The sub-committee appointed to formulate standard provisions for portable fire-extinguishers has almost completed the draft proposals covering the soda-acid type of extinguisher, which will shortly be circulated to affected interests, after which similar provisions will be prepared for extinguishers of the foam and carbon tetrachloride types.

The importance and value of the work of this sub-committee is best indicated by the fact that it was commenced in the first place in consequence of several accidents, resulting from the bursting of fire-extinguishers, one of them proving fatal. A Government departmental committee was therefore set up to investigate the standard of construction and maintenance of fire-extinguishers and to report on the desirability of imposing some form of control of the position. As a result of the investigation it was found that a number of sub-standard extinguishers was in use, both in public and private buildings, and further, some extinguishers in service were found to be heavily overcharged. In many instances nozzle blockages, similar to that which caused the fatality, were discovered, and the committee reported that there was urgent necessity for the standardization of both construction and maintenance of fire-extinguishers. The Standards Institute was therefore asked to set up a committee to formulate specifications to which portable extinguishers should conform, and good progress has been made, as indicated above.

The provisions, of course, will have regard for efficiency in operation by elimination of factors which might cause delay in bringing a fire-extinguisher into use in the case of emergency, in addition to satisfying safety requirements.

Civil Engineering Divisional Committee (Five Meetings).

Fencing Wire Sub-committee	6 meetings.
Steel Sub-committee	1 meeting.
Bridge Loads and Stresses Sub-committee	1 meeting.
Cement and Concrete Sub-committee	
Asbestos Cement Products Sub-committee	

This committee has examined thirty-two British and nine Australian draft standard specifications and fourteen British and two Australian standard specifications, recommending the adoption of two draft specifications and the following four standard specifications:—

N.Z.S.S.	B.S.S.	
110	674–1936	Rubber Joint Rings for Water Mains and Sewers.
112	722–1937	Borehole and Well Pump Tests.
113	723–1937	Sewage Pump Tests.
114	724–1937	Vapourizing Liquid Pump Tests.

The *Fencing-wire Sub-committee* was responsible for the preparation of a standard specification for galvanized (zinc coated) steel fencing-wire which, as previously reported, has been issued as N.Z.S.S 143.

The *Steel Sub-committee* has been giving consideration to the adoption of standard specifications for different classes of steel. In view of the difference in the provisions of the specifications covering steel which are issued by the Standards Association of Australia and the British Standards Institution, the committee has found some difficulty in recommending the adoption of the standards issued by either authority because of the fact that steel is imported from both countries for use in this Dominion.

The *Bridge Loads and Stresses Sub-committee* is preparing provisions for a New Zealand standard specification for highway bridges, loads, and stresses which may be used as the basis of design for all highway bridges. This will mean that designers throughout the country will know exactly the strength to which they need to design their structures. Uniformity in bridge strengths is necessary since it would be quite useless and wasteful to undertake the expense of constructing a bridge to carry a given loading at one point of a highway, if a bridge at the next point under the control of another authority were incapable of carrying the same loading. Hence the reason of the Public Works Department in referring this project to the Standards Institute for attention. The standard specification referred to will serve to avoid the necessity for much duplication of work in designing, and at the same time will avoid wasteful expenditure in designing to unnecessary strength or in the construction of bridges that may have to be renewed at an unduly early date because of their inadequate strength.

The *Cement and Concrete Sub-committee* is undertaking the development of specifications for reinforced concrete pipes, rapid-hardening cement, concrete, and standard methods for testing concrete.

The specification for rapid-hardening cement will probably be issued as an addendum to the New Zealand standard specification for Portland cement for use in special cases in which the time required for concrete to set is an important consideration from the point of view of permitting its early use and in order to allow attendant work to proceed, which otherwise would have to be held up for a considerable period.

The strength of concrete, so important for constructional purposes, depends upon a proper mixing of its constituents—sand, stone, water, and cement, which need to be used according to defined standards. The importance of exercising the utmost care in this regard cannot be overemphasized if our buildings, dams, reservoirs, bridges, and other such forms of construction are to withstand the stresses imposed upon them, including resistance to seismic forces. This consideration will be further satisfied by the specification in course of preparation for the testing of concrete, which will define the most effective methods by which the engineer may satisfy himself of the strength of the concrete used throughout a structure.

The *Asbestos-cement Products Sub-committee* has only recently been instituted, and on this account has held two meetings only so far, but its function will be to prepare standards that will ensure that asbestos-cement products will be manufactured to strengths that will satisfy the purposes for which they are used, and to dimensions that will render them interchangeable, thus facilitating maintenance service.