

these subjects special study. Is there any more pressing or important question for the Educationist and Statesmen of Ontario than the mining question?

That there is need for such instruction is shown by the fact that not many years ago one in every eight miners was killed the causes being explosions, flooding of mines, defective machinery used in working the mines, or unskilled management of the same.

The coal traders of Great Britain in meeting assembled by request of a Parliamentary committee charged with enquiring into the causes of death to so many miners, declared that the high death rate was caused largely by the ignorance of the miners and their overseers, and recommended that mine owners should see that instructions should be given to the miners by which it was believed that the number of deaths might be greatly reduced. An eminent Government Mine Inspector stated in this connection that "there would be no difficulty in spreading amongst the miners the inclination and the means of becoming better acquainted with the operations upon which their lives depend," and that men might easily be trained as overseers and mine bailiffs, to the great advantage of the laborer and mine owner.

The defects of our present system have been pointed out by many United States authorities on educational matters as existing there also. Charles Francis Adams Jr., speaking of Massachusetts public schools which cost \$4,000,000 a year says, "The imitative or memorizing faculties only are cultivated and little or no attention is paid to the thinking or reflective powers, indeed it may be said that a child of any originality or individual characteristics is out of place in the public school. Wendall Phillips says of that system. "It stops too short and in justice to boys and girls and society it should see to it that those whose life is to be one of manual labor should be better trained for it."

The Russians have established and for many years successfully tested a system of manual training which is the pioneer of this educational reform. It is but the amplification of the Kindergarten system. It does not propose to teach the practical exercise of particular arts but to train the eye and hand to the execution of designs and the use of tools, so that the pupil may take up readily whatever art he may afterwards choose to follow. It has been copied in the United States in several schools in large cities, notably Boston, Chicago and St Louis. The rapidity with which this movement is being adopted is shown by the fact that in Sweden it was practiced in only 80 schools in 1876, and in 1882 in 500 schools; in Finland it is practised in all the schools. The French law of 1882 makes it obligatory.

There has, I understand, been much said about tariffs, bonuses, drawbacks and other contrivances for improving the mining and manufacturing interests of the country. These may be very useful in their way if the party in and the party out of power can be got to agree as to them and the time and extent of their application. Have we given enough attention to the fact that knowledge, skill, precision and ex-