

THE DIAMOND PROSPECTING DRILL IN MINING
CANADIAN PHOSPHATE AND OTHER
IRREGULAR DEPOSITS.

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It is generally held that the diamond drill is not of the same utility in prospecting and determining the position of irregular deposits as it is in minerals of more regular occurrence.

This is more from the fact of the great results achieved in determining, accurately the area, extent and depth of regular deposits scientifically located, than failure to discover the position of acknowledged uncertain deposits.

However great the service rendered with regard to regular deposits, it will be remembered that the value of the diamond drill as a prospecting tool became first properly appreciated from the remarkable discoveries made through its use in the great hematite deposits of North Lancashire and Cumberland, England.

Deposits, which from their apparent fitfulness and irregularity had been worked only on a small scale, and as mere surface pockets occurring here and there over a considerable area of ground, and abandoned when apparently exhausted, until the boring operations of a few enterprising proprietors taught the lesson that, although the character of the ore seemed irregular, similar deposits occurred at much greater depths, and of much greater magnitude, the irregularity, scientifically considered, being but another form of regularity and the peculiar order in which these deposits were to be looked for.

Subsequently, and chiefly owing to the use of the prospecting drill, these mines have been worked to a very great depth, and much more extensively, turning out annually many hundreds of thousands of tons.

And the great number of successful results of recent years in such deposits, in all parts of the world, appears to indicate that the diamond drill is of even greater utility, in prospecting these than in the more regular minerals referred to.

The very irregularity which makes some kinds of mining so uncertain shows the necessity of traversing and searching the zone of occurrence in many directions by some method much more rapid and less