the Hot Spring, here repeated, but dipping in just the opposite direction. Thus the existence of an anticlinal axis, along the line from which both the springs issue, seems very well made out. I found the same limestone rock as at the Hot Springs, in the lowest part of the valley, and observed it likewise in a bottom intermediate between the two localities. Now the latter lie north and south of each other, and consequently issue from the rent produced by the upheaving of the rocks on either side of them. The vegetation is here luxuriant, and the trees and shrubs of great beauty.

Wednesday, June 27th.—At five this morning I took a final leave of the Warm Spring, after bathing once more in its delicious waters. Proceeding by the stage to Holidaysburgh, we first crossed the same mountain which I had traversed the day before, then went for some way along Cow Pasture Valley, and afterwards through a valley intervening between the North Mountain and the Blue Ridge. The country was pleasingly diversified by hill and dale, forest, pasture, and arable land, but there was nothing very bold or striking in the scenery. Dined at Augusta spring, a weak, cold, sulphureous, mineral water, in no great repute. Arrived at Holidaysburgh about nightfall, having accomplished rather more than fifty miles since morning.

Thursday, 28th.—We started before four o'clock in a stage with eleven inside passengers, two of them children. Had reason to set down the Americans as more accommodating in these conveyances than the English; though it must be confessed, that to consult the convenience of one individual at the expense of the comfort of ten, as was in this instance done, does not seem good as a general rule. A fat Quaker lady,

"who room for twenty took,
Pious and big as a Polyglot Pentateuch,"

begged so hard for herself and her little black slave to be admitted, after the stage had obtained its full complement of passengers, that one person gave in his opposition, and then another, until an appeal was at length made to the driver, who merely said, with the usual *sang froid* of these gents in America, "O, suit yourselves; you may have fourteen inside if you like it, for ought I care." Accordingly the lady's party gained the day, and we did not get on the better by this addition to our numbers, either in point of comfort or expedition. The road was as bad as seemed at all compatible with travelling in so lumbering a vehicle, being rough in all parts, and actually dangerous in some. Twice during the journey the wheel got so implanted in the mud, that all the available strength of the party was put into requisition to assist in the task of extricating it. On the second occasion, which happened after dark, half an hour at least was consumed in the labour of dragging the ponderous concern out of the mire, the whole of the male part of the passengers literally "putting their shoulders to the wheel," and applying the stakes taken from the snake-fence close to the road, as levers to elevate it from its sunken position, or as planks on which it might glide until it had arrived on *terra firma*. It was curious to observe the tranquillity with which the Quaker lady remained all the time in the coach, whilst the rest of us got out, under the apprehension lest the horses, in their efforts to pull the vehicle out of the mire, should upset it. Nothing however seemed to disturb the placidity of her countenance. Notwithstanding these little adventures, we arrived in safety at Winchester about eleven at night, having accomplished more than seventy miles in nineteen hours, stoppages included.

The road this day lay through the valley of the Schenandoah, having on its right the Blue Ridge, and on its left a fine tract of cultivated country. The Blue Ridge, like the other chains composing the Alleghany range, is remarkable for its regular and even outline; being interrupted only at distant intervals by gaps, of which advantage is taken for roads. One of these gaps leads to Staunton.

It is throughout a pleasant ride, but the latter portion, twenty or thirty miles from Winchester, abounds particularly in fine views. About fifteen miles south of that city, I saw one of the best country seats that had come under my notice in America, placed too in as fine a position as any in the whole country. It belonged to a gentleman named Hoyte, and is at present occupied by his widow. The rarity of mansions of a better kind than farm houses, induces me to note down any such that occur. The rock all along the road was limestone, (No. 2. of Rogers), which protruded in large irregular masses through the soil, proving the

main cause of the great unevenness and discomfort of this route. The dip of this limestone is in general towards the Blue Ridge. The fare at the inns this day was very moderate, as indeed appears to be the common case in Virginia. At Charlottesville and at Staunton indeed, I found them tolerably comfortable, and the table at Colonel Fry's at the Warm Springs was worthy of all commendation, but for the most part there is great slovenliness, and but indifferent eating, at the houses of public entertainment throughout this State.

Friday, 29th.—Started at six o'clock for Harper's Ferry by the rail-road, reached that place at half past eight, and took up my quarters for the day at the inn, in order to have time for contemplating the fine natural scenery which Mr. Jefferson has so much dwelt upon.

Harper's Ferry, as it is called from a ferry that existed there before the erection of the wooden bridge which now spans the river, is situated in a gap, or chasm, of the Blue Ridge. For several miles before reaching it, from the direction of Winchester, we have to proceed through a gorge in the Blue Ridge, which, at Harper's Ferry, meets at an angle another in which the river Potomac flows. Thus the two rivers, the Schenandoah and the Potomac, meet at an acute angle, in this point, having had between them, previously to their junction, an elevated tract of land, which rises pretty abruptly from the Ferry.

By ascending this neck of land, we gain a fine view of the whole pass. A rock on the summit is called after Mr. Jefferson, who was wont to place himself upon it to contemplate the scenery, worthy, as he says, to repay one for a voyage across the Atlantic. I know not whether I can join in this extreme eulogy, though the scene is doubtless a striking one. On either side of the pass in which the united stream flows, the rocks are lofty, and almost perpendicular, covered with timber to their very summits, and presenting to the eye a nearly even and regular line. At bottom however the naked rock protrudes in various places, and is found on examination to consist of clayslate alternating with a quartz conglomerate, in strata highly inclined to the east.

The extreme heat of the weather, which was stated to me as being 96 in the shade, (for having broken my own thermometer I was obliged to content myself with such information on this point as I could obtain,) rather curtailed my walks, but in the evening, after having climbed up to Jefferson's Rock, I proceeded along the banks of the Potomac for a mile or two, and then returned through a glen almost covered with azaleas and kalmias, which when in flower must present a brilliant appear-

ance. On my return, I had a stroll along the banks of the Schenandoah by the light of the moon, enjoying the brilliancy of that luminary, and the flitting light of the fire-flies, less numerous here however than they were in Arkansas even in the early spring. I cannot imagine a hotter place in summer than Harper's Ferry, from its position between two precipitous ledges of rock, reflecting their heat upon the valley in which it stands; nor can I conceive any place more likely to be visited with extreme cold, whenever the wind in winter blows either up or down the valley. Heat so great this night as to prevent me sleeping.

Saturday, June 30th.—I proceeded by the rail-cars to Baltimore, passing along some very fine and romantic scenery. For the first twelve miles till we reach the Point of Rocks, the pass continues as narrow and precipitous as it is at Harper's Ferry. The rocks at first were of the same description as before, but near the Point of Rocks occurs that conglomerate, of which the columns of the House of Representatives at Washington are constructed, and a little serpentine is seen beyond it. Having proceeded through this defile, we entered upon a fine arable and pasture country, diversified with hill and dale, which spreads over a considerable part of Maryland. Here the crops of wheat, rye, and maize, were most luxuriant. The river Potomac pursued its tortuous and rocky course through the midst, foaming and roaring as it went. We arrived at Baltimore about five p. m., after experiencing on the road a severe thunder storm, accompanied with deluges of rain. This cooled the air somewhat, and enabled me to proceed to Philadelphia by the steam conveyance with less inconvenience. We slept in the vessel, as we could, upon benches, and arrived at our destination by about four o'clock on Sunday morning.

Sunday and Monday was all the time I could allow myself at Philadelphia, for seeing my friends, and making arrangements for departure. My luggage had at length arrived from the West, and the time was approaching which I had fixed upon for setting sail from New York. On Monday I went over to Bartram's garden, where I saw some fine trees—especially catalpas, magnolias, &c. The *cupressus disticha*, from its size and height, is the pride of the garden, which is kept in a slovenly manner. I also got a glimpse of Peal's new museum, which does great credit to his taste, and to the spirit of his supporters. There is one fine saloon with galleries extending round its sides, fitted up with cases of natural and artificial curiosities. The skeleton of the mastodon in the centre is however the great object of interest. It is to be hoped, that

other cities will be excited to emulate Philadelphia in respect to museums, until they become more of a national object.

On Tuesday, July 3rd, I started for New York, and arrived there to dinner, though we met with some little delay, in consequence of the immense number of passengers that crowded the steamer and the rail-road cars by which we were forwarded. I calculate that not fewer than 700 persons were in the former, the cause of this great pressure being the holiday of the Declaration of Independence, which was to be celebrated the next day. I found that almost all my friends at New York had gone into the country to avoid the bustle.

Wednesday, July 4th.—The Jubilee was ushered in, with fireworks, firing of pistols, blunderbusses, and noise of all sorts; but when one strolled through the streets, the air of dulness and apathy, that seemed to pervade the people, formed a striking contrast to what one witnesses during a holiday in France. I went into the Tabernacle, where I heard from Dr. Becher, the President of a College in Illinois, a long and very prosy address. The spirit of it was decidedly abolitionist, and there were some good home thrusts at the extraordinary misconceptions that exist in America, as to what constitutes genuine liberty. Forest, the Tragedian, gave a more popular oration, but I could not get to hear it. In the evening I went to the Castle Garden, and saw some fireworks. They were rather scanty in number, considering the vast concourse of people present. A very pretty Mongolfier balloon went up, emitting fireworks when it had reached a certain elevation. The great merit however of the scene arose from the situation itself, standing out as it does in the harbour, commanding beautiful views of the city and bay, and illuminated by all the brilliancy of an American moon. No fear of colds either, as in England, from exposure to the night air.

Friday, 6th.—Went by the steamer to South Amboy, and collected plants in the adjoining woods, for which I paid dear from the annoyance experienced from mosquitoes. I have nowhere in America found them so numerous. Witnessed the disgusting custom of feeding swine on the large crabs called horse-shoes, which at this season frequent the coast in vast numbers. The crabs are thrown into a kind of pen, into which the hogs are allowed to enter; and, as the meat is only in part devoured, the stench for many yards from the spot is horribly offensive. It does not appear, that the hogs are deterred by the effluvia, or that the farmer regards the putrefactive condition of the food any sufficient reason for excluding them from

it. All that was necessary, he said, was to *sweeten* them before they were sent to market, by putting them for a short time on a course of Indian corn.

From Saturday till Monday, chiefly occupied with arrangements for my departure. In the evening of the latter day crossed over to Hoboken, and obtained specimens of serpentine, hydrate of magnesia, carbonate of ditto, and an asbestiform mineral, called marmolite; enjoying at the same time some charming views of New York and of the Hudson River from the walk along its banks. The country now looks most verdant and beautiful.

At length, on Tuesday, July 10th, the time for my departure from the New World had arrived; and at eleven o'clock on that morning I embarked on board the packet ship *Samson*, Captain Sturges, for London. By the afternoon the steamer had towed us out into the main sea, and a fair breeze augured well of our future progress. Nor were we disappointed. Though the weather was damp and misty, the wind continued favourable, and throughout the voyage never increased to a gale. I therefore experienced few of the ordinary miseries of a sea voyage; and on the 18th day came in sight of Portsmouth. Nothing could be better than the arrangements on board, and as there were few passengers, each one had a cabin to himself.

And here terminates my tour through the several portions of the great American Republic, from which, if I have gleaned a more scanty harvest than my sanguine expectations had previously prepared me to anticipate, I may at least hope to have derived, in addition to some insight into the physical characters of a vast continent, a juster appreciation of a people closely connected with ourselves, by the ties of origin, of language, and of national physiognomy. No doubt, in looking over the foregoing pages, some inconsistencies may be detected between the impressions, with respect to the country and people, which arose in my mind from the occurrences of each day—temporary annoyances may have imparted a too unfavourable colouring to them at one time, or acts of personal kindness and civility may have given to my view of things too partial a gloss at another. Nevertheless, I think, that those who may peruse hereafter these rough notes, will collect from their general import, that, although not a servile admirer of the American people, I am disposed to give them credit for the possession of many of those sterling qualities, which, in a state of fuller development, at least as we are apt to flatter ourselves, constitute the basis of the British

character, and furnish the true explanation of the secret of our national greatness.

With respect too to those traits, which are apt to strike a stranger as most annoying and repulsive in his intercourse with American society, I fear it must be admitted, that they are often only exaggerations of qualities of mind, which they have inherited from the parent stock, and which foreigners in this country find but too much reason to remark in ourselves. I do not of course allude to the discomforts which an Englishman encounters in the United States, from the existence of practices, which a more advanced stage of refinement will by degrees efface—but to that restless spirit of adventure, that intemperate after gain, that comparative indifference to mere amusement and recreation, which seem to be the necessary attributes of a people, designed by Providence to act, as it were, as the pioneers of civilisation, and to extend the empire of its laws and institutions over a New Continent.

To the Anglo-Saxon race, as to the Roman in ancient days, may be applied the words of the Poet, with this only difference, that the conquests of modern civilisation are effected, not by the ravages of hostile armies, but by the slow and pacific progress of commerce and emigration :

*Excudent alii spirantia mollius æra :
Credo equidem, vivos ducent de marmore vultus :
Orabunt caussas melius ; cœlique meatus
Describent radio, et surgentia sidera dicent :
Tu regere imperio populos, Romane, memento ;
Hæ tibi erunt artes.*

And in adverting to the coldness of temperament which is attributed to the American people, their indifference to social intercourse, and their liability to be acted upon by an appeal, rather to their interests, than to their feelings, I may remark, that the influence which would be exercised, by the peculiar circumstances of their position, on a nation possessing the vigorous and practical understandings which distinguish the British race, may account for much that is defective, and excuse much that appears unamiable.

We must also recollect, that if the Americans exhibit in an exaggerated degree those failings which other European communities ascribe to ourselves, they also possess in the main those domestic virtues which the latter are ready to concede to us. Nor can there be a greater mistake than to suppose, that frivolity of mind is any security against selfishness, or that men are more prone to obey the laws of morality, because they display a less degree of earnestness in the prosecution of their plans of gain or of ambition. I forget whether it is Madame de Stael, or

Rousseau, who has observed—but the remark, from whomsoever it may proceed, appears a sound one—“that a fixity or steadfastness of character, whether in nations or in individuals, is a quality highly favourable to morality. He who can be moved from his purpose by every gust of passion, or fascination of novelty, is all the more liable to swerve from the path of rectitude, when interest points out to him a course opposed to that of duty.”

I see therefore no reason to doubt, that, with increasing prosperity and more advanced civilisation, the American people will obtain also a greater elevation of character—or that the ascendancy, which they appear to be acquiring over the other nations of European extraction spread over the vast regions of the New World, is an omen of future good to the human race, and a circumstance which may be regarded with just pride and complacency by their brethren on this side of the Atlantic.

With respect to their Institutions, I have said less concerning them, than I might have otherwise done, had I not been from the first persuaded, that democracy is a necessary consequence of such a state of society as that which exists in the United States, or at least one only to be exchanged for a stringent military despotism.

To point out disadvantages which appear irremediable, is neither a very useful, nor yet a pleasant task; but I have nevertheless on several occasions shewn myself sensible to the evils which such a government entails—to the tyranny of public opinion, the truckling to a mob, the tendency which it has to throw the conduct of political affairs in a great measure out of the hands of the most upright and the most enlightened portion of the community.

These evils are, it must be confessed, in a certain degree moderated in the United States, by the general diffusion of competency, education, and common sense; but in Europe they would become intolerable, as they would extend to the destruction, not merely of the legitimate influence of property over numbers, but even to the destruction of property itself, and thus render the other alternative of an arbitrary government a condition infinitely preferable.

But I am loath to wind up with a sentence, which, if it should ever meet the eye of brother Jonathan, might gall the sensitiveness of so thin-skinned a personage.

In bidding farewell then to a land, in which I have experienced so much hospitality and kindness, as has at times made me forget, that the broad Atlantic separated me from my native shores—I will conclude these hasty notes with the remark, that since, in my estimation, political institutions are one only

amongst many elements that together serve to determine the character and condition of a people, the unfavorable opinion, which my *prejudices* perhaps may have led me to entertain, with respect to the form of government which is established in the United States, has not caused me to overlook the points, in which the citizens of this Republic possess a real superiority over the nations of the Old World.

Such, for example, is the diffusion, in the better portions of the Union at least, of those moral habits, and of that general respectability of demeanour, which belong peculiarly to the middle classes in Europe, over a comparatively wider area of society—such, the surprising advances which they seem to be making in material prosperity—such, their rapid conquests over external nature—and above all, that exemption from absolute want, which every individual, to whom God has given but the use of his limbs and faculties, may feel himself almost secure of obtaining, in some portion or other of a Continent, at once so boundless in its resources, and so vast in its extent.

Ref. to Journal. Page.	ITINERARY. <i>Place, Latitude, and Longitude.</i>	TEMPERATURE OF SEA.	METEOROLOGICAL OBSERVATIONS.				
			1837.	Temperat. and humid. of air.		Solar Rad.	
				Thermometer.		Acti-nom-eter.	
				Dry.	Wet.		
1	Off coast of Hampshire	..	Jul. 22,	12 a. m.	67	..	7.0
	Off coast of Dorset ..	..	23,	12 a. m.	63	57	6.0
	Lat. 49.38 .....	..	24,	12 a. m.	65	60	8.0
	49.1	65	25,	1 p. m.	70	58	9.5
	49.28 Long. 6.36	64	26,	12 a. m.	68	59	7.0
	50.5 9.19	64	27,	4 p. m.	66	..	7.5
	.... 12.0	..	28,	3 p. m.	..	..	..
	49 12.7	..	29	..	..	..	..
	47.27 13.35	64	30,	3 p. m.	65	56	7.0
	48.5 15.30	64	31,	3 p. m.	65	..	8.0
	48.40 17.40	..	Aug. 1,	3 p. m.	..	..	..
	46.45 17.34	..	2,	3 p. m.	..	..	..
	44.40 20.15	66	3,	3 p. m.	66	56	8.0
	43.41 21.42	68	4,	3 p. m.	..	..	..
	43.43 24.18	68	5,	3 p. m.	66	..	8.0
	43.18 28.38	68	6,	3 p. m.	66	..	8.0
	43.30 30.45	72	7,	3 p. m.	74	..	..
	.... 32.9	72	8,	3 p. m.	74	..	..
	44.45 33.22	71	9,	3 p. m.	72	..	..
	45.12 34.52	71	10,	3 p. m.	..	..	3.0
	45.36 37.3	71	11,	3 p. m.	72	..	..
	45.40 40.14	65	12,	3 p. m.	60	..	..
	44.50 42.2	64	13,	3 p. m.	59	..	..
	42.29 45.45	72	14,	3 p. m.	62	..	..
	41.10 48.23	66	15,	3 p. m.	66	..	..
	41.30 50.48	64	16,	3 p. m.	67	..	..
	42.30 52.10	{ 58 } { 64 }	17,	{ 12 a. m. 3 p. m.	..	..	..
	44.00 53.51	60	18,	3 p. m.	..	..	..
	42.52 57.18	61	19,	3 p. m.	60	..	..
	.... 57.58	63½	20,	3 p. m.	67	..	..
	.... 62.0	66	21,	4 p. m.	69	..	..
	41.0 65.43	62	22,	4 p. m.	64	..	..
	40.40 67.24	69	23,	4 p. m.	65	..	..
39.54 67.34	72	24,	4 p. m.	72	..	..
39.50 69.27	65	25,	4 p. m.	67	..	..
39.27 71.13	74	26,	4 p. m.	..	..	..
13 Off Sandy Hook ....	..	27,	12 a. m.	..	..	..
Anchored at N. York	..	28,	11 a. m.	85	..	..
At New York .....	..	29,	2 p. m.	..	..	..
Ditto .....	..	30,	.....	85	..	..

Ref. to Journal. Page.	ITINERARY. <i>Place.</i>	METEOROLOGICAL OBSERVATIONS.		
		1837.	<i>Temper. of air.</i>	<i>Solar Radiat.</i>
			Therm. Dry.	Actino-meter.
14	New York	Aug. 31, 10 p. m.	77	
15	To West-point	Sept. 4		
16	To Albany	6		
—	To Lebanon	9		
18	To the Shakers' village	10, 12 a. m.	75	14.85
24	To Ballston	11, 7 p. m.	57.5	
25	To Saratoga	12		
26	To Whitehall	13		
27	On Lake Champlain	14		
—	To Montreal	15		
28	To Quebec	17		
30	Started for Montreal	21		
—	In the steamer on the St. Lawrence	22		
31	Reached Montreal ..	23		
—	On the Ottawa river	25		
32	Reached Bytown	27		
34	On Lake Chat.	28		
34	On the Rideau Canal	29		
35	Reached Kingston ..	Oct. 2		
36	On the Bay of Quinte	3		
38	Reached Cobourg	4		
—	Reached Toronto	5		
39	On Lake Simcoe	10		
40	At Mr. Lally's	12		
42	On Lake Simcoe	13		
43	To Toronto	15		
—	To Niagara Falls	17		
—	To Buffalo	18		
44	At Buffalo	19		
45	Back to Niagara Falls	20		
48	To Leweston	23		
49	To Rochester	24		
50	To Auburn	26		
—	At Auburn	27		
51	To Syracuse	28		
52	To Trenton Falls ..	29		
—	At Trenton Falls	30		
53	To Albany	31		
—	To New York	Nov. 1		
54	To Newhaven	2		

Ref. to Jour- nal. Page	ITINERARY.	METEOROLOGICAL OBSERVATIONS.		
	Place.	1837.	Temper. of air.	Solar Radiat.
			Therm. Dry.	Actino- meter.
56	To Hartford	Nov. 6		
59	To Amherst	7		
61	To Worcester	9		
62	To Boston	10		
—	Boston	20	65	
—	Ditto	21	65	
—	Ditto	26, 12 p. m.	23	
75	To New York	28		
77	To Philadelphia	Dec. 5		
—	Philadelphia	11, at sunrise	26	
—	Ditto	15, 8 p. m.	23	
—	Ditto	18, 12 a. m.	57	
94	To Baltimore	29	43	
95	At Baltimore	30	39	
		1838.		
97	To Washington	Jan. 1	32	
—	Washington	2	35	
—	Ditto	3	29	
—	Ditto	4	39	
—	Ditto	5	45	
—	Ditto	6	35	
—	Ditto	7	33	
—	Ditto	8	45	
—	Ditto	9	35.8	
—	Ditto	10	25.8	
—	Ditto	11	18.5	
107	To Richmond	12		
108	Richmond	13, { 8 a. m.	23	5½
		{ 1 p. m.	60	
110	Ditto	14, { 8 a. m.	32	
		{ 1 p. m.	60	
112	Ditto	15, { 2 p. m.	55	
113	To Halifax	16		
115	South Washington	17		
—	Wilmington	18, 6 a. m.	70	
116	To Charleston	19		
—	Charleston	20, 1 p. m.	43	
—	Ditto	21	40	
—	Ditto	22	36	
—	Ditto	23, { 7 p. m.	32	
		{ 2 p. m.	45	

Ref. to Journal. Page.	ITINERARY. Place and Latitude.	TEMPERATURE OF SEA.	METEOROLOGICAL OBSERVATIONS.				
			1838.	Temperat. and humid. of air.		Solar Rad.	
				Thermom.	Dry.		Wet.	Acti-nom.
116	Charleston ..	..	Jan. 24, 7 a. m.	36			
118	Ditto .....	..	25	46			
120	Ditto .....	..	26, 8 a. m.	55			
—	Ditto .....	..	27, 7 a. m.	61			
—	Ditto .....	..	28, 7 a. m.	58			
—	Ditto .....	..	29, { 7 a. m.	48			
			at night	52			
122	Ditto .....	..	30, { 7 a. m.	48			
			12 a. m.	62			
—	Ditto .....	..	31, 7 a. m.	53			
—	Ditto .....	..	Feb. 1	41			
—	Ditto .....	..	2	42			
—	Ditto .....	..	3, { 7 a. m.	42			
			at night	35			
—	Embarked for Isle of Cuba	} 48	4, { 7 a. m.	30			
		} 68	1 p. m.	37	31		9
123	Lat. 30.2	} 64	5, { 12 a. m.	45	42		3
		} 62	8 p. m.	45			
—	28.10	62	6, 12 a. m.	53	45		
—	27.30	64	7, 12 p. m.	69	63		11
		73	8, 8 a. m.	73			
		75	9, { 8 a. m.	73			
		76	2 p. m.	69	66		16
		76	10, { 12 a. m.	68	60		
		76	sunset	72			
—	24.44	76	11, 12 a. m.	65	59		13
—	23.28	76	12, 12 a. m.	72	65		14
127	Havanna	76	13, { 12 a. m.	81	71½		18½
			6 p. m.	82			
—	Ditto .....	..	14, 12 a. m.	82			
—	Ditto .....	..	15, sunrise	77			
			12 a. m.	84	70		16
—	Ditto .....	..	16, sunrise	78			
			2 p. m.	84	72½		
—	Ditto .....	..	17, sunrise	78			
			night	72	68		17
131	Matanzas ....	..	18, sunrise	72			
			2 p. m.	79	71		
—	Ditto .....	..	19, sunrise	65			
			12 a. m.	81	71		17

Ref. to Journal. Page.	ITINERARY. <i>Place, Latitude, and Longitude.</i>	METEOROLOGICAL OBSERVATIONS.			
		1838.	<i>Temperat. and humid. of air.</i>		<i>Solar Rad.</i>
			Thermom. Dry.	Wet.	Acti-nom.
132	Canamar	Feb. 20,	sunrise 64		
			12 a. m. 81	69½	
—	Ditto	21,	sunrise 63		
			12 a. m. 85	67	20½
—	Ditto	22,	sunrise 70		
			12 a. m. 71½	69	
			sunset 66		
—	Ditto	23,	sunrise 56		
			12 a. m. 71	63½	
			sunset 66		
134	Matanzas	24,	sunrise 56		
			12 a. m. 70	63½	11
			sunset 67		
135	Havanna	25,	sunrise 60		
			1 p. m. 79	..	13
			sunset 71½		
—	Ditto	26,	sunrise 62		
			1 p. m. 80	65½	13
			sunset 69		
—	Ditto	27,	sunrise 68		
			12 a. m. 77	64½	13
			sunset 68		
—	Ditto	28,	sunrise 68		
			12 a. m. 75	62½	12
136	Gulf of Mexico ... } 24, 23 84.30	Mch. 1,	sunrise 68		
			12 a. m. 71½	60½	14
—	Ditto 26.33 86.47	2,	sunrise 72		
			12 a. m. 74½	70	13
			12 a. m. 74½	70½	
—	Ditto	3,	5 p. m. 56		
	Bar of the Mississippi	4,	12 a. m. 56		
137	New Orleans	5			
—	Ditto	6,	sunrise 54		
			1 p. m. 61½	56	13
			night 58		
—	Ditto	7,	sunrise 60		
			12 a. m. 63	54	12½
141	Steamer to Attakapas	8,	12 a. m. 45		
			night 54	44½	
—	To Plaquemine	9,	12 a. m. 54		
			night 57		

Ref. to Journal. Page.	ITINERARY.		METEOROLOGICAL OBSERVATIONS.			
	Place.	1838.	Temperat. and Solar humid. of air. Rad.		Acti- nom.	
			Thermom. Dry.	Wet.		
142	At Plaquemine	Mch. 10,	{ 1 p. m. 57 night 55 sunrise 56			
—	In an open boat } to Attakapas }	11,	{ 2 p. m. 60	57		
143	Reached ditto	12,	{ 12 p. m. 67	56		
—	Ditto	13,	{ sunrise 64 night 61			
—	Ditto	14,	{ sunrise 54 12 a. m. 58 night 62	47½		
—	Ditto	15,	{ sunrise 56 12 a. m. 64½	56	11	
—	Ditto	16,	{ sunrise 54 1 p. m. 62 10 p. m. 58 sunrise 48	52	10	
—	Ditto	17,	{ 11 a. m. 55 10 p. m. 49 sunrise 36	45	8	
—	Ditto	18,	{ 12 a. m. 60 10 p. m. 47 sunrise 42	47	7	
—	Ditto	19,	{ 2 p. m. 70 sunrise 47	55	9½	
—	Ditto	20,	{ 10 p. m. 57 sunrise 55 12 a. m. 77	66	14	
—	Ditto	21,	{ 10 p. m. 65 sunrise 56½ 12 a. m. 72½	65		
146	Steamer to N. } Orleans .. }	22,	{ sunrise 56 12 a. m. 76 10 p. m. 68	65	15	
—	Ditto	23,	{ sunrise 56 12 a. m. 68 sunrise 63	58	12½	
—	Ditto	24,	{ sunrise 69 12 a. m. 75 night 64	67		
147	New Orleans..	26,	{ sunrise 57 12 a. m. 75 night 63	64	7	
—	Ditto	27,	{ sunrise 57 12 a. m. 75 night 63			

Ref. to Journal. Page.	ITINERARY.		METEOROLOGICAL OBSERVATIONS.			
	Place.	1838.	Temperat. and humid. of air.		Solar Rad.	
			Thermom. Dry.	Wet.	Acti-nom.	
148	Steamer to Little Rock	Mch. 28.	{ sunrise 52 12 a. m. 72 night 60	62	12½	
—	Ditto	29.	{ sunrise 51 12 a. m. 70 2 p. m. 81 10 p. m. 61	60	12½	
—	Ditto	30.	{ sunrise 50 12 a. m. 75 night 68	66	11½	
—	Ditto	31.	{ sunrise 56 12 a. m. 70½ night 62	63		
—	Ditto	April 1.	{ sunrise 53 2 p. m. 74 sunset 60	64	13½	
151	Reached the mouth of the riv. Arkansas	2.	{ sunrise 51 2 p. m. 66	53	11	
—	Up the river Arkansas..	3.	{ sunrise 46 2 p. m. 66 sunset 56	53		
—	Ditto	4.	{ sunrise 46 2 p. m. 73½ sunset 62	55	11½	
—	Ditto	5.	{ sunrise 56 2 p. m. 70 4 p. m. 62 sunset 61	55		
—	Ditto	6.	{ sunrise 58 2 p. m. 70 sunset 64	65		
—	Ditto	7.	{ sunrise 60 2 p. m. 68½ sunset 62	58		
152	Reached Little Rock . .	8.	{ sunrise 54 1 p. m. 69½ sunset 61	54	12	
—	At Little Rock	9.	{ sunrise 79 2 p. m. 46	56	9	
—	Ditto	10.	{ sunrise 83 2 p. m. 62 sunset 62	63		

Ref. to Journal. Page.	ITINERARY.	METEOROLOGICAL OBSERVATIONS.			
	Place.	1838.	Temperat. and humid. of air.		Solar Rad.
			Thermom. Dry.	Wet.	Acti- nom.
153	To Washita Springs . . .	April 11,	sunrise	46	42
			2 p. m.	53	
			10 p. m.	33½	
—	Ditto	12,	sunrise	34	47
			2 p. m.	65	
			8 p. m.	50	
—	Ditto	13,	sunrise	54	62
			2 p. m.	76	
			8 p. m.	58	
—	Started for Little Rock }	14,	sunrise	54	65
			2 p. m.	83	
			sunset	71	
—	Ditto	15,	sunrise	65	64
			2 p. m.	83	
			8 p. m.	74	
156	Reached Little Rock }	16,	sunrise	67	66
			2 p. m.	81½	
			sunset	78	
157	At Little Rock	17,	sunrise	67	52
			2 p. m.	59½	
			sunset	57	
159	To Kellog's . . .	18,	sunrise	45	46
			sunset	57	
160	To Walker's . . .	19,	sunrise	36	44
			aftern.	62	
			8 p. m.	44	
163	To Magnus' . . .	20,	sunrise	36	57
			2 p. m.	77	
			sunset	52	
164	To Pates'	21,	sunrise	46	64
			2 p. m.	84	
			sunset	68	
166	To Batesville . . .	22,	sunrise	47	63
			2 p. m.	84	
			sunset	63	
—	Camped out 14 mls. from Batesville . . }	23,	2 p. m.	81½	63½
			sunset	67	
167	Smithville	24,	sunrise	66	66½
			2 p. m.	83½	
			sunset	69	

Ref. to Journal. Page.	ITINERARY.		METEOROLOGICAL OBSERVATIONS.			
	Place.	1838.	Temperat. and humid. of air.			
			Thermom.		Dry. Wet.	
168	Mr. Black's ..	25,	sunrise	56		
			2 p. m.	75		62½
—	Jarrett's ..	26,	sunrise	54		
			2 p. m.	78		59½
169	Branham's	27,	2 p. m.	84		64
			sunset	79		
170	Bulner's ..	28,	2 p. m.	75		56
			sunset	59		
—	Greenville....	29,	sunrise	47		
			sunset	67		56
171	Miller's	30,	sunrise	41		
			2 p. m.	72		54
			sunset	53		rain
—	Brown's	May 1,	sunrise	57		
			2 p. m.	62½		60
			sunset	58		
173	Caledonia	2,	sunrise	65		
			2 p. m.	71		64
			sunset	61		
174	Roger's	3,	sunrise	55		
			2 p. m.	49		rain
			sunset	50		
—	Selma	4,	sunrise	45		
			2 p. m.	49		42
			at night	46		
—	Ditto	5,	sunrise	47		
			2 p. m.	62		51
			at night	54		
176	Prairie du Pau.	6,	sunrise	41		
			2 p. m.	62		51
			sunset	43		
177	St. Louis	7,	sunrise	46		
			2 p. m.	58		47
			sunset	55		
—	Ditto	8,	sunrise	43		
			2 p. m.	62		48
			sunset	55		
—	Ditto	9,	sunrise	47		
			2 p. m.	63		51
			sunset	52		

Ref. to Journal. Page.	ITINERARY. Place.	METEOROLOGICAL OBSERVATIONS.			
		1838.	Temperat. and humid. of air.		47
			Dry.	Wet.	
180	Steamer	May 10,	{ sunrise 45 2 p. m. 61 sunset 48	47	
181	Ditto	11,	{ sunrise 42 2 p. m. 57 sunset 51		
182	Louisville	12,	{ morning 45 2 p. m. 65 sunset 50	54	
—	Ditto	13,	{ sunrise 51 2 p. m. 66 night 51		
183	Shelbyville	14,	{ sunrise 62 2 p. m. 77 night 64	65	
—	Lexington	15,	{ 2 p. m. 79 night 68 7 a. m. 68		
184	Ditto	16,	{ 2 p. m. 80½		
186	Maysville	19			
187	Cincinnati	20			
190	Ditto	24,	{ 2 p. m. 57 night 49 sunrise 49	48	
—	Ditto	25,	{ 2 p. m. 59 night 49 sunrise 46		
—	Ditto	26,	{ 2 p. m. 73 night 58 sunrise 54	57	
193	Steamer	27,	{ 2 p. m. 68 night 58 sunrise 59		
—	Ditto	28,	{ 2 p. m. 63 night 54 sunrise 46	51	
194	Ditto	29,	{ 2 p. m. 64 night 51 sunrise 39		
—	Pittsburgh	30,	{ 2 p. m. 69 night 57	59	

Ref. to Journal. Page.	ITINERARY.	METEOROLOGICAL OBSERVATIONS.			
	Place.	1838.	Temperat. and humid. of air.		
			Dry.	Wet.	
194	Pittsburgh ..	May 31,	sunrise 2 p. m. night	62 77 69	63
195	Canal boat. . . .	June 1,	sunrise 2 p. m. night	64 65 63	
196	Summit of the Alleghanies }	2,	2 p. m. night	67 57	53
197	Canal boat. . . .	3,	sunrise 2 p. m. night	54 82 64	
—	Ditto	4,	sunrise 2 p. m. night	65 72 67	62
198	Reached Philadelphia . . }	5,	sunrise 2 p. m. night	65 72 67	
—	At Philadelphia	6,	sunrise 2 p. m. night	68 69 68	68
—	Ditto	7,	sunrise 2 p. m. night	70 73 67	
—	Ditto	8,	sunrise 2 p. m. night	72 83 78	65
199	To Washington	9,	sunrise 2 p. m. night	73 84 82		73
—	Washington . .	10,	sunrise 2 p. m. night	69 86 78	62
—	Ditto	11,	sunrise 2 p. m. night	72 88 84		75
200	To Charlottesville in Virginia }	12,	2 h. bef. sunrise 2 p. m. night	84 89½ 73	73
201	To the Blue Ridge }	13,	sunrise 2 p. m. night	74 91 84		73

Ref. to Journal. Page.	ITINERARY. <i>Place.</i>	METEOROLOGICAL OBSERVATIONS.			
		1838.	<i>Temperat. and humid. of air.</i>		72
			Thermom.		
		Dry.	Wet.		
202	To Weyer's Cave.....	June 14,	sunrise	65	72
			2 p. m.	85	
			night	66	
—	Staunton	15,	sunrise	66	67
			2 p. m.	82	
			night	67	
203	Lexington and the Natural Bridge....	16,	sunrise	66	73
			2 p. m.	86	
			night	72	
			sunrise	66	
204	Back to Lexington....	17,	2 p. m.	83	73
			night	73	
			sunrise	65	
—	Lexington....	18,	4 p. m.	78	63
			night	64	
			sunrise	64	
205	White Sulphur Spring }	19,	2 p. m.	77	68
			night	69	
			sunrise	63	
—	Ditto.....	20,	2 p. m.	76	64
			night	66	
			2 p. m.	76	64
206	Hot Springs ..	21,	night	66	
			sunrise	64	
—	Ditto.....	22,	2 p. m.	72	72
			night	70	
			sunrise	62	
—	Ditto.....	23,	2 p. m.	78	72
			night	68	
			sunrise	65	
—	Ditto.....	24,	2 p. m.	78	72
			night	69	
			sunrise	59	
208	Cow Pasture Valley....	25,	12 a. m.	78	
209	Warm Springs	26			
—	Holidaysburgh	27			
210	Winchester ..	28			
211	Harper's Ferry	29,	2 p. m.	85	
212	Baltimore....	30,	sunset	75	
	Philadelphia..	July 1			

Ref. to Jour- nal. Page.	ITINERARY.		METEOROLOGICAL OBSERVATIONS.			
	<i>Place, Latitude, and Longitude.</i>		1838.	<i>Temperat. and humid. of air.</i>		<i>Solar Rad.</i>
				<i>Thermom. Dry.</i>	<i>Wet.</i>	<i>Acti- nom.</i>
212	Philadelphia		July 2,	sunrise 79 2 p. m. 82 night 75	76	
213	New York		3,	sunrise 75 2 p. m. 87 night 78	80	
—	Ditto		4,	sunrise 78 2 p. m. 85 night 78	76	
—	Ditto		5,	sunrise 79 2 p. m. 88 night 80	76	14
—	Ditto		6,	sunrise 67 2 p. m. 82 night 78	72	16
—	Ditto		7,	sunrise 68 2 p. m. 85 night 80	72	
—	Ditto		8,	sunrise 80 2 p. m. 84 night 80	73	18
—	Ditto		9,	sunrise 79 2 p. m. 85 night 83	74	19
214	Embarked for London		10,	sunrise 82 2 p. m. 85 night 74	75	16
—	Lat. 40. Long. 70.*		11,	sunrise 74 2 p. m. 74 night 67	69	14
	40.32 65.40		12,	sunrise 68 2 p. m. 73 sunrise 68	68	
			13,	2 p. m. 72 night 71		
			14,	sunrise 74 2 p. m. 65 night 59		
	42.18 54.5		15,	sunrise 60 2 p. m. 66 night 63	58	

* Taken each day at about 12 a. m.

Ref. to Journal. Page.	ITINERARY.		METEOROLOGICAL OBSERVATIONS.			
	Place, Latitude, and Longitude.		1838.	Temperat. and humid. of air.		
				Thermom.	Dry.	Wet.
214	Lat. 43.6	Long. 51.0	July 16,	sunrise	63	57
				2 p. m. night	59 61	
—	44.2	46.3	17,	sunrise	68	57
				2 p. m. night	65 64	
—	44.23	43.4	18,	sunrise	63	65
				2 p. m. night	65 65	
—	45.46	39.35	19,	sunrise	67	65
				2 p. m. night	66 66	
—	46.11	34.45	20,	sunrise	65	66
				2 p. m. night	67 64	
—	46.54	30.8	21,	sunrise	65	65
				2 p. m. night	67 63	
—	48.11	26.9	22,	sunrise	62	61
				2 p. m. night	63 62	
—	49.15	22.27	23,	sunrise	61	61
				2 p. m. night	62 59½	
—	49.18	18.28	24,	sunrise	62	61
				2 p. m. night	62 59½	
—	49.7	14.53	25,	sunrise	62	62
				2 p. m. night	62 61½	
—	49.12	10.46	26,	sunrise	62	56
				2 p. m. night	62 59	
—	Opposite the Lizard.		27,	sunrise	62	58
				2 p. m. night	62 58	
—	Arrived at Portsmouth		28			