

Theisen emphasized the fact that they must provide the public with accurate information concerning the work and achievement of the schools and detailed facts which will show the effect of recent proposed changes, such as short school terms, larger classes, curtailed curriculums, etc. In a discussion of the contribution of college research bureaus, Dr. V. A. C. Henmon emphasized the development of adequate techniques of investigation, the development of valid standards, the demonstration of the inadequacy of present practices and achievements and the identification of conditions that are sadly in need of study and correction. In commenting upon "The Function of Research in Departments of Education," Dr. Edgar Dale emphasized the need for the better coordination of research activities, for the elimination of duplicating educational activities and for the rebuilding of the educational system of the commonwealth on an orderly and factual basis. Following a detailed analysis of "The Dependability and Value of Survey Types of Investigation," Dr. Walter S. Monroe concluded that studies employing the survey technique are as a rule relatively unimportant and that very few of them have contributed directly to the development of a science of education. The third session was introduced by two discussions of maturation and its relations to intelligence. Dr. C. R. Griffith presented an illuminating analysis of the psychology of maturation, in which

certain current views were vigorously challenged. Dr. C. H. Judd pointed out the importance of a symmetrical development of individuals at each stage in their growth to the end that integrated, organized personalities may result. The second part of the program was concerned with the essentials of an education in contemporary life. In referring to the elementary level, Miss Bess Goodykoontz pointed out the importance of a well-balanced program of basic training presented under varied conditions. In considering the secondary level, Dr. A. K. Loomis emphasized the importance of the study of contemporary life. In discussing the college level, Dr. C. S. Yoakum stressed the value of the great divisions of human knowledge and of the tools which are essential in learning about and in investigating problems in various fields. The concluding session of the program had for its central theme "Education in a Democracy." S. J. Duncan-Clark, editorial writer for the *Chicago Daily News*, presented a discriminating analysis of the need for free public education in the United States and challenged the wisdom of present organized effort to curtail the educational opportunities of young people. The fact was emphasized repeatedly that the welfare of a democracy depends upon an enlightened citizenry. Only as the state provides adequate facilities for education can we hope to reconstruct intelligently the present social order.

SCIENTIFIC EVENTS

THE PREVENTION OF EARTHQUAKE DAMAGE

THE Seismological Society of America, at its meeting of April 8, 1933, at the University of California at Los Angeles, instructed its board of directors to issue a public statement concerning earthquake hazard and the importance of the inclusion in building codes of provision for earthquake-resistant design and construction. The statement endorsed by the board of directors is as follows:

It is common knowledge that from time to time in the past earthquakes have occurred in California strong enough to cause damage to property and even loss of life. Geological studies and instrumental records of seismic activity indicate a high degree of probability that similar earthquakes will occur from time to time in the future.

Man can not prevent or control earthquakes any more than he can prevent or control tornadoes or typhoons. However, recent experience in severe earthquakes, especially in Japan, in California and in Italy, has demonstrated that buildings designed and constructed to resist earthquakes suffered only slight or no damage, while many buildings not so designed or constructed were

seriously damaged or even demolished, too often with injury to persons and loss of life.

In the light of past experience and of present knowledge, there is no excuse for the erection of schools, theaters, hotels, apartment houses, churches or other buildings where many persons are expected to live or congregate, without proper provision having been made to prevent possible damaging or destructive effects of earthquakes. The public should be protected by strictly enforced building codes carrying specific provisions for earthquake resistance.

In general, buildings should be so designed and constructed in all their parts as to resist a horizontal force of one tenth their weight. The foundations should be strong and adapted to the character of ground on which they rest, and the buildings should be well attached to them. Parapet walls, decorative projections and veneer walls should be either very securely fastened to the frame or else omitted. The buildings should be designed as completely separate units, or well tied together, and properly braced. It is less expensive and more feasible to protect a community against earthquake damage than against fire damage.

By appropriate building design and construction, and only by such design and construction, can earthquake damage be prevented, and fear of such damage eliminated.