

**Commission of Conservation
CANADA**

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CONSERVATION is published the first of each month. Its object is the dissemination of information relative to the natural resources of Canada, their development and proper conservation, and the publication of timely articles on planning and public health. The newspaper edition is printed on the inside of the paper only, for convenience in clipping for reproduction.

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A CHALLENGE

"...if we can find anyone loyal enough to the interests of the Dominion to enforce the law."

In the above words, Mr. W. H. Shapley, chairman of the Dominion Fire Prevention Committee, has issued a challenge to the Canadian people—individually and collectively—on our standing in the matter of the enforcement of the law.

The occasion was the meeting of the Dominion Fire Prevention Committee in Ottawa, on May 9 last, and Mr. Shapley's remarks, contained in the minutes of the meeting were:

"In these days when so much money is needed to meet expenditures incurred by the war, it is the short of criminal to waste \$5,000,000 a year by fire. If half this loss can be prevented, this committee will accomplish a splendid piece of work. The change that has been made to the Criminal Code should have a good effect, if we can find anyone loyal enough to the interests of the Dominion to enforce the law."

LIGHTING ESSENTIALS

Efficiency in lighting promotes good work in offices, factories, stores and wherever work is carried on indoors. It improves the quantity and quality of the work performed, while inefficient lighting is known to be a cause of eye-strain and headache and thus to be prejudicial to health. It may also be a fruitful source of accidents.

The lighting of buildings must be considered from two aspects, (1) the distribution of daylight admitted through windows and (2) artificial lighting.

As regards daylight, the best method is undoubtedly through skylights, so that all parts of the rooms are lighted about evenly and the light is uniformly diffused. For this reason, many modern factories have been built of only one storey. Owing to high land values and other considerations, such buildings are not always possible. But much can still be done by proper arrangement of work-tables, etc., with relation to the windows. The shadow of the worker's body, head or hands should not to be thrown upon his work. Often it may be necessary to supplement the daylight by

artificial light which is kept burning all day, but this is a wasteful condition to be avoided wherever possible.

Artificial light has this advantage over daylight, that it is absolutely under our control. One should not imagine that mere brightness or quantity of light constitutes good illumination. On the contrary, a glare is unpleasant and injurious to health. For large areas of work, the light should be overhead and as uniformly diffused as possible, direct glare being avoided by the use of frosted globes. For example, such lighting would be suitable for warehouses. But for some operations, the light needs rather to be focused on the work, for example, for office work, where usually all that is necessary is a desk-light which illuminates the paper without shining directly into the eyes of the worker.

An English author gives the following five tests for good illumination:

1. It must furnish the user sufficient light so that he can see;
2. It must be so placed that it does not cause the user's eyes to change the size of the diaphragm when ordinarily using the light;
3. It must be steady;
4. There shall not be any polished surfaces in its vicinity that will reflect an unnecessary bright spot anywhere that can be seen by the eyes of the worker;
5. It must be protected so that it does not shine in the eyes of some other worker.

The Fur Resources of the Northland

An Exceedingly Valuable Asset among the Natural Resources of the Dominion

"Our fur-bearing resources are very extensive in what are known as the 'barren lands', but which are in no sense barren lands, because no barren land can sustain the animal and plant life that these lands sustain. In that district, therefore, there are tremendous possibilities of greater fur-bearing and, indeed, meat-bearing development. I think it was Seton Thompson who fixed the number of caribou of that country at very many millions, and that it was Mr. J. B. Tyrrell who referred to them as being like the sands of the sea, not capable of being numbered, but only to be estimated numerically on a square-mile basis. It is impossible to conceive that we are not going to do something to extend the geography of Canada, so far as civilization and utilization are concerned, nearer to the Arctic, and make use of these vast domains which, while not comparable with the rest of the Dominion, will, if properly administered, become an exceedingly valuable asset among the natural resources of Canada."

Hon. Arthur Meighen, at the Conference on Wild Life Protection of the Commission of Conservation.

Full Utilization of Water Powers

Conserving Water and Regulating Flow on Streams is Important Problem for Canada

A water conservation work of vast importance is that at present under construction at Big Eddy, on the Spanish river, Algoma district, Ont., for the International Nickel Co. The conservation dam will raise the level of the river 100 feet, and will create a lake with an area of 15 square miles. Combined with the storage in the upper third of the Spanish River watershed, it will increase the minimum flow to over 1,800 cubic feet per second, or almost three times the natural low-water flow, viz., 675 cubic feet per second. It will also create a power site where 15,000 h.p. can be continuously developed.

The engineer who designed this work, Mr. Henry Holgate, of Montreal, in reporting on the matter to the Commission of Conservation, states that:

"When this work is complete, the waters of the Spanish river above the township of Hymn will be conserved to their full extent, and this will be one of the most complete systems of water conservation in Canada.

"Conserving water, and regulating flow on our streams, is one of the most important subjects we have before us, and merits the co-operation and assistance of the Government, as it should be a cardinal principle in power development that the full efficiency of the water in the watershed be made use of, and this cannot be done unless carefully considered systems of storage are provided, so as to equalize the flow as nearly as possible throughout all seasons of the year."

Parliament Takes Drastic Action

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"316A. (1) Any person who is suffering from venereal disease in a communicable form, who knowingly or by culpable negligence communicates such venereal disease to any other person shall be guilty of an offence, and shall be liable upon summary conviction to a fine not exceeding five hundred dollars or to imprisonment for any term not exceeding six months, or to both fine and imprisonment.

"Provided that a person shall not be convicted under this section if he proves that he had reasonable grounds to believe that he was free from venereal disease in a communicable form at the time the alleged offence was committed.

"Provided, also, that no person shall be convicted of any offence under this section upon the evidence of one witness, unless the evidence of such witness be corroborated in some material particular by evidence implicating the accused.

"(2) For the purposes of this section, 'venereal disease' means syphilis, gonorrhoea, or soft chancre."

CARE OF THE TEETH

It is a peculiar physiological fact that at birth the jaw contains the already calcified crowns of the temporary teeth and also that of the first molar of the permanent set. This fact alone is sufficient to direct attention to the care with which the mother should diet herself during the prenatal period.

The next interesting physiological fact is that, at the age of six years, the child has a greater number of teeth than at any other age, there being then the milk set and all the permanent set except the wisdom teeth.

To ensure that both sets of teeth shall be normal and healthy it is essential that there be most careful feeding of the infant and child, for any condition causing malnutrition will interfere with the proper formation of the cap of dentine and permanent defects will result. Defective dentition causes the teeth quickly to become carious after being out.

The health of the child requires that the temporary set should be sound, otherwise it cannot properly perform the process of mastication. The lowering of the vital functions of the child results on the permanent set of teeth and too often they reach the surface in a diseased condition.

It will not do to feed the baby on patent foods, cabbage, fried fish, etc., the same food that the parents eat, as it ruins the digestive apparatus and results in bad teeth. It is a fact that children's first teeth decay soon after they appear and, from growing beside the bad first teeth, the second set decay too.

It is therefore essential that proper attention be given to the careful and systematic cleaning of the teeth night and morning. Indeed the mother should anticipate trouble by a careful wiping of the child's mouth before the teeth appear, using either a solution of boracic acid or of salt. With the appearance of the teeth a soft brush should be used in place of the clean linen wipe.

As all decay begins on the outside of the tooth and works inwards and no pain is complained of until the decay gets near to or actually reaches the live part of the centre of the tooth, parents should systematically examine their children's teeth and, thus, by early dental treatment, save the live part of the teeth, remembering that treatment is necessary although there may be no toothache with the decay.

As to the decay of teeth, matter forms and, in most instances, passes into the digestive tract. This poisons the system—in adult life a similar condition occurs in pyorrhoea and, as a result, debilitating diseases follow.

We should therefore resort to preventive measures in the care of the teeth—give the teeth work to do, keep them clean and continue with systematic dental supervision.

Twenty-five per cent of the diseases of adults are traceable to the teeth.