Government investigated and reported upon the purity of the articles put upon the market, a great improvement has been observed. During the current year 150 samples, taken at random from retailers all over the Dominion, were subjected to analysis. Only one adulterated lot was found. The manufacturer of this lot was, we regret to say, a prominent Canadian concern. The sample showed incomplete solubility in ammonia. Adulterants were found in large amounts. Barytes, which would lend weight to the article, was present to the extent of 26.87 per cent., and acetic anhydride to 6.75 per cent. The pure samples were completely soluble in ammonia, and contained from 31 to 33.5 per cent. cupric oxide, and from 51.5 to 59 per cent. arsenious acid.

These figures are worth noting. Arsenic, which soon will become a staple metallurgical product in Canada, is the principal constituent of Paris green, and Paris green is itself an important article of commerce. We notice the names of four foreign manufacturers in the Bulletin issued by the laboratory of the Inland Revenue Department. It should be easily possible for Canadian manufacturers to meet the whole domestic demand.

DISCOVERY AND LOCATION.

The recent pronouncement of a United States authority to the effect that rigid requirements as to valuable discovery before location of claims would kill prospecting, has much to support it.

That discovery of valuable mineral in place is not an essential of legitimate location is tacitly acknowledged in all foreign mining countries. When the law demands such discovery, its requirements are either ignored or interpreted leniently. In several of the mining States local statutes allow a fixed period of time for marking the location after discovery. In the absence of statutory regulations it is usually understood that the prospector has a reasonable time in which to mark his location.

The tendency of mining legislation in this respect in the United States and elsewhere is strongly in favor of the man who is doing the work. Thus a prospector who has sunk a shaft, but who has made no discovery, is protected until he has made discovery. Upon discovery of valuable mineral he is allowed to make location relating back to the time of beginning work.

In this manner development is not hindered, nor false swearing encouraged.

CHINA'S NEEDS.

Reports from Shanghai indicate that China is soon to purchase large quantities of silver and copper. The Imperial Government is delaying purchase until the appearance of the report of an Imperial Commission appointed to reorganize and consolidate the Chinese coinage system. The design of both silver and copper coins is to be changed, the weights are to be increased and standardized, and the issue largely increased. The Imperial Government, after taking over all the provincial mints, will operate the plants at full capacity for some time.

There is now a pronounced scarcity of silver and copper coins throughout the vast and populous empire. An adequate expansion of currency will mean unusual demands upon the American metal producers. There is, then, sound cause for expecting a rise in the price of both silver and copper.

BREATHING APPARATUS.

The wisdom of providing collieries with breathing apparatus was illustrated lately in Nova Scotia. One section of a colliery operated by the Nova Scotia Steel and Coal Company took fire through the carelessness of employees. It was at first thought that flooding would have to be resorted to. But the Dominion Coal Company generously volunteered the services of men trained in the use of the Draeger apparatus. Equipped with these respiratory devices, the rescue party fought and conquered the fire at close range.

This is but one instance of the "insurance" value of modern breathing devices. Fires that, if left to run their course, would cause immense loss, can be coped with successfully by men instructed in the use of breathing helmets. For life-saving, after explosions, they are an absolute necessity. Their introduction into every coal mining district should be made compulsory.

ABITIBI LAKE DISTRICT.

Lying between the 48th and 49th parallels, the district surrounding Lake Abitibi is popularly supposed to be a barren, rocky, semi-arctic wilderness. Professor M. B. Baker, who has spent a few summers in the Abitibi country, contributes a letter to this issue of the Canadian Mining Journal. The statement that tomatoes can be grown and ripened so far north would be received with incredulity were the evidence not unimpeachable. This is but one item. Professor Baker's letter will be read with deep interest. He emphasizes the agricultural value of this section of New Ontario.

EDITORIAL NOTES.

We would especially draw attention to Mr. T. A. Rickard's able article on "Dredging in the Yukon," which appears elsewhere in this issue. Mr. Rickard is a mining engineer of the highest standing. He is editor of the Mining and Scientific Press of San Francisco, and he went to the Yukon this summer to study mining conditions there at first hand. In our issue of the 15th of January last, we had occasion to point out the inaccuracies of some statements made by a contributor to the Engineering and Mining Journal, with the deliber-