

He has, moreover, the power to wield an influence over an audience superior to the majority of speakers. Let me refer you to the lecture before mentioned, such was the effect of it, that, in a very short time one hundred and fifty pupils joined the Classes, which, as you have reported from time to time, proved a great success, and that too in a city where the attempt to establish evening schools *free* had been given up as a total failure.

The first prerequisite in any undertaking is to begin right, how many Mechanics' Institutes have failed in consequence of beginning wrong? And how many now exist, only to drag out a miserable, profitless, lifeless existence because they either can not, or will not, arouse themselves to begin aright now. Permit me to suggest that, if Mr. Lewis could be induced to make a tour of the Province, and arrangements could be made for him to lecture before the various Institutes, with a view of putting them in the right track on the formation of classes, or of libraries, or in fact of Institutes, I have no doubt it would prove of lasting benefit to all.

Of course the Lecture season will not begin until about November, but now is the time to make arrangements.

Very truly yours,  
MEMBER,

May 20, 1863.

To the Editor of the Journal of the Board of Arts and Manufactures.

SIR, — At the Annual Meeting of the Toronto Mechanics' Institute, held on Monday evening last, a letter was read by the Secretary, from the Montreal Mechanics' Institute, to the effect that that body had under consideration the propriety of an excursion to Toronto sometime during the ensuing summer, probably in the month of July. The writer from the Montreal Institute, as I understood it, also suggested the propriety of the Toronto Institute getting up an excursion to the Falls at the same time, from which a profit might be made, inasmuch as the great majority of the Montrealers would naturally feel anxious to visit the great Cataract. Now, sir, I think it could be easily shown that the idea is both desirable and practicable, but as that is not my object in writing to you, and as it has been decided in the meantime to endeavour to entertain them in another way, let me throw out an idea in connection therewith. I have for a long time entertained the impression, that if the leading spirits of the various Institutes of the Upper Province could by any possibility be brought together, in some central locality, for the purpose of discussing matters of interest to all, for counsel, for encouragement and for united action, much, very much good might be the result. Here then is the opportunity. The Toronto Institute has agreed to entertain the excursionists from the Montreal Institute at a conversazione in their

beautiful Music Hall, why not entertain delegates from all the Institutes at the same time? What is to hinder? Could any harm come of it? On the contrary, is it not more than probable that much good would result to all concerned?

I have always looked upon the Board of Arts and Manufactures as the centre around which the Institutes should cluster as the members of one body to its head, and submit this matter to you, as such, for your consideration.

S.

## Patent Laws and Inventions.

### ABRIDGED SPECIFICATIONS OF ENGLISH PATENTS.

2400. GEORGE DYSON. *Improvements in machinery for finishing and polishing circular metal rods, bars, and shafts: applicable also to the manufacture of metal tubes and pipes.* Dated August 29, 1862.

This machinery consists of a pair of rolls, set slightly at an incline, and each inclined in an opposite direction to each other, both rolls being driven in the same direction. The rod, bar, or shaft is introduced between guides and between the ends of the rolls, and at right angles or nearly so to the direction in which the rolls are driven; then upon the rolls being made to rotate through toothed gear, the rod, bar, or shaft is drawn between the rolls in a direction at right angles or nearly so to the circumference thereof, and is thereby rendered cylindrical, smooth, and polished.

2446. W. CLARK. *Improvement in the manufacture of colouring matters.* (A communication.) Dated September 4, 1862.

For the purposes of this invention the inventor takes equal parts of aniline, red and crystallized toluidine, and heats them for five or six hours at a temperature not exceeding 324 deg. of Fahrenheit, and of not less than 270 deg., after which time a paste of a beautiful blue colour is produced, of a slightly violet hue. This raw paste contains besides the blue colouring matter traces of red which has not become changed, and also an excess of toluidine. In order to purify it, he boils the paste with dilute sulphuric or muriatic acids which form salts very soluble in toluidine and red aniline, without injuring the blue. A mixture of one part of common muriatic acid with eight or ten parts of water is preferable for effecting this purification. The matters are boiled in the diluted acid until there is no longer any trace of red colour in the washing waters. The insoluble residue will be pure blue, which may be used for dyeing and printing.

2532. E. BALURFORTH. *Improvements in machinery employed in finishing textile fabrics, commonly called "raising gigs."* Dated September 15, 1862.

This invention consists in the application to raising gigs of a cylindrical brush placed in contact with the tussels on the swift, to which rotary motion is given at a greater surface speed than the surface speed of the said swift, and in the direction