

des Mines, L'Ecole Centrale des Arts et Manufactures, and Le Conservatoire des Arts et Metiers, of France, the Polytechnic Academies of Germany, the excellent Mining Schools of Sweden and Austria, and the counterparts of these in England, at South Kensington, Manchester, Leeds, and Birmingham. "The chemist has become an almost indispensable adjunct to all well-ordered establishments; and he has succeeded in substituting for the old rule-of-thumb practice of former days, the more precise and definite results that his science enables him to furnish."

THE AMENDED LAND REGULATIONS.

The recent conference at Ottawa, between representatives of the Canada Pacific Railway Syndicate and the Dominion Government resulted in certain arrangements with regard to the disposal of the public lands in the North West, which have since been made known by the promulgation of the new regulations, dated May 25th, 1881. According to the regulations previously in force, namely, those of the 14th Oct., 1879, the various railway belts comprehended all the lands embraced in a tract of territory extending 110 miles on each side of the assumed route of the Pacific Railway, and which actually included the whole of the surveyed lands then existing in Manitoba and the North West. These regulations, it was well understood, were of a provisional nature. Even so recently as eighteen months ago it was very commonly thought that the great bulk of the valuable lands of the North West was located within the area of the Red River Valley. It remained for the explorations of Professor Macoun and other observers to be published in order to inform the public mind as to the wide extent of country that existed, equally well adapted for settlement and cultivation. That the capitalists who have undertaken to build the Pacific Railway should be willing to accept a reduction of the width of the belt out of which they are to receive lands in the Red River region, from 220 to 48 miles appears to indicate belief in the existence of equally good lands further West, and as an evidence of their desire to build such branches through fertile districts more distant.

We find, upon examining these new regulations, that the settler who hereafter takes up a homestead and a pre-emption claim within the present railway belt, stands in precisely the same position as he who secured land in a similar manner previous to the 25th May, 1881. That is to say, he is still entitled to take up 160 acres as a free grant, upon conditions of actual occupation and reasonable improvement, compliance with which requirements entitles him to a patent from the Crown at the expiration of three years, upon making the necessary proofs before

a proper officer of the Dominion Lands Department. Such a settler, also, is entitled to be entered for an additional tract of 160 acres (called a pre-emption) upon the following very liberal conditions. He may occupy and enjoy this plot of land also without payment until the time when he is enabled to claim the patent for his homestead. He is then required to pay for the pre-emption, at the rate of \$2.50 per acre upon the following terms:—Four-tenths, with 6 per cent. interest, during the three past years of free occupation, and the remaining six-tenths by six equal annual instalments, with a like rate of interest. These are the considerate terms upon which the government offers land of unsurpassed fertility to immigrants from abroad, or settlers from the older Provinces, within twenty-four miles of a great national highway. The practical purport of which is that any such can acquire a farm of 320 acres in near proximity to transportation conveniences at a total cost of \$1.25 per acre for the whole, of which no immediate payment is demanded for three years, the balance on terms very easy for the occupant. Half of the lands disposable within the railway belt is to be placed in the market on these conditions, and the other half, which has been assigned to the railway company, is offered by them on terms that are practically equally liberal to the active settler, as we have already stated.

The tendency of the existing regulations, both those of the government and those of the railway company, is thus entirely favorable the industrial actual settler. The former will sell none of its own lands within the railway belt to any but the actual settler. The Syndicate will charge the speculator double the amount that the resident purchaser will be called upon to pay. We have not space to-day to dwell upon the matter, but may refer in our next to consider the effect of the new regulations upon lands outside the railway belt.

THE QUEBEC FIRE.

A sad calamity has fallen upon the city of Quebec. A great fire, beginning at eleven on Wednesday night and burning till six yesterday morning, destroyed 600 buildings, including St. John's Church, the finest in the city, and made 1,500 families homeless. To the inefficiency of the fire brigade the great extent of the disaster is owing. There was also a deficiency of water. Many wooden buildings with shingled roofs helped to spread the consuming flames. Both insurance companies and individuals have suffered heavily. If similar disasters could read any useful lessons, as they certainly should, Quebec did not require this incitement to a

wise and prudent course; for no city in Canada has suffered so much from repeated fires. In 1845, in 1866, in May, 1876, and now, great conflagrations have visited her. But the law against erecting wooden buildings was systematically disregarded, and the fire brigade was not fit to perform the duty required of it. In this hour of calamity we do not wish to say a harsh word; but it is nevertheless true, that reasonable precautions would have immensely contracted the circle of devastation, though it might not have prevented a minor misfortune.

—It is reported that the Canada Pacific Railway Company has acquired a controlling interest in the projected Ontario and Quebec Railway, which is intended to run between Toronto and Ottawa. This company has also got control of the Canada Central, of which individual members of the Syndicate, before their organization as a company, owned considerable stock. The North Shore Railway they have not yet, but may in the future, purchase. Their system will then begin to be complete, if not formidable.

—The New York *Shipping and Commercial List* assures us that "no private corporation can be found rich enough and bold enough to build and maintain lines of steamers to ply between our ports and the Ports of South America," without a Government subsidy, by which name that journal mis-calls the sums paid by England for ocean postal service rendered. But there is a difference between an avowed subsidy and a fair payment for a service rendered.

EASTERN TOWNSHIPS NOTES.

A week's tour through the English speaking portion of the Eastern Townships of Quebec, reveals the fact that business men, as a rule, are in a satisfied and contented state of mind. Particularly is this the case among manufacturers, whose mills are all running to their full capacity, and in some cases working extra time. Labor commands good prices, and with the more general circulation of money, store-keepers appear inclined to limit credits, and sell more for cash, an effort in which it is to be hoped they will persevere.

The town of Sherbrooke, which has been termed the metropolis of the Eastern Townships, is showing signs of material progress, and with its excellent water power is fast developing into a manufacturing centre. The water power of the Magog, which here empties into the St. Francis, may be called unfailing. There was, last season, which was an exceptionally dry one, a slight shortness of water for one or two days, but any recurrence of this sort is being provided against by building a dam at Magog Lake, by