

subscribers to the capital stock of the Gold Mining Association of Canada, but this has been emphatically denied.

The mines in Beauce, now being so successfully operated by Messrs. Allan & Humphrey are situated many miles from this company's property, and are in no way connected with it. We mention this so as to correct an erroneous impression that these properties and their owners are closely allied.

### Provincial Rights to the Minerals.

Some disquietude has for a long time existed among British Columbians from the fact that a large portion of the mineral deposits in that Province comes within the railway belt, and it has been feared that the Canadian Pacific Railway Company would gobble it up. In commenting on the subject the *Victoria British Colonist* remarks:—

"The public may rest secure in the assurance that the rights of the province to the minerals within the railway belt will be conserved by the Government. It is now no secret that the Dominion Government have laid claim to the rich deposits of future wealth and greatness comprised within the belt. By the 109th section of the British North America Act, all lands, mines, minerals and royalties belonging to the several provinces are secured to them in the following terms:

"109. All lands, mines, minerals and royalties, belonging to the several Provinces of Canada, Nova Scotia and New Brunswick at the Union, and all sums then due or payable for such lands, mines, minerals or royalties, shall belong to the several provinces of Ontario, Quebec, Nova Scotia and New Brunswick, in which the same are situate or arise, subject to any trusts existing in respect thereof, and to any interest other than that of the province in the same.

"And section 11 of the terms of union the province agrees 'to convey to the Government, in trust, to be appropriated in such manner as the Dominion Government may deem advisable in furtherance of the construction of the said railway, a similar extent of public lands along the line of railway \* \* \* as may be appropriated for the same purpose by the Dominion Government from the public lands in the North-West Territories and the Province of Manitoba.' There is nothing in the extract quoted conveying the mines and minerals which by section 109 of the B. N. A. Act are specially reserved for the use and enjoyment of the several provinces. To our mind the title of the province seems clear, and the Government would fail in their duty should they neglect to enforce the rights of the province."

In connection with this difficulty

the Gold Commissioner at Shuswap, B.C., has published the following:

"Public notice is hereby given that the Provincial Government of British Columbia have not recognized the claims advanced by the Dominion Government of Canada to the precious metals within the 20 mile belt on each side of the line of the Canadian Pacific Railway through British Columbia. The provision of the mining laws now in force through the Province of British Columbia, will be enforced within the railway belt, as well as in all other places in this district, by the undersigned until such time as official instructions are received to the contrary. All persons interested must govern themselves accordingly.

(Sd) A. W. VOWELL,  
Stipendiary Magistrate  
and Gold Comm'r.  
Shuswap, B.C., Sept. '84."

### BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The great event of the year 1884 in the Dominion of Canada has been the 54th annual meeting, held in Montreal, of the British Association for the Advancement of Science, at which 1,500 members, home and foreign, were in attendance. The sessions were devoted to the reading of papers on scientific subjects and to discussions amongst the scientists present. The meeting was divided into sections as follows:

- A—Mathematical and physical science.
- B—Chemical science.
- C—Geology.
- D—Biology.
- E—Geography.
- F—Economic science and statistics.
- G—Mechanical science.
- H—Anthropology.

As Professor C. D. Wilber, who was present at the meeting, has stated, "these are convenient divisions of the whole field of human investigation. The practical intent of the British Association is simply to 'post the books' of the toilers in these fruitful fields during the past year, and with auguries and divinations cast the horoscope of discovery and invention for the coming year."

The importance to Canada of this meeting of the British Association for the Advancement of Science cannot be overestimated when it has been the means of bringing to the country a thousand scientists, among whom were numbered many of England's most learned men. Since the close of the meeting in Montreal the members of the association have been travelling in detachments over the length and breadth of the Dominion, and will return to their respective homes more familiar with Canada and possessed of more reliable information as to her natural resources than they could have gathered in

years through any other channel than personal observation. A very large number of the visitors have been to the Rocky Mountains, and the unanimous opinion they have formed of the North-West Territories is a most flattering one, and will doubtless be the means of advertising the country as a suitable and attractive home for British and European emigrants. Of our mineral resources time did not admit of such a thorough investigation as could have been wished; nevertheless many of the scientists attached to the geological section found an opportunity to visit some of our mines in operation, and in the vicinity of Ottawa the phosphate mines appeared to possess an especial interest for those who examined them. At the meeting in Montreal, in the course of a review of our numerous rich mineral indications, a serious defect was brought to light by one of the leading geologists and mining authorities in England—namely, that Canada, of all the colonies, is the most destitute of information concerning mineral reports and statistics available for reference. The fact was brought out in the discussion that followed Mr. W. Hamilton Merritt's paper on the "Occurrence, locations and output of the economic minerals of Canada." In the course of the paper the lack of reliable statistics on the above was alluded to, as there exists no department for the collection of reports and statistics on mining under the Dominion Government. In the discussion following, the president of the section spoke very strongly on the necessity of mining encouragement and successful development by the existence of some such department. Mr. Clement Le Neve Foster, F.G.S., of Wales, stated that it was first at a meeting of the British Association and in this section, that the collection of mining statistics in England was suggested, and that he considered the visit of the Association to Canada would not be thrown away if it had for its outcome no other result than the establishment in Canada of some system for collecting reports and statistics relating to mining and mineral development. Mr. Foster considered the Government would do well to take some steps in the matter, and suggested the English system as a basis. The same gentleman also brought before the section the unpleasant fact that the Committee of Inspectors of Mines, in preparing last year for the Home Office, a report of the mineral statistics of the British colonies, when they came to Canada, experienced great difficulty in securing information. All sorts of sources had to be resorted to, and the result was very imperfect and unsatisfactory. This being the state of things, it would appear that, in the interest of what should be one of our greatest natural sources of wealth, the advisability of taking some steps in the matter cannot be questioned.

Much is done for agriculture and

forestry, and it is evident that in our country, so full of valuable mineral indications, from Nova Scotia to British Columbia, more attention should be given to mining.

### MINERAL GEMS.

Mr. Willimott, a member of the Geological Survey, has had a most successful season in his researches through Central Canada for mineral specimens. He has succeeded in adding to the collection in the Museum many gems in the form of crystals, sphenes and zircons, and some of the garnets he has recently collected excel in beauty anything ever before found in Canada. Mr. Willimott is a painstaking and efficient officer, and is to be congratulated on the present appearance of the Museum. The classification and arrangement of the specimens have had his personal supervision, and the result is evidence of his skill in such work.

### Ancient Method of Washing Gold.

The gypsies of the Bannat, in Austro-Hungary, in washing the gold from the sands of the rivers and plains, still use a very antiquated system, out of which, no doubt, the modern systems have grown. It is practised now by the gypsies, as it was by the Romans in the same country. It consists in nothing more than pouring the sand, mixed with water, over an inclined plane, the heavier particles of the gold remaining upon the surface, while the light impurities are washed away. Sometimes the inclined plane is covered with woollen cloth, to which the gold adheres; wanting the cloth, the Gypsies now and then use for the same purpose the more ancient substitute of a fleece. The manner of collecting gold dust on sheep's fleeces, upon inclined planes, is represented in the curious old works of Agricola.

In the rivers of Colchis the custom is still retained of placing sheep skins in the beds of the Phasa and other auriferous streams to collect particles of gold; hence, the dedication of such fleeces to the gods, and the fabulous history of the Argonauts, as far as it related to the Golden Fleece.

The more common manipulation among the gypsies of Bannat, as far as the gold washing is concerned, is performed by means of a plank of lime tree, six feet long and an inch and a half thick. At the upper extremity is a small trough, and across the board are about a dozen grooves or furrows cut in the wood. The plank is set at an angle of forty-five degrees. The sand is put into the trough at the upper end, and thence, by plenty of water, washed down the sloping board. The gold dust falls into the grooves, whence it is scraped or brushed off. It might be supposed that a great