This Mr. Cirkel has failed to do. Not only has he failed to recognize his responsibilities, but he has used, and has permitted others to use, his official status for precisely those purposes that are most opposed to the usefulness of the Department of Mines and to the welfare of the mining industry as a whole. In lending his name, officially, to Amalgamated Asbestos, Mr. Cirkel ceased at once to merit the confidence of the Department that employs him.

It is not our intention to animadvert upon the moral phases of this incident. It suffices to say that Mr. Cirkel has been lamentably indiscreet, officially and professionally. It remains for the Minister of the Department of Mines to clear up a situation that is false and unsavoury. We have every confidence that he will do this right speedily.

THE FORMATION OF COAL.

Two remarkable papers appear in the May bulletin of the Canadian Mining Institute. Both were read at the last Annual Meeting in Montreal.

At that meeting there was practically no opportunity for giving these papers the discussion that they fully deserved. We hope that our readers will take advantage of our columns to effect a thorough exchange of views on the vital phases touched by these two contributions to modern scientific thought.

"Some Possible Chemical Changes in the Formation of Coal" is the title of Mr. D. B. Dowling's essay. The second paper, "Petroleums and Coals," which has already been reproduced in the Canadian Mining Journal, is from the pen of Mr. Eugene Coste. We shall glance at Mr. Dowling's paper first, and then allude to a few points that connect the two.

To the application of pressure and heat upon vegetable remains we owe the substances called coal. By a series of ingeniously plotted diagrams, Mr. Dowling illustrates the successive effects, first, of the charring of wood; second, of the gradual extraction of hydrocarbon compounds from peat; third, of the extraction of carbon dioxide; fourth, of the extraction of carbon dioxide and methane in equal parts and in various combinations with ammonium; and, lastly, of the extraction of water and carbon dioxide, and of water alone.

Of all the results arrived at, that due to the ex-extracting from peat of seven to nine parts of water and one part of carbon dioxide, appears to duplicate most closely the natural process of coal-making. To quote Mr. Dowling: "That the greater amount of the change in formation of our coals is due to the slow process of water extraction, seems evident from the fact that the ash in the coals is not increased to a very much greater extent over that for vegetable matter than this theory would allow; and, secondly, that very few geologists will allow that the vegetable remains associated with the coals have lost a great percentage of their carbon."

Mr. Dowling's deductions throw a clear side-light upon Mr. Coste's argument for the inorganic origin of petroleum. Mr. Coste contends that the geological history of coal is known sufficiently well to leave no room for belief in the organic origin of liquid hydrocarbons. The successive steps in the formation of coal from vegetable matter have been traced and recorded. The distillation of liquid hydrocarbons from these coals implies a large loss of carbon. All available evidence proves that this is not the case. Mr. Dowling demonstrates—for according to our present knowledge his paper amounts to a demonstration—that the loss of carbon in nature's laboratory is very slight.

This is one item on the credit side of Mr. Coste's ledger. It is a significant item, as it comes from a totally independent source.

PROSPECTING AND HOLIDAYS.

No country in the wide world affords so many clean opportunities for out-of-door holidays as does Canada. It is to be regretted that as a nation we do not use these opportunities to better advantage.

In many respects our holiday making is not only unproductive of good, but is actually a source of harmful waste. Our fatuous popular resorts and the gladiatorial games that we have copied largely from the United States, do not make for wholesome recreation.

Nothing is more noticeable than the energy with which transportation systems encourage the holiday instinct. Throughout the summer every week end is marked by the migration of hundreds and thousands of people from the crowded centres of population to suburban places of amusement, more correctly described as places of excitement. In this manner a truly enormous expenditure of money and time is incurred, mostly unprofitable, directly and indirectly, so far as the people themselves are concerned.

Suppose now that a fraction of the attention that is centred upon highly artificial forms of entertainment were diverted to the object of introducing Canadians to their unique heritage—untouched expanses of forest and prairie, threaded everywhere by noble waterways and gemmed with innumerable lakes. In other words, suppose that there came a national awakening to the need of learning more about the meaning of our undeveloped resources.

Prospecting is popularly supposed to consist in the search for the ores of valuable metals. Prospecting should be more than this. It should be the vocation of thousands of Canadian youth. Mineral veins are by no means the only or necessarily the most remunerative discoveries that the prospector may hope for. Clay deposits, marl beds, timber, farm lands, these are but a few of the objects for which the prospector may