liquid with a spoon, energetically, and removing the latter, I noticed that a sharply outlined spiral was *persistently* present on the surface, until the deep paraboloid returned to the plane. My explanation would be, that at *l*, part of the tangential velocity is converted into local vortical motion, whereby the particles at *l*, because of the reduced centrifugal force, slide down the inclined plane of the rotating paraboloid. From another point of view, a stationary wave is produced on the surface by the interference at *l*.

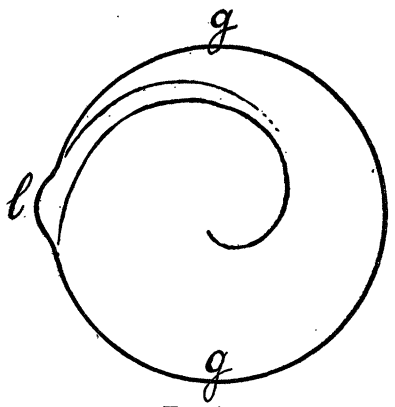

FIG. 1.

Now though I will not venture to repeat the superscript of this note, I will nevertheless ask whether something analogous to the above simple experiment may not be taking place in astronomical space. Suppose we replace the glass vessel of the figure by a gravitational mechanism; and suppose we "lip" it at *l*, by making that locality a region of effectively greater density and relatively at rest. If Kepler's law be written in the form so convenient in its present relations to the modern atom (M, being the virtual mass at the center and A the angular momentum per gram, whereby $rv^2 = A^2/r = M$, for the tangential velocity v at r), then any local diminution of A in accordance with the above model, would be followed by a diminution of r in the part affected.

At all events the hydrodynamic experiment (rotational surface figures, as related to shape of boundary) is very beautiful and certainly more approachable. I shall allow myself to play with more interpretable modifications of it a little longer.

CARL BARUS

BROWN UNIVERSITY

THE PACIFIC DIVISION OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE Seattle meeting of the Pacific Division of the American Association for the Advancement of Science held June 17 to 19 at the University of Washington, Seattle, was perhaps the most successful so far held by the Pacific Division. Sixteen affiliated societies were scheduled in the final program and delegates were in attendance from every part of the Pacific Coast area. The representation from the University of California and Stanford University was particularly large.

The special sessions of the convention in which the various affiliated societies participated were well attended and the beneficial results of this cooperation were apparent. The conference of Research Committees from the educational institutions of the Pacific Coast held two sessions which were attended by all the delegates. The problems connected with the maintenance and encouragement of active research in the college and university were presented and discussed and some practical suggestions were made. It was felt that distinct progress in the solution of these problems had resulted from this meeting and that the research conference should be a permanent feature of the annual meetings of the Pacific Division.

A symposium on the "Einstein Theory of Relativity" was of general interest and was also well attended. In the symposium on "The Animal and Plant Resources of the North Pacific Ocean" given under the auspices of the Pacific Fisheries Society and the Western Society of Naturalists, each speaker emphasized the great need for more knowledge of the ocean and its life to save the fisheries industry. It is hoped that the means will be found to publish the papers in this symposium as a contribution to a better understanding of the importance of the projected exploration of the North Pacific Ocean through international co-

operation. This project will be further advanced at the Pan-Pacific Scientific Congress to be held in Honolulu from August 2 to 20.

Notable features of the meeting were the presidential address by Dr. John C. Merriam who spoke on "The research spirit in the every-day affairs of the average man" and the address by Professor R. W. Brock, of the University of British Columbia, on "The last crusade under Allenby." On account of illness, Dr. Charles E. St. John, of Mount Wilson Observatory, was unable to give the Sigma Xi-Phi Beta Kappa lecture. His place was supplied by Dr. Paul W. Merrill, of Mount Wilson Observatory, who spoke on "The chemistry of the stars."

Dr. William E. Ritter, director of the Scripps Institution for Biological Research, was elected president of the Pacific Division for the year 1920–21. Dr. William M. Dehn, professor of chemistry, University of Washington and Dr. E. P. Lewis, professor of physics, University of California, were elected members of the executive committee to serve five years and Dr. E. C. Franklin, professor of chemistry, Stanford University, was elected a member of the executive committee to fill the vacancy caused by the election of Dr. Ritter to the presidency.

The officers of the Pacific Division for the coming year are accordingly as follows:

Dr. William E. Ritter, president, Scripps Institution for Biological Research, La Jolla, Calif.

Dr. Barton W. Evermann, vice-president and chairman of the executive committee, California Academy of Sciences, San Francisco, Calif.

W. W. Sargeant, secretary-treasurer, California Academy of Sciences, San Francisco, Calif.

MEMBERS OF THE EXECUTIVE COMMITTEE

Dr. Barton W. Evermann, chairman, California Academy of Sciences, San Francisco, Calif.

Dr. William E. Ritter, Scripps Institution for Biological Research, La Jolla, Calif.

Dr. W. W. Campbell, Lick Observatory, Mount Hamilton, Calif.

Dr. William M. Dehn, University of Washington, Seattle, Wash.

Dr. E. C. Franklin, Stanford University, Calif.

Dr. C. E. Grunsky, Mechanics Institute Building, San Francisco, Calif.

Dr. T. F. Hunt, University of California, Berkeley, Calif.

Dr. E. P. Lewis, University of California, Berkeley, Calif.

Dr. D. T. MacDougal, Desert Laboratory, Tucson, Arizona.

An amendment to the constitution of the Pacific Division was proposed in executive session held Thursday evening June 17 to exclude Arizona and the states of Chihuahua and Sonora in Mexico from the territory of the division. This action was in conformity with that taken by the National Council which has caused these states to be included in a recently organized division of the American Association.

As an encouraging sign that the purposes of the annual meeting are being in some measure fulfilled it is noted that considerable publicity was given to the meeting in the Seattle papers. At least two editorials appeared on topics related to the discussions and reports of the meetings were given in some detail. This would indicate that the public is becoming more generally interested in the progress of science and augurs well for the future support of scientific investigation.

Announcement was made by the executive committee that the next annual meeting would be held in the San Francisco Bay region, the definite time and place to be determined later. This location will accommodate the largest number of members and should insure a good attendance for the 1921 meeting.

W. W. Sargent,
Secretary

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