# (onservation

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# Waste of Natural Gas in Canada Prevention of Railway

Relative Efficiency of Gas and Steam Engines - Waste at Wells Should Re Prevented

Much has been written about the saving effected by using natural gas in gas engines to generate power, instead of burning the gas under boilers to generate power from steam. Experiment has shown that the amount of gas required per hour, for the development of one horse-power, varies from 9 cu. ft., with the highest type of large internal combustion engine, to 130 cu. ft. with the ordinary steam engine. In other words, the effi-ciency of the gas is over fourteen times as great when used in gasengines as when used for generating steam under boilers

It has also been suggested, in other countries, that provisions be made for preventing the use of natural gas for such purposes as lime and brick burning, etc., in order to conserve this ideal and economic fuel for domestic and other less wasteful industrial purposes, for which, owing to its nature, it is especially useful.

#### Reckless Waste in Canada

We, in Canada, need not at present consider the above refinements in the use of natural gas. Such a course, particularly in Western Canada, would seem like trying to stop a leak in the bung before "heading" the barrel.

Natural gas rights in the prov-inces of Alberta, Saskatchewan, Manitoba and North West Territories are disposed of under Dominion laws. These laws make no provision for preventing the waste of natural gas, and the consequence is that considerable waste occurs.

The importance of natural gas in Alberta may be realized when it is considered that a company is now

## Teaching Buyers How to Test Eggs

What Kansas is Doing to Improve the Quality of Eggs Marketed

Kansas has a college for egg buyers. It was started by Prof. W. A. Lippincott, of the Kansas State Agricultural College in an ndeavour to raise the standard of ggs marketed. The students are full-grown men—egg-buyers from all over the State. The school moves about from place to place.



The photograph illustrates how natural The photograph illustrates how natural gas is being wasted under existing laws. This burning gas well is situated within 165 miles of Edmonton, so that it is some twenty miles nearer to that city than are the Bow Island wells to Calgary. Edmonton is not yet supplied with natural gas.

piping natural gas from Bow Island to Calgary, a distance of 175 miles. In addition to supplying Calgary, the company has branch lines to Lethbridge, MacLeod, Granung Nanton, Claresholm, Brooks and Okotoks

The province of Ontario has reduced the waste of natural gas to a minimum by causing all abandoned wells to be plugged and by levying a tax of two cents per thousand feet, with a rebate of 90 per cent. when the gas is used.

—W.J.D.

It was first opened at Wichita, where forty-seven egg-buyers attended.

The eggs are graded to a nicety, distinction being made between absolutely fresh eggs, eggs with black rot, eggs with rings, eggs with spots and shrunken eggs. Professor Lippincott estimates that the farmer who can produce eggs that will stand a strict candling inspection will be able to get three cents a dozen more than the farmer whose eggs prove to be merely seconds under the candling test.—

# Fires in Ouebec Special Patrols to be Established

by the Railway Companies

The province of Quebec has taken a very advanced stand with regard to the prevention of fire along railway lines. For the control of the fire situation along lines having Dominion charters, the Hon. Jules Allard, Minister of Lands, has entered into a co-operative arrangement with the Railway Commission for the handling of inspection work under the regulations of Order 16570, which provide for the establishment of special patrols by the railway companies, the reporting and extinguishing of fires by railway employees, and the regulation of the burning of inflammable material along rights of way during the fire season. The control of the fire situation along Provincial chartered railways is most effectually provided for through the recent issuance of a general Order by the Quebec Public Utilities Commission. The provisions of this Order are substantially identical with the Order of the Dominion Railway Commission. Provision is made in the provincial Order for the appointment of a fire inspector, with authority to prescribe the measures to be taken by the railway companies.-C.L.

### FIRE INSURANCE A TAX

The payment of a fire insurance premium, fundamentally considered, is the payment of a tax. The supervisors of this taxation are the fire insurance companies, who make the assessments upon which this tax is collected—not haphazardly, but upon a scientific basis-administer the funds and for their remuneration retain, by way of commission, what remains over from the premiums collected after they have paid all the claims upon them for future losses and paid their ex-

For what purpose is the fire surance tax? For the purpose of distributing over a large part of the community, the losses which hap-pen to fall upon one individual. Fire insurance is, in fact, under another aspect, a system of co-operation. Losses which would ruin one man if he had to bear them by himself are borne with comparative ease, when distributed pro rata throughout the community. This co-operation does not, of course, replace capital which has been destroyed by fire; that is an impossibility. Merely there is a distribu-tion of the loss. The actual loss of

#### Preventive Medicine A New and Important Profession-Its Possibilities of Usefulness

Modern cities have been made possible, in large measure, through advances in transportation. Their continuance will depend, to a large degree, on sanitary engineering Fortunately, the science of bacteriology, and preventive medicine genology, and preventive medicine generally, have made possible great advances in municipal sanitary practice. The day when the family doctor can be considered to possess the hygienic wisdom of the town or the city, is well nigh passed. In his stead men are being trained in the larger universities in mechanical and biological engineering, with a view to preparing them to prevent Such training involves mathematics; statistics relating to the sick and the dead must be constantly and daily used, in order to show what forces of disease are at work, and where the attack is next likely to be made. It involves engineering; for the public must be provided with properly ventilated buildings, pure water, and clean streets. It involves chemistry; for the people must be protected against adulterated foods. It involves bacteriology; for infectious diseases must be traced and anti-toxins provided. Then, too, the health officer should make his department an educational centre, to which the people can safely look for guidance in all hygienic matters. Sanitary engineering is a new and promising profession. Its advance will make disease epidemics municipal and national disgraces, and will vastly improve the conditions of life in the modern city.-A.D.

## Pollution of Waterways

Two important bills are now before the Federal Parliament. Both have to do with the prevention of the pollution of navigable waters by sewage and by industrial and other wastes. One of the bills, sponsored by Mr. Bradbury, is at present in progress in the House of Commons; the other has been presented to the Senate by Senator Belcourt. The bills are very similar in all essential points, so that the disgusting and disease producing practice of polluting streams and waterways will, in all probability, be made illegal within the course of a few months.

wealth caused by the fire to those who pay fire insurance premiums and to the nation as a whole, remains. Nothing can replace that. -The Shareholder.