

RESEARCH WORK

Study of Efficiency of Heat Insulating Substances

Several pieces of research have been carried out during the year in the Laboratory of Heat Measurements with a view to determining the relative efficiency of a considerable number of heat insulating substances notably the varieties of concrete. The question of the necessary thickness of concrete to insure adequate fire protection depends very much upon the nature of the concrete as regards the action of hydraulic cement and the kind of sand and rock with which it is made.

A systematic study of a large number of the mixtures in practical commercial use has been carried on by means of electrical methods which have been originated in the Laboratory for this work. The variation in insulation resistance with the temperature is found to be considerable for most substances and concrete proves to be no exception to this rule.

Similarly, the increasing demand for cold storage installation has led to the production of a considerable number of new commercial products which are used for insulating cold storage equipments. The study of these has been undertaken systematically with a view to determining the essential quality of the various substances which makes them efficient as thermal insulators.

A study of the value of concrete as a protection from electrolysis by stray currents is being carried on in the Laboratory, tests which are to run for a year or more having been started with a view of studying the methods of preventing the electrolysis and subsequent weakening of the lower portion. With these pieces of research an elaborate transformer, which may be adjusted with the greatest precision and facility to give alternate supply of widely varying voltage and current, has been installed and has added much to the facility with which this experimentation has been carried out.

INTERCOLLEGIATES

(Continued from page 1.)

mouth (119 ft. 2 in.); Kooyumjian, Amherst, second (113 ft. 7 1-2 in.); Kilbourn, Amherst, third (106 ft. 10 in.); Hanna, Wesleyan, fourth (102 ft. 1 ft. 4 in.).

High jump—W. Palmer, Dartmouth, and Horrax, Williams, tied for first (5 ft. 9 1-4 in.); Dalrymple and Allen, Technology, tied for third (5 ft. 5 3-4 in.). Palmer won medal on toss-up.

Broad jump—Won by Sherman, Dartmouth (21 ft. 3 3-4 in.); Horrax, Williams, second (21 ft. 2 in.); Atwood, Bowdoin, third (20 ft. 11 in.); Mayhew, Brown, fourth (20 ft. 7 1-2 in.).

Pole vault—Won by Holdman, Dartmouth (11 ft. 6 in.); Allen, Technology, second (11 ft. 3 in.); Horrax, Williams, third (11 ft.); Salisbury, Technology, and Jenks, Dartmouth, tied for fourth (10 ft. 6 in.).

Summary by points:
100-yard dash—Dartmouth 5, Williams 2, Amherst 1, Wesleyan 3.

One mile run—M. I. T. 3, Bowdoin 5, Brown 1.

120-yard hurdles—Williams 5, Brown 5, Maine 1.

440-yard dash—M. I. T. 2, Wesleyan 5, Maine 1, Tufts 3.

880-yard run—Dartmouth 2, M. I. T. 5, Williams 1, Maine 3.

220-yard hurdles—Williams 2, Bowdoin 5, Brown 3, Maine 1.

Two mile run—M. I. T. 6, Bowdoin 2, Brown 3.

220-yard dash—Dartmouth 5, M. I. T. 1, Williams 5.

Shot put—M. I. T. 1 1-2, Bowdoin 1 1-2, Amherst 8.

Hammer throw—Dartmouth 1, M. I. T. 2, Bowdoin 5, Amherst 3.

Discus throw—Dartmouth 5, Amherst 5, Wesleyan 1.

High jump—Dartmouth 4, M. I. T. 3, Williams 4.

Broad jump—Dartmouth 5, Williams 3, Bowdoin 2, Brown 1.

Pole vault—Dartmouth 5 1-2, M. I. T. 3 1-2, Williams 2.

Totals—Dartmouth 32 1-2, M. I. T. 27, Williams 24, Bowdoin 20 1-2, Amherst 17, Brown 13, Wesleyan 9, Maine 6, Tufts 3, Vermont 2.

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