*Deux Mondes* computes the average yearly loss of life on railway journeys as 1 in 7,000,000 travelers, whereas 70,000 in 30,000,000 travelers would be no more than the fair proportion to the annual loss of life in former days among travelers by land and sea.

### The Reciprocity Treaty.

The Reciprocity Treaty came into operation in Canada in October, 1854; but in the States not till the spring of '55, in consequence of the absence of legislative authority. The following table is a statement of the whole trade between the two countries for the ten years, during the continuance of the treaty, from 1854 to 1863 inclusive, showing the excess of imports and exports, the total of free goods, including those under the Reciprocity Treaty as well as under former treaties, and the amount of value under Reciprocity alone:

| | THE WHOLE TRADE. | Exports to United States. | Imports from United States. | Excess of Imports over Exports. | Total free goods Imported. | Imports under the Recip. Treaty. |
|---|---|---|---|---|---|---|
| 1854 | $24,182,099 | $8,649,002 | $15,533,097 | $6,884,095 | $2,083,756 | $681,643 |
| 1855 | 37,565,952 | 16,737,276 | 20,828,676 | 4,091,400 | 9,879,204 | 1,725,572 |
| 1856 | 40,694,262 | 17,979,753 | 22,704,509 | 4,724,756 | 9,983,586 | 8,080,820 |
| 1857 | 33,431,087 | 13,206,186 | 20,224,651 | 7,018,215 | 10,258,220 | 8,640,044 |
| 1858 | 27,565,659 | 11,930,094 | 15,635,565 | 3,705,471 | 7,161,958 | 5,564,615 |
| 1859 | 31,515,230 | 13,922,314 | 17,592,916 | 3,670,602 | 8,556,545 | 7,106,116 |
| 1860 | 35,750,988 | 18,427,968 | 17,273,020 | Increase ..... | 8,740,485 | 7,069,098 |
| 1861 | 35,455,815 | 14,386,427 | 21,069,388 | 6,682,961 | 11,869,447 | 9,930,937 |
| 1862 | 40,236,887 | 15,063,730 | 25,173,137 | 10,109,427 | 16,514,077 | 14,430,626 |
| 1863 | 48,159,794 | 20,050,432 | 28,109,362 | 3,058,930 | 19,184,966 | 12,339,367 |
| | $349,497,773 | $150,358,432 | $199,144,341 | $49,945,857 | $103,622,244 | $18,620,838 |

The whole trade between the United States and Canada, for the ten years, amounted to three hundred and forty-nine millions, to which there is to be added sundry small exports along the borders of both countries which, paying no duty, are not recognized, and remain unrecorded—an amount which no doubt would swell the total to over four hundred millions, or a yearly average of forty millions.—*Quebec Chronicle.*

# Miscellaneous.

### Death in the Laboratory.

At a time like the present, when chemistry occupies largely the attention of professional men and amateurs, and enters not only into the fields of art and science, but the arena of popular amusement, it is essential to caution inexperienced chemical operators against the practical dangers to which they expose themselves and others by inattention to scientific rules and natural laws, and by the use of imperfect apparatuses. It is quite certain that no amount of advice, however energetically given, will deter men, in these days of sensation and excitement, from dabbling in matters which they do not understand, or from risking their lives with a view to putting money into their pockets. The public will have novelties and stimulants, and they care little about the risks run by caterers to their unhealthy appetites. If we cannot cure the public, we may warn their servants. Only last week two sudden and violent deaths occurred in Manchester through the explosion of a gas retort placed on the fire in a kitchen, forming an improvised laboratory. A photographer named Crowther, was engaged in the production of oxygen gas, when the apparatus burst, and blew himself and his infant child into eternity. His wife narrowly escaped the same fate; and it is not very long since two young women at Leeds, who had been left by a *pseudo* chemist to watch a similar process, were killed on the spot by a like catastrophe. These, it will be admitted, are exemplifications of the perils to which chemical manipulators expose themselves and their assistants.

The use of oxygen gas was never more prevalent than at present. In the exhibition of the patent ghost of Messrs. Pepper and Dircks, it is an indispensible adjunct, and it has become a substitute, in almost all cases, for the coloured fires so long used for the production of supernatural "effects" at our theatres. Again, the oxy-hydrogen light, which depends for its extreme brilliancy upon oxygen, is extensively employed in the illustration of scientific lectures and for the purposes of popular amusement. The coloured lights, it need not be said, are produced by the transmission of the rays of oxygen in combustion through heated lime and stained glass, and were first used by Professor Ansell, at the Panopticon, some years since. By the introduction of these and similar scientific improvements, oxygen has become almost a necessity, although its expansive and explosive properties make it as dangerous to deal with as high pressure steam or gunpowder, that is, in the hands of the tyro in chemistry.

The accidents of Saturday night last arose principally from the palpable ignorance or want of observation of the unfortunate photographer. In the elimination of oxygen it is of the greatest importance that the closest attention should be paid to the evolvement of the gas, and, when ebullition ceases, that the heat which causes it should also cease to play upon the retort. These points poor Crowther appears to have neglected entirely; hence, the super-heating and consequent expansion of the gas to the bursting strain. The oxygen most