

# Conservation

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## Lumbering a Science

Logging Engineering at the  
University of British  
Columbia

That lumbering should properly be regarded as a science and as a profession is the substance of resolutions recently adopted by the British Columbia Lumber and Shingle Manufacturers' Association and by the Canadian Forestry Association, favouring the establishment of a course in logging engineering at the new University of British Columbia. The success which has attended the agricultural colleges of Canada and the United States in equipping the farmers' sons with a scientific knowledge of husbandry, is evidence of what might be expected from similar courses devoted to logging engineering. The courses of study in our agricultural colleges have been intensely practical and helpful. The lumber industry deserves the same consideration for those who desire to become expert loggers and lumbermen, in the broadest sense of the term. Logging is rapidly coming to be recognized as one of the most important features in the lumber industry. Each year the difficulties increase, and the consequent demand for knowledge grows more apparent.

## WATER POWERS OF BRITISH COLUMBIA

A good example of what can be done in developing and, at the same time, conserving water-power resources is given by the Jordan River plant of the British Columbia Electric Railway Co., on Vancouver Island. Although the average precipitation over its watershed reaches the excessive figure of 80 inches, the Jordan river, like the majority of our streams, has a wide variation between summer and winter flow. The company has had the flow of this river systematically gauged since 1907 and the results obtained justified the building of large storage reservoirs for the purpose of impounding waters which would otherwise go to waste. The total capacity of these reservoirs, of which there are five, is 1,500,000,000 cubic feet, and they provide ample storage, within reasonable cost, for an ultimate maximum plant output of 24,000 h.p. to 36,000 h.p.

### HAZEN'S THEOREM

"Every life saved from death by typhoid means two or three persons saved from death by other causes."



## Chimneys and Flues—A Fable for Builders

Last Summer a Good Citizen of a certain town not over a hundred miles from almost Everywhere, built a wooden house for a woman and her children. He built the chimney of brick because he had to. The chimney was able to stand alone, so he did not have to prop it with wood. But the floors of the house would not stay up without props. The Good Citizen saved a dollar by using the chimney as a support to the floors. He nestled the ends of the floor joists nicely in the brick of the chimney. He covered up the job and got his money.

The rains fell and the winds blew in the most biblical manner, and winter came after its fashion. The chimney settled a little; and there was a tiny crack.

One morning the woman woke up with fire all about her. She tried to get to her children. If she got to them no one ever knew it. The Good Citizen who built the house was not arrested for manslaughter. He is building other houses of the same kind for other women and children.

He is making his living by it.—*Courtesy National Fire Protection Association, Boston.*

## Water Supply of Cities

### Work of the Great Lakes International Pure Water Association

How to procure pure water, is one of the most vital problems confronting the cities and towns of America. The practice of discharging sewage and industrial wastes into streams and lakes has become so prevalent and general as to be intolerable. Indeed, to these disgusting practices, is largely attributable the relatively high morbidity and mortality rates of American and Canadian cities, as compared with those of Europe.

It is a hopeful sign that organized efforts are being made to improve these conditions. One of the latest organizations to be formed for this purpose is the Great Lakes International Pure Water Association. This Association held its organization meeting in Chicago in September, 1911. It has for its object the careful study of pure water sup-

plies, and to interest legislative bodies in the water supply of municipalities in the Great Lakes basin.

It is proposed to base the study mainly on the following points:—

- (1) The need of a uniform policy in the location of water intakes.
- (2) The disposal of sewage.
- (3) The prevention of discharge of ship sewage.
- (4) The study and control of typhoid fever.

An annual conference was held jointly with the National Association for the Prevention of the Pollution of Rivers and Waterways on October 23 and 24, 1912. The conference was held in Cleveland, Ohio, and a number of Canadian health authorities were in attendance. Dr. Chas. A. Hodgetts, Medical Adviser of the Commission of Conservation, represented the Federal Government. The meeting was addressed by distinguished sanitary engineers and medical men, and much valuable information was elicited.

## Industrial Diseases

### Danger in the Use of Lead in Paint—Substitutes Should Be Found

Occupational diseases and accidents are a very serious feature of modern industrial life. Almost every industry presents some danger to the employees engaged in it. It is fortunately true that these dangers have in many cases been reduced to a minimum, but, on the other hand, there are some forms of employment where but little progress has been made in this regard. One of such occupations is that of the painter. Lead poisoning is now a well recognized disease. In some of the countries of Europe it is true that almost drastic measures are being taken to stamp out the disease.

According to an article in a recent number of the *LABOUR GAZETTE* lead poisoning is engendered by the entrance of the lead through the skin, the lungs and the alimentary canal. The presence of the metal itself in the form of shot or a bullet in the body has resulted in lead poisoning years after the date of injury. The symptoms of lead poisoning include pallor, salivaceous distaste for food, sickness, constipation, lassitude, and several minor ailments.

### Causes of Lead Poisoning

The causes for excessive lead poisoning among painters may be traced to a variety of removable conditions, as well as to others which will exist so long as carbonate of lead is used for paint, and red lead for making gas joints. Painters, too frequently, fail to realize the seriousness of the dangers to which they are exposed. Such lack of care as holding between the teeth a tool to which lead paint adheres; taking of meals without properly cleaning the hands, and various other practices which permit of lead entering the system, make the subject liable to the disease.

Efforts have been made to find a finished substitute for poisonous materials. So far, however, nothing of a satisfactory nature has been discovered, although zinc pigments have been found to be fairly satisfactory for interior work. It is interesting, however, to note that a number of European countries are carrying on investigations, with a view to obtaining substitutes, so as to eventually prohibit the use of white lead for interior work, and the use of red lead for all painting work.