

THE PHILOSOPHER.

WHERE OUR WHEAT GOES.

According to Government statistics, in the five-year period 1905-1909 Canada grew 621,950,000 bushels of wheat, and exported 270,353,000 bushels either in its natural condition or in the form of flour. This leaves 351,000,000 bushels to be accounted for in other ways. On a basis of five bushels per head per annum, our estimated population of 7,000,000 for the five years has in that time consumed 175,000,000 bushels. This leaves 176,000,000 bushels still to be disposed of. One and a half bushels of wheat are required to seed one acre of land. Statistics show that in the five years in question about 33,000,000 acres have been seeded, and thus we have got another 50,000,000 bushels accounted for. We still have to account for 126,000,000 bushels. Some of this was fed to live stock, but surely not more than a mere fraction of it. Where the rest has gone the statistics do not show. It is a way statistics have, when you get to work and study them out.

THINKING IN MILLIONS.

Those who may be inclined to smile at the statement of James J. Hill that it will cost the railway companies of the United States \$1,600,000,000 a year for the next six years to equip themselves sufficiently to be able to handle all the traffic that they will have to handle and to do it without congestion, fail to realize that the head men of our Canadian railway systems also talk of huge sums of money when they are telling of the things they are doing and the things they intend doing. Sir Thomas Shaughnessy and Mr. Hays and Messrs. Mackenzie and Mann make public statements about work that runs into millions of cost. During the past few years there have been several of these statements, and the work has been gone on with. Mr. Hill's figures look pretty huge, but we in Canada are getting accustomed to figures which are proportionately as huge. We are living in an era of unprecedented expansion and development, when the men at the head of the big railway systems have to think in millions.

DEVELOPING A NEW FRUIT.

Luther Burbank has his rivals at home. Hugo Lillenthal, a horticulturist at Berkeley, California, has been developing by cross-grafting an edible fruit from the climbing rose of that region. It is as yet but a berry, but it has a pineapple flavor, and is good either cooked or raw. Why not? The peach, the apple and the apricot have all been developed from the rose or the almond stock, or both together, and by buddings and graftings of which record was never made. How else have the fruits and the grains of the world been produced? The Indians of this continent, ages before the coming of the white man, grew the maize from some original grass, and there are now "corn" grasses whose fruit suggests a similar development. The wild rice, from which the rice we use as food was grown, is in our lakes and rivers, and feeds the wild geese and ducks. Mr. Burbank's wizardry, and that of his neighbor, are but a highly intelligent following of encouraging indications from Nature itself. What might be done with the little "rose apples" of the wild rose, which is so plentiful in this country, or with some of the other wild berries and buds that are the food of the prairie chickens and of other birds, remains to be found out by some patient experimenter.

A COSTLY CANOE ROUTE.

"Nearly half a century ago the Canadian Government spent close on three million dollars in locating, improving and maintaining the finest canoe route on the continent." This is the introductory sentence of an article by Mr. Rex Croasdel, of Toronto, in "The World To-day." The article deals with the old Dawson route intended to furnish continuous water communication between Lake Superior and Winnipeg, in the days when a railway from Eastern to Western Canada was only a dream of the most audacious—a dream that is now a reality, over and over again. By that old fur-traders' route came the Red River expedition under Sir Garnet Wolseley at the time of the first Riel rebellion in 1870, when Fort Garry was for a time in Riel's possession. Mr. Croasdel tells in his article of how he canoed over the whole route; his story makes the reader want to do likewise. The country through which that route passes abounds in fish and game, and is full of charm for the lover of scenery. It is to-day for the most part untouched by the march of civilization, for all that it was once intended to be the main-travelled line of communication between the East and this country.

THE "NOBLE RED MAN."

A deputation of redskins from the Six Nations reserve down in Ontario waited upon Mr. Frank

Oliver, the Minister of the Interior, a couple of weeks ago, with a view to having the old autocratic method of controlling Six Nations affairs changed to representative government, such as is enjoyed by white Canadians. Nelles Montour, a deposed chief, whose first name was given him by his parents in honor of the late Rev. Dr. Nelles, and who doubtless is one of the descendants of Mr. and Mrs. Hiawatha, explained that under the present system the women choose the chiefs, eighty of whom constitute a council, which exercises supreme control of the Six Nations. Mr. Montour and those who think as he does, want a new order of things. They want politics and election campaigns and, possibly, ballot box stuffing. Mr. Oliver heard all the deputation had to say, and promised to give the matter his most serious consideration. Which is the usual thing that Ministers say to deputations. Suppose, now, that some fine day Mr. Oliver were to find his office invaded by a deputation of indignant squaws from the Six Nations reserve, protesting against any change from the present system, by which, according to the statements of the ex-Chief and his deputation, the ultimate political power is vested in them. The Minister of the Interior would then be in a position to sympathize with the British Ministers who were given such a strenuous time by the suffragettes.

THE YOUNG OFFENDER.

Government blue books usually make exceedingly dry reading. An outstanding exception is the annual report of the Dominion Parole Officer, Major Archibald. This official, to judge him from his report, has a warm heart, but he has also a clear head. His attitude toward the criminal is neither vindictive nor sentimental, but scientific. He would not have the criminal think that his offence is trivial, nor that he is a victim of wrong and oppression. He would adopt towards him a passionless, patient and impartial attitude, making it as easy as possible for him to do right and as difficult as possible to do wrong; he would always hold up before the criminal the hope of redemption, and teach him that his destiny is largely in his own hands. Major Archibald has charge of the ticket-of-leave system, by which prisoners in the penitentiaries who are judged deserving of such treatment are conditionally released before the expiration of their terms. He sets forth in his report that he has had experience with reformatory boys, and he makes a strong plea for more intelligent methods of dealing with young offenders, sending them to reformatories rather than to penitentiaries. It is the duty of the state to do all that it is possible to do to prevent the young offender from becoming a hardened criminal. Many delinquents, says Major Archibald truly, may be traced back to squalid homes. The antecedents and the character of each youthful offender should be carefully considered by the authorities. Two boys of similar character may commit some offence, not gravely serious in itself, yet bringing them under the penalties of the law. One may drift into a career of crime. The other by wise direction may be brought into the ranks of useful citizenship. A little streak of wildness, the reading of a foolish, if not worse, book, in which the crime is surrounded with a false glamor of romance, may, through lack of wise guidance, result in a course of life leading to vice and depravity.

BRITISH SEA POWER AND THE UNITED STATES.

Some of the newspapers in the United States have been discussing the question of how the sympathies of the United States would go in a war between Great Britain and Germany. This is a practical question; and among the practical considerations which would determine the answer to it, one is that if Germany were to obtain a command of the seas corresponding to her present military strength in Europe, there would be grave danger of the conditions in continental Europe being extended to America. The United States has an army that, to European eyes, looks a mere handful, less than 100,000 regulars and a militia of somewhat more than 100,000. Germany has a "peace establishment" of 614,000 soldiers, and the total strength of the German mobile forces in war would be 1,760,000 men. And behind these there are 1,500,000 partially trained men. The other continental European countries are forced to keep up the same pace. A small and peaceable nation like Switzerland, with a population of only a million and a half, or not a great many more than one-sixth the population of Canada, maintains an army of 205,740 men. The people of this country and the United States have always been in a position to congratulate themselves upon freedom from conscription and militarism. Great Britain alone of the nations of Europe, by reason of her steadfast maintenance of her suprem-

acy at sea, has been able to do without conscription. When Napoleon was terrorizing all Europe, save only Great Britain, he found it to his advantage to sell to the United States the French territory which is now one of the richest areas in the United States. By that transaction, known as the Louisiana Purchase, the United States acquired 875,000 square miles for less than \$20 a square mile. In that and other ways the United States profited by the rivalries and conflicts of European countries. It was able to work out its destiny without fear of outside interference. And it was to maintain this advantage that the Monroe doctrine was promulgated. The danger to the United States that would loom up in the event of the possibility of a war between Great Britain and Germany would be the danger of the possibility of Germany acquiring supreme naval as well as military might and embarking upon a career of world-wide conquest. In looking at the matter in this way, the Philosopher is leaving out of account any consideration of the natural sympathy and friendship between the great English-speaking nations, and is taking into account only hard, practical considerations. It is true that the people of the United States, by drawing upon their tremendous resources, could resist and probably repel such a host as we are imagining; but they could do so only by loading themselves with the continental European burden of conscription and military taxation. British supremacy at sea is thus of the first essential value to the United States. It is of the first essential value to the continued peaceful and prosperous development of the whole of this continent. The Canadian people stand ready to give the utmost support in their power to the maintenance of British supremacy at sea. To those, if any, who may ask why there should be British supremacy at sea, and why the seas should not be free and safe for all, the answer is that the ideal solution, no doubt, would be to have the seas freed from the possibility of war and policed by a small international force. But until that ideal is realized—and the remoteness of any hope of its being realized is only too evident—history proves that the world cannot have as just a police force of the seven seas as the British navy, or one under whose guardianship the development of free institutions will go on more safely and the interests of civilization and humanity be more secure.

SEEING AS WELL AS TALKING BY WIRE.

An electrical invention by which we shall be able to see by wire is confidently predicted as the next marvel while, after we have become familiar with it, as in the case of the telephone and the phonograph, we shall regard as a commonplace thing. It is declared that the day is not so very distant in the future when we shall be able not only to listen to the voice of a friend miles away, but see him. This new marvel is called "television," and follows along the line of development made possible by the original discovery of the telephone by Prof. Alexander Graham Bell, who has given the world his own account of how he chanced upon that great invention while making experiments with an entirely different object in view. The invention of the phonograph in like manner occurred to Thomas Alva Edison when he was at work trying to devise an improved telephone receiver and thought of experimenting with making a record upon a piece of tinfoil. This convinced him that the human voice could be recorded and reproduced. Along this same line has now come a new method for locating gold and other metals, based on the differences in the electrical conductivity of the earth due to the presence of different ore deposits. As to the "television" apparatus, which its two French inventors, Messrs. Rignoux and Fournier, have named the "telephote," it is said to transmit variations of light and shadow, as the telephone transmits variations of sound. A concave mirror projects a beam from an electric lamp of 3,000 candlepower on the person, or thing, of which it is desired to transmit the image. Between the person, or thing, thus strongly illuminated, and a surface composed of cells of the metal selenium, arranged in the shape of the retina of the eye, a lens is placed. The selenium acts under the influence of the light transmitted through the lens, and each cell sends into the wire a current of intensity proportionate to the degree of its illumination. The degrees of light and shadow are thus transformed into electric variations that travel along wires to the receiving point. There they form on a screen the image of the person or thing, which it was desired to transmit. Such is the account given of the "telephote." All that remains to be devised is an electric apparatus by which, when we call up our friends by telephone and talk to them and see them, we shall be able to greet them with electric handshakes. This, too, will come in due time, without a doubt.

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