

THE ROYAL GAME IN CANADA.

JAMES I. of England once described the game of Chess as "philosophical folly." Ivan the Terrible died in an apoplectic fit caused by a checkmate given him by a subject. Whether it is that the cultured classes of Canada agree with the dogma of the pedantic and narrow-minded English monarch, or that they fear an ending to their terrestrial career similar to that which befell the Russian despot, it is difficult to determine. The fact remains, however, that the Royal Game, the favourite pastime of the court and the cloister, of the study and the camp, in many lands and during many centuries, receives but scant recognition in Canada.

That this state of affairs is much to be regretted will, after a careful consideration of the matter, be admitted by most thoughtful men. The influence of the game, when engaged in as a recreation and not as a life-work, can only be for good. Of course if the devotee of Caissa worships at her shrine morning, noon, or night, to the utter disregard of the sterner and more important engagements of life, there can be no doubt of the evil done. But this may just as truly be alleged of those who bow before the wine-god Bacchus, or whirl away the hours of night at the call of Terpsichore. Even Cupid will often lead his infatuated slaves much too far in the by-paths of pleasure. Temperance in this as in every other enjoyment must be insisted upon; but it in no way weakens the fact that this intellectual pastime is eminently qualified to strengthen and even create some of the most useful faculties of the human mind.

The neglect of the game in Canada seems very strange. The more closely its standing in this country is compared with its position in Great Britain and the older countries of Europe, the more marked does the contrast appear. In every department of life, public and private, a very remarkable difference exists.

Marshal Saxe, the illustrious general, and an enthusiastic chess-player, declared that the principles underlying the successful conduct of a game of chess were identical with the principles which guided a commander-in-chief on the field of Mars. Wellington and Napoleon were both chess-players, and during the exile of the latter in St. Helena he used to play the game, daily, going over on the board his many campaigns. At such times he was wont to declare that he ought to have won Waterloo. In Germany, and in fact in all the armies of Europe, the chess-board is as common as the sword. During the weary wait before Paris, while the siege guns were reducing the "Beautiful City" to ruins, every day saw hundreds of mimic battles on the chequered field.

The soldiers of Canada have just returned from a successful campaign of four months' duration. Many a monotonous day have they passed with not even "fatigue duty" to relieve the dulness. Yet it would be safe to say that not one game of chess was played among the troops during the rebellion, nor could a set of men or a board be found among the baggage of any man or regiment at the front. Surely the volunteers of Canada are as intellectual as the hirelings of Germany.

Turning from the camp to the study, do we find any difference there? Oxford and Cambridge possess chess associations equal to any in the country. At Leipzig, Breslau, and the other colleges of Germany, the game is encouraged and played by nearly all students, while the professors are among the best exponents of the art. In Canada there is not a chess club among all the colleges and universities in the country, and very few individual players.

Among public men again the neglect of the game is marked. In England Lord Randolph Churchill is a chess enthusiast and a Vice-President of the British Chess Association, while Lord Tennyson is President, and Sir Robert Peel, M.P., and John Ruskin are also Vice-Presidents. Herbert Gladstone, M.P., is President of the Leeds Club, and Queen's counsel and members of Parliament contended together in a late tourney. In France the President gives annually valuable prizes to encourage the game, and in Germany it receives Imperial countenance and aid. In Canada not one single name of note in art, science or literature, law, medicine or divinity, is ever mentioned in connection with the game.

What can be the objection to it? It does not interfere with literary effort. Buckle the historian was champion of England while writing his "History of Civilization." It does not interfere with legal success. Golmayo was champion of Cuba and Attorney-General at the same time. It does not interfere with financial success. Kolesch, the Vienna banker, was champion of Austria and one of the richest men in the empire as well. The Astronomer-Royal of England is a chess-player. The Astronomer-Royal at Berlin was not long since a chess-player. We have seen that it does not interfere with military success. What can be the objection to it? There is one, and that, until the people of this country change their nature, is insuperable: the game of chess is inimical to gambling. You cannot

gamble at it. The element of chance is wanting. The best man must win, and this, until poker, euchre and stock gambling lose their hold on the affections of the people, will render it unpopular.

Let philanthropists, therefore, who bemoan the haggard forms and bloodshot eyes, the wasted energies and impoverished pocket-books of the inveterate poker-players, too frequently followed by the suicide's end, adopt the remedy and endeavour to replace the card-table by the chess-board, initiating our rising generation into the mysteries of "check" and "checkmate," rather than let them lose their way in the mazes of "ante," "bluff" and "flushes."

Pawn.

SCIENTIFIC JOTTINGS.

Two pieces of engineering at widely separated points are now interesting the railway men of the Dominion, and though neither of them can be classed among the principal achievements of modern engineering, their effect on traffic will make them of great importance. From New Brunswick comes word of the recent completion of a cantilever bridge at the City of St. John, and at Sarnia the Grand Trunk have begun the excavation of a tunnel to Port Huron, under the St. Clair River. The bridge connects the terminus of the Intercolonial with that of the New Brunswick Railway in the Town of Carleton, and crosses the River St. John immediately north of the fine suspension bridge that has long adorned the city. Here the river narrows to about four hundred feet, furnishing with its banks of solid rock the best if not the only feasible bridge site within many miles. Through this gorge the great tides of the Bay of Fundy rush with irresistible impetuosity, wholly precluding the possibility of erecting any false work, and so necessitating the adoption of either the suspension or cantilever principle. In the newer style of structure the cantilevers are so arranged that an arm reaching out over the river is exactly balanced by a similar arm reaching shoreward, while the additional weight of an intermediate span of trusswork is sustained by anchoring down the shore ends of the cantilevers. In erecting, the shore ends are first put up with the help of staying, and anchored, and the river ends can then be built out piece by piece without staying until they meet in the middle of the gap. The St. John Bridge, being entirely constructed of mild steel, has a very light and graceful appearance. It carries a single track, and consists of the two cantilevers, with horizontal bottom chords, resting on granite piers built on the edges of the river. The intermediate span is 142½ feet long, and a tresslework approach 400 feet long at the west end. The bridge proper is 811 feet long, with a central span of 477 feet. The west cantilever is much the larger of the two, being 382 feet long, with pier posts 80 feet high, the east one being 287 feet long, with posts 65 feet high.

The tunnel has been located opposite the Great Western terminus at Sarnia instead of at Point Edward, where the terminals of the Grand Trunk proper are situated, because the river though narrow at the latter place is seventy feet deep as against twenty-four at the former. The work presents no great difficulties of either an engineering or a financial kind, and would probably have been done long ago had the Grand Trunk had control of the site. Only those who know the immense amount of freight now ferried across the river, the expense of maintaining the huge steamers, and the risk of damage or detention by ice in the winter, can realize the advantages which will follow the completion of this tunnel. It is estimated that the net saving of \$40,000 per annum will be made.

The first essay of this year's Hudson Bay expedition to pass through the strait and gain the "Mediterranean of Canada" has resulted in failure, Lieutenant Gordon having been obliged to put back to St. John's, Newfoundland, for repairs to the *Alert*. The voyage was begun as early in the season as there was any probability of piercing the strait, Cape Best being reached on the 16th June. Here the vessel was caught in the ice, and after being drifted backwards and forwards in a perfectly helpless condition for three weeks she escaped from it almost at the same point on the 6th July, with her bow plates ripped off and her stem so badly damaged that it was deemed advisable to refit before proceeding. The season may be an exceptionally severe one, but experience proves that only a very short season can be counted on, and that only specially strengthened vessels can under any circumstances be used for the strait. There is little doubt but that Lieutenant Gordon will succeed in relieving the observing stations at a later date.

EXTENSIVE experiments are being made both in Europe and America to acclimatize the tea plant. It will grow in the open air in the vicinity of Florence, and Prof. Beccari, who went to India for the purpose of investigating its growth, thinks it would succeed in Italy if plants or seeds were brought from a climate similar to that of the peninsula. A large order for tea plants has consequently been sent to Japan by the Italian minister of agriculture. In the Southern States it has been pretty clearly established that tea can be profitably grown. Some plants raised from seed in South Carolina attained a luxurious growth of eighteen inches within a year, and in Georgia and Mississippi it has been successfully cultivated. The Government tea gardens at Summerville, for the maintenance of which an appropriation of \$3,000 was made last year by Congress, are said to be badly located owing to the dry soil and lack of other suitable conditions.

THE chemical wonder of the London Inventions Exhibition is said to be the manufacture of oxygen by the process of Brin Freres. Common air is drawn by means of a partial vacuum, through a vessel of quicklime, which absorbs all the carbonic acid and moisture, leaving only the oxygen and