

things to say on the new gas acetylene, which, however, he said, was even thirty years ago one of the coryphæi of chemical synthesis when it was formed by the direct union of carbon and hydrogen in the electric arc.

Why was Canada
Absent?

By far the most important and suggestive portion of M. Berthelot's speech, however, was that in which he insisted on the difference between the modern era of applied science during the last three-quarters of a century and the whole development of the race during the last 6,000 years, a difference so marked that a new man was being created in a new earth and the entire social organization was being transformed amid conditions for the comprehension of which the past offered no suggestive precedents or *data*. That the continuous intervention of science is an unprecedented fact in human history is a point to which the great chemist again and again reverted, and it is in developing this idea that he was most eloquent. When to this Congress the United States could send twenty representatives, why could not Canada send one? Even Cuba could send four. At Toronto University by far the largest expenditure has been of late years in the direction of the encouragement of the scientific branches. In Montreal, hundreds of thousands of dollars have been expended in the same direction for McGill College. Are we to have no return for this expenditure? Is Canada for ever to jog on in self-complacent obscurity? Our University men seem to have no ambition. They are hopelessly *arriérés*.

An American
Sentiment.

The New York Critic, of the 8th August instant, contains a curious sentiment. It begins one of its paragraphs—"All mankind love a swindler." The Critic must be taken to be speaking for itself. We are afraid that the evil communications it so constantly receives are corrupting its manners. In the United States, perhaps they do love a swindler—no other country does. In the United States, if A shoots B it is not "murder," it is "a little unpleasantness." If A cheats B, A is a "smart man." If A defrauds a company, it is a "financial operation." These euphemisms have aided in blinding United States moral sense. We regret to see a journal like the Critic giving currency to a sentiment like that we have quoted. If it is a joke, it is a bad joke, and, therefore, worse than no joke. If it is serious, it is reprehensible. We fear it is only a symptom of the general laxity of moral tone so prevalent across the line.

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An Interesting Government Report.

IT is not often a departmental report is of more than ephemeral value. It contains, perhaps, statistics for the past twelve months or a defence of the Government of the day made to order. When the occasion of its production has passed away the report goes to the butterman to roll up his pats of butter or to the trunk man to line his trunks. But we have had the pleasure of receiving one report which stands out as being of permanent value and indeed of national importance. If there is any subject in which Canada is or ought to be interested, it is her mines and forests. In them lies her capital. Concerning them and not concerning the Manitoba schools question ought Canadian Parliaments and Local Legislatures to debate. Ontario has millions of acres of forest land and millions of tons of iron ore side by side. Why do Canadians not put this and that

together? Why is it they have not seen what is above their heads and under their feet? Why is it that their strength has been frittered away in Orange and Green quarrels instead of being applied with giant vigour to the development of the Dominion? These are questions which strike home and they are suggested more than ever by the report of Mr. Thomas Southworth, Clerk of Forestry to the Province of Ontario. Hear what Mr. Southworth reports. We may premise that we are not advertising the company whose operations Mr. Southworth describes, but on the principle that *palman qui meruit ferat*, we desire to call attention to the example set by the company he names. Would that our lumbermen followed their example.

The Rathbun Company float logs, cut from their own limits and bought from settlers, down the Napanee, Moira, Salmon, and Trent Rivers to Deseronto, and by the Madawaska and Calabogie. Considerable quantities are also brought in by rail, over a thousand car-loads of cedar and non-floatable timber coming in this way yearly. I drove from Deseronto to Napanee Mills to see the annual timber drive which was then on the way down the Napanee river. It was not a very handsome lot of timber, from a lumberman's standpoint. It was composed of "all sorts and conditions" of logs. There were some good sticks of pine, but there was also every kind of log that would float, large and small, straight and crooked, smooth and knotty logs partly burnt, in fact everything light enough to float down the river. I was informed the drives coming down the other streams were similar in quality. Upon reaching Deseronto, the logs are separated and to some extent classified. The cedar is taken to the cedar mill, a large and substantial structure, where cedar, tamarack, etc., is worked up, and where a large number of men are employed. When the logs are hauled up into the mill, if large enough, they are sawed up into lumber, now become very scarce. If the log is not large enough or good enough for lumber, it may do for a couple of railway ties, in which case it is sawn in two and flatted, or it may make a tie and a fence post, or two fence posts, leaving enough over at the end for one or more blocks for street paving. In some cases the log has to be made into shingles, but it is a pretty tough stick that is not manufactured into something, if it is no more than steam. The saw-dust is used partly for fuel, as is that from the other mills, which I will further refer to. With the other logs the process is similar. In the case of pine and spruce, waste pieces that cannot be made into lath may be long enough for matches, and if so they are cut up into match splints and exported to England. This branch of their business, though of quite recent date, already gives employment to nearly one hundred hands. Short pieces of lath not long enough for use as lath are cut to regular lengths and sent to New York to be made into banana crates. Oak, maple, cherry, ash, birch, butternut, tamarack, and other woods are used in ship and car building. Of the timber found unfit to be sawn into any kind of lumber or square timber the worst and roughest is sent to Napanee mills to be used in the Portland Cement works to make steam or burn lime and hydraulic cements. Other of the rough wood is fed to the sixteen big bee-hive furnaces or kilns and is made into charcoal and a variety of other articles of commerce. A cord of wood will produce forty-five bushels of charcoal, and quantities of alcohol, acetate of lime, oil of tar, pitch and pyrolignite of iron. These ingredients are distilled from the smoke of the wood during carbonization in a large building erected for that purpose. Scarcely any wood is consumed in the process of carbonizing the contents of the kiln, as this is effected by means of the gas generated from the wood being carbonized, the generating of this gas being started by a small quantity of wood placed in a small arch inside the kiln. When this quantity of wood is consumed the gas does the rest of the work. Of the product of the charcoal works and the chemical works, nearly all, except the alcohol and the acetate of lime is exported to the United States. The charcoal is sent to Detroit and is used in smelting iron. Their output would run a twenty ton iron furnace, and it seems odd that with so much iron ore of good quality as is known to exist all through Eastern Ontario this charcoal should be sent to the United States to be used in mak-