

been so wisely and carefully preserved, the workings are not only made with safety, but also with a probability of success which they would not otherwise have. On the other hand, without such records, capital is uselessly expended, time wasted, and mayhap many valuable lives lost, by a sudden irruption of water or gas from the old workings. This is no fanciful picture; instances are not wanting in confirmation of its truthfulness, and I propose to relate the circumstances in connection with a few in illustration of the danger incurred by the neglect of some system such as I am now advocating.

The value of mining records is of a two-fold character, viz: their practical importance and their aid to scientific knowledge, or in other words, their importance with reference to their utility to the mining adventurer, and their value as a means of extending our geological knowledge. I propose to show how they may thus be beneficial; and I would remark that the time cannot but be considered fitting for drawing attention to the necessity of some system by which mining operations may not only be regulated, but registered, when we take into consideration the extent of these operations even at present. Until the last few years the number of coal mines in Nova Scotia was limited to those possessed by the General Mining Association, and the gold and other mines had no existence. Now there are upwards of 60 gold mines being actively prosecuted, 3000 tons of bar iron of a very superior quality have been produced during the last two years, 27 collieries have yielded in the same period 1,397,341 tons of coal, and several others are being rapidly brought into a position to augment this produce.

In a country like England, where mining has been practised for centuries, and the appliances of science are of comparatively recent adoption, we need not wonder that difficulties which are considered trivial in the present day should at one time have been thought to be insurmountable; and that mines were abandoned which have of late years been re-opened and profitably worked. Thus, Alston Moor, a large and valuable lead mining district, in the North of England, was considered to be exhausted upwards of 200 years ago, whereas for some time it has been a source of great wealth to the fortunate possessors of the mineral rights. Too generally no account, not even a sketch of the old workings, has been kept, and the only record of them is to be found in the statements handed down from sire to son with the ambiguity usual in such cases. It is not surprising that operations conducted under such circumstan-