cation. The results so far obtained indicate that, provided a sufficient amount of kieselguhr is used to afford the minimum adsorbing surface required for the colloids present, there is little, if any, difference in clarifying efficiency when equal weights are used, even though the various kieselguhrs may differ considerably in physical properties. The dialysis experiments further proved, as has been indicated by the work of previous investigators, that heating and filtration with kieselguhr remove all colloids of such a degree of dispersion as to give a turbidity visible to the eye. Using active decolorizing carbon after preliminary treatment of the juice with kieselguhr, it was found that colloids of such dimensions as to be invisible to the eye were thereby removed.

*Determination of the density of molasses:* W. B. NEWKIRK. The picnometer suggested permits a greater accuracy in the determination of the density of molasses than has been possible heretofore. It is essential for commercial reasons that an accurate method of determining the density be used. The interfering obstacles in the determination of densities of molasses are due to the high viscosity, included gases and dissolved gases. The picnometer suggested is adaptable in the presence of these difficulties. It consists of a bottle fitted with an enlargement at the top ground optically flat and closed off by another optical flat. An expansion chamber is ground on to the bottle to permit the expansion of the included gas to permit of its easy removal and is fitted with a vacuum connection and stop cock in order to put the contents of the bottle under greatly reduced pressure and maintaining the same for a considerable length of time, without the loss of moisture. The evaporation is negligible. The change in temperature of the picnometer after closing is reduced by very thick walls over the neck of the flask. This reducing temperature changes on handling. Two methods of deaerating were studied—the application of heat to reduce its viscosity and the application of air to expand the entrained gas. The heating causes considerable decomposition and has a deleterious effect in the determination of the density. The vacuum method removes entrained gas and does not have the bad features of heating or dilution. The accidental errors are shown to be very small and the total error in any one direction is shown to be within .1 of 1° Brix, and the majority of determinations can be made within a few hundredths of 1° Brix. Densities with this apparatus can be determined with reasonable facility and with considerably more accuracy than the sample of molasses can be obtained.

CHARLES L. PARSONS,
*Secretary*

## ASSOCIATION OF AMERICAN GEOGRAPHERS

THE annual meeting of the Association of American Geographers was held with the department of geography of the University of Chicago during Convocation Week. Five sessions were held at which forty-one papers were read, nine by title.

Especial interest centered in the joint meeting with the Ecological Society of America and the session devoted to invited papers on industrial geography. The papers given at the joint meeting were as follows:

*Experimental animal climatology:* V. E. SHELFORD.
*Geography in zoological museums:* A. G. RUTHVEN.
*The relation of plants to new habitats:* D. T. MACDOUGALL.
*Ecology and geographic boundaries:* H. C. COWLES.

Owing to the necessary absence of President Gregory, because of an emergency telegram, his presidential address on "Geographic basis of the political problems of the Pacific" was omitted. The following papers on Industrial Geography were given during the afternoon session of the same day.

*The significance of vegetable oils in the economic development of the tropics:* V. C. FINCH.
*Geographical influences in marketing; illustrated by the meat industry:* GUY C. SMITH.
*Geographic factors in dairy farming in southern New England:* RICHARD E. DODGE.

The papers presented at the remaining sessions were as follows:

*Rainfall maps of Latin America:* EUGENE VAN CLEEF.
*The trade winds and anti-trades of Porto Rico:* OLIVER L. FASSIG.
*Progress in organization of the Climatological Service of the West Indies:* OLIVER L. FASSIG.
*Rise in temperature on mountain summits earlier than on valley floors:* H. J. COX.
*Cold surf with off shore winds:* CHARLES F. BROOKS.
*Vertical gradients of evaporation and soil moisture in desert and coastal mountains:* FORREST SHREVE.
*Stream and ocean terraces in relation to recent earth movements:* R. S. HOLWAY.

*The status of the general magnetic survey of the earth:* L. A. Bauer.

*A significant contrast between the Atlantic and Pacific regions:* W. H. Hobbs.

*Intermont basins:* W. M. Davis. (By title.)

*The importance and permanence of the physical factors in determining the utilization of land for agricultural and forest production:* O. E. Baker.

*Problems of land classification:* Carl O. Sauer.

*Distribution of sunlight and moonlight over the earth:* Zonia Baber.

*Chili: a land where immigrants need not apply:* Mark Jefferson.

*Some aspects of the geography of South Dakota:* S. S. Visher. (By title.)

*Finland as an independent republic:* J. J. Sederholm. (By title.)

*The Armenian frontier:* Lawrence Martin. (By title.)

*The geography of part of southeastern Idaho:* G. R. Mansfield. (By title.)

*Geographical regions of the fisheries of Asiatic Russia:* S. J. Novakovsky.

*The grain trade of ancient Athens:* Ellen Churchill Semple.

*Geography and man in Cuba:* R. H. Whitbeck.

*Geography and man at Panama:* R. H. Whitbeck. (By title.)

*Physiography and man in Porto Rica:* A. K. Lobeck.

*Notes on the geography of Honduras:* N. A. Bengston.

*A geographic study of the Saginaw Valley as an area of gentle relief:* F. W. Frostic. (By title.)

*Population changes in Nebraska since 1880:* Esther S. Anderson.

*Nashville and the central basin of Tennessee:* K. C. McMurry.

*The world's markets: a map based on natural regions:* Eugene Van Cleef.

*Significant geographic problems of the outwash plains of southern Michigan:* D. H. Davis.

*Census maps of the United States with some suggestions for improvement from the standpoint of geography:* R. M. Brown. (By title.)

*Development of productive scholarship among American geographers:* W. W. Atwood. (By title.)

*Bering's two expeditions to determine the relation of America to Asia:* W. L. G. Joerg.

*Geography as regional economics:* Carl O. Sauer.

The enjoyable and stimulating sessions were supplemented by an evening dinner tendered to the association by the Geographic Society of Chicago and by an informal lunch given by the department of geography of the University of Chicago. Both these events gave an opportunity for social greeting and discussion that was much appreciated, for in the rush and demands of so large a meeting, and group of meetings, there is but little chance for social get-togethers unless they are deliberately planned for.

During the sessions the Council met and acted upon a number of important plans. W. M. Davis was appointed representative of the association in the Division of Geology and Geography of the National Research Council. He succeeds himself for a period of three years.

It was voted to hold the next annual meeting in the city of Washington during Christmas week, 1921; and to recommend to the Council of 1921 that the meeting for 1922 be held in the east and that for 1923 in the mid-west.

A canvass of the ballots showed the following officers elected for the year: *President,* Ellen Churchill Semple; *Vice-presidents,* A. J. Henry and Curtis F. Marbut; *Secretary,* Richard E. Dodge; *Treasurer,* George B. Roorbach; *Councillors,* Eliot Blackwelder, Ray H. Whitbeck, Nevin M. Fenneman.

The spring joint meeting with the American Geographical Society will be held at the society's building in New York City on April 22 and 23, 1921. Program will be published as soon as completed so that all who are interested in the papers to be given may attend. The secretary will be glad to receive the names of those who would like to be informed of meetings of the association so that they may receive programs of papers as issued.

Richard Elwood Dodge,
*Secretary*

Storrs, Conn.


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