

Drugs sampled showed that the requirements of the British Pharmacopœia, the British Pharmaceutical Codex, and the New Zealand Formulary are generally complied with. The saponification value of a coconut-oil did not come within the official range, but values recorded in recent literature indicate that the specified range may now be out of date. Medicines dispensed by pharmacies to doctors' prescriptions were analysed, and some of the medicines found to be not as ordered.

MEAT RESEARCH

The increasing demand for meat of better quality has led to an agreement between the United Kingdom, Australia, and New Zealand for collaborative research into better methods of freezing storage, and transport of beef. Very little research on this subject had been done except for a comprehensive survey of the industry made in 1932.

The Dominion Laboratory assisted in carrying out a practical trial of a new system by which lamb carcasses and offals were shipped to England in wraps of a plastic material according to the "Cry-O-Vac" process. The purpose was to determine whether shipment in bags impermeable to water vapour would restrict weight losses from the meat, preserve the natural bloom, and prevent "streak" on the surface after thawing, and whether the particular bags used were sufficiently strong to withstand the handling during processing and transport. Some improvement in the appearance of the carcasses and offals resulted from the use of the bags, but the slippery nature of the bags led to handling difficulties on the ship.

An officer of the Laboratory spent a month at the Division of Food Preservation and Transport, Homebush, Sydney, and the Cannon Hill Meat Laboratory, Brisbane, discussing research problems and organization with Australian workers in meat research.

ORGANIC CHEMISTRY

In co-operation with the New Zealand Forest Service the study of the New-Zealand-grown pines, *Pinus radiata*, *P. laricio*, and *P. murrayana*, was continued. The determination of the distribution of resinous extractives in *P. radiata* was concluded, and work of a similar kind on *P. laricio* and *P. murrayana* was commenced. A large soxhlet-type extractor capable of holding 100 lb. of sawdust was designed and constructed in order to obtain sufficient extracted resin for quantitative separation and analysis. For *P. radiata* the analysis was completed of the resin from heart-wood, dry zone, sap-wood, and whole wood. A similar project was commenced for *P. laricio* and *P. murrayana*. Whole-wood analyses of the three pines were also done.

Two phenolic substances, pinosylvins and pinosylvin mono-methyl ether, which have been shown by Swedish workers to have a retarding effect on the sulphite pulping of pine heart-wood, were isolated from *P. radiata*.

Work was done on the neutral-resin fraction of rimu (*Dacrydium cupressinum*) and a new compound isolated of which the structure was established as 9-keto-ferruginol. From totara (*Podocarpus totara*) a new compound, hydroxy-totarol, was isolated.