

## Mechanics and General Science.

### COLONISATION THE PIONEER OF CIVILIZATION.

The new impulse reserved for our century is colonisation. Always existing, even from the earliest ages of mankind, it had hitherto scarcely deserved the name. The French colonisation of Canada had not advanced, in a century, beyond the nook where they first nestled themselves, and where the most absurd of all policies—that of allowing them to place their language on a footing with the manlier tongue of their conquerors—has perpetuated them as a separate race, with all their absurdities, all their prejudices, and even with all their hostility to the British name. The Spanish colonisation of South America amounted to scarcely more than settling the descendants of the Spanish garrisons, of the Spanish refugees, and of the attendants on the viceroys.

The only true colonists were the English of North America; who, for a hundred years, poured a feeble stream towards the prairies of the Mississippi, recruited and stained by the vagabondage of Europe. But no great impulse of national necessity gave depth and force to the current. But within these two years a more powerful impression has been made by necessity. The Irish famine of 1846, and the following year, drove multitudes to seek for bread on the shores of America. Some hundred thousands probably have left Europe behind for ever, and are now delving and woodcutting in the forests of the western world. A German emigration, though of a more tardy order, has followed, from a pressure, if not of direct famine, yet of difficulty. And within the last year a powerful impulse has also been made in the direction of Australia, of all countries the one which offers the fairest prospect for the Englishman. The success of these emigrations will naturally tend to continue the outpourings of Europe. The emigrants, once settled and successful, will encourage the movement of those whom they have left behind, as much embarrassed as they themselves originally were; and the comforts which come into the possession of industry, in a land of cheap purchase—unburthened with taxes, and unburthened with the still heavier taxes which the vanities of old countries lay on the myriads of middle life—must form a strong temptation, or rather a rational inducement, to seek independence at the antipodes.

But the sudden discovery of the Californian gold-country has given a still more determined urgency to emigration. That a vast territory, which, if we are to rely on the reports of its labourers, is a sheet of gold, should have lain for three hundred years in the hands of the Spaniards, wholly unknown to a people always hungry for gold, is among the wonders which sometimes strike across us in the history of nations. But its immediate effect is, unquestionably, to aid the general tendency. It is already drawing thousands from every part of the world towards California. Columns of men, followed by their trains of oxen and wains of merchandise, are already pouring over every track of the West. In a few years, the desert will probably be filled with population; and when the mines are exhausted, or taken into the possession of the government, the more valuable mine will remain, in the existence of a new nation, in the commerce of the Pacific, and in the richness of a soil unploughed since the Deluge.

The effect of this emigration, for the moment, is obviously to assist the reception of the multitudes from Europe. It is thinning the population of the United States, carrying off the labourers, and turning every unoccupied eye in the direction of the west. The drudgery of Ireland, the skilled labour of England, and the patient and not unintelligent toil of Germany, will daily find the mart more open; and thus even the mania of gold-digging will have its effect on the sober welfare of mankind.

But a still more important effect, though more remote, may follow from the Californian mines. The celebrated Burke, sixty years ago, predicted that the new population on the plains of the Mississippi would extinguish the power, if not the existence, of the cities on the coast, and that when those "English Tartars," as he imaginatively described them, once poured down on the New Yorks, Bostons, and Philadelphias, they would turn them into warehouses, and their sites into watering-places. They would have fulfilled his prophecy long since, but for the boundless expanse of territory which lay behind this "Tartar" region. Their discontents evaporated into the wilderness; the provincial who looked with a jealous eye on the man of cities, found it easier to travel than to make war; and he forthwith set up a state for himself in the boundless prairie. A Californian republic may erect a formidable balance to the domination of the old States. Washington will no longer be the capital of America, and the north of the New World may yet have a stronger resemblance to Europe—with its great kingdoms, its little princes, and its commercial cities—than the anomalous government of the Stripes and Stars.

But the noblest of all the projects which have ever excited the curiosity of the world is still to be consummated—the communication between the Atlantic and the Pacific—a canal across the Isthmus of Darien. That Isthmus is but twenty miles broad, but a passage across it would shorten the voyage to China, perhaps to six weeks, instead of four months; annihilate the perils of the navigation round South America, and bring Europe into rapid contact with Australia, India, and the unexplored glories and exhaustless opulence of the finest archipelago in the ocean.

The project is so natural that it had been a hundred times conceived; but the perpetual wars of Europe, the angry jealousy of Spain, and, in later years, the disturbances of the native governments, have wholly obstructed the mightiest benefit ever offered to the progress of civilisation. The enterprise of the Americans had not overlooked this key to both hemispheres, and, some years since, a compact was entered into with a company headed by the American Biddle. But it was suffered to die away; other contracts succeeded, equally abortive, the government on the spot demanding terms of such exorbitance that it was impossible to carry the work into execution. With the usual short-sightedness of the foreigner, they had placed all their profit on the rent and tolls of the canal, foolishly forgetting that their *real* profit was to be found in the wealth which the intercourse of all nations must bring into their country.

Two projects are now said to be under consideration—a railroad, which would be exclusively for the benefit of the Americans; and a canal capable of carrying large vessels across the Isthmus, and which would be open to all nations. There can be no question as to the superior benefits of the latter to mankind.

Of the five routes, four are exposed to obstacles arising from elevation of ground, (the track to Panama rises a thousand feet), from insalubrity, and from other circumstances of the soil and the locality. The fifth, by the river of Nicaragua, evidently deserves the preference. It lies through a fine river, reaching from the Atlantic to a central lake, and thence descends through a second river to the Pacific. The whole distance would be but two hundred and seventy-eight miles, which would require locks and other works (the rivers being at intervals interrupted by rapids) but this portion would amount to but eighty-two miles. The lake-sailing would be a hundred and twenty-five miles. The whole expense, estimating it at the prices of Europe, would be less than four millions sterling. Sanguine calculators value the profits at twelve per cent. But whatever might be the smallness of the dividends in the first instance, there can be no imaginable doubt that, with fair