so grand. But, as the sun rode higher, every mountain, and granite wall, and bare hill, and verdureless level came out bleak, and bald, and hard, and unpoetic, the great dome of sky dazzled and pained, the untempered light stabbed one's nerves, and there was no beauty nor grandeur left, nothing but glare and enormousness. The water is so clear that one looks down nearly to China, and sees the border-fish shooting about. The most charming of our many Generals slid back a panel of the wheelhouse, that we might look at the whirling wonder of the broken waves. There is no such blue in the world as was in that gleaming water, so soft, so bright, so saturated with color, that you were certain it would stain your palm if you could scoop it up. And it flashed into white through a sea-change of clearest beryl-green; thus foaming, complaining, leaping, changing, for hours. Then, long before we looked for it, we were at Tahoe House, and in California, and the waiting stages creaked and rocked before the door, and the moment had come when we were to say good-by to the kindest, and most hospitable, and most unselfish of friends. There was such shaking of hands and running back to shake hands over again when it was found that the signal of departure had been a false alarm, there were such hearty entreaties to us to come again, there were such howls of despair and God bless you's, there was such an eagerness to have us comfortable, and such honest regret to part with us, that it was no easy thing to leave Nevada behind. But off we were at last, on the gallop as usual, and looking back till the forest absorbed us we saw a queer orchid-like growth of hats and handkerchiefs waving in mid-air, and heard renewed volleys of howls and benedictions. The long way lay along the narrow, rocky valley of the Truckee, and as we pitched hither and thither, crossing and recrossing the swift, picturesque stream and winding down to the railroad, there was time to think over those memorable four days and the impressions of them.

PIONEER PEOPLE.

Nevada, as I felt then, and as I see now, is but the eldest child of California, for whom the house-walls were too narrow, and for whom the fast ways of the elder were too slow. The settlements are but dots of civilization in great wastes of savagery. The people are prosaic and delving Bedouins. They look to go to the East, or to "the Bay," or to wander somewhere, and they seize their Lares and Penates, which are their daily paper, and playing cards, in a night, and are off to any new spot where richer mines are reported. The men, and I speak now of the "best society," are they who have known all the hardships and excitements of frontier life in a mining town, who have gone hungry and slept hard, who were worth a fortune last week and not a penny yesterday, and have the fortune again to-day—men who speculate with a rashness that is frightful, and "run their luck" with a success not less amazing. They are men whose generosity is lavishness, whose kindness is prodigality, men to whom money, so easily lost and won, represents no fixed value, and whose ready helpfulness is half the time sheer carelessness. They are men developed by their climate and their habits of life into an intense physical existence, and to whom the excitements of the senses are supreme. For many years they lived without the society of women, and lived, therefore, a coarse and thin life. Their isolation has made them think tenderly, even sentimentally, of the old Home at the East, and they welcome a bare acquaintance as if he were their long-lost brother. This angular and material life of fluctuations and successes has brought out a certain robust manliness which is wonderfully attractive. They are all courage, cheerfulness, eagerness, purpose, heartiness, cordiality, open-handedness. They have all a breath of the free air of their mountains about them. They like material things with a zest which is amusing, being grown up children in a fondness for dinners, new clothes, trinkets, and constant amusement. Of a finer life they know very little, nor have they much time to learn when the whole day goes to the mines or the office, half the night to billiards or coarser pleasures, and but an hour or two of waking time to home.

This life is greatly harder on the women than on the men, and they have suffered more from it. They dress more expensively and richly than their Eastern sisters of equal affluence, they have many and splendid jewels, they know and keep up to the latest fashions, and both child-husband and child-wife enjoy the display. But then there is really nobody to dress for. Every woman knows the entire resources of every other woman's wardrobe, and except for the frequent visits to the Bay, or the arrival of strangers, I dare say they would all subside into solemn black, and save themselves trouble. We heard of most elaborate lunch-parties, to which only women went, and where they sometimes scandal took, and sometimes tea. And we heard of dancing-parties in Winter. But of society in its fine sense, of gatherings of bright men and quick women, there is really nothing. Even of quiet household enjoyment there is drearily little. The men don't think it worth their while to cultivate women's society, and the women have so little motive to be interesting that they are not interesting. The man has quitted himself of his debt when he has given his wife the means to look pretty, and she has discharged hers when she looks pretty. The mutual obligation stops there, and he pleases himself, and she pleases herself—if she can.

I have said that in material good they have compassed great successes. I never saw in the East such superfluous elaborateness of dinners and breakfasts, nor such useless profusion of silver and glass. The emphasis of their hospitality lies in these things because the women have not gotten beyond them. This worship of the body, too, blunts their more delicate perception of a fine ceremony, and I saw a beautiful and accomplished and royally-attired woman take a "whisky straight" with twenty men, her husband, gentleman-like and scholarly, seeming to see nothing objectionable in the noisy good-fellowship. Because the women are apparently on just the same plane as the men, they are really lower; and, loving and faithful as Americans almost always are, they fail of being wise wives and mothers and sweethearts, in just as far as they fail of being wise women. A very thoughtful and quiet man said to me, "I am glad this question of Woman Suffrage is coming up to us here. Whatever good or ill lurks in it, the very suggestion of it must make our women think, and the necessity of a decision will do them good. We have been too busy to see that we were teaching them to be dolls—very dear and fond dolls, of course—and now, when we have more leisure, and should like companions, behold, what we have molded that we have." Everybody who goes thither from the East makes little speeches to them about their wonderful pluck and prosperity, their grandeur and freedom, their achievements and triumphs, and general excellence. Every word of praise that has been uttered I echo. Dauntlessness, if it has only heaped up riches, is a splendid quality, but it is such a little part of manhood. It is only the base on which manhood is built.

Nevada is such a young and free-limbed State! She has no memories of an unclean past to live down. She has no old prejudices to outface. She has no conservative public sentiment to hold her back. She can so easily be richest among the nation in the thoughtful manliness of her men and the gracious womanliness of her women. But they are not wise or kind who tell her that she has won her place in a fine civilization, and who crown her with quickly-fading bays, and bid her rest. We have much to learn from her of courage before danger, and cheerfulness under discouragement, and unselfish giving and loyal friendship. But she has ten times more to learn of us, of fineness and culture, and sweet home influences, and simplicity, and gracious manners.

These people of whom I have spoken thus frankly, said to me, ever so many of them, "Shall you write about us," and when I said "perhaps," they all answered, "Tell the truth about us, even if it is hard, but don't forget that we have warm hearts." As if I could ever forget that, remembering such golden kindness of them! And if it were not that they have such splendid capacities of growth in them I should never have said that they were dwarfed and warped by the cheap successes of their lives. Nor do I mean that we did not find sweet women and manly men. But I have tried in all these letters to tell, not what I fancied it would be polite to see, but what I saw. If by chance any of those far-off friends should have read this screed thus far, will they have patience to read a little farther and recall this story of Carle?

Carle was a misshapen dwarf of Arthur's Court. Day by day, for long years, he besought the knights to smite off his head, but they loved him, and they would not for the world have harmed a hair thereof. One day he came to Gawaine, and said, "I pray thee, Gawaine, strike off my head;" and Gawaine said, "Nay; I love thee too much." But when he saw tears on the poor creature's face, moved by a great impulse he smote, and there rose up, not the deformed Carle but Sir Carlile, handsomest of the knights, who had been the victim of a cruel enchantment which could be overcome only when some friend should love him enough to smite. I think the moral is that not one of us grows to his full stature till friendship is honest enough and tender enough to break, with wounds if need be, the spell of our own vanity and insulation. L. G. C.

V.

TRUCKEE.

SAN FRANCISCO, Aug. 30.—Truckee appeared to be a city of John Chinaman with an appanage of Irish shanties, the inevitable "saloons," a very comfortable railroad hotel, and certain thriving marts of infinite varieties. There were long streets of Chinese laundries, barber's shops, tea stores, peanut stands, and nondescript booths, all as like as two peas externally, little wooden barracks ten feet square, and adorned with big sign boards, persuasive, no doubt, to the Celestial mind, but impenetrable to us. We saw the thrifty creatures eating their rice with chop-sticks, chattering to each other like magpies in words that seemed all consonants, or plying their various avocations. They did not think our coaches worth the trouble of staring at, and accepted our stares as a modest tribute to their elder civilization. The Truckee American and eke the Truckee Irishman thronged to the station to see their welcome Vice-President, and viewed him with absorbing and by no means silent interest, as in some sort a possession of their own, albeit perishable and not to be roughly handled. But the Truckee Chinaman recalled the wisdom of Chee, "to sit in silence and recall past ideas, to feel no anxiety—this is ability," and pounded his wash, indifferent. When our special engine and one car were ready, the Central Pacific officers having sent that pleasant conveyance down for Mr. Colfax, the whistle shrieked a sort of "Boot and Saddle," and we were off, puffing up the last rise of the mountains to Summit to tear down on the other side.

It is a most wonderful ride, but the sun hung in mid-heaven now, and, as at Tahoe, this mountain scenery at noon is only big, not grand. Our Eastern eyes would never be reconciled to these vast domes of cloudless blue, to these hard miles and miles and miles without a shadow. And these enormous cañons, these heaped-up and countless mountains, these gorges and precipices on whose dizzy verge we hung, seemed always to me, though my mind acceded their wonder and terror and stupendousness, less grand, less majestic even, than the familiar Franconia and White Mountains, which are but hills in the comparison. Because the brooding shadows and purple lights that forever brood upon our Northern hights give them that element of mystery and unattainable beauty that is so dear an attribute of the sublime, while here all is confessed, and so, profaned. There are no sacred silences, no hiding-places of the gods. So, save at sunset and sunrise, I could not love the Sierras, though I knew how much they should command me by reason of their immensity. However I might have hoped with Slender, that if there were no great love in the beginning, Heaven might decrease it on better acquaintance, the railroad company gave travelers and landscape little chance to come to an understanding. For the dreadful snow-sheds, which are wooden tunnels, built of stoutest timbers, abutting on the mountain on the one side, and nailed to staunch uprights on the other, beetle over the cliffs for miles and miles of wildest scenery, with never a crack to peep through. What with them and the rock tunnels, we had a general sense of being swung round and round, as one swings an apple-paring over one's head, for shut up in those wooden galleries, we could only see that the sun shone first on one side, and then on the other, now in front, and now behind. Snatching what views we could, wherever the snow-sheds had the grace to disjoint themselves for a mile or two, we found that the track was as daring as the stage-road had been, and very like it, except that it seemed to climb even higher, and to leave less room for turning summersaults on if ever it should feel thus frolicsomely inclined. When we gazed shuddering down a mile of precipice, which the engine looked clean over to see if grim Death were waiting at the bottom or had gone by with a whistle that it couldn't call to-day, we comforted ourselves with thinking that the frosty churl was just as securely established on that great rock only twenty feet down from a sudden level that we came upon, and that a few hundred yards of tumble, more or less, couldn't signify. It was curious, in these cessations of snow-shed, to look up to the very crest of an opposite and near mountain, and see your track winding up and up, to turn again and come back on the same side whence you gazed, and so wind and turn and struggle with the grade till at last it gets the best of it, and comes down the slopes still zig-zagging, but taking courage, and making fewer concessions than one would suppose inevitable. Our thoughtful host, determined that we should have a glimpse of Donner Lake, as he saw it from the stage-road four years ago, had the car stopped, and we all clambered down to behold a lovely sheet of water glittering in the sunshine far below us, and still as if we were its discoverers. So, despite the niggardliness of the corporation, we did have some manna of heaven in the wilderness. But what shall be done about the snow-sheds? Shall an outraged public stop a train some Summer morning, and fire them, regardless, as outraged publics always are, of those who shall come after, not itself intending to cross the inhospitable mountains under Winter skies? Or will the Management, warned in season by this distant thunder, avoid the gathering tempest, hinge a board or two all the way along, and possibly receive a silver cup in token of a world's gratitude?

Presently we were out of the mountains, running over parched plains, all covered with what looked at first like the few forgotten and unreaped spears of Summer's teeming harvest. But, looking closer, we saw that it was a light-brown seeded grass, thick-set and strong, and we heard not only that the sand-hills of California clothed themselves with vineyards and gave, for the largess of a little water now and then, fruitage richer than Eshcol's, but that the fields kindly did all their own haying and gathering into barns, the intense sun and long, dry days perfectly curing the grass in the stem, and drying so many seeds at the same time as to make this fodder rich as grain, while it may safely be left out of doors, since the very first rain starts the new crop, which grows like Jack's bean-stalk, and which is not in botany that I ever heard of. There are great groves of what they call here live oak, with a narrow-pointed leaf, and a general look of a big and independent-minded apple-tree. And there are cotton-woods. No old friends nod and beckon anywhere, no elms, nor maples, nor larches, and if they did it would only make us miserable to think we could not get out and give them a bath, so loaded down and disfigured and pale with dust would they stand. We cross the deep, dry, red beds of streams, that in Spring are turbulent torrents, drowning whole towns sometimes. We pass hills and gulches where hydraulic-mining has made queer-looking dwarf-tunnels and ruins. Then, in the Sacramento River, we see what looks like half the wise men of China gone to sea in bowls. It is a fleet of tubs, and the laundry-men are doing enormous washings in the cold water of the stream. Stooping down over their tubs, and shaking the garments wildly in air, and bowing and standing up over and over, they look at that distance, in their queer dress, like priests of some strange god whose muscular worship they are celebrating. However they do it,—washing with cold water, beating the garments against a rock instead of rubbing them on a board, shaking them instead of boiling, and when ironing-day comes, dexterously sprinkling each garment by squirting water out of their mouths in an even and forcible fashion,—certain it is that *our* clothes consigned to these extraordinary apostles of cleanliness have come back untorn, well-ironed, and beautifully white, which is more than can be said always in the praise of Christian laundresses, with a whole armory of washing-machines, sprinklers, wringing-machines, patent mangles, and Swiss irons.

SACRAMENTO.

Next we were in the suburbs of Sacramento, among vineyards, orchards, towering oleanders in full bloom, white and rose and pink, pomegranates, figs, and flowers innumerable. And next, eight weary people were debarked in a huge depot, among a shouting, excited, excellent-tempered, and shouldering crowd, and this *was* Sacramento. Mr. Colfax, having persistently declined all Receptions, there was nothing for his friendly hosts but to let him go to his hotel in quiet. Which they did, with the assistance of a full band, an artillery salute, a procession of military and civilians, showers of bouquets, several open barouches for his following, huzzas, hoorays, and hi-his, flattering, but going off in deafening volleys which, after the tenth round, we could cheerfully have foregone, and a mile or two of close-packed citizens, bowing and cheering! Thus unheralded and unnoticed we managed to wend our quiet way to the Golden Eagle in the course of an hour, but if the Vice-President *had* consented to be received, I don't think he would yet have gotten there, such new bands, and new artillery companies, and new crowds of friends, such Committees, and orators, and tributary bouquets would have sprung up to block the road. After nightfall, a cool salt wind swept up the river from the sea, and comforted us for a whole week of hot sirocco. And a bright dinner-table, all flowers and fruit *and* meat for the perishing, comforted us too. And so did our all sitting down together for a cozy evening, we and a dozen new friends. But behold, hardly were the chairs drawn up when a wave or two of a great sea of people out-of-doors lapsed into the room, and washed off Mr. Colfax. Presently we heard him on the balcony, making a wise, sensible, and friendly speech to his constituents, in which he said, in effect, that if loyalty and the manly virtues did not keep pace with the material growth of a State, its prosperity was hollow, splendid as it might seem. And that it was such a pity to let any petty and local jealousies, or any undue haste to be rich, interfere with the usefulness of the stupendous railroad which he had done his best to make possible, and which they with wonderful perseverance and labor had built. For that, if it did not establish a nearer friendship between East and West, between Old and New, and did not compel exchanges of interest and knowledge, as well as of commodities and money, if it but earned wealth for its owners and did not also develop a higher order of citizenship wherever its influence was felt, it would painfully and disastrously have failed of its best uses. Much more he said, of unstinted praise and thoughtful criticism, out of the depths of his affectionate and hearty good will, and then, breaking away from further friendly solicitation and hand-shakings that would have wearied an automaton, he came in to sweep us all off to bed. For in the morning were to be drives, and visits, and sights enow, and in the afternoon San Francisco.

I knew a philosophic American youth who spent six weeks in Europe once, and used to vex his friends thenceforth with monologues on the incapacity of the Anglo-Saxon for self-government, and with minute analyses of the comparative culture of Continental capitals. So I should take shame to myself if I had not wholly seen and understood a city of twenty thousand inhabitants, in two hours of cursory observation, and here, dedicated to waiting posterity, are the results of my study. Sacramento is a large village, which has outgrown its village clothes, and sprawls with ungracefully evident arms and legs, that it has not learned to manage. It had only a great, flat, sandy stretch to live on, and neither work, nor prayers, nor tears, could make that tame dullness picturesque. Then it received a baleful legacy of regular streets which would decline existence rather than cross each other half an inch short of or beyond the equal points of intersection which their geometrical founders decreed. Not a crescent, not an oval, not a circle in town. Only the depressing exactness of checkerboard regularity. We are very little better off at home, I admit, but Broadway is a saving eccentricity, and there are small arrowheads of verdure where it touches the avenues. And then we have hills, and a Park in the very midst of the City of the Future. But *we* had no chance. The perpetrators of our right angles had, by their ugly lamp-posts, been lighted to dusty Death before we were grown up enough to remonstrate. But out here, where there is room enough for picturesque growing, and energy to achieve it, and where not even the most skillful curves and sweeps could wholly overbear the blank and hateful monotony of the site, without mellow distances or horizon line of grandeur, to be satisfied to read in the geography, "This city is regularly laid out, in uniform blocks, upon a wide plain, and is convenient and thrifty," is too pitiful a contentment, too tasteless a success for these ambitious and rich burghers. The citizen needs a beautiful and well-ordered city, as the man needs a beautiful and well-ordered home. Character thrives better. I have no doubt that in a flat town of regular streets, and all the houses with the street-door in the same place, and the same number of windows in the front, and most of the inhabitants interested in the same occupations as is the case in —— Heavens, I was near being imprudent,—we will say in New-Constantinople or New-Babylon, the men and women of the third generation would be as like as two marbles, and quite as devoid of angles or interest.

So, if Sacramento, now in her bright youth, could have all her streets tossed up in a blanket to fall wherever they would, or, debarred from that energetic reform, would open a few irregular Places, and Courts, and Parks, and Crescents, and Ovals, with a double row of trees in the lesser oval included within, between the opposite rows of houses—why then she would be a shining example which much bigger cities, even cities with hills, or a Lake Front, or a dowry of the fairest bay in America, might sigh to emulate.

The dust of Nevada is to the dust of California as foam to billows. I know not how often in the day the sprinklers make their watery rounds, but Sacramento, conscientiously trying to keep clean, sits melancholy among her gray trees with ashes on her head because she fails so utterly. Her streets are a white and flying powder, which carriage wheels roll up into gritty clouds of dirt, and which the wind that is never weary, blows into mounds and sifting pillars. We heard of melancholy days when Sacramento had been more than once overflowed by a sudden rise of the American, and of houses floating off and lives imperiled. But it seemed so impossible that Niagara itself could make any deep impression on that volatile and disgusting soil, could even make it sober and clean enough to go to housekeeping with, that though we listened with polite melancholy, I don't think we were as tragically moved as we should have been. Yet we were assured that this very dust blossoms into beauty with the first rain, and gives such verdure and grace and fruitful loveliness to a weary world as nowhere else gladdens its old heart. I suppose it is true, and, if it be, it is one of those gracious analogies of Nature which must be the strength of the faith of Liberal Christians. If these plains of Marah have within the germ of a sweet and lavish fruitfulness, then there may be a stirring of life under the crusts of any soul.

There is hardly a house in Sacramento without its door-yard of trees—little cottages, and great costly dwellings alike. And that is so excellent a thing that you translate these trees into the green and beautiful creatures they must be after the rains, shutting your bodily eyes to the pale, sad, patient sufferers that they are, shut in by their gratings of dirt from all joy in the sunshine, or the winds, or the delicate touch of the light. We stopped at two or three houses to see their grounds, whose gardeners labored more zealously with hose than with pruning-knife or spade, and learned in their successes what the rains must do for larger tracts. It is the thing to open one's eyes at the story of a Upas-tree, which one must go to Africa—or somewhere—to see. But I think that a lemon verbena ever so much bigger than a peach-tree, in whose shadow we all stood, is quite as remarkable and a great deal pleasanter. And what will the untraveled cockney, who, like me, has coaxed coy heliotropes and fuchsias to grow two feet high in a pot and blossom once a year, say to fuchsias growing over a house-front like Wistaria, and stooping down to look in at the second story windows, or to heliotropes, honey-sweet, and fiery as the sun, growing high above one's head, in clustered stems which my two arms could not enfold? Or to trumpet-vines and Cape jasmine, and honeysuckle, and passion-flowers even, such masses of them all together and bending to be plucked, as in all these years, wherein I have often seen the righteous forsaken and his seed begging bread, these eyes have never beheld. Or to hedges, rods in length and very banks of color of velvety scarlet geraniums, or to spreading thickets of a thick-stemmed bush, whose heavy, shining, laurel-like leaves, being broken, rouse you from the languor of the hot morning with the pungent, aromatic odor of camphor? But to mention half the floral wealth of these gardens inventorially, dizzies the arithmetic of memory.

Sacramento, like the other new towns of the West, is slipping out of its small cottages into very showy houses, just as it slipped from its mining cabins and squatters' huts into the cottages. But wealth has come faster than taste kept pace, and though your true Californian will not only have costly but *real* surroundings, this honesty of intention does not prevent his being satisfied with very tawdry and glaring effects. So in their houses you will see doors and panels of solid laurel, most exquisite and costly of woods, and in the same room a ceiling of stucco horrors, and a carpet whose design must have been composed in a nightmare. You will see wooden "mansions" built on the scale of a palace, bizarre with crockets, verge-boards, finials, tracery, bell-towers, and turrets, whose owners would cheerfully give thousands of dollars for a lovely picture which they can enjoy, but despise the sham of an elaborate library whose doors they would never open. You will see barns more costly than houses, and cellars better furnished than parlors. There is a little overdoing of everything never found in an assured society. Tones are a little too loud, talk is a little too voluble, trains are a little too long, equipages are a little too showy, colors are a little too bright, good fellowship is a little too emphatic, welcome is a little too absorbing, the stranger is asked a little too often if he knows Smith of Washington, or Jones of New-York, California is a little too much thrust forward and urged to "shake a day-day to the lady," or "make a pretty bow to the gentleman"—to be quite comfortable. But it is so much easier to tone down a too eager and ebullient life, than to tone up an inane and empty one, that there will one day be a charming society here,—unless, indeed, the men and women who are to compose it are so often told that crudeness is charming nature, and boisterousness cordiality, and show elegance, and eating and drinking hospitality, as to come not to care for something finer than they.

An American in Europe could so rout with banner and spear the languid vices of aristocracies, to admiring slow music on the part of his countrymen; but An American in America shrinks from pointing a cambric needle at the energetic shortcomings of own flesh and blood, lest he be accused of abusing his sacred Hospitality, not to speak of his being instantly transformed into a Viper, and a Ghoul, and a Ruffian, "Let him never come here again!" being the mildest anathema registered against him. We are such a young people, and have been so nervous lest we should be ridiculous, that we have been ridiculous, and brazen too. "Bashfulness is vanity wrong side out," says the subtle Autocrat, and a personal and passionate resentment of honest and kindly criticism is a confession that the critic is right. We have not in America so noble elements of manhood as on this Pacific slope to-day. The two oceans will give us the best civilization—salt, and strong, and abiding. But in the East we have certain old infirmities to struggle against, certain taints and obstacles, unknown here, to conquer. So that in some respects California, Oregon, Nevada have the best of us. That they have the worst of us in others is the fault of youth and laggard opportunity. And when I have said what they seemed to me to lack, I mean only that, as Western Americans, they have not yet come into the riches of their inheritance of culture and fineness, which, when they have fully possessed, they will outvalue us all.

That Sacramento publishes the best newspaper in California and one of the best in America, that it is fond of music, and gives the largest houses to the cleverest lecturers, and takes many copies of *The Overland*, are all facts of excellent significance. And, lest I forget the satisfaction of the practical reader, let me here and now say that there are many streets of shops where clothes-pins, ginger, neckties, rings, blacking and every thing else necessary to cheerful housekeeping and elegant dressing, can be bought cheap for cash, and there is, I believe, no difficulty in obtaining good cigars at ruinous prices. Also, there are churches, banks, and a steamboat landing, where on this same day we took boat for San Francisco. The wharf was covered with a good-humored crowd, many acquaintances went down to wave a kind farewell as we sailed, as we sailed, and the leave-taking was as festive as the welcome, though dashed a little with regrets. It is impossible to be kinder than every body whom we met was to us all, though only two of us had even a fancied claim upon their kindness. To Eastern visitors this exuberant friendliness that runs to serve you when it might walk, that tires itself out to save you steps, that sits up o' nights to plan new pleasures, and all because you have come from the Old Home, is inexpressibly touching. We said good-by with honest pain, and long after we were out of sight our thoughts went back in tenderness, while in our after-dinner coffee—because not even as a stirrup-cup will its genial first guest drink wine—we drank to the health of Sacramento. L. G. C.

COAL AND IRON—VIRGINIA AND WEST VIRGINIA.

The iron deposits in Virginia and West Virginia are equal to, if not more extensive than, those in Pennsylvania. Along the line of the Chesapeake and Ohio Railroad are found inexhaustible deposits of superior iron ore. From Staunton, Va., to the White Sulphur Springs in West Virginia, a distance of 100 miles, there are very large quantities of valuable iron ore. Also along the line of the James River Canal, west of Lynchburg, is found superior iron ore in great abundance. In fact, the entire Alleghany range of Mountains in both Virginia and West Virginia, extending 350 miles, from Maryland to Tennessee, are filled with iron ore in quantity and quality equal to the most valuable deposits found in Pennsylvania, the largest quantities being found east of the main Alleghany range of Mountains, and west of the Blue Ridge.

West of this vast area of iron ore deposits is to be found the Appalachian coal field of West Virginia, which, in extent, is greater than the coal field of Pennsylvania. For the coal field of West Virginia is estimated to contain 15,900 square miles, while that of Pennsylvania is estimated to contain 12,656 square miles. The coal area of Great Britain is estimated to be 11,859 square miles.

The Chesapeake and Ohio Railroad and the James River and Kanawha Canal (when completed to the Ohio River) will pass through the very heart and center of the coal and iron deposits of Virginia and West Virginia. These improvements will pass through the New River Valley and the Great Kanawha Valley to the Ohio River, a distance of 200 miles, cutting at right angles the *most extensive deposits of superior cannel, splint, and bituminous coal known in the world*. Coal remarkable for its superiority in generating steam, in smelting iron ore, and in making gas, and unsurpassed as a fuel.

Thus in Virginia and West Virginia, and especially along the line of the Chesapeake and Ohio Railroad, and the line of the James River and Kanawha Canal are to be found in great abundance and of superior quality, two great elements of a nation's wealth—*coal and iron*.

Not long since Mr. Gladstone, in a speech delivered in the English Parliament, said the commercial prosperity of Great Britain over all other countries was attributable chiefly to her coal deposits and their location near iron ore—that coal and iron in close proximity to each other constituted the *substratum of England's commercial prosperity*.

The same may be said of Pennsylvania. It is the development of the coal and iron of that State that constitutes the basis of its wealth and power. And what has been done in Pennsylvania may be done in Virginia and West Virginia, *and even to a greater degree*. For the deposits of coal and iron are more numerous and varied, and more favorably located for a thorough development by means of Virginia's central water line and railway uniting the Great West with the Atlantic seaboard.

Pennsylvania capitalists have already commenced investing in this coal and iron region. In the past few weeks Heister Clymer, W. Firmstone, and others of Pennsylvania have bought very large tracts of iron land in Alleghany County, Va., near both the canal and railroad.

THEORIES OF EARTHQUAKES.

Our last letter from Lima gives a ludicrous picture of the effect of a savant's prediction. A Catholic clergyman in Leipzig, the Rev. Mr. Falb, editor of *The Sirius*, a scientific journal, foretold that, about the close of September, Peru and Ecuador would be overwhelmed by a tremendous earthquake. The assertion, confidently made, turns all Lima out of doors in terror, at a loss almost as serious as that of a real earthquake. The theory on which Father Falb founded his prophesy is, that the phenomena of earthquakes are produced by the influence of the moon and other celestial bodies on the masses of water within our planet. We are inclined to think he meant, instead, the attraction of the moon and sun on the igneous masses of the earth's interior. The fact that in the last days of September the earth was nearer to the sun and moon than for many years past, and the attraction of these two bodies was accordingly augmented, gave great color of support to Mr. Falb's theory. The earthquake, being expected, declined to come, and science is nibbling its fingers again over the laws of this strange phenomenon. To the prediction of comets and eclipses we shall doubtless one day add that of phenomena which now baffle us. We already foretell the recurrence of the "shooting stars" of August and November; and, with more attention, we may, in accordance with Redfield's theory, predict the fearful hurricane which desolates annually our American coast. Theories as to the cause of earthquakes are innumerable. Their primary cause, as well as their intimate nature, is no more known than their relations to the whole of atmosphero-terrestrial phenomena. The ancient philosophers attributed earthquakes to ordinary air which was blazing in the bowels of the earth. This air engulphed in the cavities of the earth is condensed into clouds, is compressed, accumulates, is loosed, revolves circularly, or in a whirlwind, and finding vent, escapes with a crash by terribly shaking the ground. Such is one of the first theories sustained by Anaximander Anaxagoras, Aristotle, and even Seneca, with others as renowned. All we can say at present is, that earthquakes naturally belong to dynamic phenomena, while in their origin, certain electro-chemical notions must play either a primary or secondary part. The ground is shaken by a system of waves of diverse kinds. According to the mode of first impulsion, these are sent from the interior to the outside of the earth's crust, and *vice versa*, as well as to a certain depth of the heated mass below. The idea of comparing the progress of earthquakes to sonorous waves was first proposed by Dr. Young, and sustained by Gay-Lussac.

Many philosophers of antiquity, and among them Pliny, compared earthquakes to subterranean thunders. Dr. Stukeley read before the Royal Society of London in 1750, memoirs in which he held that electricity was the cause of earthquakes. Beccaria was of the same opinion. Hyancinthe Coggo, who compiled a journal of the shocks felt at Burges, held that they came from electricity condensed within the earth. Nicholson believed they were caused by discharges between the clouds and the earth. Abbe Bertholon held so strongly this idea that he invented *earthquake rods* and *volcano rods*, to carry off as much as possible the fulminating matter stored up within the globe. In 1855, M. Ferdinand Hoefer, appearing to be ignorant of the labors of his predecessors, compared earthquakes to true subterranean storms in a solid medium, as Pliny had done before him. Until the earthquake at Alba in 1771, Father Beccaria believed that electricity was the primary cause of the shocks; but from that date he attributed them specially to dissolutions of pyrites. Vassali-Eandi, a disciple of Beccaria, adopted, later, his master's theory, and held that the electricity developed in the fermentation of sulphurous pyrites extended its effects. Dr. Lister was of the same opinion. This theory deserves to be taken anew into notice, not exclusively from the point of the dissolution of the pyrites, but in connection with the electro-chemical actions and reactions taking place in the heat of the globe. No one is ignorant that there is in different strata of the earth's crust a rich deposit of substances produced by electro-chemical action; that there are liquids in circulation, and metallic masses, capable of exciting electric currents. As M. Becquerel has already shown, there exists in most terrestrial formations substances whose alteration by atmospheric agents and water produces electric effects like the water we obtain with zinc. Of all theories proposed on the subject, that of M. Alexis Perrey seems to be the best founded and well observed. At the time when the Academy of Sciences in Paris, in 1854, made a favorable report on the labors of M. Perrey, this savant had collected and discussed *seven thousand* observations for the first half of this century. The conclusions from his work are these: first, that the frequency of earthquakes increases toward the syzigies (points of the earth's orbit nearest the sun); second, that their frequency increases also in the neighborhood of the moon's perigee (point of its orbit nearest the earth) and diminishes toward the apogee (the point of its orbit furthest removed); third, that earthquake shocks are more frequent when the moon is in the vicinity of the meridian than when it is removed 90 degrees. Every other cause which tends to diminish the enormous pressure suffered by the central mass of the globe may act equally, and at the same time with, the action of the moon and sun. For example, the sun's heat by rarifying the atmospheric strata tends to diminish their pressure, and the centrifugal force of the cyclone of hurricanes tends equally to exercise an ascensional action on the central mass. M. Humboldt believed that we must attribute to the reaction of vapors submitted to enormous pressure in the interior of the earth, all shocks which agitate it.

From this rapid glance at the principal theories in relation to earthquakes, it is easy to see that they turn around a fixed principle of which the forms of interpretation alone vary. At present we may say that theory reposes on one side, according to the researches of M. Perrey, upon the attractive force of the moon and the sun exerted on the central fiery mass of our planet; and on the other upon the chemical, or probably electro-chemical action produced by the contact of compounds, solid, liquid, or gaseous, in the center of the earth, influenced by atmospheric agents. In this respect, the late researches of M. Ch. Sainte Claire Deville upon the analysis of volcanic emanations have great value.

AMERICAN SHIP-BUILDING.

CAUSES OF DEPRESSION—WHO OWN THE VESSELS THAT DO OUR FOREIGN CARRYING TRADE.

It is strongly intimated that the British ship-builders are at the bottom of the movement for the repeal of the laws of Congress whereby Americans are prohibited from going abroad to purchase vessels upon which to fly the Stars and Stripes. It is stated as a fact that one of the Lairds—builders of the piratical Alabama—has been in this country and left large sums of money to be used in bringing about a result long sought by the iron ship-builders of Great Britian. It is moreover asserted on good authority that a firm in Scotland has offered to build 11 steam vessels to form an American line as soon as this law shall be repealed, the ships to fly the American flag, while over 90 per cent of them will be owned by English capitalists, and to be built, fitted, provisioned, and, when requiring it, to be repaired in England. For many years the Cunard line swayed all trans-Atlantic steam trade; it was not until the Cunarders did not require additional ships to keep up their regular communication, and the ship-yards were slack of work, that other lines were started. The ship-building firms, not being disposed to remain idle, interested themselves to form another line, and the Inman line was the result. When that line had been sufficiently developed, another, and still another, was started direct from Liverpool, to say nothing of the same influence and interest being developed in lines which bear the German flag. Not satisfied with the profits accruing to them in the construction of vessels for Great Britain, France, Germany, Spain, Turkey, in fact, nearly the whole of Europe, they have been trying for years to obtain a foothold on our soil, to drive our ship and engine-builders to the wall, and leave us in a worse relative position to them as regards shipping than they are to us in the matter of breadstuffs. At this very hour there are agents of the principal English ship-builders in this country, busy as beavers working to dam up our commerce, and everything connected with our maritime interests. When we come to sift the matter of ownership down to its true basis—should such a misfortune befal us as the repeal of the present prohibitory law—we will find that the most trifling portion of each vessel will have an American name, a bare little fact, while the rest will be in the hands and under the entire control of the British, the deadliest enemies of our shipping interests. It is but a few months since a steamer flying the American flag entered the port of Liverpool with a cargo of cotton from a Southern port. First, the petty dock officials delayed her in obtaining a berth, and when she obtained one, it was designedly an inconvenient one; every obstacle was put in the way of her carrying on a legitimate business. When she commenced to load, the Royal mail lines put a steamer on the berth to load at lower rates, so as to lessen her cargo and discourage her owners. She wished to carry passengers, but the Surveyor of British Lloyds insisted upon so many alterations and so much extra expense that the passage money would not cover the outlay necessary to conform to the exacting rules of this British agent, who was bidden to do the dirty work of his employers. This fact is cited to show the feeling which exists on the other side of the water in relation to our flag. On this side it is asserted, and with much truth, that most of the men who are loudest in calling for a change in our present prohibitory laws are those who either are foreign born and whose largests interests are in foreign shipping, or those who, when the British ship-builders had furnished the Confederates with vessels to destroy our commerce, hauled down the Stars and Stripes from over their ships, and hoisted in their place the blood-red flag of St. George. These same men were the first to clamor to have their vessels back under the old flag when the danger was past, and to obtain privileges which they did nothing to obtain, nor aided others to maintain. It is this class of men who desire to be permitted to go abroad to purchase ships, they owning one one-hundredth and the British ship-builder ninety-nine one-hundredths, and, at the same time, cause to be wrested from us all the glory and profit accruing from an interest we once maintained with honor, and which placed us at the head of the maritime nations of the world.

It is said that American ship and engine builders cannot compete with those of Great Britain. Pray, tell us how much better speed the English or German steamers make at the present time than the Collins steamers did nearly twenty years ago! The Collins line was built and managed under very disadvantageous circumstances. It did not have capital sufficient to properly carry out the working details of such an enterprise, and at that time our machine-shops were not so complete as they are now. There is no doubt, in the minds of men who have performed some of the greatest ship-building feats of the age, that we can compete with and even excel the trans-Atlantic builders. Half the world laughed at the builder of the Dunderberg, and prophesied that his vessel would be a failure. She exists to-day the greatest and fastest iron-clad in the world; and her builders, both of hull and machinery, also live, and are ready to prove the assertion that a fleet built by them could thunder a revolution in ship-building as we did when we introduced the sharp clipper-ship and the Collins line of ocean steamers, to excel which led the Cunard line to build the Asia and Africa class, which proved failures, for it was not until the Persia and Scotia were put afloat, many years subsequently, that this British builder came up to the American standard of speed. Then again we startled the world and revolutionized the whole system of naval warfare by the introduction of our iron-clads, to say nothing of wooden vessels of the Wabash and Hartford type. These facts show pretty conclusively that we have not always followed patterns, and that we have ideas of our own, and the energy to develop them. If foreigners were to build our ships, even supposing they did not own them, what would become of us in the event of a war which would close their ports and our depot of supplies? We would be in a sad predicament. Yet no one seems to have considered this point. If our ship-yards and machine-shops are to be closed, and the art and science of ship and engine building banished, what would become of us in the event of intestine troubles? For several years a portion of our own people, who when they rebelled had no ships, kept us at work with all our energies and resources to build vessels and machinery to subdue them. Suppose at that time England had been engaged in war, and we had been depending upon her to furnish our vessels, what would have been the result?

At the meeting of the Special Congressional Committee on the Decay of Commerce, the Shipowners' Association of the State of New-York, through its representatives, took strong grounds in favor of repealing the prohibitory law, and an impression has gone abroad that the Association represents the majority of American ship-owners. In numbers it does not; in point of fact, the Association largely represents the foreign ship-owning interest. The following are some of the names of the members, with their nationality and the foreign trades they are identified with: Francis Alexandre and John E. Alexandre are largely interested in the French shipping trade; Henry Becker, in German vessels; Roderick W. Cameron, a Scotchman, and agent and owner in British vessels in the Australian trade; John G. Dale, a British subject, and agent of the Inman line of steamers, with all his energies and sympathies engaged in establishing English commercial lines on a firm and enduring basis; A. De Vertu, a Frenchman; Henry W. O. Edye, a German, and interested in foreign vessels; Egisto P. Fabbri, an Italian, and controls vessels of his native country; I. E. Ainslee, a German, and largely interested in German ships; James B. Boyd, partner of the firm of Boyd & Hincken, the latter partner being the President of the Association, largely interested and sympathizing with British ship-builders; Surian De Visser, Frenchman; David R. De Wolf, English, with interests in direct trade with England and the Colonies; H. J. De Wolf & Co., of which the same can be said; Christian F. Funch, a German, with his interests all in foreign ships; Adolph E. Godeffroy, French; Herman Koop, German; Francis McDonald, an Englishman; George Mackenzie, an Englishman, and agent of the French line of steamers; Robert Mackie, an English agent of Lloyd's in London; John C. McArthur, a Scotchman; J. B. Phillips & Son, largely engaged in the consignment of foreign vessels; Wm. Salem, a German; Frederick C. Schmidt, Wm. F. Schmidt's son, both Germans; Gustav Schwab, a German, one of the North German Lloyd's company; George Stocovich, an Italian; F. W. J. Hurst, an Englishman, and agent of the National line of steamers, whose ships are largely owned by ship-builders; Richard Irwin, Kunhardt & Co., managers and agents of the Hamburg American Steamship Company; Chas. Luling, a German and a large ship-owner; J. Meincke, German; Louis Myer, a German; Oelrichs & Co., German, and agents of the North German Lloyd's (Bremen) Steamship Company; Emil Ruger and William Ruger, charterers of American ships in the German trade, &c.; Ambrose Snow and Alfred D. Snow, Daniel & Star are said to be foreigners; G. L. Tapscott, mostly in the English trade, ships in time of war; James E. Ward, ditto; Geo. P. Voss, German; Chas. L. Wright, largely in the English trade.

CHARITIES AND CORRECTION.

HOW MASSACHUSETTS TREATS HER PAUPERS—THE STATE REFORM SCHOOL—WHAT MAKES CRIMINALS OF BOYS—THE APPRENTICESHIP SYSTEM—THE WORKING OF THE TRUANT LAW.

BOSTON, Nov. 15.—The report of the Board of State Commissioners of Public Charities of the State of New-York which was recently published, contains some statements concerning the improper management of poor-houses, which call to mind the excellent classification system which was adopted in Massachusetts in 1866. Under its workings the worthy poor are kept at the State alms-house at Tewksbury, the boys and girls are at another at Monson, and the criminal State paupers are quartered at the work-house at Bridgewater. The system has worked admirably, and there has been a material decrease in the number of paupers. The work-house at Bridgewater, which is per force the most difficult to manage, is worthy of inspection by officers of poor-houses in all parts of the country, and our State alms-houses show the immense benefit of classification. The Hon. Levi L. Goodspeed, formerly a member of the Executive Council, is the manager of the institution, and, though it is no holiday task to control such a heterogeneous mass of dispositions embraced in decrepit old men and women, vicious young men and women and unruly boys, yet Mr. Goodspeed is the most popular person in the establishment, and his orders are obeyed promptly, and does not have an aggravated case of disturbance twice a year. Paupers at Monson and Tewksbury who are unmanageable, or who commit any offense, are sentenced to Bridgewater for a term of years. The boys and men who are able, work upon the farm, which embraces 220 acres, and such of the women as are strong enough work on sewing-machines, their labor yielding about $4,000 per year. Hardly one of them can work on every secular day until they have been there several months. They are received in a shocking condition, with loathsome diseases, and many are in the hospital for months after their arrival. Their rooms are properly ventilated, they have healthy food, an abundance of fresh air and sunlight, and many indolent and shiftless women are reclaimed from pauperdom and are sent into the world with good physical organizations and habits of industry which enable them to obtain an honest livelihood and become blessings instead of curses to themselves and their friends.

Another reformatory measure which has been brought out prominently by Gov. Claflin, is in the full tide of successful operation, and was adopted to improve the condition of the class for whose benefit it is intended. For years farmers, boot and shoe-makers and mechanics have taken boys from our State Reform School to work for them instead of serving out their term at the institution. In many cases the lads were ill-treated by their temporary guardians, as most of the employers merely wished to take the boys to have them do their drudgery, and have begged a man's work on a slender stripling, beside abusing him with the rod. They looked upon the boys as Beadle Bumble and his rulers upon little Oliver Twist and his graceless companions. This reference suggests that the boys taken from the Westborough Reform School were not given any more meat than was little Oliver in Sowerberry's kitchen. To remedy this great and growing evil, a bill was passed by the Legislature to allow the appointment of an agent whose duty it is to take boys who are sentenced for misdemeanors by the Probate Judges, find good homes for them, and by frequent visits to establish the fact that they are well treated and are as cheerful and contented as may be under the circumstances. Col. Gardiner Tufts, well known as the State Agent for Massachusetts at Washington to look after our war claims against the United States, received this appointment, and he is just the man in the right place, and has already effected no one hundred cases of this kind. In addition to this he has made a list of boys who were already thus apprenticed, and has complete data concerning each case. Through his instrumentality all new cases will be promptly looked after; the welfare of those apprenticed before his office was created will also be properly considered, and all evils effectually remedied. It has been demonstrated that nine-tenths of the boys who when sentenced are not vicious, are easily induced to form and keep good resolutions. It is also not a little remarkable when the astonishing fact that a large majority of them are children whose step-fathers or step-mothers wish to get rid of them, and adopt this method, as it is the easiest known to them. Nearly all of the cases are directly or indirectly traceable to inhuman step-parents or family jars between the parents. Another cause of the evil is the neglect of parents to prevent truancy by their children. This has been remedied by the Truant Law, which stopped truancy without much effort when cases were reported to them by the teachers, but now they have delegated that plain duty of theirs to policemen. The result is a demoralizing influence upon the boys. A truant is in a manner looked on as a criminal when he is arrested, and when brought into school by a big burly policeman, he may indicate almost anything else. Again, many may be boys who have taken boys from the Reform School have complained that as soon as they had given them a good trade and had taught him to be useful he left them, and they have had no redress. To remedy this, Col. Tufts is authorized in such cases to pay a certain sum per week until the boy's disposition and ability are discovered.

The following sections of the statute give a good idea of the power and duty of the agent:

SECTION 1. The Governor, with the advice and consent of the Council, shall appoint an agent to visit all children who may be maintained by the Commonwealth, or who have been indentured, given in adoption or placed in charge of any family or person by the authorities of any State institution, or under any provision of this act. [illegible]

SEC. 2. It shall be the duty of said agent to visit the children aforesaid, or cause them to be visited, at least once in three months, and to inquire into their treatment, their health and their associations, and especially to ascertain whether their legal rights have been invaded, and whether all the stipulations of their indentures are being faithfully kept. [illegible]

SEC. 3. All applications to take any of the children above specified, by indenture, adoption, or any other disposition of the child [illegible] to the Board of State Charities [illegible]

SEC. 4. Whenever application is made for the commitment of any child to any reformatory maintained by the Commonwealth, [illegible] such child [illegible] the Board of State Charities [illegible] provided, that this section shall not apply to the Superior Court.

Under the operations of this law hundreds of boys will undoubtedly be reclaimed from paths of vice and made good citizens. It has been suggested that the Agent have a house in Boston where the boys will find good homes and that such would be an additional step for facilities for usefulness during the coming year.