

thousands or ten-thousands? Is it not time that something should be done for them? Is it reasonable to hope or expect that the Indians as a whole can be civilized and Christianized by the process of choosing a boy here and a girl there, taking them away to be educated, and carefully preventing them from returning to the reservations? The method is excellent so far as it goes, but it is not enough. It falls far short of our full duty to the aborigines whose game we have destroyed, and whose liberties we have circumscribed. The United States are at length, after a "century of dishonour," entering upon a large and liberal policy. The confirmation by the Senate, the other day, of the appointment of Gen. Morgan as Indian Commissioner, and of Dr. Dorchester as Superintendent of Indian Schools, means that the national policy is henceforth to be the compulsory education of every Indian boy and girl in the Union. This, combined with the other policy now being carried out, by which the tribal system is being broken up, and the reserve lands distributed to the Indians in severalty, marks the first serious attempt at a final and worthy solution of the Indian problem. Should not Canada seriously ask herself whether she should not follow so good an example?

THE Fourth Annual Report of the Board of Trade of the Town of Port Arthur is an able and interesting review of the condition, resources and prospects of that promising locality. The picture presented of the unbounded mining wealth of that district is such as to compel the conclusion that there is something seriously lacking in Canadian methods, or the development of our mineral resources would be more rapid. Lack of capital and of facilities for transportation are, of course, the most obvious hindrances to the opening up of the rich deposits of gold, silver, iron, copper, nickel and other minerals which abound in those regions. The deficiency in means of transportation is being in part removed by the construction of competing railway lines. The report, prepared by Mr. Thomas Marks, the President of the Board, lays special stress upon the projected Port Arthur, Duluth and Western Railway. The Ontario and Rainy River Railway, now being built by aid of a Government subsidy, will when completed give Port Arthur practically the benefit of two competing railways, stretching out into the western country, and forming a link in the desired chain. The other difficulty suggested, that of capital for the full development of the mineral wealth of the region, is, it may be feared, not so easily overcome, especially in view of the fact that the products of the mines are met on the threshold of their natural market with a heavy hostile tariff. The facts presented by Mr. Marks in reference to the operations of the Minnesota Iron Company should, however, give a great stimulus to the investments of money and enterprise in the prolific mines of this region. That Company, we are told, commenced shipping in 1884, the output for that year being 62,122 tons, which steadily increased, until in 1889 they forwarded to market during the season of navigation about 800,000 tons. Reasoning from the rate of development of this and similar enterprises Mr. Marks predicts that within five years Port Arthur will be shipping a million tons of ore per annum from the Atikokan and Gunflint ranges, in addition to the large quantity which must of necessity be smelted there into pig iron. The total annual output of the Lake Superior iron mines during 1889 was nearly 7,000,000 gross tons. In this connection the report draws attention to the fact that the removal of the duty on mining machinery, or at least on all such articles as are not manufactured in Canada, would be a great boon to Algoma Mining Companies, and a material aid to the mining industry. Numerous other matters connected with the resources and wants of the Port Arthur district are succinctly dealt with in this suggestive report.

THE objects aimed at by the conveners of the public meeting which is to be held in the Horticultural Gardens Pavilion on Tuesday evening next are such as must commend themselves to all who have intelligently in view the best interests of the city. Those who have organized themselves into a provisional committee for the organization of an association for the preservation and adornment of public places, spots of beauty and interest and recreation grounds, and the establishment in connection with them of Provincial Museums of Science and History, and of Art and Design, certainly deserve well of their fellow citizens, and the project should enlist the hearty sympathy and co-operation of all classes. It is, too, greatly to be desired, on grounds alike of utility and taste, that the three beautiful squares now occupied by Upper Canada

College, Government House and the Parliament Buildings respectively should not be sold or permitted to be used for any private or business purposes, but should be retained as public squares and as sites for public museums for the purposes above mentioned. There could hardly be a greater mistake, or one more certain to be bitterly regretted in future days than to suffer those beautiful spaces to be alienated from public uses. We earnestly hope, therefore, that the proposed association may meet with the enthusiastic support it merits.

A NOVEL and interesting application of the theory of development, or rather of its antithetic corollary, that disuse of any organ tends to its deterioration and ultimate decay, was made by Mr. W. A. Sherwood in a paper read before the Canadian Institute at its meeting on Saturday evening. The subject of Mr. Sherwood's paper was "Colour in Nature;" the part of it referred to is that in which he unfolded his theory of colour-blindness. Setting out from the view propounded by Professor Le Conte, of the University of California, endorsed by Professor Herring, of Vienna, and said to be now generally accepted, that the perception of colours is accomplished through the medium of certain rods or cones in the retina, whose special function it is to enable us to distinguish red, green, blue and yellow, the essayist went on to maintain not only that colour-blindness is a retinal defect, of which there can be, we suppose, no reasonable doubt, but that the prevalence of this defect is due to the tendency of modern society to the disuse of the brighter colours. For the last two centuries, he claims, the colour red has been almost unused, and with it have gone out, by decree of certain creeds, other associated colours, leaving the field of vision to uninteresting grey, black and white. *Pari passu* with the disuse of those retinal cones whose special functions are the perception of the bright colours, the cones themselves would become first inactive, then dormant, and would finally die. There is certainly nothing intrinsically unreasonable in the theory. Whether it is one of those happy hits of the scientific imagination which patient induction ultimately shows to have been the products of true scientific insight, remains, we suppose, to be determined, since it is scarcely possible that it can as yet be established on a basis of observed facts sufficiently broad to warrant its acceptance. Mr. Sherwood does indeed cite the case of the Quakers, though the abstract of the essay which we have before us does not supply facts to prove the statement that colour-blindness is specially prevalent amongst members of this sect. If that be the fact it will go a good way in support of Mr. Sherwood's theory. But amongst other facts which, in order to its complete demonstration, it will be necessary to establish, we may mention as primary and fundamental what is, so far as we are aware, as yet only an assumption, viz., that colour-blindness is really more prevalent now than it was two centuries ago. May it not be that this supposition is due simply to modern conditions, particularly those arising from the necessities of railway signalling, and that great inequalities in the power of distinguishing colours have always existed, just as similar inequalities exist in the power of distinguishing musical sounds, or in that power of perceiving nice harmonies and contrasts in natural objects which constitutes the artistic sense? Mr. Sherwood may have less difficulty in showing that the tendency to the disuse of the brighter colours is really a characteristic of what we regard as advancing civilization. The field of inquiry is certainly interesting as well as of great practical importance. Let us not be in haste to conclude that, should further investigation support the theory in question and lead us, on scientific grounds, to re-cultivate the childish and so-fancied barbarian fondness for the brighter colours, the discovery will not have conferred a distinct benefit upon modern life, even though it should lead to a state of society in which it will be the correct thing for learned professors to hold forth robed in purple, while their students disport themselves in gowns of baize-green.

THE meeting of the Canadian Fruit Growers' Convention, held in Ottawa last week, shows that the attention of the tillers of the soil is becoming more and more drawn to the value of this branch of industry, and the importance of carrying it on in accordance with the most improved methods. It is evident from the discussions at this meeting that the business of fruit-growing in the various Provinces of the Dominion is capable of vast, almost unlimited, expansion. There is evidently great need of more care and more scientific knowledge in regard to the choice of varie-

ties, the adaptation of kinds and varieties to the peculiarities of soil and climate in different districts, the best modes of culture, etc. Great deficiencies also exist, it appears, in means and modes of transportation. The railways in particular seemed to have failed to provide needed facilities for the prompt and careful movement of perishable fruits. This is, of course, a matter of the very first importance, as everything depends on getting the more delicate fruits to market in a fresh, sound and attractive condition. The attention of railway managers having been called to the matter, they will surely see that it is in their own interest to provide the best facilities. Even if the business is as yet too small to warrant the outlay required, it is clear that under such stimulus as better facilities for getting to market would afford the traffic would rapidly increase. The Minister of Agriculture certainly deserves credit for the energetic attention he is giving to this and other departments of agriculture, and the whole country can hardly fail to profit greatly by the encouragement given to more intelligent and advanced methods, in all branches of this staple Canadian industry. It is not easy to conceive of a more interesting and delightful occupation than that of the scientific horticulturist, and the department of fruit culture is one of its most attractive branches. It would be well for the country if much larger numbers of educated and energetic young men could be induced to make this their chosen industry, and enter into it with the combined patience and enthusiasm which are born of knowledge and essential to success.

THE day of free elementary education in England is evidently near. Whether Lord Salisbury adheres to the plan of "assisted" education foreshadowed in his Nottingham speech and succeeds in carrying it into effect this session or not, it is clear that free education must come and that soon. It is also clear that with the remission of fees must come the admission, in some form, of its corollary, the right of popular control. Even should the present Government succeed in passing a Bill following the lines which Lord Salisbury probably had in view, by putting the Church or Voluntary schools on the same footing as the Board schools in reference to the payment of fees by the State, the arrangement would almost surely be short-lived. One of the first acts of a Liberal Government would be to apply the principle that public money and representative control must go together. This is now admitted even by many of the ardent supporters of the Church Schools as against the Board schools. It is true that not a few are still disposed to complain with Lord Morton that "the representative principle is foisted in here as now everywhere," or are, with Archdeacon Smith, horrified at the idea of the State imposing popular representation on the committees of schools which, according to the trust deeds, were always to be strictly under the management of the Church and the Clergy, and doing this simply because "the State may see fit to make a fresh arrangement with a third party—the parents—by paying the fees." But other leading minds in the establishment, better endowed with the power of putting themselves in the place of their neighbours, frankly admit, as does Canon Fremantle, that "the more the question is considered the more just it will appear that there should be representatives of the community generally on the management of all schools which receive public grants." Several influential clergymen and others, members of the London School Board, though themselves supporters of voluntary schools, admitted at a recent meeting of the Board that free education is inevitable, and that the principle of popular control is also inevitable if the voluntary schools are to share in the State grants. At that meeting Mr. Lyulph Stanley's motion declaring that the assisted schools should be under representative management was carried by a vote of 20 to 19, and another motion to the effect that admission to all schools aided by grants from the State should be free was carried by 24 to 16. Dr. Percival, Headmaster of Rugby, while granting that public aid should unquestionably carry with it the right of popular representation, proposes that there shall be a free school within reasonable distance of every home, with a reasonable number of elected householders on the committee, one-half the fees being paid by Government grant and the other half out of the rates. This being provided for, the other schools might, he thinks, charge fees and receive Government grants as at present. But, as the *Christian World* observes, this plan, however reasonable, is not likely to be accepted by the friends of the Church schools. "It would necessarily at once deprive them of the exclusive control of the schools in thousands of country districts, for the sectarian Church schools