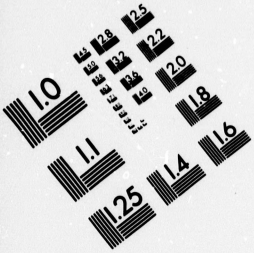

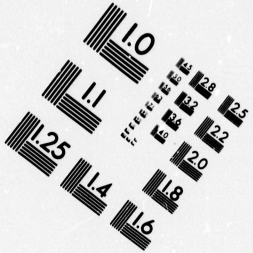

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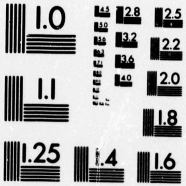

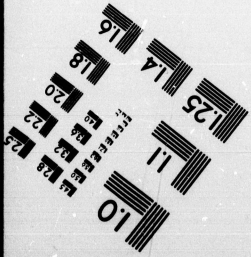

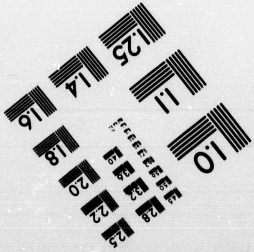

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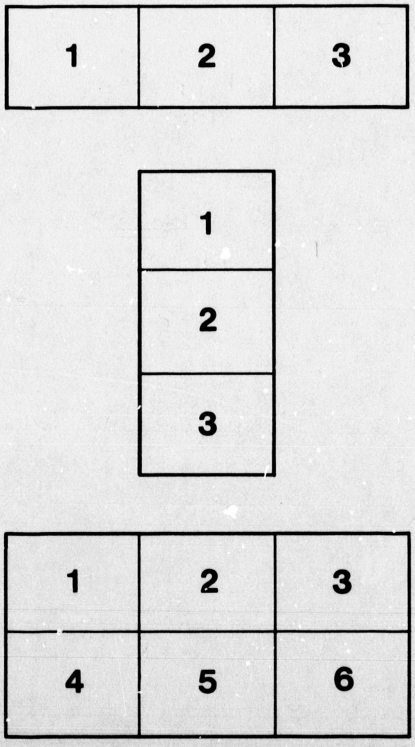

The Dominion in 1983.

BY

RALPH CENTENNIUS.

Entered according to Act of Parliament of Canada, in the year 1883, by Toker & Co., Publishers, on behalf of the Author, in the Office of the Minister of Agriculture.

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THE DOMINION IN 1983.

I.

"Before the curing of a strong disease,
"Even in the instant of repair and health,
"The fit is strongest; evils that take leave,
"On their departure most of all show evil."
—*King John, Act III.*

IN the present advanced and happy times it is instructive to take a retrospective glance at the days of our forefathers of the nineteenth century, and to meditate upon the political struggles and events of the past hundred years, that by so doing we may gain a clear insight into the causes which have led to the present wonderful developments. We, in the year of Grace 1983, are too apt to take for granted all the blessings of moral, political and physical science which we enjoy, and to pass over without due consideration the great efforts of our ancestors, which have made our present happy condition possible.

Let us try to contrast the Dominion of to-day with the Dominion of 1883. To begin with population. Our population at the last census in 1981, was just over 93,000,000. A hundred years ago a scant 5,000,000 represented this great Canadian nation, which has since so mightily increased and proved itself such a beneficent factor in human affairs.

Seven provinces and some sparsely peopled and only partially explored territories formed all that the world then knew as Canada. To-day have we not fifteen provinces for the most part thickly peopled, and long since fully explored to the shores of the Arctic Ocean?

In the present days of political serenity it is hard to realize the animosity and extreme bitterness of the past century. The two parties into which men formerly divided themselves, viewed each other as enemies, and each party opposed on principle whatever measures the other proposed. From a careful study of the principal journals of the time, fyled at Ottawa, we gather that the party, self-styled "Reformers," frequently opposed progressive measures, and even attempted to hinder the construction of railroads, while the other party called "Conservatives" considered railroads as ths best means of opening up the enormous tracts of country then lying untrodden by man, and useless to civilization. Such are certainly the inferences to be drawn from the records at our command, though it is hard to believe in opposition to railroads or to advancement in any form in these days, when new channels of communication and new industries are viewed with favor by the whole nation. Each party seems strangely to have belied its title, for the Reformers, after the confederation of the provinces in 1867, endeavored with singular perverseness to frustrate or retard reform and improvement of all kinds, while the Conservatives did not desire to preserve things in the old ruts and grooves, but strove hard for beneficial advancement of every sort.

In 1883 the United States was one of the leading nations of the world. With a population of over 50,000,000, and an almost illimitable extent of territory still open for settlement by the fugitives from troubled Europe; with exhaustless wealth, developed and undeveloped, it seemed reasonable to suppose that a nation so placed should be able to attain the foremost position and be able to keep it. Such appears to have been the opinion of most foreigners, and also of some of our Canadians of the period, for the wealth, apparent power and prestige of the United States caused many of our weak-kneed ancestors to lose heart in their own country, and in fits of disloyal dejection to fancy there could be no progress except in union with the States. Stout hearts, however, ultimately gained the day, and we

in the twentieth century are reaping the benefits won for the country by the valor of our great-grandfathers.

The troubled times through which the youthful Dominion passed from 1885 to 1888 constitute one of the greatest crises through which any nation ever passed successfully. Canada, with her confederated provinces and large territories loosely held together, with her scattered population chiefly grouped in Ontario and Quebec, with her infant manufactures and scarcely-touched mineral resources, was the home, nevertheless, of as prosperous and promising a young nation as the world ever saw; and had it not been for the timid portion of her population just mentioned, a great deal of trouble might have been saved. But out of evil came good. The Americans for years had been too careless about receiving upon their shores all the firebrands and irreconcileables from European cities, and the consequence was that these undesirable gentry increased in numbers, and the infection of their opinions spread. American politics were as corrupt as they could be. Bribery and the robbery of public funds were unblushingly resorted to. A low moral tone with regard to such matters, combined with utter recklessness in speculation and a furious haste to get rich by any means, fair or foul, were, sad to say, prominent characteristics in the American nation in many other respects so great. To counteract these evils, which were great enough to have ruined any European state in a couple of years, there was, however, the marvellous prodigality of nature—a bounteousness and richness in the yield of the soil and the depths of the earth hardly equalled in any other part of the world, and in consequence princely fortunes were accumulated in an incredibly short space of time. Millionaires abounded, and monopolists, compared with whom Crœsus was poor, flourished. But bitter poverty and starvation also flourished, especially in the large cities, bringing in their train the usual discontent and hatred of the established order of things. Yet these old-fashioned evils were scarcely noticed in the general magnificent prosperity of the country. The short-sighted statesmen of the time delighted to look only on the bright side of things, and to them the very exuberance of the prosperity seemed to condone, if not to justify, the nefarious practices which obtained in high places. No wonder that among our Canadians, hardly 5,000,000 all told, there were some who

were weak enough to be dazzled at the wealth and success of their brilliant go-ahead neighbours, more than 50,000,000 strong. Among those who lost heart in Canada, it began to be a settled conviction that it was "the destiny of Canada to be absorbed in the States."

This was the state of things in 1885. Conservative statesmen pointed to the general progress of our country, to unprecedented immigration from Europe, increased agricultural products and manufactures, and to many other convincing proofs of solid advancement. But facts were of no avail in dealing with Reformers habitually, and on principle despondent. The sanguine buoyancy and plucky hopefulness indispensable to true statesmanship did not animate them to any extent. Unhappily events over which no statesman could then have control overtook Canada, while as yet things bounded along gaily in the States, and the sons of despair seemed to have some ground for their pusillanimity. The harvest of 1885 was deficient, and agriculture was in consequence depressed; a slight panic in the Spring was succeeded by a great one in the Fall. Heavy failures followed. A feeling of uneasiness was caused at the same time by great social and political changes which were going on in the mother country, and were threatening to assume the proportions of a revolution. The unparalleled prosperity of the States caused the Americans—never backward in blowing their own trumpet—to assume an attitude of overweening confidence in themselves, and to brag offensively of what they considered to be their duty to mankind, namely, to convert all the world—by force if necessary—to republican principles. Such was the commencement of the great crisis in the history of the young Canadian nation—a crisis through which, if our sturdy forefathers had not pulled successfully, would have led to our gradual obliteration as a nation. All honor then to the great men to whom, under Providence, our preservation is due!

In 1886 commenced the reign of terror in Europe, that terrible period of mingled war and revolution, during which thrones were hurled down and dynasties swept away like chaff in a gale. The face of Europe was changed. Whole provinces were blackened and devastated by fire and sword. During the three years in which the terror was at its height it is calculated that at least four millions of men bearing arms, the flower of each land, must have

fallen. Great Britain was frequently on the very brink of war, but was almost miraculously kept from actually taking part. And most providential it was that Britain was not drawn into the tumult, for home troubles and defensive measures required all the attention of the nation. These stirring events, of course, had their effect on this side of the Atlantic. Canada was affected detrimentally by losing for a time the prestige consequent on being backed up by British ironclads and regiments, every available soldier and every vessel of war being required for the protection of British interests nearer home.

The harvest again in 1886 was below the average. Trade and finance had not recovered from the shock of the previous near. The outlook was certainly gloomy.

A Conservative government, with Sir ——— ———, as Premier, was in power at Ottawa. Sir ——— and his government were, however, in great straits, owing to the prevailing depression throughout the Dominion, for the hard times were seized upon by the opponents of the government as a means whereby to thwart and distract the ministers, and stir up discontent among the people. The States were pointed to by the Reformers as the only country in the world where security and prosperity co-existed. British connection was held up to scorn as a tie whose supposed advantages had proved worthless. A less able or a less determined ministry would have collapsed under the strain. The winter of 1886-7 was very severe, and discontent began to be noisy and aggressive. To make matters worse, a Fenian organization was going on in the States with the avowed object of invading Canada in the coming Spring. The heads of the movement were well-known politicians of a low order, having considerable funds at their command, and much influence in certain quarters. Their emissaries were known to be working all over Canada, freely distributing American gold and holding secret meetings. The position of affairs was one of increasing gravity owing to the connivance of the American authorities and the powerlessness of the Home Government. So matters progressed until the spring of 1887, when the situation became one of extreme tension. The Conservatives were taunted with having ruined the country financially and with pursuing a "Jingo" policy certain to end in bloodshed. Reformers "stumped" the country, calling on their excited

audiences to march to Ottawa and compel the Premier and his infatuated followers to resign. Annexation was openly advocated as the only sensible way to be relieved from the overwhelming surrounding difficulties.

A ray of hope to buoy up the sorely-tried loyalists appeared, when Canadians who had been domiciled in all parts of the States returned to defend their native land on hearing of the great danger she was undoubtedly in. Having lived many years under the shadow of the Stars and Stripes, they knew well enough all that it amounted to; the glamour of accumulated successes had not turned their heads for they had had opportunities of observing the sinister influences at work in American affairs, beneath the attractive exterior. Quebec rallied to a man, and the latent military strength of the province was developed under efficient leaders to a formidable degree. Invaders would have met with a warm reception in this quarter. Manitoba and the whole North-west were up and ready, prepared to fight, more to preserve their own independence, however, than the integrity of the Dominion, as there was then considerable difference in sentiment between the North-west and the Eastern Provinces. The Manitobans, too, though the Irish element had become very strong, did not intend to succumb to Fenian raiders, however well organized and backed up. The weakest points were the Maritime Provinces, Ontario and British Columbia; not that the feeling in British Columbia was not loyal to the Dominion, but that some 30,000 rowdies who had assembled and organized in San Francisco were preparing for a descent upon her poorly fortified ports. Now was the turning point in the destinies of the country. If the ministers at Ottawa had not stood firmly to their guns, all our subsequent career, instead of being the golden century of magnificent progress and peace that it has been, would have been linked with all the turbulence and the alternate advance and retrogression of the States.

A general election for the Dominion had been timed to take place in the beginning of June, and the day was looked forward to by all the noisy demagogues of Ontario as the day when the blood-thirsty Tories were to be hurled from power by the people in righteous wrath, and the country saved from the horrors of war. According to these garrulous parties, Ontario, the wealthiest and most populous

Province of the seven, was to welcome the invaders, bidding them enter Canadian territory in the name of the people, and plant the Stars and Stripes wherever they halted. Bloodshed would thus be avoided, and everyone would soon come round to the new order of things and take to it naturally. Quebec might perhaps object, "but what did a few handfuls of Frenchmen matter anyway."

On the day before the election, one party was full of boisterous, bragging insolence; the other, still steadfast, firmly clinging to what seemed a forlorn hope. Before the ending of another day all was changed—a complete transformation scene had taken place.

When the morning journals on the election day appeared, their news from the United States was such a terrible chapter of accidents as has rarely fallen to the lot of journals to publish in one day. The President had been shot at in New York by an unemployed foreign artisan, the night before, while leaving a mansion on Fifth Avenue. Troubles between labor and capital, which had been brewing for some time, had broken out in several manufacturing centres, and were threatening to spread to all large cities. The money market was showing signs of considerable derangement. Fearful storms and floods were chronicled from all parts; while last, but not least, three transports which had embarked the greater part of the "army," at San Francisco, that was to have "delivered" British Columbia, had foundered in a hurricane only two miles out, dragging all the poor deluded fellows to a watery grave. The same day brought good news from the old world. Ireland's great statesman had won for Britain a wonderful diplomatic triumph in the East, which added to the Empire, without a drop of blood being shed, territories extending from the confines of British India to the Mediterranean. All the leading men in Europe (so the despatch read) were astonished at the exhibition of so much moral force in the Old Country after they had been imagining the Empire as about to go to pieces under the recent terrible strain Other good news which had its effect here was that for Ireland there had at last been found men who understood her wants, and what was better, whom she herself understood, so that she considered herself as having just embarked upon a new career of glory as an integral and indispensable part of the Empire.

The effect of all this information on the electors of Canada was very marked. The demagogues who elevated themselves upon barrels or waggons and buggies to spout their frothy nonsense to the public, could get but few listeners, though only twenty-four hours ago applauding crowds would have assembled. Their hold on the people was gone; every one was reading the papers or discussing the startling news. Many men who the day before were noisily advocating everything disloyal and rebellious, were silent and thoughtful. Men who had remained loyal to Canada all through quickly seized the occasion and appealed to the people to stand firm to the Dominion, pointing out the uncertainty of affairs in the States and contrasting them with the vitality and power of the Old Country, doubly powerful now that Ireland had obtained perfect satisfaction and was contented. The election resulted in a complete triumph for the government, and was a most satisfactory vindication of their policy. The ranks of the Opposition were broken up and their forces demoralized. Not a word was heard about annexation that night unless in scorn.

The heart of the young nation was stirred to its very depths during the next two months, while a most sublime period in our history was being passed through. The would-be invaders of Canada were determined not to be baulked in their enterprise, the movement having gone too far to collapse suddenly, and perhaps the leaders had not sufficient foresight to see that the troubles rising in the States must necessarily get worse before they were better, and take several years to subside; perhaps they did not realize fully the new unanimity of public feeling in Canada. Anyhow the activity of their preparations did not lessen, but rather increased, and the commencement of offensive operations was postponed so that they might be more complete. Disloyalty was no longer popular in Ontario or in any other province, in fact among all who had been disaffected a reaction and revulsion of feeling set in, in favor of intense loyalty to the Dominion, and a most felicitous union was effected between the Conservatives and Reformers. The common danger brought all parties together, forgetful of old prejudices, and the old bitter hatred grew less and less until its final extinction. Henceforth there was but one party with but one object in view—the welfare of the Dominion.

Every able-bodied man in Canada between the ages of 20 and 45 was under drill, and the country was fully prepared and fully expecting to undertake the invaders without outside assistance, but Great Britain being in no danger now in Europe, despatched 12,000 men to Canada, and with her recovered prestige was enabled to remonstrate forcibly with the Washington Government concerning American connivance. The British remonstrances had the desired effect, for the American authorities promptly arrested the leaders of the "army of deliverance," though by so doing they aroused the animosity of many of their own supporters. The "army" then speedily fell away and all danger was over.

Of course the benefit to Canada of having had the national feeling so deeply stirred was incalculable, for all classes of men in all the provinces had been animated by the profoundest sentiments and the strongest determination possible, and it was the opinion of leading military men of the time that the Canadians under arms, though outnumbered trebly by the intending invaders, would have held their own gallantly and have come off victorious.

The excitement aroused by these stirring occurrences began to quiet down towards the approaching Fall, when the Canadian ship of state was again under full sail, heading for the waters of prosperity. Since then our political history has been so intimately connected with great inventions and discoveries, that a narration of one without a description of the other is scarcely possible.

II.

"For miracles are ceased;
"And therefore we must needs admit the means
"How things are perfected."

—*Henry V, Act I.*

IT was well understood by the Romans in their palmy days that a great empire could not be held together without means of easy communication between distant provinces, and their fine hard roads ramifying from Rome to to the remote corners of Gaul or Dacia, testify to their wisdom and enterprise in this respect. When Great Britain in the eighteenth century, full of inventive skill, reared men who by means of improved roads, well-bred horses and fine vehicles raised the rate of travel to ten miles an hour from end to end of the kingdom, a great deal of complacent satisfaction was indulged in over the advantages likely to result from such rapid travelling. This great speed, however, was made to appear quite slow in the first half of the nineteenth century when locomotives were invented capable of covering sixty miles an hour. Nowadays the old cumbrous locomotive, rumbling and puffing along and making only sixty miles in sixty minutes, is a very dilatory machine in comparison with our light and beautiful rocket cars, which frequently dart through the air at the rate of sixty miles in one minute. The advantages to a country like ours, over 3,000 miles wide, of swift transit are obvious. The differences in sentiment, politically, nationally, and morally, which arose aforetime when people under the same government lived 3,000 miles apart have disappeared to be replaced by a powerful unanimity that renders possible great social movements, utterly impossible in the railway age, when seven days were consumed in journeying from

east to west. The old idea that balloons would be used in this century for travelling has proved a delusion, almost their only use now being a meteorological one.

Our rocket cars were only perfected in the usual slow course of invention, and could neither have been constructed nor propelled a hundred years ago, for neither was the metal of which they are constructed produced, nor had the method of propulsion or even the propulsive power been developed. Inventors had to wait till science had given us in abundance a metal less than a quarter the weight of iron, but as strong and durable, and this was not until some fifty years ago when a process was discovered for producing cheaply the beautiful metal calcium. But calcium would have been little use alone. Aluminium, which is now so plentiful, had to be alloyed with it, and aluminium was not used to any great extent till the beginning of this century, when an electric process of reducing it quickly from its ore —common clay—was discovered. The metal known as calcium bronze, which is now so common, is an alloy of calcium, 0.75 ; aluminium, 0.20 ; and 0.05 of other metals and metalloids in varying proportions according to different patents. This alloy has all the useful properties of the finest steel with about one-fourth its weight, and is besides perfectly non-oxydisable and never tarnishes. Without the production of a metal with all these combined qualities, we might still in our journeys, be dawdling along at sixty miles an hour in a cumbrous railroad car behind a snorting, screaming locomotive.

Our swiftly darting cars were not at first constructed on such perfect principles as now. Invention seems to follow certain laws, and has to take its time. A new discovery in physics has to be supplemented by one in chemistry, and one in chemistry by another in physics, and so on through a whole century, perhaps, before any great invention is perfected. Thus it happens that, though the principle of the rocket has been known for an age, it is only comparatively recently that it has been applied to the propulsion of cars. An invention, too, always presents itself to an inventor at first in the most complicated form, and frequently many years are passed in attempts at simplification. What a wide interval is there between the steam locomotive with all its complex mechanism, and the magnificently simple rocket car! A century of ceaseless invention is compre-

hended between the two! Before the simplicity of our cars was arrived at, inventors had to give up boilers, fire-boxes, valves, steam-pipes, cylinders, pistons, wheels, cranks, levers, and a host of minor parts. Wheels died hard. Electric locomotives using them were brought out and were considered to do the very fastest thing possible in locomotion, and such was in fact the case while wheels were used, for wheels could not have borne a faster pace without flying to pieces from centrifugal force. But when an inventor devised a machine on runners to move on lubricated rails, a great step was gained, though the invention was not a success, and when, after this, liquid carbonic acid, or carbonic acid ice expanding again to a gas was employed as a motive power, another advance was made. Then the greatest lift of all was given. The solidification of oxygen and hydrogen by an easy process was discovered and mankind presented with a new motive power. In due time a way was found to make the solid substance re-assume the gaseous form either suddenly or by degrees, and thenceforth thousands of potential horse-power could be obtained in a form convenient for storing or carrying about. It is now as simple a matter to buy a hundred horse-power over the counter as a pound of sugar.

From Toronto to Winnipeg in thirty minutes! From Winnipeg to the Pacific in forty minutes! Such is our usual pace in 1983. By hiring a special car the whole distance from Toronto to Victoria can be accomplished in fifty minutes. A higher speed still is quite possible, but is not permitted because of the risk of collision with other cars. Collisions have never yet occurred on account of the rigid adherence to very strict regulations. Cars that take short trips of 50 to 100 miles between stations, seldom travel more than 500 feet from the earth, but for long distances about 1,500 feet is usual. The broad metal slides for receiving the cars and for their departure, which extend for a mile on each side of all our stations, are the only portions of the rocket system which much resemble anything connected with railroads. It is said that great skill and long practice on the conductor's part are required to cause the cars to alight well on the slides and draw up at the stations. The slides at many stations are nearly level with the ground, but ascend in opposite directions, till at the distance of a mile, where they end, they are 100 feet high. The cars are now made quite

cylindrical, tapering off abruptly at the closed end. The outside is entirely of metal, very highly polished, and showing no projections except a flange on each side, two broad runners underneath, and a 40 foot rear flange or vane. The dimensions are usually—diameter of cylinder, 20 feet; length, 45 feet. The high polish is necessary to avoid heating when the highest speed is attained. Passengers are seated in a luxurious chamber in the interior of the cylinder, which is suspended like the compass of a vessel, and therefore always retains an upright position whatever may be the position of the car when travelling. About fifty passengers can be accommodated at one time. The tube emerging a little beyond the mouth of the cylinder, through which the expanding gases are expelled, can be slightly deviated from its axial position in any direction, and thus what little steering is required is easily effected. The long projecting 40 foot vane or tail which steadies the motion of the whole machine is, in the newest patents, made to assist it in alighting on the slides easily and without jarring. Such is the splendid apparatus, briefly described, which brings all the ends of the earth together and makes the whole world a public park, the most distant parts of which can be visited and returned from in the course of a day. Long tedious voyages of a week or a month belong to the forgotten past, for Paris, Calcutta or Hong Kong can be reached in a fraction of the time formerly occupied in going from Toronto to Montreal. No passenger traffic is ever carried on now in dangerous vessels upon the treacherous ocean, but solely in the safe and comfortable rocket-car through the air a thousand feet or more above the cruel waters. Steamships, electric ships and sailing vessels are still common round our coasts engaged in transporting heavy freight, but they only cross the ocean to convey some bulky produce which cannot be divided and go by car.

Private vehicles and travelling have also undergone wonderful changes. The much-abused horse has vanished from cities entirely, and is not permitted to enter them, greatly to the preservation of health and cleanliness. All our vehicles have the automatic electric attachment and move along briskly through the clean wide streets. The handsome electric tricycles we are so familiar with, were hardly thought of a hundred years ago; now there are few men who do not possess a single or a double one.

How dismal must night have been in the times when only gas lamps or a few electric lights were used in the streets, although our great-grandfathers appear to have extracted a good deal of merriment from the dimly lighted hours after sundown. Our domestic lighting is now done almost entirely by electricity, or the brilliant little phosphorescent lamps, gas having long been banished from dwelling-houses; and our method of lighting the streets is a grand advance, indeed, upon the flickering yellow gas lamps of old. The great glass globes, which we see suspended from the beautiful Gothic metal framework at the intersections of streets, contain a smaller hollow globe, about eighteen inches in diameter, of hard lime, or some other refractory material, which is kept at white heat by a powerful oxy-hydrogen flame inside. In this way our cities are illuminated by a number of miniature suns, making all the principal streets as light by night as by day.

One of our most interesting cities, and one to adopt all the newest improvements as soon as they come out, is Churchill, Hudson Bay, that most charming of northern sea-side resorts. Churchill's population is already 200,000, and is rapidly increasing. Here are the celebrated conservatories which help to make the long winter as pleasant to the citizens as summer. These famous promenades, or rather parks under cover, have a frontage of a mile and a half along the quay, with a depth of nearly 500 feet. They contain two splendid hotels and a sanitarium, the latter being surrounded by a grove of medicinal and health-giving plants and trees from all parts of the globe. A summer temperature is kept up through the vast building by utilising the heat from the depths of the earth, and by natural hot springs which flow from deep bores. Another fine city of which we may well be proud is Electropolis, on Lake Athabaska. Electropolis can boast of 100,000 inhabitants, and most enterprising citizens they are. Their great idea is to work everything by electricity, and to them belongs the credit of all the latest discoveries in electrical science. Their beautiful city is a great centre of attraction for scientific men, and many European electricians make a practice of coming over every Saturday to stay till Monday. Here are the colossal thermo-electric batteries which work throughout the year by there being stored up in immense solid blocks of aluminium the heat of summer and the cold

of winter. The hot blocks, which are protected in winter, are exposed to the sun in summer, and are heated nearly to red heat by the rays concentrated upon them by a series of large mirrors. The cold blocks are simply exposed to the intensest cold of winter and protected from the heat of summer. Thus two permanent extremes of temperature are provided during the whole year, and the batteries only require to be placed in suitable positions with regard to the blocks to work continuously.

While speaking of cities in the far north, that of Bearville, on the shores of Great Bear Lake, in latitude 65°, must not be passed over. Bearville is the metropolis of one of the finest mineral districts in the world, but had it not been for the inexhaustible deposits of all the useful metals in its vicinity, it is probable a city would never have sprung up in such an inhospitable region. Between the Coppermine and Mackenzie Rivers gold and silver are abundant. Platinum and iridium are also common, and are exported from here to all parts of the world; they are in great demand by chemists and electricians. A rough population from all quarters has been attracted to the district, of which Bearville is the centre, and it would astonish people who seldom come to the North to see how the ingenuity of man has made life not only tolerable, but enjoyable, in the neighborhood of the Arctic Circle. Coal seams crop up above the ground in many places, and wherever this is the case, large frame conservatories are built which are lighted, not from the roof, but by wide double windows reaching from the eaves to the ground, and heated by numerous stoves into which the coal just taken from the ground is thrown. Electric lights, magnesium lights and lime lights help to make the long nights of winter as cheerful as day elsewhere.

In this region wonderful blasting operations are performed by charges of solidfied oxygen and hydrogen. The charges are placed at the bottom of a 40 foot bore and exploded by a powerful electric spark. The effect is very different from that of other explosives which usually rend the rock into large fragments that have to be blasted again in detail before a clearance is made, for the oxyhydrogen charge has such terrible force that it completely pulverizes the rock, scooping out, even in granite, a deep wide pit of parabolic section of which the spot where the charge was is the focus. The dust is blown out in a cloud high in the air.

Our finest and largest cities are Halifax, St. John's, Rimouski, Quebec, Montreal, Ottawa, Toronto, Hamilton, Saulte Ste Marie, Port Arthur, Winnipeg, Brandon, Edmonton, New Westminster and Victoria. Toronto, Montreal and Winnipeg each contain more than 2,000,000 inhabitants, while the others range between 500,000 and a little over 1,000,000. At Halifax is one of the greatest car depots in the world, and here the traveller can step on board a car for London, Rome, Jerusalem, Bombay, Cape Town, Melbourne, Sydney, Auckland, etc. St. John's, Fredericton and Campbelltown are large cities, the latter being a great rendezvous for pleasure-seekers in summer. Rimouski is a manufacturing centre and a large car depot. Cars spring from here to Tadousac, Lake St. John's, Lake Mistassinie and Hudson Bay ports. Quebec retains much of its old-world picturesqueness while keeping up well with the times; its inhabitants number about 700,000. Montreal and Toronto are without doubt the most magnificent cities in the Dominion, perhaps in the world. They are both famous for the grandeur of their buildings. In them, for the most part, each block is a complete structure and not a conglomeration of little buildings of all shapes and sizes, a two-storey house next to a four-storey one, and so on. Thus, among a number of blocks a pleasing harmony in architectural styles is obtained, which is a golden mean between the rigid uniformity of some new cities and the antique irregularity of old ones. Winnipeg is generally reckoned to contain the finest brick buildings to be seen anywhere; many blocks in brick may be seen of eight and nine storeys in the grandly decorated modern style. Victoria has grown into fame by its immense trade with the old Asiatic countries. The ancient Orient and the modern West here combine. The broad busy streets are thronged with a motley crowd, in which representatives of Asiatic races mingle with Anglo-Saxons and representatives of European nations, all speaking the universal English language. New Westminster increases its attractions every year. It contains the noted observatory with the splendid telescope through which living beings have been observed in the countries in Mars and Jupiter. In its Hall of Science is the great microscope which magnifies many million times, and shows the atomic structure of almost any substance. Its College of Inventors and Physical Institute are the most

perfect establishments. From its extensive Botanical Gardens, where the Dominion Botanical Society make their experiments with plants and trees from all countries, great national benefits have been derived. Here are grown specimens of herbs and shrubs which prevent or cure every human disease. On one side is seen the plant, before the smoke of whose leaves when inhaled, consumption succumbs; on another, the shrub whose berries eradicate scrofula from the system, and thus through all the catalogue of ills. New Westminster also boasts a fine University, a College of Physicians and a Sanitarium; the two latter cause the city to be the resort of invalids from far and near. No diseases are here called incurable. At Mingan harbour, on the Gulf of St. Lawrence, are situated the great works where all the rocket-cars for the Dominion are built. The site was chosen on account of the large tract of desolate country to the north of it. The cars as soon as built are tested, first at short flights, then at longer ones, and conductors are trained to manage them. There are no regular lines of cars through or over Labrador, and so there is no risk of collision in the trial trips. Considerable difficulty is experienced at first in taking a car a flight of 100 miles, but by practice flights of over 1,000 miles are managed with perfect safety.

The contrast between the present and past might be drawn out to any extent, but enough has been said to enable the dullest mind to realize the truly marvellous development of our great Dominion. And if the development and advance have been great industrially and commercially, so have they been great, almost greater, socially; for socially we have set examples which the whole world has not been slow to follow.

III.

"But Heaven hath a hand in these events."
—*Richard II, Act V.*

THE state of society in the nineteenth century would have but few attractions for us of the twentieth, were we able to return along the vista of a hundred years. Our manners and customs are so vastly different from those of our great-grandfathers that we should feel out of place indeed had we to go back, even for a short time, to their uncouth and imperfect ways. Their extraordinarily complex method of governing themselves, and their intricate political machinery would be very distressing to us, and are calculated to make one think that a keen pleasure in governing or in being overgoverned—not a special aptitude or genius for governing—must have been very common among them. From the alarming blunders made in directing public affairs, and from the manner in which beneficial measures were opposed by the party out of office, it appears quite certain that the instincts of true statesmanship did not animate all classes then as now. Nevertheless our forefathers went into the work of governing themselves and each other with a great deal of vim. They had no well drawn out formulæ to work upon as we have, but they went at things in a sort of rule-of-thumb, rough-and-ready style, and when one party had dragged the country into the mire, the other dragged it out again. It was customary for the party that was out of office to say that the party that was in was corrupt and venal—that every man of it was a liar, was a thief, was taking bribes, would soon be kicked out, etc. Then the party that was in had to say that the party that was out should look to its own sins and remem-

ber that everyone of its men when they were in proved himself incapable, insensible to every feeling of shame, with no susceptibilities except in his pocket, corrupt in every fibre, being justly rewarded when hurled from office by an indignant people, etc., etc. The wonder is that the country ever got governed at all, but it seems that all public men who had any fixed and sensible ideas and wished to see them carried out, had to make themselves callous, pachydermatous, hardened against this offensive mud-slinging. Of course politics did not elevate the man, nor the man politics, while things went on thus. A general demoralization and lowering of the tone of public opinion naturally resulted, which did not improve till the stirring events of the summer of 1887 brought men to their senses again. The number of members sent to Parliament was something so enormous, that it seems as if the people must have had a perfect mania for being represented. Nowadays we get along spendidly with only fifteen members (one for each Province) and a speaker. Formerly several hundred was not thought too many, and before the constitution was revised in 1935, there were actually over seven hundred representatives assembled at Ottawa every year. Perhaps this was all right under the circumstances, as there did not then exist any organization for training men for Parliamentary duties, or selecting them for candidature such as now exists; so there was safety in numbers, though the floods of talk must at times have been overwhelming. Besides the Central Parliament at Ottawa, there was a Local Parliament to every Province, and in some Provinces two Houses. It seems a mystery to us, now, how any measure could be got through in less than twelve months, but our forefathers apparently took pleasure in interminable harangues and oceans of verbosity, and prominent men contrived to make themselves heard above the universal clatter of tongues, so that good measures got pushed through somehow to the satisfaction of a much-enduring public. Nowadays our fifteen members put by as much work in two days as would have kept an old Parliament talking for two years. Provincial Parliaments, with their crowds of M.P.P's, were abolished in 1935, and it was then also that the number of members at Ottawa was reduced from the absurd total of 750 to 15, and the round million or so which they cost the country saved. Members are not now paid;

the honor of the position is sufficient emolument. When these and other changes were made, the expenses of government were enormously reduced, so much so, that after ten years, that is in 1945, taxes were abolished altogether, and from that time forward not a cent of taxation has been put upon the people. The revenue is now obtained in this way. Up to 1935 the revenue of the country stood at something over $150,000,000. When the constitution was changed the expenses of government were lessened to $50,000,000. It was then agreed that for ten years longer the revenue should remain at $150,000,000 (people were prosperous and willing enough to have contributed double), so that every year of the ten $100,000,000 might be invested. Thus at the end of ten years the Government possessed a capital of $1,000,000,000, and the interest of this constitutes our present revenue. If any great public works are being carried out, and more money is required, the municipalities are appealed to, and public meetings are held. All the great cities then vie with each other in presenting the Government with large sums. How the poor over-burdened tax-payer of 1883 would have rejoiced in all this !

Another great blessing to us is that war has ceased all the world over. It became, at last, too destructive to be indulged in at all. During the last great European war in 1932, while three emperors, two kings and several princes were parleying together, a monster oxyhydrogen shell exploded near them and created fearful havoc. All the royal personages were blown to atoms, as were also many of their attendants. Their armies hardly had a chance of getting near each other, so fearful was the execution of the shells. Since then the world has been free from war, and, but for gathering clouds in Asia, would seem likely to remain so. Anyhow, we in Canada, have not the shadow of a standing army, nor a single keel to represent a navy. We are too well occupied to wish to be aggressive, and no power except the United States could ever attack us, and even if Americans coveted our possessions they are not likely to resort to such an old-fashioned expedient as warfare to gain them. They could only annex us by so improving their constitution, as to make it plainly very much superior to ours. If they ever do this (and as yet there are no signs of it) there might be some chance of a union. At present the chances are all the other way. The only sort of union

that is quite likely to come about is the joining by the Americans of the United Empire, or Confederation of all English-speaking nations, with which we have been connected for some years. The seat of the Imperial Government has hitherto been London, but British influence has made such strides in the East that there is every probability of another city being chosen for the capital, and of the seat of Government being made more central. Should one of the now restored ancient cities of the East become the metropolis of this glorious Imperial Confederation, the United States would certainly come into the Confederation, as great numbers of Americans have already migrated to the Orient.

A word on the changes which have come over the East will not be inappropriate, lest we should be tempted to boast too much of the progress of Canada. Ever since the conquest of Egypt by the British, as long ago as 1882, Anglo-Saxon institutions have been gaining ground from the Nile to the Euphrates, and from the Euphrates to the Indus. Soon after the great stroke of diplomacy in 1887, by which Great Britain practically became ruler of all this vast territory, the railroad was introduced, and before many years had passed the railroad system of Europe was linked with that of India. The pent-up riches of the fertile Euphrates valley thenceforth began to find channels of commerce, and to be distributed through less fertile regions. The ancient historic cities of these lands, Damascus especially, began at once to increase. Jerusalem, as soon as the Turk departed and the Anglo-Saxon entered, was purified, cleansed, and finally rebuilt. Great numbers of Jews from all parts of the world then returned and gave the city the benefit of their wealth, but all the commerce of the East keeps in the hands of Britons and Americans. English is, therefore, the chief language spoken from Beyrout to Bombay.

There is, however, a great cloud hanging over the East which causes dismay to thinking men, and threatens to mar the general prosperity of all the lands. Great as has been the increase of the Anglo-Saxon race, the numbers of the Sclavonic race have kept pace. The Sclavs, unfortunately, retain much of their old brutish disposition and ferocity in the midst of all the civilizing influences of modern times, so that statesmen foresee an inevitable collision in the not

distant future between the Sclav and the Anglo-Saxon. It is disheartening in these days of splendid progress, when we had hoped that war was for ever banished from the world, to find that humanity has yet to endure the old horrors once more. How fearful these horrors will be, and how great the destruction of life, it is hardly possible to conceive, so terrible are the forces at man's command nowadays, if he uses them simply for destructive purposes. The Sclav has spread from South-Eastern Europe and multiplied greatly in Asia, till his boundaries are coterminous with British territory, and it is his inveterate aggressive disposition which causes all the gloomy forebodings. Before we return to our own happy Canada, let us glance at Africa, the "dark continent" of the last century. Civilization has long penetrated to the upper waters of the Nile, and to the great fresh water lakes which rival our Huron and Superior. The beautiful country in which the mighty Congo and the Nile take their rise, is all open to the world's commerce, and highways now exist stretching from Alexandria through these magnificent regions to the Transvaal and the Cape. Madagascar, fair, fertile and wealthy, has developed, under Anglo-Saxon influence, her wonderful latent resources for all men's good. In addition to mineral treasures she had wealth to bestow in the shape of healing plants, whose benefits were greater to suffering humanity than tons of gold and silver. The botanical gardens at New Westminster, and the conservatories at Churchill, are greatly indebted to the flora of Madagascar. But let us now return to Canada and continue our contrasts.

Much of the success of our modern social movements has been due to the exertions of the noble Society of Benefactors. The members of this Society, as we well know, are now mostly men of independent means. Their chief idea is to bring together and combine social forces for the public good, which were formerly wasted. The Society has already existed for two generations, so that our rising generation is reaping the full benefit of its exertions. It is chiefly to these exertions that the improved tone of public opinion is due, and the general, moral and intellectual elevation of the present day are largely owing to the same cause. In the old benighted times before 1900 much wealth and ability were, for want of organization, allowed to run almost to waste as far as the general good of society was

concerned. Men of means led aimless lives, squandering their riches in foreign cities, or staying at home to accumulate more and more, forgetting, or never considering what a powerful means of ameliorating the condition of their fellow creatures was within their reach. It was not only the lower classes that needed improvement, but the whole mass of society in all its aims, ideas and pursuits. Improvement on this large scale would never have been accomplished by the elaborate theorising and much preaching of the nineteenth century. Action, bold and fearless action, was wanted, and until men were found with minds entirely free from morbid theories, but full of the courage of their new convictions, the world had to wait in tantalizing suspense for improvement, always hoping that each new scientific discovery would enlighten mankind in the desired direction, but always doomed to be disappointed and to see humanity growing either more savage or physically weaker, simultaneously with each phase of enlightement. These things are perhaps truer of society in Europe, and in some of the States, than in our young Dominion, where everything was necessarily in a somewhat inchoate condition. Yet had it not been for the great men who providentially appeared in our midst—our history, our manners and customs, our whole career as a nation would simply have been a repetition of European civilization with all its defects, failures and vices. Statistics of the period show that neither in the States nor in Canada, amidst all the surrounding newness, had there arisen any new social condition peculiar to this continent which remedied to any extent the evils rampant in old countries. Lunatic asylums, in ghastly sarcasm on a self-styled intellectual age, reared their colossal facades and enclosed their thousands of human wrecks. Huge prisons had to be built in every large town. Hospitals were frequently crowded with victims of foul diseases. Great cities abounded with filthy lanes, alleys, and dwellings like dens of wild beasts. Epidemic diseases occurred from brutal disregard of sanitary measures. Murder and suicide were rife. Horrible accidents from preventible causes occurred daily. Great fires were continually destroying valuable city property, and ruinous monetary panics happened every few years. And all this in an age that prided itself on being advanced! An age that produced the telephone, but crowded up lunatic asylums! That

cabled messages all round the world, but filled its prisons to the doors! That named the metals in the sun, but could not cleanse its cities! An age, in fact, that was but one remove from the unmitigated barbarism of medieval times! How marvellous is the change wrought by a hundred years! We have not been shocked by a murder in Canada for more than fifty years, nor has a suicide been heard of for a very long period. Epidemic diseases belong to the past. The sewage question, that source of vexation to the municipalities of old, has been scientifically settled—to the saving of enormous sums of money, and to the permanent benefit of the community's health. Malignant scourges, like consumption, epilepsy, cancer, etc., are never heard of except in less favored countries. There is but one prison to a province, and that is sometimes empty. Our cities are all fire-proof, and the night air is never startled now by the hideous jangling of fire-bells, arousing the citizens from sleep to view the destruction of their city. So rational and interesting has daily life become, that mind and body are constantly in healthy occupation; the fearful nervous hurry of old times, that broke down so many minds and bodies, having died out, to give way to a robust force of character which accomplishes much more with half the fuss. Of course, advantages such as these, did not spring upon society all at once; they have come about by comparatively slow degrees.

The first president of the Society of Benefactors, who died some years ago at an advanced age, was the man who started the new order of things. When he commenced to give the world the benefit of his views, he met with a good deal of opposition and ridicule, being told that the world was going on all right and was improving all the time, and that if people would only stop preaching and set to work at doing a little more, things would get better more quickly. He could not be convinced, however, that society had any grounds for its satisfaction, but he took the hint about preaching and stopped his lectures, which he had been giving all through the country. He then set to work at organization, and as he had inherited ample means from a millionaire father, he commenced under good auspices. He went into his work with great eagerness, gathering together all sorts of people, who held views similar to his own, though usually in a vague unpractical way, and formed

his first committee of a bishop, celebrated for his enlightened opinions, two physicians, two lawyers, several wealthy merchants, and several working men who were good speakers and had influence among their fellows. His capacity for organization was great, and his success in gaining over to his side young men of means, remarkable. From the very beginning the committee never lacked money. Though they were actuated by purely philanthropic motives, it was one of their first principles never to sink large sums of money in any undertaking that would not pay its own expenses ultimately. There was, therefore, a healthy business-like tone about whatever they did, that distinguished their efforts from many well-intentioned, but sickly, undertakings of the same day, which one after another came to grief, doing nearly as much harm as good. One of their first works was to buy up lots and dwellings in the worst districts of Toronto, where miserable shanties and hovels stood in fetid slums, as foul as any in London or Glasgow. The hovels and shanties were then torn down, and respectable dwellings erected in their stead. The unfortunate wretches, the victims of drink, crime, or thriftlessness, who inhabited such places, were not turned away to seek a fouler footing elsewhere, but were taken in hand by the working-men on the committee, and were started afresh in life with every encouragement. They were generally permanently rescued from degradation, but if some fell back their children were saved, and so the next generation was spared a family of criminals. Montreal was next visited and the same thing done there ; attention was then turned to Quebec and Winnipeg. Successful attempts were afterwards made to control the liquor traffic, not by sudden prohibition, which always increased the evil, but by common sense methods, necessarily somewhat slow, but sure. When the Society had been at work ten years, there was a very perceptible diminution in the amount of crime and smaller offences in all their spheres of action. Police forces could be decreased, and a prison here and there closed. This had a tendency to lessen the rates, so the taxpayer became touched in his tenderest part—his pocket. His heart and his conscience then immediately softened toward the Society's work, though years of preaching and the existence of all abominable evils close to his door had failed to move him. When this point had

been reached, the Society began to be looked upon as one of the great remedial agents of the age, and work was much easier. One evil after another was grappled with, and in time subdued. Scientific researches were set on foot in hygiene, medicine, and every subject from which the community at large could derive benefit, till in twenty years time so much general improvement had been effected that Canada's ways of doing things came to be quoted in other countries as a precedent. Our cities were the best built, best drained, cleanest and healthiest, and our city populations the most orderly and most enlightened. The Society's roll of members now included a great number of eminent men, and their operations were extended over the whole Dominion, and works of all kinds were carried on simultaneously in all parts. Outside the Society, it had become quite fashionable for all classes to take the most eager interest in everything concerning the public welfare, so the Dominion continued to prosper and advance with wonderful rapidity. Thus it happened that we came to take the lead among nations and have been able to keep foremost ever since, though with our 93,000,000 we are not by any means the largest nation.

The improved hygienic conditions under which we live have had the effect of very largely increasing the population. Our forefathers in their wisdom spent large sums of money in attracting immigrants to our shores, but it did not occur to them to increase the population by preventing people from dying. Very few persons die now, except from old age, and the tremendous and almost incredible mortality of old times among infants is stopped, consequently the death rate is very low, and the excess of births over deaths very great. There are only three doctors to each large city, and they are subsidised by government or the town councils, because there are not enough sick people from whom they could make a living as of yore. The good health of the public is also in some measure due to the fact of our scientific men having been able, since a few years past, to gain a good deal of control over the weather. By means of captive balloons, currents of electricity between the higher atmosphere and the earth are kept passing regularly. By other electrical contrivances as well as these, rain can now be nearly always made to come at night and can be prevented from falling during the day. Hurricanes

and desolating storms are also held very much under control.

Our contrasts are now drawing to a close. Enough has been said to make it plain to the slowest intellect among us, what is gained by having been born in the twentieth century, instead of in the nineteenth, and by being born a Canadian, instead of to any other land. There can hardly be to-day such a woful creature as a Canadian who does not realise and is not proud of the grandeur of his heritage. Our race, owing to the splendid hygienic and social conditions that have been dilated upon, is one of the healthiest and strongest on the face of the earth. We are not demoralized or effeminated by the luxury and abundance which are ours, but elevated rather, and strengthened by the very magnificence and opulence of our circumstances, and by the perfect freedom, under healthful restraint, which we enjoy through the community's strong, vigorous, moral and intellectual tone.

As there is nothing more wonderful about the present age, or more characteristic of the times, than our mode of travelling, these few pages shall be concluded with a plan of a very simple journey, a journey which can be strongly recommended to all who are wishing for change of scene and are somewhat bewildered in choosing a route among the innumerable places in the world which have claims on their attention. We will imagine that a party of twenty has been made up, and that the start is from Halifax, the direction eastward, and the destination Constantinople. The car which is timed to start at 7 a.m., is standing at rest on the sloping side, while the passengers, say fifty in number, are taking their seats in the luxurious chamber within. The first stop is at Sydney, Cape Breton, and the car is pointed accurately in that direction. At three minutes to 7 the engineers and conductor come on board ; the former to place the powerful oxyhydrogen charge in the great breech-loading tube, the latter to close the doors against ingress or egress. Precisely at 7 the signal is given. A furious and powerful hissing is then heard, as well as a momentary scraping of the car on its runners. In another second she is high in the air, and already Halifax has nearly receded from the engineer's sight. The rate of a mile in three seconds is kept up till Sydney rapidly appears in view. In the next few seconds the engineer exerts his

skill and the car lands gracefully on the slide, still in brisk motion. After a little scraping and crunching on the runners, she pulls up at the station platform at the bottom of the decline, ten minutes only after leaving Halifax. The next spring is made to St. John's, Newfoundland, which is reached in fourteen minutes. Here a few minutes are taken up in pointing the car accurately for Galway. Great caution is necessary, and very delicate and beautiful instruments are employed. When all are on board again and ready for the supermarine voyage, the engineer loads up with a much more powerful charge than before. He prepares at the start for a speed of a mile in three seconds, then, when fairly out over the sea, a stronger electric current is applied to the huge charge, and a speed of a mile, or even more, a second is obtained. This fearful velocity is not permitted overland, for fear of collisions, as car routes cross each other. But no routes cross over the sea between St. John's and Galway, nor is the Galway car allowed to leave till the St. John's car has arrived, and vice versa, therefore the highest speed attainable is permitted. Before land again looms in view, speed is much slackened, and now the engineer requires all his experience and his utmost skill. The high winds across the ocean may have caused his car to deviate slightly from its path, so as soon as land appears the deviation has to be corrected, and only two or three seconds remain in which to correct it. However, the engineer is equal to his task, and the car is now in the same manner as before, brought to a stand in Galway at 6 minutes to 8, just 30 minutes out from St. John's and 54 from Halifax. At 8 o'clock Dublin is reached, next comes Holyhead, and then London at 8.20. Here passengers for the South of Europe change cars. As the car for the South does not start till 8.30, there is time for a hasty glance at the enormous central depot just arrived at—one of the wonders of the world. Cars are coming in every minute punctually on time from all parts of the country and the world. The arrival slide is here shaped like the inside or concavity of a shallow cone, two miles in diameter, with the edge rather more than 150 feet from the ground. In the centre, where the cars stop, is a hydraulic elevator, by which they are immediately let down below to make room for the next arrival. The passengers are then disembarked without hurry. Those who are to continue their journey then go

on board their right car and are again started on time. The departure slide is like a lower storey of the arrival one. It is immediately beneath it, but its grade is not quite parallel. Near the centre, where the cars start, the upper slide is twenty-five feet above the lower one, but at the edge, a mile distant, in consequence of the difference in grade, there is fifty feet between them. The path of the cars before they emerge from the departure slide, is between the supports of the upper one, yet the supports are so placed that the cars can be pointed before starting for all the principal routes. There is a through car to Constantinople, and in it the twenty passengers from Halifax take their seats. At 8.30 the first spring is made, and Paris is reached in 10 minutes. Another spring, and in 10 minutes more Strasbourg appears. Then successively: Munich in 8 minutes, Vienna in 10, Belgrade in 15, and lastly Constantinople in 20, or at 9.43, that is just one hour and thirteen minutes from leaving London, and two hours and 43 minutes from Halifax. It is still early in the day—well that is where a surprise awaits the traveller who has not considered that he has been journeying eastward through more than ninety degrees of longitude, so that instead of being a quarter to ten in the morning, it is a good six hours later, or just about four in the afternoon. Two out of the twenty Haligonians are on business only, and intend to return the same night; the other eighteen, after seeing the lions of Constantinople intend visiting Jerusalem, the Persian Gulf, Bombay, Calcutta, Hong Kong, Pekin, and Yokohama, staying a day or two in each city. The car services on this route have been in existence a good many years and are well organized. From Yokohama a long flight over the Pacific will be taken and Canadian soil again struck at Victoria. We will not follow the eighteen travellers in their eight or ten days sight-seeing, but will return to the two Haligonians at Constantinople, who have got through their business in a few hours, and must go back to Halifax at once. They start for London at 10 p.m., Constantinople time, arriving there in one hour and thirteen minutes over the route they traversed in the morning. They change cars, and in ten minutes are off again via Holyhead, Dublin, Galway, St. John's and Sydney, C. B., for Halifax, where they arrive in one hour and 20 minutes from London, or forty-three minutes after midnight by Constantinople

time, but more than six hours earlier, or about 6.30 in the evening by Halifax time. They have therefore got ahead of the sun in his apparent journey round the world, for he had set for at least two hours when they started from Constantinople, but they caught up with him when over the Atlantic, and to the engineer it appeared as if he were rising in the west. This is a daily experience of travellers going west, which never fails at first to create great surprise. Our two voyagers are now safe back, at the port from which they set out a little less than twelve hours before. They are quite accustomed to such travelling, and have done nothing but what thousands are doing daily. But what would have been thought, if such a journey had been described a hundred years ago, in 1883? And how will the world travel a hundred years hence, in 2083? It is hard to say, or even to imagine. Yet inventive skill is unceasingly active, and in all probability speed will eventually be still further accelerated.

And now our task of contrasting Canada in 1983 with Canada in 1883 is concluded, and surely in this epitome of the works of a century there is food for reflection for the inventor, the statesman, the moralist and the philanthropist. All, when pondering on the gradual, but sure improvement that has come about in their respective paths, can take heart and nerve themselves for renewed effort, or be induced to stand firm till success comes to reward their courage. No man can despair who ponders on the position of the Dominion in 1983.

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