subject of very broad interest and intensive study, in the light of which our conception of that period as a convenient time of transition from the so-called Dark Ages to the Renaissance is undergoing a considerable modification, for we are realizing that the Dark Ages were not dark, except as our knowledge of them was without illumination, and that the Renaissance, except on the calendar, is indistinguishable from the Middle Ages themselves. Scholars in this field have found it essential to restudy the documents on which our knowledge of it is based, not only to test those foundations but as a means of establishing the processes by which tradition, literature, ideas, thought, learning and science were transmitted in constantly changing form from generation to generation and from place to place. This, in turn, has made necessary a new study of the chief vehicles of this transmission of culture—Medieval Latin, Arabic and Hebrew.

Closely related to the study of the Middle Ages is the interest taken in searching for the sources of the ideas that dominated western literature and thought in the seventeenth and eighteenth centuries, and in tracing the changes in the ideas themselves as they influenced and were in turn influenced by the rapidly shifting intellectual styles.

The completion of the great Oxford Dictionary during the last generation has given rise to a marked revival of interest in the English language. Supplementary dictionaries of Middle or Chaucerian English, of Early Modern or Tudor English and of American English have been undertaken by American scholars, who are also devoting much attention to variations of dialect spoken in the United States and Canada. The American Linguistic Atlas, for which a field study of New England speech has been completed, will furnish material of interest not only to students of dialect but to historians and sociologists, as well.

Another linguistic subject to which increasing attention has been given of late years is that of primitive language. This field is so vast and as yet so little worked that no more than a beginning has been made. The interest of American scholars has been directed largely to the languages of the native Americans, and for nearly a decade sustained and systematic efforts have been made to record them for purposes of comparative study. The languages of South America have hardly been touched, and it will be many years before anything like a comprehensive survey of native American linguistic materials is possible. Such a survey is, however, essential to any intensive study of native American culture.

Biography as a form or method of historical research has received marked attention, partly, at least, because of its current popularity, but certainly also because of a conviction that the proper study of mankind is man. The most notable American undertaking in this field is, of course, the Dictionary of American Biography, sponsored by the Council of Learned Societies, now well past its half-way mark.

It is possible only to mention such well-defined interests as that in contemporary history, which comes to the front in an effort to make some diagnosis of the current ills of humanity, or that in so-called cultural history, which represents a reaction from the conventional political history of the nineteenth century. One of the most important and significant of such interests is that in the history of science, shared alike by the scientist and the scholar, as each feels the need to understand the historical background of the extraordinary advance during the last century in scientific research and technology.

Finally, the American scholar, looking beyond the Pacific, is irresistibly attracted by the possibilities of research in the history and civilization of the Far East. The art, literature, philosophy and learning of China and Japan constitute unlimited and almost unexplored fields for fruitful work by generations of scholars. Difficult skills and techniques must be acquired by all who hope to do any original work in these most attractive domains of living languages and studies, but the reward promises to be well worth whatever effort may have to be put forth.

In concluding this brief review, it is not inappropriate to observe that the scholars whose work lies in the fields of the humanities have not shut themselves up in an ivory tower in order to carry on their studies oblivious to what is going on about them. They are aware of the acuteness of the problems that beset humanity to-day, and desire to contribute to their solution. They believe that they have, in troublous times, a special duty to minister to the needs of the world, but they believe that, foremost among those needs, are a true knowledge and a clear understanding of the spiritual experience of mankind. To contribute to this knowledge and to advance this understanding constitute the chief obligations of humanistic scholarship.

SCIENTIFIC EVENTS

JUBILEE OF THE ROYAL SCOTTISH GEOGRAPHICAL SOCIETY

THE *Proceedings* of the Royal Scottish Geographical Society includes the following account of the history and plans of the society and its journal:

The Royal Scottish Geographical Society was founded on October 28, 1884, and the first issue of the *Scottish Geographical Magazine* appeared in January, 1885. The present issue, therefore, forms the beginning of Volume 50, and the council has considered the occasion suitable

for the introduction of certain improvements in the form of the magazine. As will be noticed, these improvements include a more opaque paper, a more legible type, and better presentation of illustrations. It is also intended to issue during the year an enlarged, illustrated jubilee number, dealing with the history of the society and its founders, and including some original maps. Other ways of celebrating the occasion are under consideration, and details will be given in due course.

The volumes of the magazine already issued represent in the main a period of uninterrupted progress. The circulation has steadily grown, and this represents an increase in the number of the geographically-minded—an increase in which this magazine itself may claim to have played a part. A more important factor, of course, is the position now held by geography, both in the universities and in the schools; and in securing this enhanced status the influence of the society and of its individual members has been important. Of more significance than the increase in its circulation is the position which the magazine has gained among the geographical publications of the world. The range of topics discussed in its pages is now much greater than in the early days, and papers are submitted to the editor from an ever-widening circle of geographers in almost every English-speaking country in the world, and in greater numbers than the limits of space can accommodate.

There are, however, two matters for regret, both of which are the result of the financial position of the society. The first is that it has not yet become possible to return to the monthly issue of pre-war days; here, however, some compensation has been made in the increased number of pages of the present six issues. The second and more serious cause for regret is the impossibility of publishing maps, other than sketch-maps, to any satisfactory extent. Our earlier volumes contained many maps which were not only beautiful examples of the cartographer's art but represented valuable original geographical material. The absence of this feature in recent years is not due to any want of material, certainly not to any lack of appreciation by the council of the value of such material, but wholly to the lack of funds.

The council has under consideration the possibility of forming a special map fund, but all such efforts depend for success upon the support given to the society in its main object of promoting a scientific interest in geography in all its branches. It is at least a matter for legitimate pride that during its half-century of existence the society, in addition to its various activities as a Scottish society, has been able to secure and maintain through its magazine an ever-improving status in the world of science.

THE 200-INCH TELESCOPE MIRROR

THE pouring of borosilicate glass for a 200-inch telescope mirror at a temperature of 2,400 degrees Fahrenheit took place at the Corning Glass Works on March 25.

The mirror is to take its place in the world's largest telescope being designed for the Carnegie Institution of Washington and the California Institute of Technology. It will be set up on an as yet unnamed mountain site in California.

Dr. Walter S. Adams, director of the Mount Wilson Observatory, is reported to have said that in pouring the glass two or three of the turret-like pylons had broken loose and floated to the top of the molten glass. He attributed this to the melting of iron bolts which were supposed to hold the pylons in place. He stated that all the mishap means is that the glass will be filled in solidly where there should have been a "valley" on the back of the finished casting and this will have to be drilled out with sand-blasting apparatus or other equipment.

The grinding and polishing of the mirror will take place in a special laboratory now under construction at the California Institute of Technology. This is expected to require three full years. The work will be done under conditions of constant temperature, as the mirror must be ground to an accuracy of one five hundred thousandth of an inch.

Six thousand persons passed through the foundry while the glass was being poured. According to an Associated Press despatch, astronomers and scientific men who were present included the following:

Dr. George Ellery Hale, director of the California Institute of Technology, where the telescope will be installed; Professor William L. Bragg, of England, who has been lecturing at Cornell University as an exchange professor; Lyman J. Briggs, director of the U. S. Bureau of Standards; Walter S. Adams, director of the Mount Wilson Observatory, Pasadena; Dr. Warren Weaver, of the Rockefeller Foundation, New York City; Dr. C. A. Chant, director of the Dunlap Observatory, Toronto; Dr. Max Mason, president of the Rockefeller Foundation, New York City; Dr. C. E. K. Mees, director of research, Eastman Kodak Company, Rochester, New York; Dr. Arthur L. Day, director of geophysical laboratories of Carnegie Institution, Washington, D. C.; Dr. Clyde Fisher, curator astronomical section, Museum of Natural History, New York City; Gustavus Wynne Cook, of Philadelphia, amateur astronomer; H. J. Lulcheo Stark, chairman of the observatory council of the University of Texas, for which the Corning Glass Works is now annealing an eighty-one-inch disk; Otto Struve, director of the Yerkes Observatory of Chicago and the MacDonald Observatory of the University of Texas; Dr. John Allen, professor of astronomy at Colgate University; Dr. W. B. Rayton, research expert of the Bausch and Lomb Optical Company of Rochester, and William Bausch; George A. Davis, Jr., of the Buffalo Astronomical Society; Professor S. L. Boothroyd, of Cornell University; Dr. John E. Merrill, Buffalo Museum of Science; James Stokley, associate director of astronomy, Franklin Institute, Philadelphia; J. W. Fecker, of Pittsburgh, and Charles J. Stillwell, of Cleveland, representing the disk grinders, and Dr. Frank B. Jewett, director of research for the American Telephone and Telegraph Company.