Glayva 🛚 SCOTCH LIQUEUR RONALD MORRISON & CO. LTD., EDINBURGH

NEW ZEALAND AGENTS: Hancock & Co. Ltd., Customs St., Auckland, C.1., P.O. Box 21; R. Powley & Co. Ltd., Dunedin. Wallington and Christchurch

DURING this year there has been frequent reference in our daily papers to hydatid disease. This follows the holding of meetings all over New Zealand, the aim of which is to rouse the public conscience to the iniquity of allowing this disease to continue to affect both stock and human beings. That is a strong word, iniquity. Is it too strong? Is it, when children and adults continue to die each year-and these deaths are quite unnecessary, being wholly preventable by the exercise of a little extra care on our farms? Through all ages, from the first to the 70th year, there is a steady toll of annual deaths until we have lost nearly 900 New Zealanders from this cause in just over 60 years. In the same time between five and six thousand people have had to undergo serious operations to save their lives. They are lucky. The hydatid cysts were in some

A Burden on the Conscience of Farmers

This is the text of a talk on health broadcast recently from ZB, ZA, YA and YZ stations of the NZBS by DR H. B. TURBOTT, Deputy-Director-General of Health

place where surgery could get at and remove them.

New Zealand cannot be freed from this disease until farmers realise it is their farm practice that keeps it going. If dogs are prevented from eating raw pluck or dead carcass pluck they cannot infect themselves. Pluck is the "innards" of the killed animal. Livers and lungs are particularly dangerous as being the most likely sites for hydatid cysts. When the dog gobbles up cyst-dotted pluck, he swallows in these cysts living worm heads which use hooklets to catch on to the gut lining and develop there into hydatid worms. There are many thousands of worm heads in each cyst, and a dog allowed to eat raw liver or lungs soon can have several thousand hydatid worms alive in the intestines. Every fourth or fifth day 500-800 eggs are produced by each worm. These are passed out in the dog's droppings. They lie on the grass or in the sheepyards, blow about all over the farm and on to neighbours' farms when dry, and remain infective for about three months. Stock and human beings eat these eggs. Stock pick them up with the grass eaten. Humans can eat them on improperly washed raw vegetables or fruit grown on the farm, or from failing to wash hands after working with dogs and stock before eating food. The French name for hydatid disease is "the disease of dirty hands."

Hydatid disease springs from the egg of the worm. Swallowed by stock or humans, the egg develops, passes through the wall of the intestine, gets caught in the liver, a lung, or other parts of the body, and develops in one or other of these places into a watery bladder or cyst, containing worm heads. In stock

these cysts ruin the economic value of the livers, and if discovered in any of our exported meat would soon ruin our overseas markets. It has become so widespread in livers that the Government has taken action to control the export of livers as from the first of October. In human beings these cysts grow and endanger life, unless a surgeon can remove them.

Have you the cycle clear, now? Dogs eat cysts in livers and lungs and develop worms that lay eggs dropped by dogs on farms. Stock and humans eat these eggs and develop cysts. Human beings cannot become infected by eating the cysts.

Meat inspectors at abattoirs cannot detect every small cyst deep in livers so you may at times find small cysts in livers you buy. Cut these out and burn or bury them. Even if you didn't notice them and cooked them whole, there would be no damage done, Human beings can only become infected by swallowing eggs from the dog.

Town dogs are unlikely to become infected unless left off the chain to roam farms nearby and get at dead carcasses. Some farmers are experimenting, carrying on their rounds a beer bottle full of a mixture of benzine and kerosene, half and half, slitting the carcass, emptying the mixture therein and setting it alight. The carcass is so spoilt that a dog is disinclined to touch it.

At least one third of our farm dogs have hydatid worms, and the children of all farmers are at risk because dustborne eggs can blow anywhere in the district. Dogs should be dosed with arecoline each quarter to expel the worms, and the result buried. This will reduce the egg risk. But why not cut the cycle completely? Why throw raw offal to dogs? If this is stopped the dogs cannot possibly grow the worm. It can be boiled off if wanted for dog food, otherwise buried or burnt.

Farmers, if you don't do this, there is a burden of human disease that should

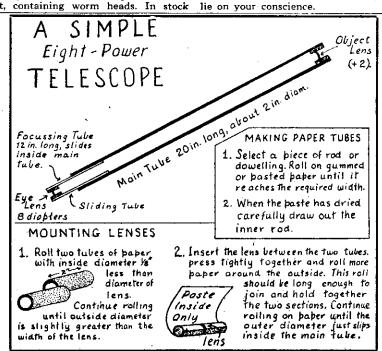


A TREE USED IS A TREE GROWN

Forestry maintains a wide and continuing program of research, always with an eye to the economics of timber production and utilisation. The complex story of timber science begins in the forest with climatic and soil fertility research, the selection of pedigree seed stocks, establishment of nurseries and the study and prevention of insect and fungal danger to both native and exotic forests. The aim is always to improve the quality of timber for the benefit of its ultimate user. The New Zealand Forest Service, in collaboration with other scientific departments and universities also carries out research on the correct types of wood, grades seasoning and preservation methods to provide Engineers, Architects, Builders and Manufacturers using wood as a raw material with sound information on the properties and uses woods and wood products from the forests of New Zealand.

Forestry is forever

Inserted in the interests of forest protection by the New Zealand Forest Service ... Soil Conservation Council.



IN "Let's Look at the Stars," broadcast in the Children's Sessions, R. A. McIntosh recently described how to make a simple astronomical telescope. Here is his diagram illustrating the method of mounting the lenses inside paper tubes. For focusing, the paper tube for the eye lens is made to slide inside a cardboard mailing tube (from stationers). The paper tube for the object lens is fixed. If ordinary spectacle lenses are used the cost of the telescope should be under 10/-. Detailed instructions are available if a stamped, addressed envelope is sent to Mr McIntosh, c/o Station 1YA, Auckland.