WE'RE THE GREATER HALF

CANADA IS LARGER AND RICHER THAN THE U. S.

Erastus Wiman Describes the Illimitable Area of the Dominion — Ontario a Breeder of Men — Immense Mineral, Agricultural and Forest Wealth.

From The North American Review for January.

It is not a little singular that, in this country, and in this period of the easy acquirement of general information, so little is known of the greater half of the continent of North America, included within the British possessions. It shows, for instance, how little is known even of the broadest generalities, when the statement is received with surprise, if not incredulity, that excluding Alaska, Canada is a larger country than the United States. Yet such is the case; for the United States, prior to the purchase of Alaska, was included within 3,036,000 square miles, while Canada stretches out to fill 3,470,392 square miles. It would perhaps help to convey some conception of the magnitude of Canada when the statement is made that, in area, it comprises very nearly 40 per cent. of the entire British Empire, the extent of which is recalled by the boast that the sun shines always on British possessions. A still further rather startling statement in relation to Canada is, that, including the great lakes which encircle it and which penetrate it, and the rivers of enormous size and length which permeate it, is found more than one-half of the fresh water of the entire globe. Such broad generalities as these may well excite the attention of the people of the United States, who, in view of the magnificent proportions of their own country, have been unconsciously led to believe that it comprises all that is worth having on the continent.

The impression of magnitude, so far as Canada is concerned, is, however, always accompanied by a conviction, born of ignorance, that the Dominion is a region of frost and snow; that it is a sterile and inhospitable waste—simply a section of the North Pole. There is a further conviction that it is of little or no use to this country, so rich in resource, so varied in climate, and so self-contained and independent of the outside world. The vast number who thus look upon the northern half of the continent, fail to remember that, by the purchase of Alaska, and its subsequent development, testimony was afforded as to the exceeding value of regions very many degrees farther north than the average of Canada, and that to-day, so full of promise is the prospect for this latest acquirement of the United States, that no money payment, however large, would have the faintest hope of acceptance for its cession to another power. It is doubtful if, in any part of the United States, a greater return has been realized in proportion to the capital invested or the effort put forth, than that which has rewarded the enterprise in this most northern section of the United States.

So far as the climate of Canada is concerned, it should never be forgotten that, within the parallels of latitude which include the greater portions of the Dominion, the development in the United States has been the most marked. Indeed, no development in the history of the world is more rapid than the growth of the commerce of the great lakes, which to-day act as a barrier, dividing the two countries, but which, under happier conditions, should be the bond that united them. Reference to the extent of this lake commerce brings out another startling comparison, which, creating surprise, shows after all how little the average man knows even of his own country, much less of the regions alongside of his own land. This statement is, that the tonnage and value of products which passed through the Sault Ste. Marie Canal, compressed within seven months of the season of navigation of 1888, equaled that which passed through the Suez Canal in the entire year. Here, in the northern part of North America, between two inland lakes, with only one shore of these developed, a commerce has been created which equals that between two oceans, whose traffic is almost as old as the universe, and contributions to which are made from every clime and country of the globe. Recall, also, the fact that the water communication of the lakes is competed with by the most perfectly equipped railway systems of the age, while the commerce of Suez is practically without a competitor. This development of the States and cities bordering upon the great lakes, and the growth and productive forces which have been set in motion, not only on the shores of these inland seas, but on the wide stretches of country tributary to them, is a testimony to the advantages of a northern climate that it is impossible to ignore. So magnificent is this growth, so significant is the lesson that it teaches, that, so far as Canada and its climate is concerned, a true appreciation of her vast value is, from the advantage of her location, at length beginning to dawn upon the minds of observant men. The place that she should occupy, as the greater and northern half of the continent, can be no longer denied to her. A proper estimate will show Canada to be a country having few equals in extent, none in riches of resource, in accessibility, ease of interior communication, and, notwithstanding the smile that lightens up the face of the reader, none superior to her in the advantages of climate.

manner of spelling the word which designates it, and though it is still called the "Flower City," it is because of the development of the nursery and seed interests, which so adorn and benefit it, and the rest of the country. No longer is Rochester the centre of the wheat-producing areas. Westward these took their way, first to the valleys of the Ohio, then to the prairies of Illinois and Iowa, until now, in the most northern tier of States and territories, is found the great sources of national wealth in the production of this great cereal. The milling activities of Minneapolis, the marvelous railroad development in the Northwest, both toward the west and north, and more recently toward the east, for the special accommodation of this flour and wheat trade, tell the story, that so far as climatic advantage is concerned, wheat has found its greatest success in States the extreme north. Is it to be supposed that there is something magical in the 49th parallel that bounds Minnesota on the north, that will check the progress of wheat production toward the north? Its steady trend in this direction for so many hundreds of miles makes it highly probable that, beyond it, wheat should be produced, largely and profitably. Indeed, this is certainly so; for it so happens that, north of the Minnesota line, and within the Canadian territories, are wheat areas possessing all the advantages of the regions to the south, but, in richness, fertility and extent infinitely greater. It would be a startling statement to make, as showing the advantages of the much derided Canadian climate, than even in its extreme northern latitudes the Dominion possesses a greater wheat producing area than does the entire United States; that the soil of this wheat area is richer, will last longer, and will produce a higher average of better wheat than can be produced anywhere else on the continent, if not in the world. Wheat is known to have been grown in the vicinity of numerous Hudson's Bay Company's stations for twenty consecutive years, without rotation, without fertilization, and annually producing crops averaging thirty bushels to the acre!

If, therefore, the production of this most valuable of cereals is the truest test of climatic advantage; if the tenderness of the wheat plant in its cultivation is a delicate standard of conditions, as it really is, it is submitted that the prejudice as against the Canadian climate should, in the first place, prevail no longer than it prevails against the climate in similar latitudes in the United States, where the greatest success has been achieved; and, second, that—

Perhaps the best test of climatic advantage is found in the ability to produce, in the largest quantities, and of the best quality, the most valuable and the most universally used article of commerce. Certainly, in this respect, there is nothing surpassing the article of wheat, which may be said to be the basis of civilized existence. The steady movement toward the north of the wheat-producing regions of this continent is remarkable. Wheat is a plant so delicate, and so easily affected by frost and adverse conditions, that it might be supposed to be cultured safely only in the most temperate zones. Yet the movement of the wheat-producing areas toward the North Pole has been as steady as the movement of the needle in the compass in that direction. Within the memory of many readers of this publication, the Gennessee Valley, in the State of New York, was the great wheat-producing region. So much so was this the case that Rochester was named the "Flour City," from the number of its flouring mills, and the activity of its commerce in this direction. Since then it has changed the the advantages which the northernmost portions of Canada possess over even parallels far to the South, should be recognized. These advantages are found in the often forgotten circumstance that climate is much more the result of altitude than it is of latitude. According to Humboldt, Europe has a mean elevation of six hundred and seventy-one feet, and North America a mean elevation of seven hundred and forty-eight feet. It is a significant circumstance that the Canadian portion of North America has an altitude of only three hundred feet. In the extreme northwest of Canada, the falling off from the height of land toward the vast body of water known as Hudson's Bay is shown in the fact that from even within the Minnesota line the rivers all begin to run towards the north. This low altitude, in its influence upon the climate, is second only to the effect of the marine currents, which are singularly favorable to Canada. These influences are shown in the startling fact that the mean temperature of Hudson's Bay is three degrees warmer during the winter than that of Lake Superior; and that it is on the southern and western shores of Lake Superior where the most important development of American enterprise has taken place,—developments that have yielded in lumber, in iron and copper, riches of greater magnitude than produced elsewhere in the country; and within parallels of latitude included in this lake, an agricultural development more remarkable than that elsewhere in the world. The moderating influences of vast bodies of fresh water that never freeze over are well known. In the great chain of lakes that surround Canada, and the vast number of lakes and rivers that diversify her surface, there is a fresh water area of one hundred and thirty thousand square miles, and as above stated, comprising nearly one-half the fresh water of the globe. The effect upon the climate of this vast aggregation is most beneficial, so that in altitude and in other influences that mitigate the extreme northern location of the land, there are found considerations of the greatest weight. These influences are shown in the warmer climate of the great territory of Alberta, which lies directly north of Wyoming, from the latter of which and into the former, stock is being regularly driven at the beginning of each winter, because of the presence within the Canadian border the year round of an abundance of grass. The experience of last winter showed conclusively that while throughout Manitoba and the Canadian Northwest Territories the winter of 1888 was not excessively severe, as far south as Iowa and Nebraska the severest cold was felt, and as far east as even New York in the famous blizzard, which never found its equal even in Winnipeg, the most northern of Canadian cities. It is true that in the northwestern portions of Canada the winters are long; that the frost is severe and continuous; but it is equally true that the climate is dry and invigorating.

But aside from this continual severity of the climate in the winter, there are compensations and advantages in the summer months in this extreme northern region of Canada which must not be ignored. For instance, what would be thought of a device that should provide, underneath the whole surface of a vast and fertile wheat-producing area, of a well-spring of moisture, that should continuously exude and feed the delicate tendrils of roots that the wheat plant sends down into the earth for sustenance? Yet this is precisely what nature has provided in the thousands of square miles of wheat areas of the Canadian Northwest. Ages of long winters, continuous and often severe cold, have produced a frost line in the earth far down below the surface, which being thawed out during the summer months is full of force. What seems, at first glance, a barrier to the productive power of nature, is, in this case, found to be contributory in the highest degree to man's advantage. For this vast area of ice, far enough below the surface to permit the growth of plants, holds in suspense and readiness for the land above, the needed element of moisture, constant and assured, which in other regions comes only in the rains and dews that fall from the sky—a supply uncertain and uncontrollable. But there is still another advantage in these northern wheat-fields of Canada, incident to the climate; and that is, that while these latitudes imply long winter days, they equally imply the longest days in summer. Thus, there is an average of two hours per day more of sunshine during the period of the growth of wheat in the Canadian Northwest, than is vouchsafed in any other locality where wheat can be produced. Not only is two hours of sunshine in each day an inestimable advantage, but the sun is stronger and more forceful at this period, and in this region, not only helping rapidly forward the ripening process, but the heat is continuously sufficient to cause an exudation of the moisture from the ice in the ground beneath. So that, in this far north land, despised in the minds of many for its cold and sterility, conditions unite to make it the most productive, and the most valuable of all the wheat lands upon the continent. It would seem as if a conjunction had been formed by the heavens above and the earth beneath to illustrate, in the highest degree, the productive forces of nature, in regions where man least expected this development. It so happens, also, that the soil which enjoys these advantages of moisture beneath, and long, forceful rays from above, is particularly rich and inexhaustible. Lord Dufferin, an observant and reliable authority, said that throughout his whole journey of weeks through the Canadian Northwest, he was constantly reminded of the English kitchen gardens in the vicinity of London. Cauliflowers grow large enough to serve for three meals for an ordinary family, while potatoes four or five pounds in weight are nothing extraordinary. The average crop of wheat in 1887, in Manitoba, was thirty bushels to the acre, while nowhere else on the continent did it exceed twenty bushels to the acre, and in Minnesota and Dakota did not average more than fifteen bushels. A mere handful of settlers in Manitoba produced in that year a surplus of twelve millions of bushels of wheat, seven millions of barley, and two millions of bushels of potatoes—the latter crop being a failure so great in the States as to command throughout the greater portions of the year a rate as high as $1 per bushel, while at points of production within Manitoba they could be had for one-eighth of that price. It is true that early frosts in August of that year have partially injured the crop of 1888, and that there is this contingency always present in the northern regions; but early frosts are equally dangerous in Minnesota and Dakota, while this year, as far east as Massachusetts, there was serious damage done. There is no locality but has its disadvantages with its advantages; but taking all the circumstances in view, it may be very well claimed for these northern wheat-producing regions that they are full of the greatest promise, as being in the line of the steady movement north of this most valuable product, and that they cannot fail to have a most important influence in the world's future supply of the staff of life.

But it must not be inferred that the climate of Canada is represented by the regions to the extreme north which have just been referred to. The Dominion, from its vast extent, as has been truly said, "possesses all the climates of Europe, from the Mediterranean to the Arctic Ocean, as might be expected, seeing that it extends from the latitude of Rome, in Italy, to that of the North Cape, in Norway, and is of almost equal area." The Gulf Stream, in the Atlantic coast, and the Japanese Current in the Pacific, are both singularly favorable to Canada. In the Province of British Columbia the thermometer in the summer months ranges from eighty degrees to ninety degrees, while in winter the cold rarely goes below twenty-two degrees. On the Atlantic the climate of Nova Scotia and New Brunswick is in no respect less desirable in winter than that of Massachusetts and Maine. St. John, the chief city of New Brunswick, is in the latitude of Milan, Lyons, and Venice, and the whole province is within parallels which include Belgium, Holland and the German Empire, where populations are most dense. Indeed, for more than half of the summer the maritime provinces are most delightful resorts, as shown in the steady stream of summer tourists that are setting in even north of Mount Desert in Maine. In Ontario the climatic conditions created by the practical encirclement of the great lakes are especially favorable, and such stretches as are included in the Niagara Peninsula, and those bordering upon Lake Erie, force themselves upon the attention of the student of North America as among the most favored spots on the whole continent. So far as climate, then, is concerned, there is no one thing in all the catalog of advantages which Canada possesses that is of greater value; for, in its variety, it favors the production of numerous cereals and crops, and, in its forcefulness and vigor, it stimulates the best efforts of its population. Malte Brun said of these regions: "Everything is in proper keeping for the development of the combined physical and mental energies of man. There are to be found at once the hardihood of character which conquers difficulties, the climate which stimulates exertion, and the natural advantages which reward enterprise. Nature has marked out this country for exalted destinies!"

The immeasurable content with which the average citizen of the United States contemplates the fact that, as between the Atlantic and Pacific, there are no stretches of territory that do not contribute to his greatness, can equally be shared by the Canadian. But the American has limitations on the north by a line drawn at the St. Lawrence and the Lakes, and along the forty-ninth parallel, against which his commerce beats as against an impenetrable wall, and like a wave rolls back upon itself. A night's journey from Boston or New York, and the limit of his boasted areas towards the north are reached; two nights and a day, even from Chicago, in the centre of his territory, and the ground to the north covered by the trade of that great city is exhausted. Not so with the Canadian. Not only does his territory stretch two hundred miles further out into the Atlantic, on the Nova Scotia coast, than the average of the United States—not only does it then stretch across a vast continent of untold wealth to the Pacific, on the coast of British Columbia, but it extends as far north as the Arctic Ocean. Take in the stupendous figures included in these measurements. Adopting the eighty-fifth degree of longitude as a centre, Canada stretches west to the one hundred and thirtieth degree, and east to the forty-second degree—forty-five degrees on one side and forty-three degrees on the other. North and south the Dominion stretches from the fifty-first degree of latitude, south to the forty-second degree, and north to the frozen sea. George Johnson, the accomplished head of the statistical department of the Dominion Government at Ottawa, whose disposition and ability to furnish the fullest information regarding Canada are unequaled, makes some comparisons regarding the size of the Dominion that are very instructive. He says:

> It is difficult to afford an adequate conception of the vastness of this country. England, Wales and Scotland form together an area of 88,000 square miles; you could cut forty such areas out of Canada. New South Wales contains 3 0,75 square miles, and is larger by 162 square miles than France, continental Italy and Sicily. Canada would make eleven countries the size of New South Wales. There are, (in extent), three British Indias in Canada, and still enough left over to make a Queensland and a Victoria. The German Empire could be carved out of Canada and fifteen more countries of the same size.

In the light of such comparisons, the statement made in a previous sentence, that Canada comprises forty per cent. of the area of the entire British Empire, is not so incredible as at first sight appears. Judged by standards of American areas, the comparison is quite as interesting. Thus, the province of Ontario, the fairest land of all the North American continent, is larger than the six New England States, with New York, New Jersey, Pennsylvania and Maryland, by twenty-five thousand square miles. Ontario, extending over ten degrees of latitude and twenty degrees of longitude, the single province, covers an area larger by ten square miles than Ohio, Indiana, Illinois and Michigan combined; larger than Iowa, Minnesota and Wisconsin by eleven thousand square miles. The basin of the Hudson's Bay comprises two million square miles, in which are the fertile plains of the Saskatchewan Valley, measuring five hundred thousand square miles, and which, according to Lord Selkirk, are capable alone of supporting thirty millions of people. That he was right in this contention is proved by the indications of the enormous productive forces of this region since developed; and that a European area, similarly situated east of the tenth degree of longitude, comprehends very nearly the whole of England and Ireland, the northeast corner of France, the whole of Belgium and Holland, and the greater part of the valley of the Rhine.

The vast expanse of Canada may be judged by the extent of her rivers and bays. The St. John, in New Brunswick, the largest river on the Atlantic coast south of the St. Lawrence, is five hundred miles in length, and is navigable for two hundred and thirty miles. The St. Lawrence, one of the noblest of the great rivers in the world, has a length of seven hundred and fifty miles, entirely navigable. The Ottawa, which is a mere affluent of the St. Lawrence, joining it six hundred miles from its mouth, is in itself five hundred and fifty miles long. The chain of great lakes is familiar to all who look at the map, but not so, to the north, in an almost unknown land, are the lakes Shebandowan, and Rainy lake and river, a magnificent body of water, three hundred miles broad and two hundred miles long. The Lake of the Woods, too, is almost unknown outside of Canada, yet it is a vast stretch of water of marvelous beauty, especially its westernmost portion, of 80 miles, consisting of land-locked channels,—a lacustrine paradise. Then comes the Winnipeg River, of which Lord Dufferin said: "Whose existence in the heart and centre of the continent is itself one of nature's most delightful miracles, so beautiful and varied are its rocky banks, its tufted islands; so broad, so deep, so fervid is the volume of its waters, the extent of their lake-like expansion, and the tremendous power of its rapids." Here empties the great Red River of the North, starting from the northern portions of Minnesota, and the equally great Assiniboine, one five hundred miles and the other four hundred and eighty miles in length. Far beyond these is Lake Winnipeg, a fresh water sea 300 miles long, from the northwest angle of which starts the Saskatchewan. The entrance to this noble river has been called "the Gateway of the Northwest," for here is a navigable stream 1500 miles in length, flowing nearly due west and east, between alluvial banks of the richest soil. Reaching the Rocky Mountains by this stream, beyond this range are the Athabasca and the Mackenzie rivers, the navigation of the latter alone exceeding 2500 miles, while the Fraser River and the Thompson River to Vancouver are streams of great magnitude. This enumeration of principal streams will give some faint idea of the vast areas of land through which they flow. But no better idea of magnitude can be formed of the extent of Canada than by the contemplation of the Hudson's Bay. This bay would seem like a projection of Providence for the good of mankind, by which is introduced into the heart of the continent an ocean in itself, midway between the great Atlantic and Pacific oceans. Fancy a bay so long as to extend from New York to Chicago, so wide as to extend from Washington to the lakes, projected like a huge tongue of sea into the land. What would remain of the fairest part of the United States? Yet this is the proportion of the Hudson's Bay, say 1000 miles long and 600 miles wide, running from the north into the heart of Canada, carrying with it enormous riches in sea wealth, for the supply of fish food so greatly benefiting, if permitted, the prairie States to the south.

Having almost exhausted the space allotted, by a description of the climate and of extent of Canada, the reader must be carried rapidly forward to a consideration of the marvelous resources which this northern half of the continent contains. Incidentally, in describing the climate of the northwestern portions of Canada, allusion has been made to the agricultural possibilities of that region. There are comparatively few portions of Canada, however, but possess great possibilities in this direction. The Province of Ontario, which will be recalled as covering so vast an area, is peculiarly rich in this respect. The excellent statistician of the Ontario Government, Mr. Archibald Blue, at Toronto, says of his native province:

> But Ontario has something more to boast of than broad expanse. It has a fertile soil, an invigorating climate, vast forests of merchantable timber, treasures of mineral wealth, and water power of limitless capacity. It has extensive areas which grow a better sample and a larger yield of the staple cereals than any other portion of the continent; and it has more extensive areas not yet brought under cultivation which may be converted into grazing fields of unsurpassed richness, suitable for the production of the best qualities of butter and cheese.

In a report on the trade between the United States and the British Possessions in North America, made by J. R. Larned, of the United States Treasury Department, in 1871, it was observed that

> Ontario possesses a fertility with which no part of New England can at all compare, and that particular section of it around which the circle of the great lakes is swept forces itself upon the notice of any student of the American map as one of the most favored spots of the whole Continent, where population ought to breed with almost Belgian fecundity.

Another American, whose worthy eminence none will dispute, has also described Ontario. The Hon. David A. Wells, in the stately pages of The North American Review of many years ago, wrote as follows:

> North of Lakes Erie and Ontario and the River St. Lawrence, east of Lake Huron, south of the forty-fifth parallel, and included mainly within the Dominion Province of Ontario, there is as fair a country as exists on the North American continent, nearly as large in area as New York, Pennsylvania and Ohio combined, and in equal if not superior to those States as a whole in its agricultural capacity. It is the natural *habitat* on this continent of the combing-wool sheep, without a full, cheap, and reliable supply of the wool of which species the great worsted manufacturing industries of the country cannot prosper, or, we should rather say, exist. It is the land where grows the finest barley, which the brewing interests of the United States must have if ever expected to rival Great Britain in its present annual export of over eleven million dollars worth of malt products. It raises and grazes the finest of cattle, with qualities especially desirable to make good the deterioration of stock in other sections; and its climatic conditions, created by an almost encirclement of the great lakes, especially fit it to grow men. Such a country is one of the greatest gifts of Providence to the human race, better than bonanzas of silver, or rivers whose sands contain gold.

It is unnecessary to go into detail as to the advantages which the provinces of Ontario, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island claim, because space will not permit, except to say that no country in the world possesses a more favorable variety of climate, better soil, a more thrifty or a more industrious people than these provinces, many of them possessing great geographical advantages. This is especially the case with Nova Scotia. This province projects out from the mainland into the Atlantic Ocean like an immense wharf, being almost surrounded by tidal waters, no portion of the interior being at a greater distance than thirty miles from the coast. All of her coasts are indented and provided with fine harbors, accessible at all seasons of the year. Its extreme southerly extension is about one hundred miles further south than any other part of British America. Its position in this respect causes a variation of the climate of the country of great advantage, and as a source of supply in fruits, potatoes, and numerous other agricultural products, should be of the greatest value to the densely populated manufacturing centres of New England.

But, great as may be the agricultural possibilities of the Dominion of Canada, and the wealth in her vast wheat-producing areas that these may produce at the bidding of man, it is in the natural resources of the country that a still greater promise is found. In the matter of the fisheries alone, Canada stands unrivaled. Very few realize the vast stretches of coast line along which Canada controls the greatest fisheries in the world. Bounded as the Dominion is by three oceans, it has besides its numerous inland seas over five thousand five hundred miles of seacoast, washed by waters abounding in the most valuable fishes of all kinds. The older provinces of the confederation have two thousand five hundred miles of seacoast and inland seas, while the seacoast of British Columbia alone is over three thousand miles in extent! It is impossible to take these figures in and all that they imply without realizing at once the enormous magnitude of this interest. But it is not alone in the matter of extent of seacoast line that Canada has a surplus in fish wealth; but, in the extreme northern location which she occupies she possesses an advantage which is of immense value, and this is that the fish are not only better and firmer in northern climates than in Southern climates, but that the supply of fish food, owing to the extreme northern location, is inexhaustible. As has been truly said by Mr. Harvey, "the Arctic currents which wash the coast of Labrador, Newfoundland, and Canada, chilling the atmosphere and bearing on its bosom huge ice argosies, is the source of the vast fish wealth which has been drawn on for ages, and which promises to continue for ages to come." Wanting this cold river of the ocean, the fish which now crowd the northern seas would be entirely absent. Professor Hind says: "The Arctic seas and the great rivers which they send forth swarm with minute forms of life, constituting in many places a living mass, a vast ocean of living slime. The all-pervading life which exists here affords the true solution of the problem, which has so often presented itself to those investigating deep-sea fisheries, the source of food which gives sustenance to the countless millions of fish." The harvest of the sea has not yet been gleaned to the same extent as the harvest of the land; but this fact may be taken for granted, that of all the countries in the world, and of all the riches of these countries, nothing can be made more useful in a higher form towards sustaining life, or to a greater extent, than the vast wealth of the fisheries of Canada. They are practically inexhaustible, because the cold current of the north brings with it the food on which these fish thrive, and the supply is one that can never fail. The seacoasts of the Atlantic and the St. Lawrence on the east, the long stretches of the Hudson's Bay coast in the centre, and the three thousand miles of coast line of British Columbia on the west, are in themselves a great possession, while the fresh water fish of the great lakes of the Northwest, especially in the supply of the prairie States, should be relatively as great a contribution to the sustentation of human life as are the supplies of cattle upon the plains.

In timber, Canada possesses a wealth of very great importance to the United States. When the wide stretches of treeless prairies which this country contains are recalled, and the rapidly disappearing forests within the United States, it is with a sense of satisfaction that one turns to the northern half of the continent, containing as it does the finest forests and the greatest supply of this most essential element of human protection and comfort. Within the catalog of the woods of Canada, there are ninety-five species of forest trees, including nineteen of the pine family, while the space covered by timber within the Dominion is something enormous. Excepting the great triangular prairie east of the Rocky Mountains, lying between the United States boundary and a line drawn from the Red River to the upper Peace River, the whole of Canada, up to the northern limit of the growth of trees, presents one vast forest area, except where it has been cleared by the hand of man. It is needless to further dilate upon the enormous value which this area is to the country to the south. It is sufficient to say that the source of supply for the next hundred years for the progress of the United States lies largely within the Dominion; and that no estimate of wealth, on the one hand, or of advantage and possible convenience on the other, is possible so far as the United States is concerned. Fully one half of the lumber consumed in the west is now derived from the Canadian forests, climbing as it does over a wall in the shape of a duty of twenty per cent. The protection thus afforded practically operates as a stimulant for the destruction of American forests. The white woods in Ontario, almost within sight of the border, are of inestimable value in the manufacture of furniture; and here are enormous supplies of bird's eye maple, black birch, oak, basswood, black ash, and other highly ornamental woods, which, in this country, are of great value for the highest grade of furniture and interior decoration.

Perhaps of all the surprises which the average American encounters in discussing the wealth of Canada, nothing will startle him to a greater degree than this statement: That no country in the world possesses so much iron as Canada, in no land is it so easily mined, and nowhere is it quite so accessible to manufacturing centres. This is a statement which no doubt will challenge contradiction, and it is to be regretted that the space is too small to describe at length the location and precise advantage which the iron supply of this greater half of the continent would afford to the United States. Take the instance at New Glasgow, in Nova Scotia; where, within a radius of six miles, there are found deposits of iron ore of the highest quality, equal to that of any other portion of the world, side by side with limestone, chemically pure, in the immediate presence of coke in abundant quantities, from seams thirty feet thick, lying directly on a railway within six miles of the Atlantic Ocean! Could there by any possibility be a combination more fortuitous than this! Throughout Nova Scotia there are deposits of ore of the greatest possible value; but, in Quebec, and especially in Ontario, the value of the iron deposits is something enormous. Near the city of Ottawa there is a hill of iron called the Haycock mine, which would yield an output of one hundred tons per day of ore for one hundred and fifty years without being exhausted. On the line of the Ottawa, on the St. Lawrence, in the Eastern townships, on the Kingston and Pembroke Railway, on the Central Ontario Railway, through Lake Nipissing, in Lake Winnipeg, on Big Island, and on Vancouver's Island, there are enormous deposits of ore, all possessing this singular advantage, of almost a freedom from phosphorus. It has been truly said that "what the devil is to religion, that phosphorus is to iron." The peculiar advantage of the Canadian ore in this respect is sufficiently demonstrated by the fact that, in the face of a duty of seventy-five cents per ton, this iron is being steadily paid for its introduction, for the purpose of mixing with other ores, at Joliet, Ill., at Pittsburg, Pa., and at other points. A market such as the United States would afford, if it were free, and the introduction of enterprise and capital, would create for these deposits the same development and the same value that have followed the activity in the Vermillion, Menominee and Gogebic regions. These latter deposits are almost within sight of Canada, and are but the edge of the great Laurentian range or belt of minerals, which, starting on the Labrador coast, covers the vast area of Canada, paralleling the St. Lawrence and the great lakes, till they find an ending in the Algoma district—a locality that has been aptly described as a great treasure house of mineral wealth, waiting only the touch of American enterprise, and stimulated by an American, to yield results far exceeding those of any mineral development on the continent.

Coincident with the presence of these great deposits of iron ore, are discoveries of even greater importance in copper and nickel, and in other metals hitherto absolutely nameless out of surpassing value. The copper development at Bruce mines, and especially and recently at Sudbury Junction, on the north shore of Lake Superior, is likely to be even more profitable than that of the famous Calumet and Hecla mines on the south shore of the same lake, whose payment of thirty millions of dividends on a capitalization of two and a half millions of dollars, is a realization beyond the dreams of avarice. Already Ohio capitalists have invested over a million of dollars on the line of the Canadian Pacific Railway in these deposits. The development of nickel, of which there are only two or three known deposits in the world, is of great significance; while in gold and in silver, especially the latter, very excellent success has rewarded the efforts of the prospectors. Perhaps the most marvelous yield of silver that the world has ever seen was at Silver Islet, within the Canadian border, on the Lake Superior shore, where, for a space of two or three years, an output was realized that enriched the owners with a rapidity equaled only by dreams in the "Arabian Nights." British Columbia immense quantities of gold are known to exist, and the fact that over fifty million dollars worth has been mined from a dozen localities, hardly yet developed, is full of the deepest significance, as indicating what yet remains in that distant region to reward the adventurous effort of the denizens of this continent.

But it is not alone in these prominent metals that Canada is rich in natural resources. In phosphates, she possesses enormous quantities of the purest character. No country in the world needs fertilizers more than large portions of the United States, and no country is better able to supply them than Canada. Analysis shows that Canadian phosphates contain phosphoric acid up to forty-seven and forty-nine per cent., equivalent to eighty to eighty-eight per cent. of phosphate of lime. No contribution to the wealth of the continent is of greater value than the development of the Canadian phosphates. In asbestos, in mica, antimony, arsenic, pyrites, oxides of iron, marble, graphites, plumbago, gypsum, white quartz for potter's use, siliceous sandstones for glass, mica, and numerous other products, Canada possesses enormous quantities awaiting the touch of man. In the matter of lead, it is found in almost every province, especially in British Columbia, the lead ore there containing as much as fifteen and a half ounces of silver to the ton. The deposits of salt are the largest and purest on the continent. In the matter of coal it is another startling fact that Canada possesses the only sources of supply on the Atlantic and on the Pacific, and that between these two there are stretches of coal deposits amounting to ninety-seven thousand square miles. The magnitude of the interests involved in this question of the supply of coal, its contiguity and economy of handling, are of vast importance to the United States. It is significant testimony to the important position which Canada holds on the question of coal supply, when it is recalled that away down on the Atlantic the manufacturing coal of Nova Scotia should supply the manufacturing centres of New England, at a minimum of cost; while midway across the continent, in wide stretches of territory of the lowest temperature, supplies should be drawn from the sources which Providence has placed within the Canadian border, and, still further, that, on the distant shores of the Pacific, San Francisco and contiguous cities should at this time be drawing their supply of artificial heat from the mines of British Columbia, and paying a tax to the overburdened treasury of the United States of seventy-five cents a ton.

And now, having most inadequately set forth some of the plainly marked features of the greater half of the North American continent, it remains to be asked—What destiny awaits it all? It is true that the statements made herein are nearly all in the nature of surprises, but they take on this form mostly because of the hitherto good-natured indifference of the people of the United States in all that relates to Canada. But a change in this respect impends. The Canadian question forces itself upon the public mind for adjustment; and, aside from serious complications, involving the relations with a European power, whose navy is the only menace this country may fear, the circumstances of the hour make it imperative that at least a policy must be decided upon, continental in its character, and continental in its consequences. The strange sense of limitation that thus early in the history of the United States is felt, when there is no more new territory to occupy; the necessity that exists for the widest field for supply of wants that brook no refusal, as in lumber, non-phosphorus iron ores, coal, fresh water fish in the Northwest, phosphates, barley, and other products, either peculiar to Canada or geographically essential to local progress and local convenience; the serious unsettled railway transportation problem, involving the possible discontinuance of the Inter-state Commerce laws, or the destruction of profit to American railway systems running east and west; the future destination of immigration, so as not to completely politically extinguish the American; the wornout fishery dispute; the canal discrimination; a free St. Lawrence to supplement a free Mississippi,—all these are questions too important to remain in chaos. But, in addition to all these, is the necessity that arises out of the recent triumph of the Republican party, that a policy should actuate its leaders, commensurate with its greatness; that its return to power should be signalized by achievements that will make its claim to continued confidence less insecure than it has hitherto been. The bitter lesson of defeat four years ago, and of narrowed majorities in significant localities since, will not be unheeded, especially if, in manufacturing centres, it can be made to appear that by opening up a market, continental in extent, an outlet is afforded for the over-production which the stimulant of protection has created. If this market can be secured at the expense of that hated rival, the British manufacturer, so much the better for the purpose in view; for the frantic bid for the anti-British vote will unfortunately still be necessary to political party existence. Still another motive may be found for vast expenditures, justified by the acquirement of territory, in order to beget a reduction of the surplus without the disturbance of the equilibrium of taxation. All this catalog of essentials in the present political situation revolve around a policy which may have a Continental Unity for its aim, and which, narrowed down to practical politics, involves an attempt to shape the future destiny of Canada. The considerations that surround this whole question are of a character most comprehensive, and they will, doubtless, be discussed in this country with frankness and liberality. It is submitted, however, that the almost universal conclusion reached in the public mind, that Canada should form a part of the Union, should be revised. Usually there are two parties to a bargain; in this case the parties number three,—the United States, Canada, and Great Britain. Whether the latter is quite ready for an extension over the entire continent, comprising 40 per cent. of her empire, of the principles of the Declaration of Independence which in former years she struggled so vainly to defeat, may well be doubted. Whether the people of Canada themselves, treated by the mother country with all the affectionate consideration born of experience with her elder wayward daughter, are ready to sever the slender ties that bind them to British connection, even for material advantages, is by no means certain. Indeed, to many it would appear that no revolution in sentiment could possibly be greater than the change which would be necessary to bring about a willingness on the part of the Canadians to forfeit their loyalty and the many advantages which in their form of government they possess. A political union, to those best informed, seems most difficult and distant. To these, however, a commercial union which, so far as trade and commerce is concerned, would be just as advantageous, is among the early attainable possibilities.

ERASTUS WIMAN.

CHAUNCEY LOSES A LEG.

It Was His Glass Leg and Helped him Work as Well as Howl.

The Hon. Chauncey M. Depew was taken from his office in the Grand Central Station to his home in East Forty-fifth street, on Thursday last, where the surgeons sawed his leg off. It was the glass leg. Mr. Depew had had it on three weeks. The glass was almost an inch thick, and encircled his flesh and blood from just below the knee to the instep. With the finest saws it took the surgeons an hour to saw it apart and another hour was taken in bandaging the tender member. The leg and foot had shrunk under the pressure of the glass so that the glass was loose. Although Dr. Depew's tendon Achilles is entirely healed it will be several days before the final bandages are removed and Dr. Depew resumes a shoe that does not look like a railroad frog on a bender.

In preparing the leg and foot for the glass leg, bandages very broad and strong, and thickly wound, were used, and on them was daubed the liquid glass. The glass was thick, ... mucilage, and the daubing process was continued until there was a mass nearly an inch thick. Then the orator's agony began. He had wanted to howl before, but when that glass cooled and contracted he hadn't any breath left to howl with. He never suffered such excruciating agony, he says, and he wants to be cremated before he is required to put up with a similar dose of mental and physical torture.

At that time you couldn't get a razor blade between the glass casing and the bandages. Yesterday the handle of a jackknife could have been thrust between them, so greatly had the leg and foot shrunk.

"Poetry in all sorts of metres has been written to that leg," Dr. Depew said, "but outside of that it has not been without its advantages to me. It has kept me away from dinners. It has been all of the Carlsbad springs to me. I have been ready to howl sometimes, but for all that on an average I have worked eighteen hours a day in the last six weeks. There was nothing else to do, and I am gratified when I think that the accumulations of several years are now cleared up. They never would have been if it hadn't been for this glass leg.

"It has also demonstrated the wonderful quirks of the mind. I had always been accustomed to walking up and down the room dictating my correspondence and other documents of interest to me. I found I couldn't walk, and therefore I couldn't dictate. Even when I could hobble about on a cane I couldn't dictate. You see it wasn't the Depew gait, as I had to drag three pounds of glass after me, and I had to buckle down and do the best I could sitting. But one can get used to almost anything, and I finally came around to the new way."

A chap way off in Dakota has written to know the name of the enterprising glass foundry that blew the glass bottle around the leg.

—Caswell, Massey & Co's Emulsion of Cod Liver Oil with Pepsin and Quinine, is recognized as the best preparation known. Prescribed by the leading physicians. W. A. Dyer & Co., Montreal.

Latest Outlook of the Winter.

From The New York Herald Jan. 8.

A mild winter seems to be the rule, just now at least, on both sides of the Atlantic, except in the high latitudes of the continent. Whether this exceptional development of the season will last or be suddenly changed, it is impossible to know with certainty.

But observation of the sequence of cold and mild winters through a long series of years elicits the fact that an anomalous type of weather is very apt to be persistent, running through an entire season and often prolonging its stay for many months. The period from September, 1887, to May, 1888, for example, was one of prolonged cold in England, and had no parallel for severity around London since the year of the Crimean war. The present wet period on our Atlantic seaboard is a legacy of 1887 to 1888, which has been transmitted to the new year. It should not, therefore, astound people if the present abnormal mildness should last, in some degree, till the next vernal equinox and go over into April, giving us an early spring. Farmers, gardeners, horticulturists and builders should now take this possibility into account in making their plans and preparations for spring work. At the same time it must not be forgotten that the present eccentricity of the season may be very shortly corrected and the usual January cold set in over the country generally.

Still Hunting Down Locusts.

From The Pall Mall Gazette.

From the plague of locusts Cyprus is not yet entirely free. The annual cost of operations for their destruction is, taking one year with another, set down in the latest report of the Government engineer at £3,000. The pests, however, do not now march in armies over the island and consume the crops of the unfortunate peasants. This they were doing some years ago in such numbers that it was found possible to intercept their advance by a system of screens and traps, which destroyed them wholesale, though at an enormous cost of labor and material. Now, when they are more scattered, and do not move in swarms from their breeding grounds, the modus operandi pursued is to cover the ground where the locusts are with a thin layer of dried brushwood, and set fire to it. Great watchfulness is needed to prevent the recurrence of the scourge in its former severity. No fewer than 1,184 persons are therefore still employed in what are called the locust campaigns.

NEGLECTED COLD IN THE HEAD IS DANGEROUS

COLD IN THE HEAD is one of the most annoying, and at the same time, most insidious and dangerous diseases with which the people of this latitude have to contend during the spring and summer months. Rapid changes of temperature, and damp, sloppy weather are the fruitful sources of Cold in the Head, and there are few who have not felt its disagreeable effects. DO NOT NEGLECT A COLD IN THE HEAD, as it invariably leads to Catarrh—often to Consumption. NASAL BALM is a sure and speedy cure for Cold in the Head, and never fails to give almost instant relief. We offer the following testimony from well known people to substantiate our claims:

James Smart, Esq., Sheriff of the united counties of Leeds and Grenville, says—It would be impossible to speak too extravagantly of the wonderful curative properties of NASAL BALM. I suffered for upwards of a month from a severe cold in the head, which, despite the use of other remedies, was becoming worse and developing into catarrh. I procured a bottle of NASAL BALM and was relieved from the first application and thoroughly cured within 24 hours. I cheerfully add my testimony to the value of NASAL BALM.

Capt. D. H. Lyon, Manager and Proprietor of the C.P.R. and R. W. and O. R. Car Ferry, Prescott, Ont., and Ogdensburg, N.Y., says—I used NASAL BALM for a prolonged case of cold in the head. Two applications effected a complete and thorough cure in less than 24 hours. I would not take $100 for my bottle of NASAL BALM if I could not replace it.

Isaac Waterman, of the Imperial Oil Co., Petrolia, Ont., says—NASAL BALM gave me the most perfect satisfaction of any medicine I ever used for cold in the head. I found it easy to use, quick in giving relief and effected a complete cure in a few hours.

D. Derbyshire, President of the Ontario Creamery Association says—NASAL BALM beats the world for catarrh and cold in the head. In my own case it effected relief from the first application.

T. H. Munroe, Parry Sound, says—NASAL BALM has no equal as a remedy for catarrh and cold in the head. It is both speedy and effective in its results.

D. A. Breckenridge, General Agent Canada Life for Eastern Ontario, says—I have used NASAL BALM for cold in the head with the most satisfactory results. It is all you claim for it and its merit cannot too widely be made known.

Mr. G. T. Gorrell, Mail Clerk on the C.P.R., says—NASAL BALM is a boon to all suffering from cold in the head. It gives relief rapidly and never fails to effect a cure.

J. McKee, Chemist, Peterboro, says—NASAL BALM gives the most general satisfaction to consumers of any preparation I ever handled. My sales are large and the reports from those who use it fully substantiate your claims for the medicine as an unequaled remedy for catarrh and cold in the head.

BEWARE OF IMITATIONS, similar only in name and appearance; they are dangerous. Ask for NASAL BALM and take nothing else.

If you cannot obtain NASAL BALM from your dealer it will be sent post paid on receipt of price—50 cents and $1—by addressing

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