

## THE CLIMATE OF AMERICA.

However deeply prejudiced an Englishman may be in favor of his own country, yet I think it is impossible for him to cross the Atlantic without admiring that in both the northern and southern hemispheres of the new world Nature has not only outlined her works on a larger scale, but has painted the whole picture with brighter and more costly colors than she used in delineating and in beautifying the old world. The heavens of America appear infinitely higher—the sky is bluer—the clouds are whiter—the air is fresher—the cold is intenser—the moon looks larger—the stars are brighter—the thunder is louder—the lightning is vivid—the wind is stronger—the rain is heavier—the mountains are higher—the rivers larger—the forests bigger—the plains broader; in short, the gigantic and beautiful features of the new world seem to correspond very wonderfully with the increased locomotive powers and other brilliant discoveries which have lately been developed to mankind.

The difference of climate in winter between the old and new world amounts, it has been estimated, to about thirteen degrees of latitude. Accordingly, the region of North America which basks under the same sun or latitude as Florence, is visited in winter with cold equal to those of St. Petersburg or of Moscow; and thus, while the inhabitant of the Mediterranean is wearing cotton or other light clothing, the inhabitant of the very same latitude in the new world is to be found either huddled close to a stove hot enough to burn his eyes out, or muffled up in furs, with all sorts of contrivances to preserve the very nose on his face, and the ears on his head, from being frozen.

This extra allowance of cold is the effect of various causes—one of which I will endeavor shortly to describe. It is well known that so far as temperature is concerned, 300 feet of altitude are about equal to a degree of latitude; accordingly, that by ascending a steep mountain—the Himalayas for instance—one may obtain, with scarcely any alteration of latitude, and in a few hours, the same change of temperature which would require a long journey over the surface of the earth to reach; and thus it appears that in the hottest regions of the globe there exist impending stratifications of cold proportionate in intensity to their respective altitudes. Now, as soon as moisture or vapor enters these regions, in southern countries it is condensed into rain, and in the winter of northern ones it is frozen into snow, which, from its specific gravity, continues its feathery descent until it is deposited upon the surface of the ground, an emblem of the cold region from which it has proceeded. But from the mere showing of the case, it is evident that this snow is as much a stranger in the land on which it is reposing, as a Laplander is who lands at Lisbon, or as in England a pauper is who enters a parish in which he is not entitled to settlement; and, therefore, just as the parish officers, under the authority of the law, vigorously proceed to eject the pauper, so does Nature proceed to eject the cold that has taken temporary possession of land to which it does not owe its birth; and the process of ejection is as follows:—The superincumbent atmosphere, warmed by the sun, melts the surface of the snow; and as soon as the former has taken to itself a portion of the cold, the wind bringing with it a new atmosphere, repeats the operation; and thus on, until the mass of snow is either effectually ejected, or materially diminished.

But while the combined action of sun and wind are producing this simple effect in the old world, there exists in the northern regions of the new world a physical obstruction to the operation. I allude to the interminable forest, through the boughs and branches of which the descending snow falls, until reaching the ground it remains hidden from the sun and protected from the wind; and thus every day's snow adds to the accumulation, until the whole region is converted into an almost boundless ice-house, from which there slowly but continuously arises like a mist from the ground, a stratum of cold air, which the north-west prevailing wind wafts over the south, and which freezes every thing in its way. The effect of air passing over ice is curiously exemplified on the Atlantic, where, at certain periods of the year, all of a sudden, and often during the night, there suddenly comes over every passenger a cold mysterious chill, like the hand of death itself, caused by the vicinity of a floating iceberg. In South America I remember a trifling instance of the same effect. I was walking in the main street of San Jago in the middle of the summer, and, like every human or living being in the city, was exhausted by extreme heat,

when I suddenly felt as if some one was breathing upon my face with frozen lungs. I stopped, and turning round, perceived at a little distance a line of mules laden with snow, which they had just brought down from the Andes. And if this insignificant cargo—if the presence of a solitary little iceberg in the ocean can produce the sensation I have described, it surely need hardly be observed how great must be the freezing effects on the continent of North America, of the north-west wind blowing over an uncovered ice-house, composed of masses of accumulated snow several feet in thickness, and many hundreds of miles both in length and breadth.

Now it is curious to reflect that—while every backwoodsman in America is occupying himself, as he thinks, solely for his own interest, in clearing his location—every tree which, falling under his axe, admits a patch of sunshine to the earth, in an infinitesimal degree softens and ameliorates the climate of the vast continent around him; and yet, as the portion of cleared land in North America, compared with that which remains uncleared, has been said scarcely to exceed that which the seams of a coat bear to the whole garment, it is evident, that although the assiduity of the Anglo-Saxon race has no doubt affected the climate of North America, the axe is too weak an instrument to produce any important change.

But one of the most wonderful characteristics of Nature is the manner in which she often unobservedly produces great effects from causes so minute as to be almost invisible; and accordingly while the human race—so far as an alteration of climate is concerned—are laboring almost in vain in the regions in question, swarms of little flies, strange as it may sound, are, and for many years have been, most materially altering the climate of the great continent of North America.

The manner in which they unconsciously perform this important duty is as follows:—They sting, bite, and torment the wild animals to such a degree, that, especially in summer, the poor creatures, like those in Abyssinia, described by Bruce, become almost in a state of distraction, and to get rid of their assailants, wherever the forest happened to be on fire, they rushed to the smoke, instinctively knowing quite well that the flies would be unable to follow them there. The wily Indian observing these movements, shrewdly perceived that by setting fire to the forest the flies would drive to him his game, instead of his being obliged to trail in search of it; and the experiment having proved eminently successful, the Indians for many years have been, and still are, in the habit of burning tracts of wood so immense, that from very high and scientific authority I have been informed, that the amount of land thus burned under the influence of the flies has exceeded many millions of acres, and that it has been, and still is, materially changing the climate of North America.

The operation of this destructive practice is thus farther alluded to:—

Although the game, to avoid the stings of their tiny assailants, come from distant regions to the smoke, and therein fall from the arrows and rifles of their human foes, yet this burning of the forest destroys the rabbits and small game, as well as the young of the larger game; and therefore, just as brandy and whisky for a short time raise the spirits of the drunkard, but eventually leave him pale, melancholy, and dejected, so does this vicious, improvident mode of poaching game for a short time fatten, but eventually afflict with famine all those who have engaged in it; and thus, for instance, the Beaver Indians, who forty years ago were a powerful and numerous tribe, are now reduced to less than one hundred men, who can scarcely find wild animals enough to keep themselves alive. In short, the Red population is diminishing in the same ratio as the destruction of the moose and wood buffalo on which their forefathers had subsisted; and as every traveller, as well as trader, in those various regions, confirms these statements, how wonderful is the dispensation of the Almighty, under which, by the simple agency of little flies, not only is the American Continent gradually undergoing a process which, with other causes, will assimilate its climate to that of Europe, but that the Indians themselves are clearing and preparing their own country for the reception of another race who will hereafter gaze at the remains of the elk, the bear, and the beaver with the same feelings of astonishment with which similar vestiges are discovered in Europe—the monuments of a state of existence that has passed away.—*The Emigrant, by Sir F. B. Head.*