from their legarthy to follow in the footsteps of their neighbors. Just as certain as uniform grading rules are required in the United States, are they likewise a necessity in Canada, and particularly in Ontario, where hardwoods are found in greater abundance than in the other provinces. It would also seem a less difficult task to frame rules that would apply to the various districts of Ontario than to the extensive markets of the United States.

THE final report of the Ontario Forestry Commission appointed last year will be presented at the coming session of the provincial legislature. The Commission will then have fulfilled its duties, so lar as its present appointment is concerned. Taking, for guidance, the preliminary report submitted last December, we have reason to anticipate a volume of information and recommendations of very great value. The early work of the Commission was much along the line of ascertaining the reproductive qualities of white pine, the results of observation and investigation being of the most encouraging nature. In the final report the question of reforestization will no doubt be dealt with in a more practical manner, and some recommendations submitted to the government regarding the future timber policy of the province. This policy must bear some relation to the quantity of timber owned by the Crown, with regard to which estimates greatly vary. With a view of ascertaining as nearly as possible the extent of the timber lands of Ontario, the Commission have visited various districts in the northern part of the province, and are understood to have found a greater quantity of both pine and spruce timber than was anticipated. It is much to be desired that the work which the Commission has commenced should be continued until we are placed in possession of reasonably accurate data regarding the supply and localization, not only of pine and spruce, but also of hardwood timber.

## PERSONAL.

Mr. Thomas Cowan, of the firm of Cowan & Co., manufacturers of woodworking machinery, Galt, Ont., died last month.

Mr. R. B. Bryce, of Glasgow, Scotland, who is an extensive lumberman in the old country, has been travelling through Canada for some weeks.

We regret to learn of the serious illness of Mr. James L. Burton, the well-known lumberman of Barrie, Ont., and hope that he may soon be on the road to recovery.

Mr. W. R. Ledger, of the Ontario Crown Lands Department, is receiving the congratulations of his friends, on the occasion of his recent marriage. The bride was Miss Smuth, of Little Britain.

After being confined to his home for several weeks by senous inness, necessitating a surgical operation, Mr. George A. Anderson, of the wholesale lumber firm of J. G. Cane & Co., Toronto, has recently resumed his business duties.

Messrs. Bertram & Son, of Dundas, Ont., are about to make extensive additions to their works, in order to meet the requirements of their growing trade. It is the intention to roof in the space between the several individual buildings, and in this way, and by removing entirely out of the way one of the old buildings, to gain some 12,000 square feet of floor area. The company are at present filling orders for lathes and other iron-working machinery for customers in Russia, France and Great Britain. They are also manufacturing a large shear weighing 50 tons to be used for cutting up into scrap iron the iron in the old Victoria bridge at Montreal. The machine is to be installed in the Hamilton Rolling Mills.



"GALL."

(Rough Draft of Explanatory Design to accompany Mr. Hardy's Memorandum in reply to Messrs. Dickenson and Lansing, of Michigan.) [From the Toronto Globe.]

## CALCIUM CARBIDE FROM SAWDUST.

THE experiments that are being made at the mills of W. C. Edwards & Company, New Edinburgh, Ont., to determine the value of sawdust for producing calcium carbide and other commercial products, continue to be of an encouraging nature. On October 18th a test of the machinery was made before a large number of Ottawa lumbermen and other interested persons, including the following: Prof. Ruttan, of Mc-Gill University, Montreal; Messrs. J. R. Booth, F. P. Bronson, G. B. Greene, David MacLaren, R. M. Cox, J. F. Booth, J. A. Cameron, Hon. David Mills, Sir Louis Davies, Sir Henri Joly, Lt.-Col. Anderson, Major Gordeau, John Gilmour, Allan Gilmour, W. J. Conroy, J. C. Edwards, A. H. Edwards, H. A. Bate, H. N. Bate, W. A. Cameron, Ward Hughson, D. Murphy, Capt. Murphy, C. E. Read, H. Mc-Pherson, and Mr. Burdette, of Burlington.

The test was most satisfactory, and gives the promoters every reason to expect the ultimate success of the scheme. The machine was shown producing oil, acid, gas and carbon, and samples of the pyroligneous acid were taken by Prof. Ruttan to test at McGill University.

The machine runs automatically; first the sawdust goes through a drying process by having all the excess of heat contained in the hurned gases forced through the sawdust in a drying kiln. This dried dust is carried by an elevator to the top of the retort, and by means of an automatic feed is supplied to the machine as quickly as it is required. The retort is an upright iron cylinder, between 15 and 20 feet high, and about 3 feet in diameter, surrounded by brickwork. Within the retort are a series of hoods on a central hollow revolving axle, which has perforations under the

hoods. The various gaseous products escape through the lower end of the retort, where the liquid products are condensed and separated, escaping through two outlets. At one passes off a mostly wood creosote, which can be utilized for a variety of purposes, and from the other crude pyroligneous acid, from which can be prepared wood alcohol, acetic acid, and various other products. The gases pass through a purifying process, and after being highly heated are forced through the sawdust as it passes down the retort. The excess of gases pass into the furnace, supplying heat, which is practically sufficient to carbonize the sawdust in the retort. The carbon prepared from the sawdust passes out through an opening for the purpose in the lower end of the retort. Carbon derived from this source, owing to its density and purity, is superior, and produces what is known as charcoal iron, which commands the highest price in the market. Calcium carbide, derived from this source of purified carbon, is worth from \$60 to \$70 per ton. As the mills in the neighborhood of Ottawa produce about 900 tons of sawdust per day, it is easily understood that, if the hopes of the experimenters are realized, Ottawa will reap enormous benefits.

## "WANTED AND FOR SALE."

Persons having for sale or wishing to purchase a particular lot of lumber, a mill property, timber limits, second hand machinery, etc., in fact, anything pertaining to lumbering operations, will find a buyer or seller, as the case may be, by placing an advertisement in the "Wanted and For Sale Department" of the CANDA LUMBERMAN Weekly Edition. Testimonials to the value of this department by those who have given it a trial state that the results of advertisements were frequently better than anticipated; the cost is comparatively small. Mill owners might, with profit to themselves, make use of this method of advertising their stock to a still greater extent.