present time for the treatment of market milk, a method that was not actually put into practice until ten or more years later because the industry was not ready for it. It is certain that the credit that should be given Dean Russell for his work on pasteurization of milk has not been bestowed because it came at too early a period in the development of the industry.

Various other fields of farming investigation have engaged Dean Russell's attention, including the study of bacterial diseases of plants, especially the black rot of cabbage. One of the lines of effort in which study of bacteriology has yielded results of great practical value was the relation of bacteria to the ripening of cheddar cheese. The discovery that cheese could be ripened at much lower temperatures than was previously thought possible was a by-product of scientific work, a by-product that adds hundreds of thousands of dollars to the income of the cheese industry in Wisconsin yearly, and will do so as long as cheese is made.

The state of Wisconsin has invested much money in work that has been accomplished by Dean Russell during these twenty-four years of service as a bacteriologist and director of the work of the College of Agriculture and Experiment Station. The question of importance to-day is the soundness of the investment and the returns it brings. Those who are best acquainted with the matter would cease to worry about the high cost of living and of dying if they could feel that their investments were one half as sound and would bring them one thousandth part of the returns that the state of Wisconsin receives from the money it has invested in this man,

THE PRIESTLEY MEMORIAL OF THE AMERICAN CHEMICAL SOCIETY

By resolution of the council of the American Chemical Society adopted at its meeting in Urbana in April, 1916, the president was requested to appoint a committee to devise and carry out a plan for a suitable memorial to Joseph Priestley. After careful consideration of various plans, the members of the committee desire to present the following recommendations to the Society:

1. That a bust portrait of Joseph Preistley be secured, to be a copy of the best available portrait; that this be retained as the property of the American Chemical Society, but be deposited as a loan in the National Museum in Washington. Also,

2. That a gold medal be awarded at intervals of probably more than one year for superior achievement in chemical research; the award to carry with it the requirement that the recipient shall deliver an address before the general meeting of the society at the time of the presentation or at such other time and place as the council of the society may direct.

Carful inquiry has convinced the committee that, in order to carry out these plans, a fund of at least \$2,000 should be secured. It is requested that subscriptions be sent to the chairman or to any member of the committee. Contributions of sums from \$1.00 upwards are asked.

Joseph Priestley was born at Fieldhead in England in 1733. Although educated for the ministry, he became noted as a teacher and lecturer on natural science, and especially as an investigator in chemistry, devoting his attention largely to the study of gases. Persecuted and shunned as a result of popular prejudice for his theological views as a dissenter from the Established Church, he migrated to America in 1794 and settled with his family in Northumberland, Pennsylvania. Here he established a laboratory and continued his work as an investigator in chemistry.

While famous throughout Europe and in America for his historical and philosophical writings, for his important work on the History of Electricity, and many other contributions to scientific literature, he is more especially known to modern chemists for his researches on the chemistry of gases, which culminated in 1774 in the discovery of oxygen, described in his treatise entitled "Experiments and Observations on Different Kinds of Airs."

He continued in America to be a contributor to scientific and theological literature until his death in Northumberland in 1804.

On July 31, 1874, many of the leading chemists of America met near the grave of Joseph Priestley at Northumberland to honor the memory of the man who had discovered oxygen one hundred years before. In the account of the proceedings detailed in the American Chemist for 1874, we are told that a movement was there begun which led later to the establishment of the American Chemical Society.

And as the foundation of the American Chemical Society has been thus linked with the name of Joseph Priestley, it would seem proper that we should seek in some lasting way to commemorate his work as an investigator and philosopher and tireless searcher after truth.

It is earnestly hoped that the plans now proposed by the committee for a memorial will meet with approval and that we shall be able, by means of an adequate subscription fund, to render such honor as is due to the memory of John Priestley.

- F. C. Phillips, *Chairman*, University of Pittsburgh, Pittsburgh, Pa.
- M. T. Bogert, National Research Council, Munsey Bldg., Washington, D. C.
- E. D. CAMPBELL, University of Michigan, Ann Arbor, Mich.
- C. F. CHANDLER, New Hartford, Conn.
- F. W. CLARKE, U. S. Geological Survey, Washington, D. C.
- E. C. Franklin, Leland Stanford Jr., University, Cal.
- J. L. Howe, Washington and Lee University, Lexington, Va.
- J. H. Long, Northwestern University, Chicago, Ill.
- Edward W. Morley, West Hartford, Conn.
- A. A. Noves, Mass. Institute of Technology, Boston, Mass.
- W. A. Noves, University of Illinois, Urbana, Ill.
- IRA REMSEN, Johns Hopkins University, Baltimore, Md.
- E. F. SMITH, University of Pennsylvania, Philadelphia, Pa.
- ALFRED SPRINGER, Cincinnati, O.
- F. P. VENABLE, Chapel Hill, N. C.

Committee

SCIENTIFIC EVENTS

A STRUCTURE POSSIBLY FAVORABLE FOR OIL UNDER THE CENTRAL GREAT PLAINS

In consideration of the present great interest in oil prospects in the Great Plains region, the United States Geological Survey, Department of the Interior, has prepared a report giving all available information regarding the structure of that region. No oil or gas has been found in most of this wide area, but it contains several anticlines and domes like those which yield oil and gas in central Kansas, Oklahoma and Colorado, so that the conditions are encouraging for exploratory borings. Wells have been drilled at a number of places, but most of them have either been sunk where the structure was not favorable to the occurrence of oil or gas or have not been drilled deep enough to test all the strata.

The structure of the Central Great Plains north of latitude 37° has been investigated by geologist N. H. Darton, who has prepared a map showing by contour lines the location and configuration of a number of promising anticlines and domes. One of these domes lies on the Nebraska-South Dakota line northeast of Chadron, its crest being on White River. It may continue southward under the great sand cover in Nebraska to join an anticline of moderate prominence which crosses the Republican Valley just above Cambridge, Nebr., and extends into the western part of Norton county, Kans.

A local dome of considerable height occurs in Hamilton county, Kans., its crest being 6 or 8 miles southwest of Syracuse. It is on the flank of the largest dome in the Central Great Plains, which arches up the strata in Baca, Las Animas, and Bent counties, Colo., and adjacent parts of northern New Mexico. Its crest is under the Mesa del Mayo, on the state line. A dike of igneous rock not far west of this place contains petroleum, which undoubtedly had its source in some of the uplifted strata.

A dome east of Fort Collins, into which a drill has penetrated 3,900 feet, also presents structure favorable for oil, and when the drill reaches the beds that yield oil near Boulder it may find in them a possible reservoir. There