

**ECONOMY IN MANUFACTURE.**

Mr. E. J. Palmer, president of the B. C. Lumber and Shingle Association, read a paper on economical manufacture. He emphasized the need for utilizing the timber now wasted and declared that a market could be established for it. There was some education of the public necessary, however, and it would be well for governments also to take a hand and for railways to co-operate by granting lower rates for the transportation of cheap grades of lumber. The statement had recently been made to him (Mr. Palmer) by a prominent railwayman that coast mills annually wasted fifty thousand carloads of lower grades. Mr. Palmer cited numerous uses to which these grades could be put. He mentioned the case of limits logged over fifteen years ago, which his company is now logging again and getting twelve thousand feet an acre off, the reason being that there is now a market for the smaller timber which it would not have paid to cut when the limits were first logged.

**FORESTRY IN QUEBEC.**

Mr. G. C. Piché, chief of the forest service of the department of lands and forests of Quebec, congratulated British Columbia on having such a splendid forestry system now in effect. In Quebec the government is now engaged in a classification of lands which are suitable for agriculture, and those which are fit only for timber. There is strict control of logging operations, as to taking out all the merchantable timber and so forth. The disposition of debris is a matter still for the future, and will require lengthy experiment, Mr. Piché said. He gave the convention some interesting details of the forest service of his province, and the work which is being done in reforestation.

Mr. A. C. Flumerfelt urged the adoption of a resolution by the convention asking the Dominion government either to put the interpretation desired by the lumbermen upon the question of duty on common lumber, or else to change the tariff so as to preserve to the British Columbia lumbermen the prairie market for low-grade lumber that properly belongs to them.

**Thursday Afternoon.**

At the afternoon session, Mr. George M. Cornwall, secretary of the Pacific Coast Logging Congress, and editor of *The Timberman*, Portland, gave a paper on 'Logging as an Engineering Science.' He said that the profession of the logging engineer, though it had not been officially designated as a part of the service, was nevertheless a useful and honorable profession. He then went on to explain a course of study which he suggested should be made part of the university curriculum in order to fit young men for this occupation.

A general knowledge of the general principles of steam, electricity and hydraulics, he said, is essential; also the student should acquire an actual working knowledge of the cutting and removal of timber, and should be a man of broad sympathies, capable of looking after the men in camp. A man so trained would be very valuable for the reason that his skill would enable him to reduce the cost of logging. The difference of a dollar in cost is easily made, and would amply pay for the training involved.

The logging engineering course in a college should consist of three departments, which should be in charge of a practical logger, a cruiser and estimator, and an instructor in mechanical and civil engineering. The student should spend at least eight months in the bush and a certain time in a machine and blacksmith shop. He should learn to cruise and estimate timber; should have a practical knowledge of civil and mechanical engineering, and should be able to make topographical drawings with accuracy. A course of study of this kind would turn out an expert lumberman in the broadest sense.

The Pacific Logging Congress, in its recent sessions at Tacoma, appointed committees for the various coast states and British Columbia, with a view to having the subjects taken up in the universities, and he was glad to say that the government of British Columbia had expressed its sympathy with this.

Dr. Fernow opened the discussion and led on to a consideration of education in forestry matters. He recalled that the first graduate of Cornell school of forestry, over which he had presided, while not trained practically, was now a logging engineer and professor of that science in Yale school of forestry. The last student, because the school failed from political reasons, was in the audience.

Mr. James Macoun, C. M. G., who had lately visited Strathcona park declared that British Columbia had every other part of the Dominion 'trimmed' in the matter of fire protection. Whoever was responsible for it, the fire wardens kept notices up so frequently and constantly that one 'got the habit,' and even when they had put fires out, they went back to see if they were out.

'That region is certainly the finest part of British Columbia,' said Mr. Macoun, in conclusion. 'Not that the trees are the largest or the best, but there is the largest primeval forest on earth, and it should be preserved. There are there the finest examples of Douglas fir you can find. The government is certainly to be highly commended for the steps it is taking to make this a national park.'