waxed confidential under its influence. With cheerful abandon he notified those present that having secured all the prospects he thought he should require to keep himself in touch with the future of the country, he had retired from the field as a prospector and would now allow "the other fellow to come in." Mr. Conmee smiled when he said this, and the audience cheered him, because an audience as a rule dearly loves to be taken into the confidence of a speaker and likes to realize that it is getting some information which would not be possible to the average individual. One thing, however, Mr. Conmee said, which sent many a significant wink and smile around among his hearers. It appears that the Ontario government might be induced, under certain conditions, of course, to establish a school of mining in Rat Portage. No one ever thought of such a thing before, although seeing that the government runs so much to schools and colleges, perhaps it is the most natural thing in the world that Rat Portage should regard the establishment of a school of mining here as the climax of its ambition as a mineral country. Such, however, is not the case; and if it is thought that a series of deputations is going to start off at once to beg for a school of mining, somebody is laboring under a big mistake If, in the interests of the country, a school of mining is thought necessary in Rat Portage, the government should establish one here by all means; but what was particularly desired at the present moment is some assistance in the way of inducing capital to come in to open up the resources of the district. It is to be hoped that the gentlemen who are now here representing the government will be fully impressed with this fact; and so convey to the government a true idea of the actual needs and desires of the country. If only this is done, the work of the mining exchange and convention will not have been in vain.

THE MINERAL EXHIBIT.

No place attracts so much attention in connection with the convention as the offices of the mining exchange, wherein the samples of ore are on exhibition; and nothing perhaps is better calculated to impress a visitor with an idea of the wealth and extent of our mineral resources as is an inspection of these samples. The locations represented are altogether too numerous to mention here, and many of the names would sound strangely unfamiliar to those who have an idea that the mining possibilities of the country begin with the Sultana and end with the Mikado. Among some of the best known properties from which samples have been submitted for inspection are the Master Jack, Cornucopia, Mikado, La Mascotte, Triumph, HP301, Scramble, Foley, Bad Hammond-Folger Dyke, Randolph, Royal, and a large number of others, covering the whole district. The room is in charge of the very busy secretary, Mr. Morris, and he is ably assisted in receiving visitors and giving information by Messrs. Evans and Burritt. The Cornucopia and Mascotte specimens are rich in visible gold, and as a consequence are attracting considerable attention.

MR. PURCHASE'S PAPER.

Rat Portage June 4.—Speaking on "The Economics of Gold Mining" at the big convention here last night, T. A. B. Purchase, of South Africa, said he must deal with the subject generally and he would endeavor to point out where, in his opinion, certain uneconomical conditions exist, which he felt sure would result in unnecessary loss if permitted to continue and might in addition be the means of creating serious trouble in the future, which could easily be avoided. Mr. Purchase then proceeded to show briefly but effectively that mining was a business by itself and could not be carried on successfully as a side issue. He said, "I think we shall find that no matter how much, or how little, speculation precedes the real work of mining, or follows in its wake, a result of good returns, or of sensational "strikes," sooner or later, generally sooner than most people anticipate, the speculative stage has perforce to be abandoned and an answer found to that question which we investors invariably ask, "Can gold be produced at a profit?" It was far better that the country should find an answer to this question at once. He had no doubt of the possibility of showing figures that would sufficiently demonstrate that low grade mines could be cheaply handled and the low grade basis was the safest to adopt. In order to obtain figures for such demonstration, it was necessary to make an unbiassed examination of various factors which make up the sum total of working conditions here.

The first effect of this study should be in the direction of development operations in a more systematic and therefore, more economical manner. This would check misconceptions, which are calculated to injure the pockets of those concerned, and to recoil upon the district, should it transpire that future prospects must be viewed in the sight of what has already been proven. Generalization in the matter of working costs will give rise to errors, unless confined within legitimate bounds. "The reduction of expenses is of such vital importance that too much prominence cannot be given to it. Nothing offers such inducements for the introduction of capital as cheap working costs." Mr. Purchase further said that the machinery he had seen in operation in the district was not of an economical kind. This was no doubt due in some instances to lack of capital, but this mistake should be guarded against as much as possible, and it was most important to ascertain, first, whether the properties would justify putting in an expensive plant. No error was more fatal than erecting a mill before the ore is in sight to keep it going. When this was done, it was often found afterwards that the machinery was unnecessary, or unsuitable, and it always gave the mine a bad name if a mill ceased mining from whatever cause. The chief points were the remarks made upon the fuel used. He had been informed that wood was plentiful and cheap, but his observations did not support this statement Lumbering had seriously depleted the supply on the Lake of the Woods Tamarac, which was best for fuel, was also best for timbering mines, and if the development was as rapid as they hoped, there would be none too much for that purpose. He had endeavored to put together some figures as to the cost, and would give the result.

An acre of timber, on a liberal average, produces 25 cords. A ten-stamp mill, with crusher vanners, air compressor, etc will consume 14 cords of wood per day. Ten such mills going continuously would mean the clearing 1,700 acres per year, and if, as they all hoped, batteries were to be erected at a constantly increasing rate, the exhaustion at the above ratio might soon bring them in sight of wood at such a price as would turn this lumber question into a knotty problem Mr. Purchase also objected to wood as bulky and a poor steam producer owing to much of it in the district being young and sappy. The usual calculation was that two cords of dry wood are equal to a ton of coal, but the speaker was sure that from the quality of coal supplied to the miners, four cords to a ton of coal would be a more correct figure. The next question was a substitute that would be less subject to depletion, give more uniform generation, of steam and require less handling. Electricity from the Keewatin power was the first thought, but Mr. Purchase did not think they had as yet sufficient information as to when the power would be available, how far it could be transmitted without loss, etc. He had no doubt it would be an immense boon in the future to all within the range of practical transmission. In the meantime, he thought it would be well to look into the question of coal as fuel. Wood costs $2.25 per cord; add 15 cents for kindling, the total is $2.40. Take coal at $8 per ton at the outside figure. It is $6 at Rat Portage, and add $2 for transport to the mines, including interest on capital in transport service, storage and steam hoists. On ratio of 4 cords equally 1 ton, a plant consuming 14 cords of wood in 24 hours, would consume 3 1-2 tons of coal in the same time. Wood would cost $33.60, coal $28, a saving of $5 — twenty-eight cents on each ton of ore milled. If they admitted the figures, coal answered the question of cost. It would occupy much less room in storing, but its great advantage was the supply. While wood must inevitably get dearer, coal was likely to continue at about the same figure. He hoped that they would not think him hypercritical. He had dealt with the subject with the honest desire to influence intelligence in mining matters. In conclusion, Mr. Purchase expressed his cordial good wishes for the future success of the district.

DISCUSSION OF PAPER.

At the close of Mr. Purchase's paper President Drewry called for discussion. The first to speak was E. P. Rathbone. He heartily indorsed everything that had been said by Mr. Purchase, and especially mentioned the management of mining on business principles. Mr. Rathbone further said he thought the people of the district should do more to help themselves, and that the governments, both Dominion and Ontario, should make a great effort to develop the country by booming railways, especially the one through to Rainy Lake, making locks at Ash rapids and building good wagon roads. It was useless for them to expect outside capital to come in and do everything for them. They must help themselves, and see to it that their government helped them.