

Electrical Sectional Committee.—In common with the other engineering sectional committees, this committee's activities have been mainly concerned with specifications received from overseas. Five draft British Standard Specifications were examined and circulated for comment. Twenty-six British and three Australian Standard Specifications were examined. Of these, eight British Standards were recommended for adoption as Regular Standard Specifications, while two were recommended for adoption as Emergency Standard Specifications. Fourteen amendments to British Standards already adopted were recommended for incorporation in the corresponding New Zealand Standard Specifications, while two further amendment slips to British Standard Specifications were also examined by the committee but were found unsuitable for adoption.

Chemical Sectional Committee.—During the year one draft Australian and two draft British Standard Specifications have been considered and circulated for comment. Ten British and three Australian Standard Specifications have been examined, and, of these, two British Standards have been recommended for adoption. The other British Standards and Australian Standards have been referred to affected local interests for review and comment with a view to determining whether they are suitable for adoption. In some cases special committees representative of the affected interests have been set up to examine the relevant specification and to make appropriate recommendations. Three amendment slips to British Standards previously adopted were recommended for incorporation in the corresponding New Zealand Standard Specifications, while one other amendment slip to a British Standard was found unsuitable for adoption.

Lubricating-cup Greases.—This specification, completed during the year, establishes grades for the lubricating value of greases on the basis of requirements in relation to composition, physical properties, freedom from undesirable fillers, and corrosive action.

Analytical Reagents.—Specifications were completed during the year for Sulphuric Acid and Pure Concentrated Ammonia Solution suitable for use in many cases in place of reagents of analytical purity. Owing to war conditions these chemical reagents could no longer be imported, and industries depending on their use for testing purposes were seriously handicapped by having insufficient means of reliably determining the purity of the reagents which they used for ascertaining the nature and quality of materials and processes entering into the production of the related commodities. A further value of these specifications is that to a considerable extent they meet the deficiencies caused by the absence of imported reagents in connection with analytical and testing work which is carried out on a wide scale by the various testing laboratories throughout the Dominion.

Paint for Service Vehicles.—This specification provides for a uniform colour and absence of excessive gloss on camouflage paint for military vehicles. Other factors specified are adhesion, hardness, resistance to oil and water, and protection against corrosion, which, together with the specified methods of test, ensure that the paint is of adequate quality for the purpose required in relation to the price paid. This example soundly evidences that there can be no proper and economic basis for the expenditure of public funds applied to the purchase of commodities unless these are purchased to appropriate Standard Specifications. Otherwise manufacturers are called upon to manufacture to a diversity of specifications commodities required for one and the same purpose. This involves shorter production runs, duplication of stocks of raw material, partly processed, and finished commodities, and the manufacture of small quantity special orders at greatly increased cost instead of the manufacture of major quantities for stock from which all orders for the same type and class of commodities can be supplied on a minimum production cost basis. This consideration has had an important bearing on a number of the projects which have received the attention of the various committees during the year. The generally accepted average reduction in price which results from the acceptance of Standard Specifications as the basis for the supply and purchase of commodities is estimated at 25 per cent. The tremendous cumulative savings capable of being effected by the general application of this principle in relation to public purchasing are of the utmost importance to the economy of the Dominion.

Ink.—Attention to this project was rendered necessary since imported supplies of ink were unavailable. Consequently, it became necessary to provide a specification for the manufacture of ink in New Zealand of a quality that would not handicap the important and essential work in connection with which it is used. In many cases the proper carrying-out of major undertakings is dependent upon the clarity and permanence of plans and drawings on which they are based.

Rot-proofing.—Consequent upon the adoption of a code of practice for the rot-proofing of sand-bags as an Emergency Standard Specification during the period covered by the last annual report, steps have been taken to establish a special committee to investigate the question of preparing Standard Specifications for rot-proofing of other textile materials. In this connection preliminary tests are at present being undertaken to determine which methods of rot-proofing are most effective to cope with the climatic conditions in this country, and also in the Pacific Islands where textile materials are being extensively used. Reports of similar investigations in other English-speaking countries indicate possibilities of prolonging the life of textile materials to such an extent as to involve economic implications which this Dominion cannot afford to ignore.

Wood-preservation.—The purpose of this project is to provide for a standardized treatment of sap timber that will enable it to be used for purposes which, up to the present, have necessarily made very heavy demands on the limited supplies of heart timber available. Investigations in regard to this project are at present in their initial stages, but its possibilities are of far-reaching significance in relation to the need for the utmost conservation of timber-supplies in order to meet the potential demand of a future comprehensive building programme.