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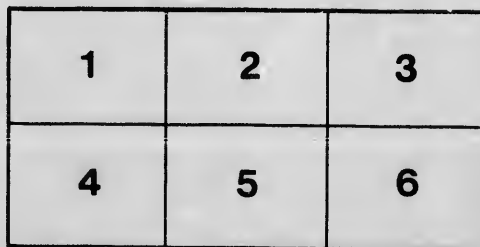
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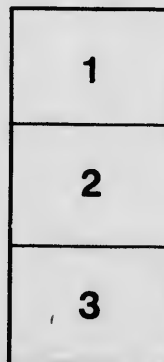
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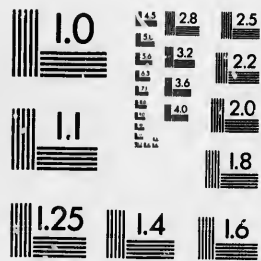
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SECTION II, 1885.

TRANS. ROYAL SOC. CAN.

I. THE HALF-BREED
II. VITA SINE LITERIS

JOHN READE

FROM THE
TRANSACTIONS OF THE ROYAL SOCIETY OF CANADA
VOLUME III, SECTION II, 1885

MONTREAL
DAWSON BROTHERS, PUBLISHERS
1886



I.—*The Half-Breed.**By* JOHN READE.

(Presented May 28, 1885.)

The opinion prevails that the fusion of white with Indian blood is of rare occurrence north of the Gulf of Mexico. There is, however, reason to believe that, both in Canada and the United States, it has been much more common than is generally assumed. In Mexico, the West Indies, Central and South America, pure blood is the exception, mixed blood the rule. Nor is it the aborigines alone that in this hemisphere have given rise, through their intercourse with Europeans, to new racial varieties. The negro has contributed largely to the same result, and the Chinese are also beginning to have an appreciable influence on the population of parts of the New World. In different regions of the Old World an analogous process is going on. Asia, Africa and the island domain of the Indian and Pacific Oceans furnish many instances of race amalgamation. Wherever we turn, indeed, we find that, in one shape or another, the inhabitants of the earth are, slowly in some places, with surprising rapidity in others, undergoing transformation by interfusion of blood.

The fact is not a novelty in human history. As far back as our knowledge of mankind can reach, with the evidences of race diversity we discover the indications of race intermixture. On the almost universally accepted theory of the unity of the human species, those divergences of feature and complexion which distinguish race from race must have required many ages to bring about. How they were caused we can only conjecture; but we know that four thousand years ago the negro was as much a negro as he is to-day. Of the neighbours of the Egyptians when their earliest monuments were constructed, Dr. Birch writes: "South of Syene lay the numerous black tribes, the so-called *Nahsi* or negroes, inferior in civilization, but turbulent and impatient of subjection. The skirts of the desert were held by wandering tribes called *Satu*, not yet subjected to the arms and discipline of Egypt. The western frontier was menaced by the *Tahennu* or Libyans. Beyond the north-east desert in which resided the *Herusha*, or inhabitants of the Waste, were the *Menat*, perhaps also a shepherd race, the dwellers of northern Asia; and hazily in the distance were seen the nascent forms of the empires of Babylon and Assyria, and the slowly rising power of the Phœnician States and Kingdoms." Champollion-Figeac, citing the authority of his more illustrious brother, is still more explicit in his account of the nations known to the Egyptians, which he illustrates by six figures copied from the tombs of the Kings at Biban-el-Molouk.² These leave no doubt that the Egyptians

¹ Egypt from the Earliest Times to B.C. 300, by S. Birch, Introd. p. ix.

² *Égypte Ancienne*, p. 30.

of the Nineteenth Dynasty were acquainted with the main race divisions—black, red, brown, yellow and white—with which we are familiar in our own generation. When, however, we contemplate the gulf that separates the Caucasian from the negro, we must conclude that, compared with the duration of man's life on earth, that remote period is but as yesterday.¹

From what order of primitive men did the various races descend? One distinguished geologist maintains that there is "no ground for the belief in the existence, even in the most ancient times, of any race of men more rude than the modern semi-civilized races or less developed physically."² This view, of course, the evolutionist cannot hold. His theory necessitates a transitional stage from the infra-human to the human, and the beings in whom the high characteristics of humanity would be first dimly recognizable were probably of the type that would suggest what the witty poet called the "prentice hand" of Nature. Prof. Grant Allen has drawn for us a picture of a "tall and hairy creature, more or less erect, but with a slouching gait, black-faced and whiskered, with prominent prognathous muzzle and large prominent, canine teeth;" whose "forehead was, no doubt, low and retreating, with bony bosses underlying the shaggy eye-brows, which gave him a fierce expression, something like that of a gorilla."³ That such a creature existed Mr. Allen, considers an "inevitable corollary from the general principles of evolution." What such a primitive being would look like may be imagined from Mr. Cushing's ideal representation of the Neanderthal man, which forms the frontispiece to Mr. J. P. McLean's "Manual of the Antiquity of Man." Whether they paint his portrait or leave his lineaments to conjecture, all writers of the development school and some who do not belong to it select, as the Adam of their *Sepher Toldoth*, a type compared with which no savage of the present could be regarded as degenerate. Professor Winchell, referring to what, until not very long ago, was considered the orthodox view of the first man, writes as follows: "Those who hold that the white race, the consummate flower of the tree, has served as the root from which all inferior races have ramified, may select their own method of rearing a tree with its roots in the air and its blossoms in the ground. I shall put the tree in its normal position."⁴ Fixing upon the Australians as the lowest extant type of humanity, he gives the Pre-Australian the second place in his affiliated classification of mankind, taking as its cradle a hypothetical continent in the Indian Ocean, of which the Malagasy Archipelago is the visible remnant. From this central "Lemuria," as it has been named (but which Mr. A. R. Wallace claims to have proved utopian⁵), Professor Winchell attempts

¹ In a useful little work, called the *Development Theory*, by Joseph and Mary Bergen, an attempt is made, by means of a diagram, to convey a notion of the possible antiquity of mankind. A diminutive square represents the time from the earliest historical period to the present; a larger square, the time since the close of the last glacial period; a still larger square, the time since the beginning of the penultimate glacial period; and, finally, a very much larger square, the time since the beginning of the Tertiary. The question is one, it need hardly be said, on which much difference of opinion exists. While some demand millions of years for the development of primitive man into the man of the river-drift, others are satisfied with from eight to ten thousand years for the whole period of man's life on earth. Sir William Dawson, for instance, writes (*Fossil Men*, p. 246): "What evidence the future may bring forth I do not know, but that available at present points to the appearance of man, with all his powers and properties, in the Post-glacial age of Geology, and not more than from 6,000 to 8,000 years ago."

² *Fossil Men*, etc., by Sir J. W. Dawson, p. 249.

³ "Who was Primitive Man?" in *Fortnightly Review*, and *Popular Science Monthly*, Nov., 1882.

⁴ *Preadamites*, p. 297.

⁵ *Island Life*, p. 371.

to trace the slow progress of racial divergence and dispersion into the regions of the earth now inhabited by man. If his genealogy and chart of dispersion are, as all such undertakings must be, largely made up of conjecture, his scheme is, in its main features, rational and fruitfully suggestive. If he has not discovered the very truth as to the development of the human races, he has, at least, indicated the path that may lead to the desired goal. We are not bound to accept Lemuria, nor to believe that the monuments of the first men, if they left any behind them, lie at the bottom of the Indian Ocean. Neither need we regard with equal favour all the details of his genealogies. But his classification and plan of distribution may be adopted, with necessary modifications as fresh light is shed on the subject, no matter where we fix our central starting-point. M. de Quatrefages, for instance, locates the first members of the family of mankind in the vast plateau bounded on the south and south-west by the Himalayas, on the west by the Bolor Mountains, on the north-west by the Ala-Tau, on the north by the Altai range and its offshoots, on the east by the King-Khan, on the south and south-east by the Felina and Kuen-lun; around that region he finds grouped the fundamental types of all the human races, the black races being the farthest from it. No other part of the globe, M. de Quatrefages urges, presents such a union of extreme human types distributed around a common centre, and, after stating some objections to his view, he concludes that no facts have yet come to light which authorize the placing of the cradle of mankind elsewhere than in Asia.¹ If, however, as M. de Quatrefages himself is inclined to believe, Abbé Bourgeois has proved the existence of Tertiary man, it is absolutely vain to look for any certainty as to his primal abode. One thing we may take for granted—that, wherever man originated, he must soon have spread out in various directions; and thus, step by step, the different zones were occupied and the process of differentiation went on, climate and the other manifold environments exerting their natural influence. In an article contributed to *Nature* (November 6th, 1884), Mr. A. F. Fraser states that wherever the sun is hottest all the year round, "the blacker are the natives down to the equator of heat." The line in question, as traced by the late Dr. Draper, enters Africa along the coast of the Gulf of Guinea; then, rising to about 15°, it crosses the continent, escaping from the eastern promontory at Cape Guardafui; it intersects the most southerly portion of Hindostan; then crossing the earth's equator, it passes through the midst of the Eastern Archipelago, and returning through America traverses this continent at its narrowest point, the Isthmus of Panama. The recession of the Mediterranean from the Desert of Sahara, in the opinion of the same philosophic writer, and its contraction within its present limits, had doubtless much to do with the possibility of negro life.² On the other hand, he maintains that the conditions for its production did not exist in America. For, whereas the range of equatorial warmth in Africa is 4,000 miles, in Central America it is only fifty-one. It may also be that equatorial America has been occupied for a period too short to dye the skin of the natives as that of the Central African has been dyed. At any rate, we know that, though the negro lives with comfort in intertropical America, as though it were his native habitat, he is merely an importation to its shores, where most likely he would never have landed had not his white master brought him thither by force. But even those who insist that nearness to the heat of the equator has been the main cause of the negro's blackness have to concede the dark-skinned tendency in races situated towards the Pole.

¹ *The Human Species*, p. 175.

² *History of the American War*, i. 122.

Whatever were the reasons for the differentiation, it is known, as already pointed out, that between B.C. 3000 and B.C. 2000, the black, brown, yellow, red and white races, had assumed the characteristics by which they are still distinguished. And who can tell by what breaking-up and regrouping, often repeated, that stage was finally attained? All kinds of investigation have been brought to bear on the early movements of our race over the surface of the earth. The spade of the archaeologist has raised to the light of day invaluable treasures of knowledge regarding a past of which the world hardly dreamed. Beneath the historic fields of Europe there lay for ages, awaiting the seeing eye and the understanding brain of the Nineteenth Century scientist, the monuments of races compared with which the great civilizations of the historic past may be considered modern. Nor is it in Europe alone that these relics of forgotten peoples have rewarded the zeal of the searcher. Already science has begun to gather from beneath the soil of China the evidences of occupation by rude tribes whose presence long antedated the earliest of its historic races. According to Pauthier,¹ when the founders of Chinese civilization first arrived in the country, they, like the early settlers in the New World, encountered the primeval forest, peopled only by tribes of savages with which they had frequently to wage war. In the mountains and otherwise inaccessible parts of the empire, still linger the descendants of such of those aborigines as escaped extermination or absorption at the hands of the conquerors. Some of them, it is said, have maintained their wild independence and isolation for 5,000 years. But those wild men of the woods were not the only people with whom the in-coming Chinese came in contact. They are but one of several races that looked upon the region as their possession by right divine. S. Wells Williams, who spent many years among the Chinese, ascribed to the Middle Kingdom a diversity of race which places it on a par with the most mixed of western nations. Besides the *Miautsze* or "children of the soil," the *Mongol* and *Manchu*, and their many varieties, there are almost countless types scattered through the empire, some of them in the maritime regions, others hidden away in the far interior where travellers seldom reach them. Such names as "Mongol" and "Tatar" (commonly called "Tartar") are entirely misleading, when regarded, as they often are, as implying a common origin. When Genghis rose to power, Williams tells us, he called his own tribe *Kukai Mongol* meaning "celestial people," designating the other tribes *Tatars* or "tributaries."²

Besides the "children of the soil," there are other relics of the occupants, in early times, of both mainland and islands. Lieut.-Col. Chas. Hamilton Smith says that in the northern mountains there are tribes of men over six feet high.³ There is also an aboriginal race in the centre of the Island of Hainan, and many other instances might be mentioned. Enough has, however, been adduced to show that, even those races that seem most uniform in their type are really made up of repeated interblendings with other families of mankind. The little communities that, in their seclusion, preserve the features of the primitive possessors of the land, thus render an important service to science, though they, too, have probably in their veins some share of the blood of the victorious intruders.

If the Chinese, whom Prof. Winchell pronounces "the most homogeneous family of mankind," can be shown to be of mixed origin, we have less difficulty in assigning such

¹ *Chine Ancienne*, p. 56.

² *The Middle Kingdom*, i. 165.

³ *Natural History of the Human Species*, p. 185.

a derivation to most other Asiatic races. The Japanese, who bear physically a close resemblance to their continental neighbours, doubtless mingled to some extent with the aboriginal Amos, whom they dispossessed. The terms "Malayo-Chinese" and "Indo-China" speak for themselves. "Malaysia," says de Quatrefages, "presents a perfect mixture of most different races from the white to the negro."¹ Winchell supposes the original Malay centre to have been "the peninsula on the south-east of Asia, or the islands contiguous, or perhaps, a continental region which has been reduced by geological denudation to some insular relics of itself." This certainly leaves us an amplitude of choice, but the fact is that the Malays have spread so far and wide from their primal home and have blended their blood with so many races, that it is impossible to ascertain where they first appeared. We find their characteristics in greater or less strength from Madagascar to the Sandwich Islands. The Polynesians diverge farthest from the Mongolian type, while the sub-race of the Micronesians fades, in one direction into well marked Malays, and in the other, into the Papuan type.²

The ethnology of India presents abundant evidence of miscegenation since the earliest times. The earliest page of its history discloses, Dr. Hunter tells us, two races struggling for the mastery—one, the fair-skinned Aryans from Central Asia, the most eastern representatives of the great Indo-European stock; the other, of lower type, long in possession of the country, and which the new-comers stigmatized in turn as non-Aryans, enemies, and slaves of black descent. These primitive predecessors of the Aryans had no records, and their traditions do not tell us much, but such hints as they yield point northward.³ Their language indicates that the early peoples of India belonged to three great families—the Tibeto-Burman and the Kolarian, who entered Bengal from the north-east, and the Dravidian, who, coming from the north-west, rushed forth in a mighty mass which no foes could resist, and spread themselves over the south of the peninsula. How manifold was the composition of the non-Aryan inhabitants of India may be gathered from the fact that their principal languages and dialects, of which a list was prepared a few years ago for the Royal Asiatic Society, number a hundred and forty-two. Their physical and moral characteristics are alike various. From the taint of alien mixture, no people ever took so much pains to preserve themselves as did the Aryans of India. To that end caste was a powerful aid, and yet it did not prove quite effectual. The new-comers formed alliances in time with the more advanced of the aborigines. Greek, Scythian and the later invasions have also played an important part in modifying the population. The coming of Alexander the Great was, like the subsequent conquest by the British, an unconscious meeting again of long-parted kinsmen. After the conqueror's death, a Græco-Bactrian realm preserved the marks of Greek civilization for several generations, but, remote from Hellenic influences and gradually corrupted by alien admixture, the Greek stock in time declined and finally disappeared altogether. Bactrian coins, as M. Francis Pulzky informs us, in his "Iconographic Researches," show the process of degeneration in successive princes and the inferior character of the later to the earlier workmanship. Eucratides (B.C. 175) is Greek in feature. The likeness of Hermaeus keeps up the prestige of a dynasty of Greeks, but Kadphyses, both in his name and features, as well as in the

¹ The Human Species, p. 163.

² Preadamites, pp. 57, 58, 59.

³ Dr. W. Hunter: The Indian Empire, p. 79.

⁴ Indigenous Races of the Earth, p. 169.

execution of the artist who reproduced them, gives warning that the day of Greek pre-eminence is drawing to a close. Both he and his dye-sinker, M. Pulzky thinks, were unmistakably half-castes. In India, Alexander had planted garrisons, founded cities, and formed alliances. Seleucus gave his daughter in marriage to Chandragupta or Sandracottus. The grandsons of the two friendly princes entered into renewed treaty relations (B.C. 256), and in the next century the Eucratides already mentioned conquered as far as the modern Hyderabad. The coins of Menander, who advanced farthest into north-western India, are found from Cabul to Muttra on the Jumna. Greek faces and profiles constantly occur on Buddhist statuary, examples of which are seen at South Kensington. Eastward from the Punjab, the Greek type begins to fade and its effect was probably inappreciable in modifying the physical characteristics of the Hindoos. The traces of other mixtures are more perceptible. Scythian invasion, for instance, did much to transform the population of northern Hindostan, and the influence of the Scythic element on the growth of ideas was considerable. Some writers go so far as to ascribe to Buddha a Scythian origin.¹ The Jats and Dhe, so numerous in the Punjab, have been identified by General Cunningham and others with the Gete and Dahæ. The more recent occupations of the peninsula, from the House of Ghazni to Bahadour Shah, must have done much to mingle the blood of the Aryans with that of allied races. It is, indeed, striking testimony to the frequent untrustworthiness of pretensions to pure blood, even when seemingly well-founded, that in India many members of the warrior and other castes, whose privileges are guarded with the utmost jealousy, have been strongly reinforced from ambitious outsiders of the aboriginal and other stocks. In like manner, Dr. Neubauer, a distinguished rabbi, in a paper read before the British Association at Montreal, shows that many Jews whose pride of race would disdain any foreign admixture, are themselves aliens from the commonwealth of Israel.

In Indo-China, in Ceylon, in Java, and elsewhere, both on the Asiatic continent and Indian Archipelago, are the monumental evidences of races that have disappeared. Here and there, also, some lonely remnant, such as the Veddahs of Ceylon, tells what the early dwellers were like. The great region west of the Hyphasis, which constituted the twenty satrapies of Darius,² when the ancient Persian empire was at the height of its power, comprised representatives, in every stage of amalgamation, of the Aryan, Semitic and Turanian families. In the Oxus region, the contest between Caucasian and Mongolian has been going on since the dawn of history, and every shade of interblending may still be found among the tribes of the Afghan frontier. The Israelites intermarried with the conquered Canaanites,³ notwithstanding the command to destroy them. Professor Sayce, who is inclined to think that the Hebrew and Canaanite differed only in their modes of life, considers the Phœnicians to have been modified by intermixture with the aborigines.⁴ According to the same authority, after the age of the Old Empire, the dominant race in Egypt ceased to be pure, and the Pharaohs of the Twelfth Dynasty had Nubian blood in their veins, while the long domination of the Hyksos and the residence of the Phœnicians in the Delta of the Nile had affected the population of the country. The gradual change of features is shown on the monuments, those of later periods differing essentially from the earlier.

¹ The Indian Empire, p. 166.

² Wilson's Prehistoric Man, ii, 248.

³ Herodotus iii. 89.

⁴ Ancient Empires of the East, p. 182.

Distinct from the Egyptians and yet closely associated with them were the ancient Libyans of North Africa, who probably may be identified with the Iberian predecessors of the Aryans on the opposite shores of the Mediterranean. In the course of time, they, like their hypothetic kinsmen in Europe, were destined to be absorbed by newcomers of every northern and eastern race, as well as by their more ancient rivals, the negroes of the interior. Of the early settlers in Asia Minor, Sayce is of opinion that to the Phrygians alone can be ascribed a fairly pure Aryan ancestry, the Mysians and Lydians being essentially mixed. And, if mixed at the remote period before the Ionian migration, the settlement of the Celts in Galatia, and the influx of horde after horde from the inexhaustible *officina gentium* of Mid-Asia, what must Asia Minor have been in later times when all the great empires of the ancient, medieval and modern worlds had successively filled it with their colonists? The explorations of Dr. Schliemann in the Troad show how many successive races had at an early date made themselves masters of that corner of the peninsula alone.

The labours of the palæontologist and the philologist have done much to illustrate the early and later ethnology of Europe. From the rude rival of the beasts of prey of the Canstatt type to the Turkish conqueror of the degenerate Byzantine, they have set before us, with a definiteness that increases with time, the physical features, the arts and, except in the case of the fossil men, the languages of the successive types of humanity by which Europe has been peopled. We know now that, long before the first westward Aryan wave was set in motion, Europe had been inhabited by races, isolated representatives of some of which still speak the ancient languages of their ancestors. On the ground which, starting from the far east we have already traversed in search of mixed races, the evidence of their existence is thus summed up by de Quatrefages: "In China and especially in Japan, the white allophylian blood is mixed with the yellow blood in different proportions; the white Semitic blood has penetrated into the heart of Africa; the negro and Houzouana types have mutually penetrated each other and produced all the Kaffir populations situated west of the Zulus of Arabian origin; the Malay races are the result of the amalgamation, in different proportions, of whites, yellows and blacks; the Malays proper, far from constituting a species, as polygenists consider them, are only one population, in which, under the influence of Islamism, these various elements have been more completely fused. I have quoted at random the various preceding examples, to show how the most extreme types of mankind have contributed to form a certain number of races. Need I insist upon the mixtures which have been accomplished between the secondary types derived from the first. In Europe what population can pretend to purity of blood? The Basques themselves, who apparently ought to be well protected by their country, institutions, and language, against the invasion of foreign blood, show upon certain points, in the heart of their mountains, the evident traces of the juxtaposition and fusion of very different races. As for the other nations ranging from Lapland to the Mediterranean, classical history, although it does not go back for a great distance in point of time, is a sufficient proof that crossings are the inevitable result of invasions, wars, and political and social events. Asia presents, as we know, the same spectacle; and, in the heart of Africa, the Gagas, playing the part of the horde of Gengis-Khan, have mixed together the African tribes from one ocean to the other."¹

¹The Human Species, pp. 273, 4.

Professor Boyd Dawkins, in an article on "The British Lion," in which he deals, not with the superb beast of heraldry, but with a genuine *felis leo*, says that a rough type of humanity, the river-drift hunter, was coeval with that animal in Britain. The lion also ranged over France, Belgium, Germany, and Italy,—in those regions, too, having man for his rival in the chase. But in the course of time a convulsive change in the geography of northern and western Europe caused his retreat to more secure and genial hunting-grounds. He was still at large in the forests south of Mount Hæmus until probably the beginning of the Christian era. But what became of the man, his contemporary in Britain? There are some who think that he managed to survive the great terrestrial shocks that frightened the lion eastward, lingering on till the arrival of the Euskarian with whose blood his own became merged, and who in afterdays, by union with the Celt, was to form the basis of the British people. Others decline to accept him as an ancestor, though they are glad to receive the Moor-like Euskarian in that capacity. The descendants of this last neolithic occupant of Britain have been recognized in the so-called Black Celts of western Ireland and Scotland, while their blood has also been traced in a more mixed condition in parts of Wales, in Lincolnshire, in East Anglia and other districts of the United Kingdom.

Mr. Horatio Hale, favouring the hypothesis, based on certain peculiarities of the Basque tongue, that those ancient West-Europeans were of the same race as the Indians of America, credits them with that love of freedom and free institutions which is so conspicuously lacking in the character of the Eastern Aryans.² What a train of thought the suggestion, if we could only admit its probability, would open up! It is, however, hardly consistent with the servile condition to which, according to our authorities, the light-skinned Celts easily reduced their dusky forerunners—to be, in turn, themselves, master with serf, enslaved by the all-conquering Romans. One effect of the coming of the latter was to amalgamate the Celtic and Euskarian elements, in those parts of the island where they stood towards each other in the relation of a superior to a subject race. But in Ireland, the Highlands of Scotland, parts of Wales, and elsewhere in Britain, the Euskarian blood continued to predominate, and is still easily perceptible after the interfusions of so many centuries. In fact, all through the successive changes which the population of the British Isles has undergone, "each earlier element has everywhere persisted in the resulting mixture, and it is probable that the numerical proportion of all the older elements, especially the Euskarian, is far greater than people generally at all imagine."³

If the Britons were a composite people, it could be easily shown that the Greeks, the Romans, the Teutons and the Slavs, were also made up of various elements. In every case we find a more or less obscure substratum of aborigines on which grew up, by colonization, invasion, *raptus*, or captives taken in tribal war, a more or less uniform population. Time and circumstance, and the chances of human conflict and intercourse, accomplish in that direction what would be impossible if human reason deliberately undertook the task. Contemplating the result, we may well say:—

"There's a divinity that shapes our ends,
Rough-hew them how we will"

¹ Contemporary Review and Popular Science Monthly, Nov. 1882.

² The Iroquois Book of Rites, p. 190.

³ "Our Ancestors," by Prof. Grant Allen, in Nature Studies, edited by R. A. Proctor.

"A thousand years ago," writes Mr. D. Mackenzie Wallace,¹ "the whole of Northern Russia was peopled by Finnish tribes, and at the present day the greater part of it is occupied by peasants who speak the language of Moscow, profess the Orthodox faith, present in their physiognomy no striking peculiarities, and appear to the superficial observer pure Russians." And, for good reason, Mr. Wallace concludes that the Finnish aborigines were neither expelled nor exterminated, but "had been simply absorbed by the Slavonic intruders." In the rest of Europe how often has the same process of absorption taken place!

But it is time to turn from the past to the present, and to inquire whether, where, and to what extent, the intercrossing of the human races is going on in our own generation? As to the main question, we have no hesitation in replying in the affirmative. As to the whereabouts of its occurrence, though, as we shall see, examples are not wanting in the Old World, it is in the American hemisphere that racial interfusion most prevails. There is not a State, indeed, in the entire range of territory from the Arctic regions to Patagonia, which does not furnish characteristic varieties of mixed races. These varieties result from the mixture in different proportions of the European, the Indian and the negro. In his "Narrative of the Surveying Voyages of His Majesty's Ships 'Adventure' and 'Beagle,'" Captain (now Admiral) Fitz-Roy gives a table of twenty-three such varieties, enumerated by Stevenson, as existing in Lima, all consequent on the union of the Spaniard, the aboriginal Peruvian, and the negro. Substituting in Brazil, Portuguese for Spanish, and in the West Indies and North America some other European nationality—French, German, Dutch, Scandinavian, or British—we may adopt the list without much inconvenience. Practically, however, except during the prevalence of slavery, which held its grip on the unfortunate in whose veins there was the least infusion of African blood, such minute distinctions are unknown. When once the negro or Indian element is imperceptible to common observation, the person of mixed blood is considered white. For this very reason, there are not a few not only in the Northwest but in the older provinces of Canada who are, perhaps without suspecting it themselves, of partial Indian descent. One of the most interesting chapters in Dr. Wilson's valuable work, "Prehistoric Man," is devoted to a consideration of the share which absorption in this way has had in reducing the number of the aborigines. "It is impossible," he writes, "to travel in the far west of the American continent, on the borders of the Indian territories, or to visit the reserves where the remnants of displaced Indian tribes linger on in passive process of extinction, without perceiving that they are disappearing as a race, in part at least, by the same process by which the German, the Swede, the Irishman, or the Frenchman, on emigrating to America, becomes in a generation or two, amalgamated with the general stock."² Dr. Wilson received striking evidences of the reality of the process during a short stay at Sault Ste. Marie in the summer of 1855. A clergyman of the place, in answer to his inquiries touching the amount of intermarriage or intercourse

¹ Russia, p. 151.

² ii. 250. James Simson makes the same claim on behalf of that singular people, the Gipsies, whose fertility he contrasts with the unproductiveness of the Indians. While the latter, he says, "really die out, the Gipsies are very prolific and become invigorated by mixture of white blood, under the cover of which they gradually leave the tent and scatter themselves over and through society, enter into the various pursuits common to the ordinary natives and become lost to the observation of the rest of the population." *The Social Emancipation of the Gipsies*, p. 3.

that occurred between the whites and the Indian, pointed to the people of the village, and drew his attention to the evident fact that few of them had not some trace of Indian blood in their veins. Subsequent investigation led Dr. Wilson to believe that what he had seen at the Sault was a fair illustration of what might be observed at any frontier settlement. Nor was it at such localities alone that he noticed the signs of twofold descent. "I have recognized," he says, "the semi-Indian features in the gay assemblies at a Canadian Governor-General's reception, in the halls of the Legislature, among the undergraduates of Canadian universities and mingling in selectest social circles. And this is what has been going on in every new American settlement for upwards of three centuries." Dr. Wilson's statements as to the extent to which traces of Indian blood are discoverable, especially in the Province of Quebec, are, perhaps, more sweeping than some of our French Canadian fellow countrymen would deem justifiable,² but we may be sure that an ethnologist like Dr. Wilson would not make assertions which he had not carefully sought the means of substantiating. When he tells us, therefore, that "in Lower Canada half-breeds and men and women of partial Indian blood, are constantly met with in all ranks of life," and cites with approval the opinion that "in the neighborhood of Quebec, in the Ottawa valley, and to a great extent about Montreal, there is hardly among the original settlers a family in the lower ranks, and not many in the higher, who have not some traces of Indian blood," we should hesitate to reject, on that point, authority which we accept on so many others. By way of illustrating the relations that prevail between the native tribes and the settlers in a new colony, the same author cites the case of British Columbia, as it was some years ago. Of two hundred and six immigrants—British and Spanish, French and Italian, Chinese and negroid—from northern and central Europe and the United States, resident on Vancouver Island, only two were found to be women. Under such circumstances an increase to the population, through association with the squaws that hang round the settlement, becomes inevitable. "And yet," he adds, "long before the province is so old as New England, the descendants of this varied admixture of nationalities will, doubtless, talk as freely of 'Anglo-Saxon' rights and duties as any of the older settlements." A little volume entitled "The Wonderland Route to the Pacific Coast," gives similar evidence as to the multiplicity of human type to be met with in a western border town. In Miles City, a village of 3,000 inhabitants, at the confluence of Tongue and Yellowstone Rivers, there is scarcely an important race, we are told, that is not represented; while the few ladies that keep chivalry alive in the small community are mostly of the aboriginal stock. But it is on Red River that the intermixture indicated has been peculiarly fruitful. The growth of the half-breed population there has probably extended over nearly two centuries, dating from the first intercourse between Europeans and the natives to the present time.³ In the early years of the seventeenth century the unfortunate Henry Hudson (in the employ of "some worshipful merchants of London"), penetrated the great bay that bears his name, but it was not till 1670 that the company called after it received its charter. The rivalry between

¹ Prehistoric Man, ii. 252, 3.

² Sulte denies with indignation the assertion that the early Canadians intermarried (except in very rare instances) with the Indian tribes. See his *Histoire des Canadiens-Français*, i. 154. Abbé Tanguay also holds such marriages to be of rare occurrence.

³ Arthur Dolbis, whose account of the countries adjoining Hudson Bay was published in 1744, obtained his information almost wholly from a half-breed trader called La France—a proof that the *Métis* was on the spot at least a century and a half ago.

France and England gave rise to conflicting claims of discovery and possession, the former basing an alleged prior right on the assertion that Jean Bourdon, a French navigator, had entered Hudson Bay in 1656. Similarly opposing pretensions were subsequently made by the fur companies as to the opening up of the interior. The explorations of the Verandryes, father and sons, lasted from 1731 to 1752. After the Conquest of Canada, the fur trade ceased for several years; but in 1766 Montrealers began to push northward. Others subsequently maintained that it was not till 1774, when they and the Hudson's Bay Company's agents met at Fort Cumberland on the Saskatchewan, that the latter reached the interior of the country. It was shown, on the other hand, that Henry Kelsey, a Hudson's Bay Company man, had got as far as the plain country west and south of Lake Winnipeg as early as 1691, or forty years before the Verandrye family began their great enterprises. The North-West Company, formed by the association of all the merchants engaged in the fur trade, was formally established in 1783-4. Some years later a rival company was started, but both these united in 1787. In 1798 there was a secession and another offshoot from the North-West Company in 1805 was called the X. Y. Company. In 1821, after the Hudson's Bay and North-West Companies had been almost ruined by troubles of one kind or another, an understanding was reached and the two bodies were henceforth known by the name of the older. No doubt, from the first arrival of Europeans in the Northwest, there had, as already intimated, been less or more intermarriage or other alliances between them and the natives. At any rate, from the time that the Montreal traders began their enterprise in 1766, their agents, mostly French Canadians, mingled freely with the Indians, and the consequence was the growth of a half-breed population. When the Earl of Selkirk began his colonization in 1811, there was a considerable community of them, known by their own chosen designation of *Bois-Brulés*, though then, as later, they often assumed the ambitious name of the "New Nation." That the Bois-Brulés were not all of French origin, may be inferred from some of their names which are Scotch (or English). But the English-speaking half-breeds proper date their first appearance from the years immediately following the establishment of Lord Selkirk's Red River Colony. In the latter year, making allowance for subsequent migrations, they numbered about 200. By 1870 the half-breeds and *métis* of Manitoba, as we may distinguish those of British and French origin, numbered about 10,000. Besides them there was a tribe of *métis* hunters, numbering at one time 6,000, and a *métis* population of uncertain number scattered through the Northwest, not to speak of the large population of half-breeds among the Indian bands living on reservations in the older provinces.

The original new-comers under Lord Selkirk's auspices were Orkney Islanders, but they were subsequently increased by English, Scotch, and French Canadians. Here, however, as in the more remote Hudson's Bay Company forts and trading posts, the white immigration consisted chiefly of young men, and the natural consequence has been the growth of a half-breed population, distinct in manners, habits and allegiance, from both the whites and the Indians. Dr. Wilson considers the rise in this way of an independent tribe of half-breeds as "one of the most remarkable phenomena connected with the grand ethnological experiment which has been in progress on the North American continent for the last three centuries." Noting the difference of character between those of French and those of British paternity, he considers the former more lively and frank, but also less stable and industrious. They are large and robust, with great power of en-

durance and, while manifesting the reserve of the Indian, display considerable vivacity under excitement. The civilized half-breeds of Manitoba differ from those of the half-breed tribe and from Indians of mixed blood. Some of them are wealthy and their sons in some cases, are sent to college, and on their return home use their knowledge and influence to promote refinement. Generally they resent the term "half-breed," preferring that of "native." The testimony of Archdeacon Hunter and Mr. S. J. Dawson is favorable to the physical and moral qualities of the mixed race as compared with the pure Indians. In 1874, Dr. G. M. Dawson, while employed on the British North American Boundary Commission, came upon the site of the Big Camp of the half-breed hunters to the west of White Mud River. It consisted of more than 200 *tepees* or buffalo-skin tents and about 2,000 horses.¹ In 1845, Mr. Paul Kane reckoned the half-breed hunters of Red River at 6,000. In the hunt or in the war, Dr. Wilson credits them with discipline, courage and self-control, and the conduct of some, at least, of the participators in the recent unhappy rising, confirms that opinion. Marrying freely, as they are said to do, with the white population, there is reason to believe that in the course of some generations the traces of red blood will disappear, not by extinction but by absorption with the dominant race.²

Professor G. Bryce, in his work on Manitoba, characterizes the half-breed of an earlier day somewhat differently. "A lithe, cunning, turbulent, but adventurous and lively race," he writes, "were the Bois-Brulés, of those early times. They were chiefly the descendants of the French voyageurs of the North-West Company who had taken Indian wives and settled down on the shore of some lake or river in the Fur Country." Like Dr. Wilson, he is struck with the strangeness of the phenomenon presented by the growth of such a mixed race in the heart of the continent—"a race combining the characteristics of the French and the Indian." Comparing the Bois-Brulés with the Scottish half-breeds, he says: "There can be no doubt that the French half-breeds are of greater stature, are more restive under restraint, more inclined to the wandering life of the Indian, and more given to the hunt and to the use of arms than those of Orkney descent." Again, "like all semi-savage races, the Bois-Brulés are fickle. They must be appealed to by flattery, by threats, or by working upon their animosities or well-known dislikes, would they be led in any particular direction."³ And the truth of this statement was exemplified in the recent rebellion under Riel and Dumont, no less than in the sanguinary conflict into which they were seduced in 1816.

To what extent Indian blood has been diffused among the white population of the United States, we have no means of ascertaining, but in all likelihood the proportion is much larger than is generally supposed. Attention in that country has been rather, perhaps, directed to the results of miscegenesis between whites and negroes. That it was largely practised in the South in the period before the Civil War, is an undoubted fact. That escaped negroes, sheltered by Indians, in Florida and elsewhere, often took Indian companions who bore them children, is also well established. Since the emancipation of the slaves, intercourse between whites and negroes has decreased, notwithstanding the strong

¹ Report of the Geology and Resources of the Region in the vicinity of the Forty-ninth Parallel, from the Lake of the Woods to the Rocky Mountains, etc. (British North American Boundary Commission.) By G. M. Dawson, pp. 295, 6.

² Prehistoric Man, ii. 266.

³ Manitoba: its Infancy, Growth and Present Condition, p. 204.

advocacy of intermarriage, as a solution of a difficult problem,¹ by professed friends of the African race. The late Wendell Phillips declared himself an amalgamationist to the utmost extent, and said that his main hope lay "in that sublime mingling of the races, which is God's own method of civilizing and elevating the world." Bishop Haven, with still greater fervour of faith, felt confident that Americans would one day see "Helen's beauty in a brow of Egypt." "We shall say:" he said in one of his sermons, "What a rich complexion is that brown skin!"² In connection with the good bishop's faith in the elimination of prejudice among his countrymen, it may not be out of place to recall what Henry M. Stanley has recorded, in the second volume of "Through the Dark Continent," as to the effect produced on him by the sight of white men after being for years accustomed to the dusky hue of African tribesmen. "Proceeding a little further," he says, "we stopped, and in a short time I was face to face with four white—ay, truly white men! As I looked into their faces, I blushed to find that I was wondering at their paleness. Poor pagan Africans—Rwoma of Uzinja, and man-eating tribes of the Livingstone! The whole secret of their wonder and curiosity flashed upon me at once. What arrested the twanging bow and the deadly trigger of the cannibals? What, but the weird pallor of myself and Frank! In the same manner the pale faces of the Embomma merchants gave me the slightest suspicion of an involuntary shiver. The pale colour, after so long gazing on rich black and richer bronze, had something of an unaccountable ghastliness. I could not divest myself of the feeling that they must be sick; yet as I compare their complexions to what I now view, I should say they were olive, sunburnt, dark." Indirectly, perhaps, there is something in these words which explains why the slaveholder was often more generous in his sentiments towards the negro than the philanthropist, whose love for him was purely of an abstract nature.

The ultimate destiny of the black, as of the red race, in North America, is a question of deep interest and importance on which a great deal has recently been written. By the census of 1880 the coloured population of the United States was 6,577,497, that of the whites being 43,402,408. During the ten years from 1870 to 1880 the ratio of increase in the former (34·8 per cent.) was larger than it had been during any decade except one, that from 1800 to 1810. The fact that the ratio of increase of the white population during the period from 1870 to 1880 was only 29·2 per cent., according to the census, naturally occasioned comment and even alarm. In the *Popular Science Monthly* for February, 1883, Prof. E. W.

¹ "Is it not wonderful?" writes Mr. G. W. Cable, "A hundred years we have been fearing to do entirely right lest something wrong should come of it; fearing to give the black man an equal chance with us in the race of life lest we might have to grapple with the vast, vague afrite of amalgamation; and in all this hundred years, with the enemies of slavery getting from us such names as negrophiles, negro-worshippers and miscegenationists; and while we were claiming to hold ourselves rigidly separate from the lower race in obedience to a natal instinct which excommunicated them both socially and civilly; just in proportion to the rigor, the fervency, and the injustice with which this excommunication from the common rights of man has fallen upon the darker race, has amalgamation taken place." And, endeavouring to account for the almost entire non-existence of amalgamation in the negrophile North, Mr. Cable asks and answers: "How have they been kept apart? By law? By fierce conventionality? By instinct? No! It was because they *did not* follow instinct, but the better dictates of reason and the ordinary natural preferences of like for like." "The Silent South," in the *Century*, Sept., 1885. But may it not also be true that familiarity with the negro in the South, even while it bred contempt, had also a tendency to conquer that Caucasian fastidiousness which prevented race-interfusion in the North? Since the war the antipathy consequent on political jealousies and altered race-relations would prove a barrier to intercourse in the South.

² Quoted in Winchell's *Preadamites*, p. 81.

Gilliam, in an article on the subject, based on the statistics of the last two censuses, maintained that the coloured people were increasing at a rate, which, unless prompt measures were taken to prevent it, would result in the inhabitants of the country becoming Africanized. Mr. Henry Gannett, in a recent contribution to the same journal, disputes the data on which Prof. Gilliam founded his argument, and denies that the negroes, either in the cotton States or in the country at large, are increasing so rapidly as the whites, and holds that the fear entertained of the latter being ultimately outnumbered is entirely groundless. But it is vain to expect that so significant a problem can be solved or shelved by merely correcting a few census mistakes. Even if the six and a half millions of African origin were dispersed all through the States, with its forty-three millions of whites, the proportion of the former is large enough to cause uneasiness to those who think that the merging of the two bloods would not improve the race. As Bishop Dudley points out in the *Century*, the coloured residents of the South will almost all remain there where the two races are nearly equal, and if intermarriage takes place, the issue will not be a new people with a small trace of African blood, but a community of mulattoes. The bishop, who, Christian philanthropist though he is, has not yet altogether discarded the sentiments of *ante bellum* days, looks with horror on the equanimity with which Canon Rawliuison contemplates such an experiment in race-fusion. And yet what he cannot accept as a doctrine for the present, may, he admits, be received with favour by generations still unborn. "What may come," he writes, "in the far-distant future, when by long contact with the superior race the negro shall have been developed to a higher stage, none can tell. For my own part, believing, as I do, that 'God has made of one blood all the nations of men,' I look for the day when race peculiarities shall be terminated, when the unity of the race shall be manifested. I can find no reason to believe that the great races, into which humanity is divided, shall remain forever distinct, with their remarks of colour and of form. Centuries hence, the red man, the yellow, the white and the black may all have ceased to exist as such, and in America be found the race combining the bloods of them all; but it must be centuries hence. Instinct and reason, philosophy, science and revelation, all alike cry out against the degradation of the race by the free commingling of the tribe which is highest with that which is lowest in the scale of development." Dr. Dudley seems to forget that such commingling seldom, if ever, takes place of malice prepense, nor, indeed, are many marriages the result of deliberate forethought. However anxious people may be for pure blood and pedigree and healthy organism in connection with their live stock, it has not as yet become usual to apply the same physiological reasoning to the question of human increase. If, early or late, the races of the United States are destined to coalesce, the union will come about not "with observation," but through the general and almost imperceptible obsolescence of prejudices.

That the aboriginal Indian element has been largely absorbed by the European settlers in the United States as in Canada, is pretty well established. Some of the best families in Virginia and other States have had Indian ancestors. Frontier life has always promoted such unions, and it must be remembered that, in its turn, every portion of the vast region from ocean to ocean has been a frontier settlement. Winthrop has placed it on record, moreover, that, after wars with the natives, it was customary to disperse the women and female children among the towns of the colonists, the male children being sent to Bermuda.¹

¹ Wilson's Prehistoric Man, ii. 253.

The increase of the Chinese on this continent in spite of all the measures taken for their exclusion, adds still more to the complications of the race problem. The evidence elicited by the commission appointed, by the Canadian Government for the purpose of inquiry into and reporting upon the subject of Chinese immigration, is of an extremely conflicting character. As to intermarriage between Mongolians and whites, Dr. Stout of San Francisco said that such unions had already taken place. Where the man and woman were superior individuals of their respective races, he thought the cross a much better one, than between the negro and the white, or between the white and the Indian. Ex-Chief Justice S. Clinton Hastings, on the other hand, regarded intermingling as ruinous, and thought even the Russian serf or the Irishman (!) superior to the Celestial. Solomon Heydenfeldt, formerly associate Justice of the Supreme Court of the State, took a middle view. He did not think miscegenation would be a success, but he saw more points of similarity between whites and Chinese than between whites and negroes. The Chinese he preferred, as servants, to the general run of immigrants, as being more faithful, reliable and industrious. The fact seems to be that, while experience shows the Chinese to be quick learners and good workers, they differ morally among themselves like other nationalities, some of them being intelligent, educated, polite and well-conducted, while others are of indifferent character, and others again are degraded to the lowest level. As to the blending of the Chinese with Aryans or other stocks on this continent, I have not been able to obtain much information. A late census in Victoria, Australia, returned 160 persons as half-castes—the offspring, in most cases, of Chinese fathers and white mothers. Prejudice would, doubtless, tend to prevent amalgamation in San Francisco, but there, in Portland, Oregon, and other places where the Chinese have resided, as well as in British Columbia, the white and Mongol races must have mingled to some extent. The commissioners have remarked upon the significant contrast discovered between the character and condition of the Chinese in San Francisco, where they are treated as pariahs, and the status and bearing of the same people in Portland, where they and the whites live on terms of amity, their stores, factories and residences standing side by side. In these circumstances they are a thriving and happy portion of the mixed community. In Victoria, B. C., the same contrast was illustrated.

M. de Quatrefages sets down the proportion of mixed blood in Mexico and South America at one fifth of the whole population. But the testimony of trustworthy witnesses makes it much larger. In Mexico, with a population of about ten millions, it is calculated that not more than half a million are of pure European descent, while those classified as Indian number about a half of the whole, or five millions. In Guatemala, Honduras, Nicaragua, San Salvador, and Costa Rica, the vast majority of the people are Indians and *Mestizos*, so that if the scheme of Barrios had succeeded, he would have practically ruled over a federation of half-breeds. In the society of the cities, only a mere sprinkling pretends to pure Spanish descent. In South America, the mixed races are still more numerous in comparison with the rest of the population. In Brazil, the coloured slave or freedman element has mixed with both Creoles and Indians. In Hayti and San Domingo, the blacks are the ruling race. In Venezuela, whites and blacks have coalesced with Indians to such an extent that, with the exception of about a thirtieth part of the population made up of savage aborigines, the great bulk of the nation is mixed. In Peru it is expected that before long the country will have reverted to the aboriginal condition, only about two

per cent. of the inhabitants remaining unaffected by Indian or negro admixture. Though in some South American States, such as Chili and the Argentine Confederation, immigration tends to keep up the supply of European blood, in no case is it in the ascendant.

Prof. Bryce, in the work already quoted, cites the opinion of Chateaubriand, that of all Europeans the French have ever been most in sympathy with the Indians, a fact due to their liveliness, dashing bravery, love of the chase and even of savage life.¹ It was doubtless to that sympathy of sentiment and tastes, joined with the forced or self-imposed isolation of their careers, that their frequent intermarriage were due. The causes which led to the growth of the extremely large half-breed populations of Mexico, and Central and South America, were more complex than those which produced the smaller communities of the North. In Mexico and Peru, for instance, the circumstance that the inhabitants were to so high a degree civilized would be deemed sufficient justification for union on equal terms with the aborigines and, the example having been thus set, it would be likely to be followed as colonization extended from those centres. Some of the most distinguished statesmen, soldiers and writers of Spanish America have been half-castes. Those whose blood is pure are still, however, jealously proud on the score of birth, and would deem it an insult to be classed in the same category with mestizos or mulattoes. In some of the West Indies, where the allophylian element is mostly African, the whites are still more exclusive, the taint of color being a stigma of social inferiority. One large island forms, however, a strange exception. Hispaniola, both French and Spanish, is ruled by blacks, and there it is the mulattoes who lack the conscious dignity of pure superior blood. The picture of the Haitians, given by Capt. Kennedy ("Sport, Travel and Adventure in Newfoundland and the West Indies"), is most deplorable. Voodooism, the rites of which are associated with cannibalism, prevails almost openly, and though nominally Christians, many of the inhabitants are still in practice savage heathen of the Congo.

M. d'Omalius has reckoned the number of half-breeds in the world at 18,000,000, his computation taking account only of the products of crossing of the European white and coloured races. But if what has been said of the proportion of half-breeds to the entire inhabitants of the New World alone be correct, it comes far short of the reality. De Quatrefages says that in Mexico and South America the half-breeds contribute at least one fifth of the population, but other authorities generally accepted as reliable—the official accounts in the "Statesman's Year Book," for instance—gave a much higher ratio. For obvious reasons, it would be difficult to obtain trustworthy statistics concerning the distribution of pure and mixed blood in a community where mixture is a mark of inferiority. Half-breeds, fair enough to pass for whites, would not be likely to volunteer the correction of misconception as to their origin. The degree of dark admixture is, therefore, more likely to be understated than overstated.

While this continent offers to the inquirer the most interesting and numerous examples of new ethnic varieties created by intercourse between different races, others to be found elsewhere are well worthy of attention. In the Sandwich Islands, there is the offspring of natives and foreigners of almost every nationality from English to Chinese. Some of the Hawaiian-British half-castes are intelligent, well-conducted and industrious. The ruler of the kingdom, who recently travelled through Europe, is an accomplished gentleman,

¹ Manitoba, etc., pp. 199, 200.

as well as a statesman-like and progressive prince. When it is recalled that little more than half a century ago the Hawaiian group was peopled by savages, meet descendants of Capt. Cook's murderers, the present condition of the kingdom, with its educated and law-abiding citizens, is one of the most striking testimonies that modern history affords to the benefits which the dark places of the world have derived from well-directed missionary labour. Tahiti, the capital of which is described as a miniature Polynesian Paris, is another instance of successful missionary and colonizing enterprise, and equally remarkable has been the transformation which the establishment of British rule has effected in Fiji. Unhappily, the contact of even the best civilization with aboriginal races is not always a boon to the latter. The Maoris, one of the finest of the dark-skinned occupants of Polynesia, have dwindled away in the hopeless struggle with an aggression which they were not strong enough to resist and were too proud to conciliate. Neither in their native New Zealand, nor in the lost heritage of the far inferior Australians, has a half-breed population sufficiently large to affect the destiny of the colonies as yet sprung up. To what extent the presence of convicts in New Caledonia has affected the half-breed problem, a writer in *L'Expansion Coloniale* gives us some means of judging. M. P. Joppicourt, in a clever contribution to that journal, presents a striking, though melancholy picture of the *popinées*, or native companions of the French settlers or pardoned criminals. While the rare French women, who have ventured to share the discomforts and perils of such an exile, are petted and courted in Noumea (the capital of New Caledonia), away off in the bush, the poor faithful *popinée* hugs with rapture the white man's child of which she is the proud and loving mother. She looks upon her husband as her master, and does homage to her own offspring as of a superior race. For their sake, she has severed herself from her tribe and refrains from the use of her own language, lest her little ones should be thereby degraded. Her kindred have turned against her as a renegade, but she minds not their reproaches. Alas! a day comes when they have their revenge, when the white man closes his door against her and bids her begone. She has served his purpose and he needs her no longer. He is paying suit to a countrywoman of his own, and the *popinée* must get out of the way. And so, with misery in her heart, she betakes herself with her children back to the tribe where for a long time she must put up with taunts and every humiliation. But she, too, has her revenge. By and by, love changes to bitterness and his children learn to hate the name and race of the father who has disowned them. When the cry of war is raised, they are the most eager to sink their battle-axes in the white man's skull, to burn his farm, to massacre his wife and children. And thus the innocent and good pay with their lives for the craven treachery of a heartless wretch. Let us hope that the picture is not representative, but exceptional. The same writer seems to see in the half-breed some ground of hope for the future of a colony avoided by the luxurious ladies of France. "Has not South America," he asks, "been entirely peopled by the crossing of Spaniards and Indians? Yes; those *mestizos* have formed powerful and respectable nations. And in North America, too, it was by allying themselves with the willing daughters of the Abenakis that the sons of France created that vigorous Acadian stock, whose patriotic spirit has more than once kept at bay the proud rulers of Old and New England. 'What a pity,' said the Indians after the capitulation of Quebec, 'that the French were conquered! Their young men used to marry our daughters.' Those mixed marriages gave us faithful allies and enabled our colonists, abandoned by the Mother-country, to make headway in

century against the inexhaustible forces of Great Britain." In like manner may the *popinée*, he thinks, prove the mainstay of France in the Pacific.

There is no more romantic and extraordinary instance of a new human variety starting in life and, in spite of deplorable beginnings, taking on the better characteristics of the wild and the civilized race, than that of the Pitcairn Islanders. The story is well known and I need scarcely repeat it. It may suffice to say that after the tragedy of the *Bounty*, the refugee mutineers, nine English sailors, accompanied by six men and fifteen women of Tahiti, settled on that little isolated islet. By feuds of race the colony was reduced in four years to four white and ten Tahitian women. A few years later, Adams, the pious patriarch of the community, was the sole survivor of the repentant mutineers. But, meanwhile, children had been born, who grew up and married and had families, and in 1830 the population of the island was eighty-seven. Some of them were then transferred, at their own desire, to Otaheite, but they had been religiously trained, and the loose morals prevalent there disgusted them. So most of them returned home within the year. In 1856, a second experiment at emigration was made, Pitcairn proving too small to support the rapidly growing population. But Norfolk Island was nearly as distasteful to the half-breeds as Otaheite had been, and in a few years they had almost all come back. When Admiral de Horsey visited the colony in 1878, he found sixteen men, nineteen women, twenty-five boys and thirty girls—in about sixteen families. At that time the elected governor was James Russell McCay, steersman of the island whaleboat, of which he was also the builder. The law of the land was the simple, but morally rigorous, code drawn up by Adams. The colony, as the admiral described it, was a community of contented, friendly, gentle, pious people, poor but happy, strict in attending to their religious duties, and taking their recreation mainly in the form of music, most of them being good singers. A later visit to Pitcairn of an English vessel was some time ago described in the *London Daily Telegraph*.

The communities of half-breeds to which I have been directing attention are mainly composed of English, French or Spanish, blended with some coloured race. The Portuguese, like their neo-Latin kinsmen, have ever been known to mingle their blood with that of aliens in all parts of the world. In Brazil, on this Continent, they are largely represented in combination with both the Indian and the negro, while instances are not wanting in which the blood of the three is blended in various proportions. In Africa, the same people has mixed with the natives of both the east and west coasts. In Asia, though none of their colonies are large, compared with those of England, their position was one of influence before the stream of exploration had drawn other nationalities eastward. The Malay word, *Mandarin*, so associated in our minds with the despotic system of the extreme Orient, was one of the prizes of early Portuguese exploration, and it is one of several terms and phrases which the daring countrymen of Camoens have, by origination or adaptation, caused to pass current in the whole world of commerce and diplomacy. Even in lands where their influence has waned, the vestiges of their former power remain in the language of the people. On landing at Batavia, in the morning of 1878, Mr. H. O. Forbes heard, here and there amid the Babel of foreign tongues that assailed his ears, "a Portuguese word still recognizable, even after the changes of many centuries, veritable fossils imbedded in the language of a race, where now no recollection or knowledge of the peoples who left them exists." And at a later date, while visiting the shops and offices of Dille, in Blamor, he was astonished "to find all business conducted, not as in the Dutch pos-

sessions, in the *lingua franca* of the Archipelago, Malay, but in Portuguese.¹ Where the Portuguese have imposed their language, it is only to be expected that they have to some extent mingled their blood with that of the people who speak it. In Goa, Hindostan, Malacca, China, famous from its association with Camoens, and in the scattered insular possessions of Portugal, as well as in other parts of the East, there is a considerable population of Portuguese half-castes. Among the 6,000,000 of the Philippines, Spanish mestizos are also numerous. In Manila, the capital, they form a considerable proportion of its population of 180,000. Of people of Dutch mixed with native blood there must be a good many in the Dutch East Indies. The Griquas of South Africa form, however, the most interesting example of a Dutch half-breed community. In Japan, there is also a population of partially Dutch descent. Inter-marriage between the ruling and the subject race in Hindostan, though not so frequent as it would be in like circumstances, if any of the neo-Latin races held the position of the English, is by no means unknown, nor, where the social conditions are on a par, is there any degradation attached to it. Ceylon furnishes many examples of mixed blood, the European element being Dutch, Portuguese or English. The extent to which the East and West have amalgamated west of the Arabian Sea, it is impossible to say, but, if the truth were known, it would, perhaps, surprise the sticklers for Caucasian exclusiveness. Travellers are constantly meeting with Europeans of almost every nation in out-of-the-way corners of the world, where they have made themselves homes and taken them wives of the daughters of the land. When, in 1836, the late Charles Darwin and Capt. (now Admiral) Fitz-Roy visited the Cocos-Keeling group in the Indian Ocean, they were surprised to find that Mr. J. C. Ross, with a *familia* of orientals, had taken up his abode in those lonely isles. Yet, Mr. Ross himself had been no less surprised to discover that another adventurer, Alexander Hare, had anticipated him. When Mr. H. O. Forbes visited the islands in 1878, he found Mr. Ross's grandson still in possession and quite happy in his self-imposed exile from civilization. The inhabitants on the last occasion were found to be nearly all of mixed blood, the proprietor himself having married a Cocos-born wife.²

If it would not tend to prolong this essay indefinitely, many more instances might be recorded. There is hardly a portion of the East in which abundant evidence is not obtainable of the mixture of race already accomplished or now going on. The Malay Peninsula, Burmah, Siam, Cochin-China, Hong-Kong, the seaport cities of China and Japan, besides the countries already mentioned or alluded to, furnish testimony to the fact, enough to satisfy all who seek information on the subject. The following picture of the racial variety to be met with in an Eastern city shows, at least, what opportunities exist for intermixture: "The city is all ablaze with colour. I can hardly recall the pallid race which lives in our dim, pale islands, and is costumed in our hideous clothes. Every costume from Arabia to China, floats through the streets: robes of silk, satin, broadcloth, and muslin; and Parsees in spotless white, Jews and Arabs in dark, rich colours,—Klings (Natives of Southern India) in crimson and white, Bombay merchants in turbans of large size,—and crimson cummerbunds. Malays in red sarougs, Sikhs in pure white, their great height rendered almost colossal by the classic arrangement of their draperies, and Chinamen from the coolie, in his blue or brown cotton, to the wealthy merchant in his

¹ A Naturalist's Wanderings in the Eastern Archipelago, pp. 6 and 417.

² *Ibid.*, p. 17.

frothy silk *cripe* and rich brocaded silk, made up—a medley irresistibly fascinating to the stranger." Such is Singapore, and not far off is Malacca, one of the oldest European towns in the East, originally Portuguese, then Dutch, and now, though nominally under English rule, practically a Chinese colony. Not less striking is Mr. Forbes's sketch of a street-scene in the capital of Portuguese Timor: "Tall, erect indigenes mingle with negroes from the Portuguese possession of Mozambique and the coasts of Africa, most of them here in the capacity of soldiers or condemned criminals; tall, lithe East Indians from Goa and its neighbourhood; Chinese and Bugis of Macassar, with Arabs and Malays and natives from Allor, Savu, Roti and Flores; besides a crowd in whose veins the degree of commingledness of blood of all these races would defy the acutest computation."² The Timorese themselves represent the Malay, the Papuan, and the Polynesian races. But they, also, offer exceptions which cannot fail to strike the beholder with wonder. For instance, the same author writes: "While in the act of turning from watching this human hunt to continue my journey, my eye lighted on an object that riveted my interest more than all else among those savage marketers—a red-haired youth, first one, then a few others, some with straight, some with curly hair, with red eye-lashes, blue eyes, and the hair over their body also reddish. I found, on inquiry, that a little colony of them, well known for their peculiar colour of hair and eyes, lived at Aitúha, at no great distance off. Though they lived in a colony together, they were not shunned by their neighbours, who even intermarried with them. The offspring of these unions took sometimes after the one, sometimes after the other parent. In looking eagerly at their faces, I saw more than their features only; their presence there was an excerpt out of a long history. In imagination I saw past them down the dim avenues of Time—a far, far cry—to their early progenitors, and pictured their weary retreat, full of strange and romantic vicissitudes from a more northern clime, till forced off the mainland by superior might into exile in this remote isle, where as a surviving remnant amid its central heights, they are living united but not incorporated with the surrounding race whose pedigree has no link in common with their own."³

Space will not permit me to more than allude to the race-mixtures of Hindostan and its border lands, of the Afghan frontier uplands, where Mongoloid and Caucasian still contend for the mastery,¹ of the important region once swayed by the sceptre of Darius, of the lands of the Sultan, of the many-tongued realm of the Czar and the long, deep range of Arab conquest in Africa. Of what blood-fusion did for that part of the world, the broad seat of successive empires in the distant past, I have already spoken. And the transformation is still going on. The sons of Joktan and Ishmael, with the Koran in their hands, have been trying for ages to convert the dark tribes of Africa to the creed of the Moslem, and, in preaching their gospel, they have not disdained to share their ancient lineage with their dusky disciples. Arabic scholars have, by the cruel fortunes of the slave-hunt, found themselves enthralled to Brazilian half-breeds, their protests availing nothing against the evidence of their skins. Whether the crusade inaugurated and sanctioned by

¹ Isabella Bird in the Leisure Hour.

² A Naturalist's Wanderings, etc., p. 418.

³ *Ibid.*, pp. 404, 65.

⁴ Mr. A. H. Keane (*Nature*, Jan. 8, 1885) divides the North-Afghan tribes into Caucasian and Mongolic; and again the former, into Galchas and Iranians, and the latter into Mongols and Tartars. The Galchas are subdivided into Siah-Posh, Badakshi, Wakhi and Shugnaris; the Iranians, into Kohistani, Firuz-Khoi, Jemshidi, Tajiks and Afghans. The Mongols are composed of Hazarals and Airmaks, and the Tartars, of Salor-Turkomans and Katalghani Usbegs. The Caucasians number something over a million, and the Mongols over a million and a quarter.

the powers that constituted the Congo Free State will prove a more successful civilizer than the Arab's mission remains to be seen. If it fails to blanch the negro's skin, it may, and it is to be hoped that it will, liberate his mind from superstition and prejudice by its higher teaching and example.

It will thus be seen that the half-breed has played a most important part in the advance of mankind to the stage of progress which it has reached to-day. In his great work on anthropology, Dr. Topinard maintains that there is not a single pure race on the globe at the present time, every group having been crossed and mixed over and over again. It has been seen that this process is still going on, and more actively now than ever before. Improved means of communication such as even a century ago had hardly been dreamed of, have brought and are constantly bringing the most widely severed and diverse communities into intercourse with each other. The movement of men to and fro over the face of the earth never ceases. Business and pleasure, war and philanthropy, science and trade, are each, with its own aim and by its own methods, penetrating day after day the obscure places of the globe. And every fresh discovery of human habitation gives rise, sooner or later, to some new phase of inter-crossing. Individual men move along the paths of their destinies, not knowing the goal that awaits them. And tribes and nations are still blinder as to the future than individuals. Unconsciously in the past, impelled by hunger, or ambition, or tribal wrath, or religious enthusiasm, or love of adventure, they laid the foundations of the races that were to be. And, under changed conditions, and with different motives, but alike unthoughtful of results, contemporary humanity, with its thousands of conflicting passions and aspirations, is engaged in the metamorphosis, by interfusion, of its own form and features and character. The change is imperceptible. The half-breed comes and disappears, and with him nations of men seem to pass out of existence. But they have merely been absorbed and by absorption helped to transform others. Now and then, the transition takes place on a scale so comprehensive or in circumstances so peculiar as to compel attention and even to excite alarm. It is only then, perhaps, that the fact and its significance are brought home to our minds. But in some form the half-breed question is never far from us. Now, as ever, though it may seem to be localized and isolated from the general concerns of civilization, it is in reality, directly or indirectly, co-existent with the interests of the human race. We meet it at every turn, on every continent, on every sea. And, more and more every day, is it complicated by new issues that must be faced. Every phase of immigration or intrusion of an inferior race among the communities of a superior one, or the reverse; every attempt at colonial expansion; every frontier difficulty, where civilized nations have undertaken to direct the destinies of uncivilized or half-civilized clans; slavery and its suppression; the coolie trade, and other outcomes of the labour question; wars of conquest, exploration, or commerce, in savage regions; the establishment of ports of call and coaling stations at points midway in great oceans or on coasts remote from ordinary traffic; the fur trade; the hunting of larger game; geological and topographical surveys, and scientific expeditions by sea and land; and last but not least, the bearing of the message of peace and salvation to the moral wastes of the earth—all these forms of human endeavour, policy, ambition, curiosity, or zeal, will be found to touch at some point or other on the problem of the half-breed.

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II.—*Vita sine Literis.*

By JOHN READE.

(Presented May 28, 1885.)

In an age to which the Preacher's words as to the endless making of books might almost seem to have prophetic reference, it is not easy to realize a state of society in which there were no books at all. And yet, with our means of rapid communication, it would not be difficult for one living in the very heart of civilization to be transported in a few days to regions, which are as bookless as were the shores of the St. Lawrence when Jacques Cartier sailed up that river. Prolific as is the modern press and varied as is its offspring, there is comparatively but a mere handful of humanity that either knows or cares anything about its operations or its products. In some countries—Great Britain, France, Germany, the United States—the proportion of the inhabitants who can read and write is pretty large. But if we consider the totality of what is called civilization, it will still be found that, in comparison, the number of readers is extremely small.¹ Much smaller, if we contemplate the millions of humanity on the globe, will be the ratio of those to whom the book is a thing of necessity. If, indeed, as has been said, life without letters is death, then the vast mass of mankind has not yet begun to live. To imagine, then, what the world was like, when there were no books, we have only to fancy what it would be if it were altogether, as to tastes and opportunities for gratifying them, what certainly more than nine tenths of its inhabitants still are. And for countless ages it remained in that condition—without books or any thought of books.

The life of humanity is so long that, compared with its whole duration, that portion of it, of which we have written or even monumental records, is entirely ephemeral. If we wish to get at the beginning of any art or industry, we must antedate history by a great many centuries. The Greeks, we know, had a fashion of cutting short the labour of research by massing the successive strivings and experiments of many generations under a single name. Æsculapius, Amphion, Dædalus, Minos, stood for the achievements in medicine, or music, or architecture, or law-making, of a great number of earnest workers and thinkers. If we ask to whom we are indebted for the boon of letters, the answer from many sources will be Cadmus, the Phœnician. And in this, as in the other cases mentioned, there may be something of truth. It was through the Phœnicians that the Greeks obtained their alphabet. But many minds had set themselves to the problem before the Phœnicians or other Semites had received the hint which they turned to such good account. Long before their day of power, the inventive genius of the Egyptians had almost mastered the

¹ "I don't suppose that we who have the habit of reading, and at least a nodding acquaintance with literature, can imagine the bestial darkness of the great mass of people—even people whose houses are rich and whose linen is purple and fine." *The Rise of Siles Lapham*, by W. D. Howells.

secret of alphabetic writing. But if we look for the first germ of the discovery, we must go back to a period compared with which even Egypt's earliest dynasty is recent. The brooding hunter of the early world, who traced on his cave-wall the rudely pictured story of his rough and peril-fraught life, was the father of literature as well as of art. In a paper contributed to the *Art Journal* some time ago on "Field Sports in Art," Mr. Richard Jeffries, discussing the engraved tusk found in the cave of La Madeleine, asked whether the ignorant savage of that long-lost day could have been capable of such work. Happily, apart from the authenticity of the find itself and other finds of similar quality, there is ample evidence in our own time of the existence amongst the lowest races of like artistic taste and skill. "Even the most degraded and savage of the Bushman race," wrote the late Sir Bartle Frere,¹ "who live on insects, reptiles and carrion, and through long privation have been reduced almost to the level of the beasts of the field, have a power of delineating and colouring animals, human beings, and other forms with which they are familiar, with a facility and truth which would be wonderful in a civilized population." Similar skill as draughtsmen has been observed among Australians and, as we shall see, some of the American Indians excelled and still excel in the same process. Whether the unknown artists of the caves came in the course of time to apply their skill to mnemonic, epistolary, or historic uses, we do not certainly know, but from what took place among savages of later date, it is not impossible—it is even probable—that they did. The employment of picture-writing for purposes of communication has been ascertained to be common to almost all rude tribes. In some cases the development was interrupted at a low stage; in others, it reached a point more advanced, while only in a very few instances has it resulted in the elaboration of an alphabetic system. We can easily imagine that men who could carve, with precision and even beauty of finish, mammoths, horses, rein-deer, bears, foxes, and human figures, in spite of disadvantages of implements and material, would be intelligent enough to recognize the use to which such carvings might be put for mnemonic or historic purposes. The picture, which, in the first place, showed merely the surroundings and occupation of the draughtsman, might be made to stand for himself or, by attitude or position, to indicate his condition, intention, hopes or needs. Of pictorial representation of this kind instances abound.² A further step is gained when the figure of an object is made to suggest, not itself, but some quality which it calls up in the mind, as when the fox becomes the symbol for cunning, the bird, for swiftness, and so on. The next stage is what is well known as the *rebus*, in which things are put for words, and an important advance is made when the pictures stand no longer for the objects they suggest, but for the sounds of those objects. Altogether, starting with the simple picture, Isaac Taylor enumerates five stages in the invention of the alphabet. These are the simple picture, the pictorial symbol, the verbal sign, the

¹ Proceedings of the Royal Colonial Institute for the year 1880-81, p. 140.

² A very good example of it is the pictograph of an Indian petition to the President of the United States, which was originally published by Schoolcraft, but has since done duty in several works. Therein the chiefs are represented by their totems—the crane, marten, tortoise, bear and cat-fish. The eyes of the petitioners are joined by means of lines with those of the head-chief (Oshcabawis) to express their unity of view, and their hearts with his to denote unity of sentiment. An exterior line connects the head of Oshcabawis with the lakes claimed by the petitioning tribes. In the signatures of the Indians to the Selkirk Treaty (1817) their totems not only take the place of the ordinary cross of the illiterate, but are also set opposite the tracts of country that they claim. Morris's *Treaties of Canada*, p. 298.

syllabic sign, and the alphabetic sign or letter. The first of these, and probably the second, was reached in far-off prehistoric times. The ingenuity of several nations has brought them to the first of the phonetic stages; the victory of invention, by which transition from the verbal to the syllabic phonogram was effected, fell to the lot of few; while fewer still achieved the ultimate triumph of the alphabetic form.

One of the most primitive mnemonic contrivances was, strange to say, common to both extreme East and extreme West. In Pauthier's "Chine Moderne" is given an extract from the Commentary of the illustrious Khong-Tseu, which reads thus: "In high antiquity knotted cords were used in the administration of affairs. During succeeding generations, the holy man (Fou-Hi) substituted writing for them." This mode of keeping records must have closely resembled the *quipu* of the Peruvians, which, as Prescott informs us, "was a cord about two feet long, composed of different coloured threads, tightly twisted together, from which a quantity of smaller threads were suspended in the manner of a fringe. The threads were of different colours and were tied together into knots; the word *quipu*, indeed, signifies 'a knot.' The colours denote sensible subjects; as, for instance, white represented silver, and yellow, gold. They sometimes also stand for abstract ideas; thus white signifies 'peace,' and red, 'war.' But the *quipus* were chiefly used for arithmetical purposes, and could be combined in such a manner as to represent numbers to any amount they required." But though the *quipus* greatly aided in the performance of calculations and assisted the memory in other ways, they could not be expected "to represent the manifold ideas and images which are expressed by writing." Prescott, indeed, places them far below the hieroglyphics of Central America or the picture-writing of the Aztecs, and regards the ignorance of the Peruvians of those superior systems as evidence that the two civilizations were quite distinct. Dr. Wilson, while taking the same view as to the inferiority of the *quipu* to the northern inventions, hesitates, on the authority of Valencia and Humboldt, to ascribe to the Peruvians an entire unacquaintance with any better method of recording events.² But even Valencia admits that the Peruvian picture-writing was less meritorious than that of the Mexican. Rivero and Tschudi believe that there are still, in the Southern provinces of Peru, Indians able to decipher those intricate memorials, though they guard their knowledge as a secret inherited from their ancestors.³ The attempts of the learned to penetrate their mystery have hitherto failed.⁴

With the knotted cords of the ancient Chinese and the *quipus* of the Peruvians, may be compared the wampum of the North American Indians, composed of variously coloured beads woven into a belt. According to some authorities, Hiawatha, the patriotic founder of the Iroquois League, was the inventor of wampum. But Mr. Horatio Hale is convinced that the honour is not due to his hero. "The evidence, of sepulchral relics, shows," he says, "that wampum was known to the mysterious Mound-builders, as well as in all succeeding ages."⁵ From the account given by Mr. Hale, all through his valuable work, of the uses assigned to wampum, it is evident that it was intended to assist the memory in the same way as the *quipus* served that purpose. The whole subject is admirably and

¹ Conquest of Peru, ch. iv.

² Prehistoric Man, ii. 72, footnote.

³ Peruvian Antiquities, translated by Hawks, p. 112.

⁴ Knotted strings are used by the Pelew islanders in the present day for mnemonic purposes and as a means of communication. Bell's System of Geography, vi. 490.

⁵ Iroquois Book of Rites, p. 24.

fully treated in the paper on "Art in Shell of the Ancient Americans," accompanied by many beautiful illustrations, by Mr. William H. Holmes in the Second Annual Report of the Bureau of Ethnology, Washington. Though it is "not possible from any known records to demonstrate the great antiquity of this (the mnemonic) use of wampum," Mr. Holmes does not think it probable "that a custom, so unique and wide-spread, could have grown up within the historic period," or "that a practice foreign to the genius of tradition-loving races could have become so well established and so dear to their hearts in a few generations." In his opinion, its archival use might have originated in the practice of exchanging gifts, which were preserved "as reminders of promises of assistance or protection." He thinks that in time "the use of such mementos would develop into a system capable of recording affairs of a varied and complicated nature,"—the colours and patterns of the strung beads suggesting, by association, facts, incidents, or solemn engagements, which had been "talked into" them. They were useless, however, without an interpreter, and it was usual among the Onondagas for one member of the tribe to hold the position of *royanner* or hereditary wampum-keeper. If I understand Mr. Hale aright, such official annalists were employed by all the nations of the Iroquois confederacy. Mr. Holmes's splendid series of illustrations includes a picture of the famous Penn Treaty belt, now in the cabinet of the Historical Society, Philadelphia. It was delivered to Penn, by the chiefs of the Lenni-Lenape under the elm-tree at Shackamox in 1682.

Like expedients for aiding the memory were, no doubt, in vogue in remote times in many parts of the old world as well as of the new. As already mentioned, the Chinese have a tradition that at a certain period in their early history, writing by pictures was substituted for the knotted strings previously in use. Pauthier, following the chronology established by the Imperial Academy, under Kuen-Lung, in 1767, assigns the sixty-first year of the reign of Hoang-ti as the beginning of the historic period. The institution of a tribunal of history, attributed to that emperor, implies that writing was quite familiar in his day. A few centuries later Yu (who died in the year B. C. 2108) is said to have had an inscription carved on a celebrated mountain, Heng-Chan, and this inscription is said to be still visible, though almost effaced by the lapse and wear of many seasons. But an exact copy of it, in the primitive characters of Fou-Hi, is preserved in the museum of the ancient city of Si-Ngan-Fou, in the province of Chensi. Father Amyot, the famous missionary and sinologue, had a transcript and translation of it sent to the Bibliothèque Royale of Paris. If, as Pauthier seems to believe, that document can be depended on as a genuine copy of an inscription of the twenty-second century before Christ, the honours of epigraphic antiquity, hitherto almost monopolized by Western Asia and Northern Africa, must be shared with the long-enduring civilization of the far East. Between the time of Fou-Hi (B. C. 2950, or, as some maintain, B. C. 3369) and the date in question, the credit of the discovery or invention, or of some marked improvement on processes already in use, is attributed to various emperors and ministers. The most interesting of these traditions ascribes the gift of writing to certain barbarians from the South, who visited the court of Yao, in the twenty-fourth century before Christ. Pauthier asks whether such a story could point to intercourse with Phœnicia or Egypt. The discovery made not long since of a connection between the most ancient literature of China and that of the Turanian founders of Babylon may more hopefully indicate its origin.¹

¹ London Quarterly Review, July, 1882.

However that may be, there is evidence enough, in the eight varieties of writing of which the characters are preserved, of the steps by which the Chinese system was evolved. The most ancient form (that of Fou-Hi), shewn in the inscription of Heng-Chan, represents simple figures of things,—a man, dog, horse, tree, being suggested by such drawings of those objects as a child might make. The characters of Fou-Hi gave place (B. C. 820) to the Ta-Chouan or ancient figurative style. About B. C. 227, this style underwent a considerable modification which, twenty-seven years later, was still further transformed into a near approach to the modern writing. The four remaining varieties are the usual, the cursive, the square (for printing), and the current (also for printing). The changes thus indicated took place between the years, A. D. 960 and 1123. The characters used by the Chinese are variously classed, according to their import, according to the objects represented (whether of things celestial, of mountains, of plants, etc.), or according to the number of strokes or radicals (from one to seventeen) that they comprise. The first classification admits of six grand divisions:—the purely figurative; the indicative (altered from their first shape, but not enough to preclude its recognition); the combined (as two trees for forest); the inverse (the meaning of which is implied by the direction, as a hand turned either way to indicate right or left); the ideo-phonetic, and the metaphoric. Of the first class, with its ten subdivisions, there are 588 characters; of the second, with two subdivisions (the second being again subdivided into three), there are 107; of the third class (two subdivisions), 740; of the fourth (four subdivisions), 352; of the fifth (two subdivisions, the second of which comprises six distinct classes), 21,810; and of the sixth (with thirteen subdivisions), 598. It will be seen that the fifth class, or ideo-phonetic, comprises the nineteen twentieths of the 24,175 Chinese symbols. Enormous as is this number and well calculated to deter the inquiring student, it is, like many an obstacle, worse than it looks. For whoever has mastered the figurative and phonetic values of the 1,400 characters of the first three classes is in a fair way to overcome a difficulty which at first sight seems so formidable. Nevertheless, even for the Chinese, this conventionalized picture-writing is cumbrous and its acquisition, a thing of labour. Isaac Taylor says that “even to obtain such an acquaintance with it as to be able to write a common business letter, or to read an ordinary book, it is necessary for a Chinese student to commit to memory some 6,000 or 7,000 of these groups of characters.”¹

The Japanese became acquainted with Chinese civilization and Buddhism in the third century, and adopted the Chinese system of writing. But their language being polysyllabic, they had to treat the Chinese characters as syllabic signs. Selecting a sufficient number of phonograms, and rejecting the “keys” or “radicals” as unnecessary, they greatly simplified the original system. Having only five vowels and fifteen consonantal sounds, they require only seventy-five possible combinations of a consonant and a vowel, and of these several occur rarely. It is possible, indeed, with less than fifty distinct syllabic signs to write any Japanese word. The two syllabaries, which were in working order before the end of the ninth century are called the *Hirakana* and the *Katakana*. The former, derived from the Chinese cursive form, has some 300 signs, many of which are variants or homophones. The other, which is more simple, was obtained from the Chinese *Kyai* or “model type” and comprises only a single sign written more or less cursorily, for each of the forty-seven syllabic sounds in the Japanese language.²

¹ The Alphabet, i. 32.

² *Ibid.*, i. 35.

At this stage of simplification, the development of the Japanese syllabary was arrested—it never grew into an alphabet. Some hold, it is true, that the Korean alphabet is an out-growth of the Japanese *Katakana*, but Isaac Taylor thinks that he is justified in classing it rather with the Pali or Buddhist alphabets of the Indian family.¹

"Writing," says Prof. Max Müller, "was unknown in India before the fourth century before Christ, and yet we are asked to believe that the Vedic literature, in its three well-known periods, the Mantra, Brahmana and Sutra periods, goes back to at least a thousand years before our era."² Prof. W. D. Whitney hesitates to accept this as an established fact. "It is not very difficult," he says, "to conjecture a reason why the Brahmans may, while acquainted with letters, have rigorously ignored them, and interdicted their confessed use, in connection with their sacred literature."³ It is certain that writing was well known in India in the middle of the third century B. C., as no less than seventeen versions of the famous edicts of Asoka have been discovered, engraved on rocks and pillars in all parts of the great peninsula. In one of these, what is known as the Indo-Bactrian alphabet was employed. The alphabet used in the other, happily deciphered by Prinsep, is termed by Taylor the *Asoka*, in honor of the illustrious author of the edicts. It is also variously called the South Asoka; (to distinguish it from the Indo-Bactrian or North Asoka), the *Magadhi* and the *Maurya* (from the names of Asoka's kingdom and dynasty), the Indo-Pali and, simply, the Indian alphabet. This alphabet is the source of the countless Indian scripts—Tibetan, Pali, Nagara, Dravidian and Malay, which now divide with Chinese and Japanese the literary empire of the East. But both Indo-Bactrian and Asoka, which differ materially from each other, must have been developed from some older graphic system, and several theories have been propounded to account for their origins. Some trace them to the Greeks, others to the Semites, while a third class of inquirers maintain that they are native to the soil. To the theory maintained by Gen. Cunningham that they grew out of a primitive picture-writing, Mr. Taylor objects that the parent script evidently possessed a small number of signs which had to be augmented by differentiation, whereas analogy would demand a number of characters far in excess of the requirements of an alphabet. He will only admit the bare possibility of their native origin. To persons not deeply versed in the science of epigraphy, it might seem more difficult to believe that a people who had produced such a literature as the Indians should not have developed an alphabet, as its normal and almost necessary accompaniment. The policy of Asoka shows that, if the Brahman priesthood were unfriendly to the *litera scripta* for sacerdotal reasons, the less exclusive Buddhists were glad to avail themselves of its aid in spreading their doctrines. Commenting on the fact that the inscriptions of Asoka were composed neither in the Sanskrit of the Vedic hymns, nor in the later Sanskrit of the Brahmanas and Sutras, but in the local dialects as then spoken in India, Professor Max Müller thus questions and answers: "What follows from this? First, that the archaic Sanskrit of the Veda had ceased to be spoken before the third century B. C. Secondly, that even the later grammatical Sanskrit was no longer spoken and understood by the people at large; that Sanskrit

¹ The Alphabet, i. 36. A journal has recently been established in Japan (the *Romaji Zasshi*) with the object of introducing the Roman alphabet in spelling Japanese words. It is partially supported by the Government and is the organ of a society of 4,200 members, whose aim is the substitution of Roman for Chinese characters in Japanese.

² India: What can it teach us? Lect. vii.

³ Oriental and Linguistic Studies, p. 86.

therefore had ceased, nay, we may say, had long ceased to be the spoken language of the country when Buddhism arose, and that therefore the youth and manhood of the ancient Vedic language lie far beyond the period that gave birth to the teaching of Buddha, who, though he may have known Sanskrit, and even Vedic Sanskrit, insisted again and again on the duty that his disciples should preach his doctrines in the language of the people whom he wished to benefit." It surely would be as natural to suppose that the scholars and thinkers who spoke that ancient tongue had evolved a method of writing it, even though, for the reasons Prof. Whitney has given, they chose to limit its use; as that their descendants should have been forced to borrow an alphabet from strangers who were less, or at least no more, ingenious. Panthier records, in his "Chine Ancienne," that many of the inventions in art and science of the earliest Chinese dynasties are said by the native historians to have come from the direction of Thibet, which, in that case, must have enjoyed a priority of civilization. It is to be noted that Magadha, Asoka's seat of power, was in a part of India (Behar) not very distant from that elevated region. Had the system of hieroglyphics, attributed to Fou-Hi as its author, been common to the dwellers on both sides of the mountains, there would be ample time for the differentiation which would give the Hindoos the benefit of an alphabet long before Asoka, while leaving the Chinese at the stage of graphic progress which suited their genius and their speech.

Mr. Taylor, however, though he does not pronounce the indigenous origin of the Indian alphabet impossible, is rather inclined to trace it to a Semitic source, the derivation from which, he thinks, is rendered probable by the analogy of the repeated transmissions of the Semitic alphabet. "The two primitive Indian scripts," he concludes, "are manifestly based upon alphabets which had reached the Semitic stage of evolution, their partial notation of the medial vowels being non-alphabetic in its character, while the emphatic initial vowels are more fully expressed, as in early Semitic inscriptions." Some writers, while allowing this argument as regards the Indo-Bactrian, decline to accept it for the Asoka alphabet. If it is of Semitic origin, they challenge those who hold that view to tell by what channel it reached India. Mr. Taylor replies, though with hesitation, that it may have got there by sea from Arabia Felix, the trade between Yemen and India having flourished between the tenth and sixth centuries, B.C. The Indo-Bactrian alphabet, according to the same authority, was introduced soon after the Persian conquest of the Punjab, in the beginning of the fifth century, B.C.

In the cuneiform inscriptions, so abundantly unearthed from the ruins of the ancient cities of Mesopotamia, we find evidences of a process similar to that which resulted in the complicated ideography of the Chinese. It is also worthy of note that, here too, we have to deal with the invention, not of an Aryan or Semitic, but of a Turanian or Allophylian race. In the material used, however, the Babylonian writing stands apart from all other systems. They took the clay that was ready to their hands, and thereon imprinted the wedge-like characters which Mr. James Nasmyth considers to have been first suggested by the mark made by a hard brick applied edgewise to a clay surface. The Semitic Assyrians adopted the system from their vanquished foes, and formed syllabaries out of the Accadian phonograms,—the adaptation being effected in part by the process known as acrology, by which the phonographic symbol was made to indicate the initial syllable of

¹ India, etc. Lect. vii.

a word. The Proto-Medic tribes, whose tongue was Ural-Altaiic, and the Proto-Armenians, who were of Aryan affinity, subsequently borrowed the Assyrian syllabaries, and the latter have left memorials of themselves in the monuments and inscriptions of Lake Van and its neighbourhood.¹

To the same race belonged the Hittites, whose empire rose to considerable power, and who carried to Asia Minor the art and culture of Babylonia. Sculptures attesting their greatness are visible in Cappadocia, Lycaonia, Phrygia and Lydia. Their sway ended with the fall of Carchemish, B.C. 717. According to Professor Sayce, the Cypriote syllabary was derived from the Hittite hieroglyphics, though other authors dispute this view. The syllabary in question is of considerable interest "as an example of an independent graphic system, unrelated to the Semitic alphabet, which was rapidly advancing on the path of alphabetic evolution at the time when it became extinct."² Professor Sayce says that it was once in use throughout Asia Minor. Conservative Cyprus alone retained it into historical times and has given to it the name by which it is known to the learned of the present day.³ The characters, at least fifty-seven in number, were solved, after long resisting decipherment, by the genius of the late George Smith, the distinguished Assyrian scholar. Whether it was of Assyrian or of Hittite origin, it missed that tide which, "taken at the flood, leads on to fortune." Not to Babylon or Carchemish, but to Tyre and Sidon, was western civilization to be indebted for the boon of letters. But where did the Phœnicians receive the impulse which urged them to the alphabetic goal? Long before the mythic, yet in one sense, most real, Cadmus set forth in his eventful quest for Europa,⁴ the inhabitants of the Nile valley had learned to express in symbols what they thought and said and saw and did. Thirty-five centuries ago, Mr. Taylor tells us, hieroglyphic writing was a venerable system of vast antiquity. Nay, even twenty-six centuries further back, the pyramid-builders were able to record in that way the glories of their reigns. Five hundred years still further into remote antiquity we may venture, confident that our search will not be in vain.⁵ At that date, B.C. 4700, was erected by king Sent, of the second dynasty, a memorial to his grandson Shera, now in the Ashmolean Museum, Oxford, which, though the oldest written record in existence, is of even greater interest for the long list of unknown predecessors that it implies. Nor is that all. Far off as it lies in the past, it already contains a germ of promise which later ingenuity was to fructify into the supreme blessing of a true alphabet. Of the symbols that stand for Sent's own name, within the distinctive cartouche, the hand and the waterline are recognized as the very forefathers of two of our most important letters, *N* and *D*. Taylor maintains indeed, that "from the times of the earliest known monuments, the hieroglyphic writers possessed a sufficient number of true letters to enable them to write alphabetically."⁶

A strong, united voice of tradition attributed to Phœnicia the honour of having bes-

¹ Taylor's Alphabet, i. 46, 47; Sayce's Ancient Empires of the East, p. 213. The Persians developed the cuneiform into a system which deserved to be ranked as an alphabet; but, after being in vogue for about a century, it was superseded by the Semitic characters.

² Taylor's Alphabet, ii. 117.

³ "The Inscriptions found at Hissarlik," by Prof. Sayce, in Appendix to Schliemann's Ilios.

⁴ If the conjectures of some writers be correct, that quest was simply the East (Kedem) seeking the West (Ereb).

⁵ *Ibid.*, i. 68.

⁶ The Alphabet, i. 56.

towed the alphabet on the Greeks. With less assurance, the Phœnicians were said to have obtained the privilege from Egypt. "Primum per figuras animalium," writes Tacitus, "Ægyptii sensus mentis effingebant, (ea antiquissima monumenta memorie hunc in modum impressa saxis cernuntur,) et literarum semet inventores perhibent: inde Phœnicians, quia mari præpellebant, intulisse Græciæ, gloriamque adeptos, tanquam reppererint quæ acceperant." But Tacitus hardly does justice to the Phœnicians, when he represents them as merely handing on what they had received. If, indeed, (for that point has first to be settled) it was the Egyptian system of writing that the Phœnicians had adopted into their *Alph-Beth*, which the Greeks in turn were to further modify into their *Alpha-Beta*, the praise of inventors, and not merely of common carriers, is their due. What they gave to the Greeks was something quite different from what the Egyptians had to give them. If Egypt gave them the hint, they made such excellent use of it that it is not beyond their deserts to honour them as original inventors, as their representative, Cadmus, has for ages been honoured. What is the evidence, in the first place, that they made the Egyptian symbols even their model?

"The two alphabets," says Isaac Taylor, "agree neither as to the number, the order, the manner, nor the forms of the respective letters. Till a very recent period these difficulties led scholars of repute to the conclusion that classical tradition was at fault in asserting that the Phœnician letters were originally obtained from Egypt." In the fifth edition of his "*Histoire Générale et Système Comparé des Langues Sémitiques*," Ernest Renan wrote that "the origin of writing, with the Semites, as with all other peoples, was hidden in profound night. Then, after asking whether it was derived from the hieroglyphics of Egypt or from the cuneiform characters of Assyria, or from both, or whether its phonetic stage was reached through the Hyksos, he thus proceeds: "To affirm that the Semitic alphabet, such as we know it, is really a creation of the Semites, it is not necessary to insist that the Semites, in creating it, did not avail themselves of any previous experiment." And in a note he adds: "It has long been observed that in the ancient Semitic alphabets the form of each letter represents what the name of the letter signifies. But it may be that these names were given to characters already formed, and indicate nothing as to their formation. The resemblances of name and form, which have been shown to exist between certain Semitic and Egyptian characters, are more significant. But we must wait till M. de Rougé has published his researches on this subject in a complete form."² The distinguished scholar, to whom M. Renan so hopefully refers, died before the purposed revision of his work could be carried out. But fifteen years later, his son, M. Jacques de Rougé, worthily performed the task, and the world was placed in possession of information which left little doubt as to the debt of Phœnicia and therefore of all western civilization to the ancient Egyptians. Hitherto, the comparison had been fruitlessly made between the Phœnician characters and the hieroglyphics. While these symbols were devoted to monumental and sacred uses, there had been, at an early date, developed out of them a series of cursive characters which were employed for secular and literary purposes. Until recently, the hieratic of the New Empire and the demotic derived from it were the only cursive forms known. But exploration having opportunely brought to light specimens of a very much older form of hieratic, which arose during the early empire

¹ Annal. xi. ch. 14.

² Hist. des Langues Sémitiques, p. 114, footnote.

and was in vogue during the Semitic conquest of the Delta, M. de Rougé was led to trace the Semitic alphabet to that source. The careful collation of both sets of characters, with special attention to the transliteration of Egyptian words in the Bible, and still more, to the Egyptian transliteration of Syrian geographical names, conducted the inquirer to the welcome conclusion that every Semitic letter could be easily deduced from its hieratic prototype. The documents of which M. de Rougé availed himself in his investigation were not accessible to students of a much earlier date. One of them, the *Papyrus Prisse*, "the most ancient of all books," was obtained at Thebes by M. Prisse d'Avannes, by whom it was presented to the Bibliothèque Nationale at Paris, and published in fac-simile in 1847. It purports to be a copy of a work written by Prince Ptah-Hotep, who lived in the reign of Assa, a king of the fifth dynasty. "By the curious irony of chance," writes Mr. Taylor, "this primeval treasure—this stray waif which has thus floated down to us from the days of the very childhood of the world—has for its subject the moralizing of an aged sage, who deploras the deterioration of his age, and laments the good old times which had passed away."¹ The *Papyrus Prisse* furnished the best type of hieratic writing, as adapted to literary and commercial purposes in the early Empire; and the Semitic characters with which that writing was minutely compared were those of another venerable, but much later, monument of the past—the famous Moabite Stone discovered in 1868. The conclusions worked out with such conscientious assiduity by MM. de Rougé, father and son, have the sanction of a number of distinguished names. But while the hypothesis is sustained by the authority of Professors Max Müller, Sayce, Peile and Mabaffy, among British, and Lenormant, Euting, Maspero, Fabretti and Ebers, among foreign, philologists, the objectors are also men of mark, including Professors Robertson Smith, R. Stuart Poole and Lagarde. Their adverse criticism has been firmly and ably answered by Isaac Taylor.²

Before taking leave of the old world, it may be interesting to show, with as much brevity as is consistent with clearness, the connection between the alphabets of to-day and those whose start in life we have been considering. If the argument of de Rougé be well-founded, and Mr. Taylor's genealogy be correct, all the alphabets in use to-day on the old continent, with the exception of the Chinese and Japanese, which are not alphabets in our sense, are descended from the hieratic, and, through it, from the immemorial hieroglyphics of Egypt. The Semitic bore two children, the Phœnician and the South Semitic. From the latter, through the Joktanite, came the Sabean, the Thamûdite (Safa) and the Omanite (Yemen). The Sabean begat the Himyaritic, which begat the Ethiopic, which again begat the Amharic. The Omanite (if Mr. Taylor's view, already stated, as to the origin of the Indian alphabet be accepted) bore the Old Indian or Asoka, which had three sturdy sons, the Pali, the Nagari and the Dravidian. The Pali became the father of the Burmese, Siamese, Javanese, Singalese, and Corean; the Nagari, of the Tibetan, Gujarati, Kashmiri, Marathi, and Bengali; the Dravidian, of the Malayan, the Telugu, the Kanarese, the Tamil and the Grantha. The Phœnician bore three children, the Sidonian, the Tyrian, and the Cadmean. The Sidonian bore the Punic and the Aramean. The Punic begat the Iberian and the Numidian. The Aramean had a family of seven: the Herodian, Palmyrene, Estranghelo, Hauranitic, Nabathean, Iranian and Bactrian. The child and grandchild of

¹ The Alphabet, i. 95, 96.

² *Ibid.*, i. 70-147.

the Herodian were the Square Hebrew and the Rabbinic. The Estranghelo gave birth to the Melchite, Nestorian, Jacobite and Mendaité. The Nestorian bore the Uigur—which in turn bore the Mongolian, Kalnak and Manchu—the Syro-Chaldee and the Karshuni. The Nabathean led for offspring the Kuffe and the Neshki; and the Neshki had an important family, the Arabic, Turkish, Persian and Hindustani. The Iranian begat the Pehlvi—which begat the Parsi—and the Mesrobian, which bore the Armenian and Georgian. The Tyrian had two sons, the Israelite and the Moabite, the former having as lineal descendants, the Asmonean, Old Samaritan and Modern Samaritan. The Cadmean bore the Carian, the Lycian, the Italic and Hellenic, and of the Hellenic were born the Runic¹ and the Greek, the latter, in turn, bearing the Coptic, Meso-Gothic, the Cursive Greek—with its progeny, the Greek Minuscule, Romic, Albanian and Glagolitic—and the Cyrillic—with its progeny, the Servian, Wallachian and Russian. The Italic bore the Messapian, Oscan, Faliscan, Umbrian, Etruscan and Latin, which last had for daughter the Uncial Latin, and for grandchildren, the Italic type, the Roman type, the German script and the English script. Such is the affiliation of the great Semitic family of alphabets, as tabulated by Mr. Taylor.

We have already seen that some of the American nations, when they first became known to Europeans, were not destitute of the means of giving their thoughts a permanent shape. The *quipu* or knotted cord in Peru, and the wampum of the North American Indians, were rude mnemonic contrivances, which only a special training and long acquaintance could turn to useful account. A higher stage was reached in the picture-writing of the Aztecs. Clumsy as it was, Prescott says, it seems to have been adequate to the demands of the nation in its imperfect state of civilization. As the same writer points out, it was, like the *quipus* and wampum belts, valuable chiefly when used in association with oral tradition. The hieroglyphics, engraved on tablets and inserted into buildings in the ruined cities of Yucatan and Central America, are remarkable for the beauty of the workmanship; but attempts to decipher them have not proved very successful. The Aztec picture-writing, though less advanced, is also extremely interesting from the ingenuity with which it was adapted to historical, mnemonic, and educational purposes. The Mayas alone of the American peoples have been credited with an alphabet. Of this I shall presently give some account. Both the Aztecs and the Mayas had books, but the most of them were burned by the Spaniards on the ground that they were idolatrous. Four Maya manuscripts, have, however, been saved from the threatened holocaust, the *Codex Peresianus*, the *Dresden Codex*, the *Codex Troano* and the *Codex Cortesianus*. The two last, according to M. de Rosny, belong to the same original document. In 1863, Abbé Brasseur de Bourbourg discovered in the archives of the Royal Academy of Madrid a work which, he announced, contained a key to the Maya symbols. Hitherto the students of American archaeology had not dreamed that the nations, in which they were interested, possessed anything like an alphabet in the received sense of the term. But Bishop Landa, the author of the "Relacion de las Cosas de Yucatan," brought to light by the indefatigable Abbé, suggested the notion that the Maya hieroglyphics were used as alphabetic characters. The publication of Landa's alphabet naturally, therefore,

¹ Mr. Taylor's theory is that the northern runes were obtained from the Hellenic Colonies of the Euxine by the commercial route of the Borysthones.

caused intense excitement in the antiquarian world. It was now taken for granted that the inscriptions which had heretofore baffled the ingenuity and patience of the most skillful palaeographer, could be readily interpreted, and that a flood of welcome light would be shed on the origin and history of the Central American nations. Alas! the hope was destined to be disappointed. The key would not open the door to the mystery, which must remain a mystery still. Some of the ardent believers in Landa's alphabet were, indeed, said to have used it to good account. By means of it "Mr. Bollaert obtained encouraging results from hieroglyphics figured in Stephens's works." But the author¹ who gives this testimony, virtually unsays it a little after. He has more faith in a distinguished French investigator, M. de Rosny, the learned editor of the *Codex Cortesianus*. "M. de Rosny," says Mr. Strong, "in his able essays on the decipherment of the hieratic writings of Central America has undertaken the solution of this interesting and perplexing problem in a scientific manner, and we have the fullest confidence that his system, constructed on Landa's key, will open to us the books and inscriptions of the Mayas." Others discredited the great discovery of M. de Bourbourg from the first, and among these none have denied its alphabetic character more vigorously than Dr. P. Valentini. In a paper, read before the American Antiquarian Society and afterwards published in pamphlet form, he says: "My study of the writers on the Spanish Conquest gave me the firmest conviction that the Central American hieroglyphics stand for objects and nothing else. From the day that I obtained a copy of Landa's work (which was in the spring of 1871, in which year, after a prolonged sojourn in Central America, I had come to New York), the impression was rooted in my mind that the believers in this alphabetic table were laboring under a manifest delusion. This impression grew stronger when watching the movements made in the phonetical deciphering, I noticed that the specimens offered to the public were only so many witnesses of the valueless character of the so-called phonetic key." Dr. Valentini gives quotations from the historians of the Conquest to shew that in no case was mention made of alphabetic writing as a native possession. The expressions used are invariably signs, figures, characters or symbols. Everything, in Dr. Valentini's opinion, goes to prove that an alphabetic system was unthought of as pertaining to any of the American nations, what was said of the Nahuas of Mexico being equally applicable to the Mayas of Yucatan. Landa's is the only authority that has ever been adduced for the contrary hypothesis, but even in Landa's work there is no passage "in which he positively states that the natives in the period of their paganism used an alphabet composed of symbolic letters." It is his meagre explanation of the plan, which he adopted to teach his converts the verities of the Christian faith, that caused the grave misunderstanding. That plan was, in line, a mnemonic device not new to missionaries situated as Landa was, and consisted in the choice of certain objects of which the names in the Maya tongue suggested the letters of the alphabet. Repeating the sound *a*, for instance, Landa would ask one of his disciples to draw a rough picture of the object which the sound called up in his mind. After thinking a moment, one of the pupils would make a rude outline of a tortoise, saying, as he showed it to his teacher, "*aa*." Seeking a better representation of the sound, Landa would urge him to a second trial, and his obedient scholar would put down the counterfeit presentment of a curved knife, *ach*. A third experiment would elicit the very echo of the

¹ Strong's North Americans of Antiquity, pp. 425, 426.

letter, *a*, the Maya word for "leg." In this way the bishop would proceed till he had impressed upon his hearers the value of every sound in the Spanish alphabet. Such, according to Dr. Valentini, is the true story of the genesis of the famous Landa alphabet. He does not hesitate to pronounce it, without any reproach, a Spanish fabrication; and, perhaps, the strongest ground for the charge is the order of the alphabet itself. It certainly would be an extraordinary coincidence to find a Central American alphabet following exactly, in the sequence of the characters, the arrangement of our *A, B, C*. Right or wrong, Dr. Valentini's theory is most ingeniously worked out. Except in three instances, *I, M,* and *O*, he has succeeded in identifying to his satisfaction the objects indicated by the Maya symbols. Though his pamphlet is not a direct indictment of the good faith of the discoverer, he expresses his surprise that Abbé Brasseur de Bourbourg should have omitted to give such detailed information as to the date, place and circumstances of his discovery as might reasonably have been expected to accompany so important an announcement.

But if Dr. Valentini is sceptical, there are others, as already intimated, on whose eager faith no shadow of doubt has been allowed to rest. The Rev. Isaac Taylor, though he does not give Bishop Landa's scheme in his work, "The Alphabet," writes of it as deserving of alphabetic honours. "It appears," he says, "that, in addition to a certain number of syllabic signs and a few ideograms, the Mayas employed twenty-seven characters which must be admitted to be alphabetic." But, after some words of praise to a civilized people who had invented a system of writing superior to that of either the Assyrians or the Chinese, he adds: "The systems of picture-writing which were invented and developed by the tribes of Central America, are, however, so obscure, and so little is known about their history, that they must be regarded rather as literary curiosities than as affording materials for enabling us to arrive at any general conclusions as to the nature of the early stages of the development of the graphic art."¹

Mr. Ignatius Donnelly, in his "Atlantis," endeavours to trace the alphabets of the eastern hemisphere, through the Atlanteans, to the Maya symbols, devoting much learning to the hopeless task. Whether it be an alphabet or not, one thing is unhappily certain, that the discovery which drew from Brasseur de Bourbourg the rapturous cry, "Eureka," has hitherto, as Dr. Valentini insists, and even M. de Rosny has been forced to concede, proved of little service in the decipherment of the Maya documents. In a review of M. de Rosny's edition of the *Codex Cortesianus*, in *Science* (April 11, 1884), Mr. Cyrus Thomas wrote as follows: "That Rosny is largely influenced in his interpretation of characters by Landa's alphabet and the names of the days, is quite perceptible in this vocabulary. I am satisfied that no decided progress can be made in deciphering these aboriginal documents until we break loose from these trammels and use as a key the few characters which can be satisfactorily determined otherwise."²

If the so-called "Landa alphabet" be nothing more than what Dr. Valentini represents it to be, there is nothing else on which palæographers can fall back to support the theory that Americans had developed alphabetic writing. The numerous finds which have

¹ The Alphabet, i. 24, 25.

² At the first meeting of the Congrès des Américanistes, at Nancy, Señor Gavino Pacheco-Zegarra read a paper, in which he advocated the adoption of a phonetic alphabet of his own elaboration, instead of the Quichua language of Peru which, he says, is still spoken by 1,500,000 people.

exercised epigraphic skill from the Dighton Rock to the Davenport Tablet, whatever else they may indicate, cannot be accepted as evidence that any of the North Americans of antiquity had a graphic system of their own. On this point the statement made by Messrs. Nott and Gliddon nearly thirty years ago, that "no trace of an alphabet existed at the conquest of the continent," is still as true as ever. "If the Mound-builders had a written language," writes Mr. T. P. McLean, "they were in possession of abundant means to have perpetuated it. Numerous plates of copper and polished slate were at their command, and if they possessed this art, letters would certainly have been engraved upon them, and uniform characters would have been found from the great lakes to the Gulf."¹ This being the case, it is unnecessary to recount the many attempts that have been made to credit them with such an acquisition. In some cases of alleged discovery of inscribed tablets, as in that of the Newark stone of David Wyrick, fraud has been clearly proved. In others, the alleged lettered inscriptions, though accepted by many as genuine, owing to the reputation of the *soi-disant* finders, have only resulted in mystification and waste of time. Even the markings on the famous Dighton Rock, of which the eventful epigraphic history covers more than two centuries, could suggest to so experienced a palæographer as Dr. Daniel Wilson, nothing but a "confused and indistinct scrawl."² Mons. G. Gravier de Montjau, in a paper read before the Congrès des Américanistes at Nancy, in 1875, in referring to the large number of such rock memorials scattered over the continent, expressed regret that they were not faithfully copied by skilful antiquaries. The French scholar had in his mind the saving from destruction, through ignorance or indifference, of valuable relics of the past; but there is another reason why the transcription or reproduction of such alleged memorials should be entrusted only to men of learning and honesty. With truthful copies before them, palæographic students would, at least, know the real character of the problem which they were endeavoring to solve and would be saved the disappointment and vexation, of which some of them have been the victims, of wasting their analytic talents on unworthy objects. Such experience, however, has not been all in vain; for, although the trade in false curiosities and antiques has in recent years assumed extraordinary proportions (the demand, no doubt, among amateurs having stimulated, if not created, the supply), the knowledge of its existence has made earnest investigators more cautious than they would otherwise have been.

This notice of the world's alphabets would be incomplete without some reference to those which have been elaborated for one purpose or other in modern times. In the first half of the last century the famous impostor, George Psalmanazar, invented an alphabet for his pretended Formosan language, though he forgot to give names to his letters. Such a ruse for living on the learned public would be impossible to-day. What Psalmanazar did to maintain his personation of a converted heathen, several missionaries have done to carry on the work of conversion. Of the missions of the present century, one of the most successful is that which the American Baptist Society has carried on among the Karen tribes of Burmah. Finding no written characters in existence, the zealous agents of the Society invented an alphabet, modelled on the Burmese, and in that they have printed thousands of Bibles, tracts and school-books. In Africa and Polynesia, the same thing has been done again and again. Some of the missionary alphabets are more correctly

¹ The Mound-Builders, p. 122.

² Prehistoric Man, ii. 97.

described as syllabaries. The mode of writing in use in the Christian schools of the Chippewyans, Crees, and Eskimos, is, indeed, distinctly so named. The syllabaries in question which differ from each other only in slight details, are of the simplest kind. The Eskimo syllabarium, for instance, consists of eleven consonants, (*p, t, k, ch, m, n, s, l, y, v, and r*) and four vowels (*a* long, *a* short, *e* and *o*). The vowels are all represented by an isosceles triangle, about the size of any ordinary small capital, the differentiation being effected by the direction of the apex. With apex down, it stands for *a* long; with apex up, for *e*; to the right, for *o*; to the left, for *a* short. Each consonant has, in like manner, a symbol, which makes a syllable with *a*, short or long, *e* or *o*, according as it is placed. Marks of smaller size serve the purpose of finals. Several devotional and educational books have been printed in these characters, which, when associated on the page, bear a remote resemblance to some of the vernacular alphabets of India.

One American Indian has won the fame of a new-world Cadmus—the Cherokee, Sequoyah. This ingenious tribesman, sometimes called George Guess, was ignorant of any tongue but his own, until, seeing some text-books in a missionary school, and being informed that the characters represented the words of the English language, as he heard it spoken, he conceived the idea of framing a system of writing for his own people. He began by trying to invent a sign for each word; but, that plan being discarded as too cumbersome, he finally succeeded in forming, with endless pains, a syllabic alphabet of eighty-five characters, which has won the admiration of even civilized men. Sir John Lubbock says of this remarkable alphabet: "Sequoyah invented a system of letters, which, as far as the Cherokee language is concerned, is better than our own. Cherokee contains twelve consonants and six vowels, with a nasal sound, *mung*. Multiplying the twelve consonants by the six vowels, and adding the vowels which occur singly, he acquired seventy-seven characters, to which he added eight, representing the sounds, *s, ka, hna, nah, ta, te, ti, tla*, making altogether eighty-five characters. This alphabet, as already mentioned, is better than ours. The characters are, indeed, numerous, but when once learned, the pupil can read at once. It is said that a boy can read Cherokee, when thus expressed, in a few weeks, while, if ordinary letters are used, two years are required."¹

Sequoyah would seem to have thus attained, by intuition, what the Spelling Reformers have for many years past been strenuously demanding—an alphabet corresponding with the articulate sounds of the people using it. Professor George Hermann von Meyer, in his "Organs of Speech," says that "our alphabet is nothing more than an arbitrary collection of letters, in which, on the one hand, several letters represent the same sound, and on the other, several sounds which exist as pure elements of speech are not represented at all by a special letter, but must be expressed by a combination of letters, while compound sounds, on the contrary, are given in a single letter." To remedy this defect, several schemes have been devised—the most celebrated and most successful being the Pitman system, generally associated with short-hand.

But the most ambitious and comprehensive of all alphabetical schemes is the Visible Speech of Dr. Melville Bell. "In this system," its author tells us, "no sound is arbitrarily represented, but each letter is *built up* of symbols which denote the organic positions and actions that produce the sound. The letters are thus physiological pictures, which inter-

¹ Origin of Civilization, Appendix.

pret themselves to those who have learned the meaning of the elementary symbols of which they are composed." Again he says: "The system of Visible Speech is the ready vehicle for a universal language, when that shall be evolved; but it is also immediately serviceable for the conveyance of the diverse utterances of every existing language. No matter what foreign words may be written in this universal character, they will be pronounced by readers in any country with absolute uniformity." According to Dr. Bell's method, there are four simple symbols for the vowels, "from the combinations of which every vowel in every language can be expressed to the eye, so as to be at once pronounced with exactitude by the reader." In like manner there are five elementary symbols for the consonants. All the elements of each class have one symbol in common—that of the vowels being a straight line, that of the consonants, a curve. From the synthesis of these symbols, which are simply directions for the action of the lips and tongue, any letter in the alphabet may be formed. Visible Speech was first made known to the world in the summer of 1867, and has been largely studied by philologists as "an exponent of linguistic phonetics." Before that date Mr. Alex. John Ellis had devoted much time to the same subject and his treatises are highly recommended by Professor Max Müller, in the fifth of his second series of "Lectures on the Science of Language," in which he discusses the claims of the physiological alphabet or alphabet of nature. The latest work on the subject is "The Organs of Speech and their Application in the Formation of Articulate Sounds," by Professor Meyer, of the University of Zurich, from which I have already quoted.

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