

stationed at Taylor, Tex., in order to deliver lectures at the University of Texas, located at Austin, which is about 30 miles southwest of Taylor, reports:

I have called upon President Prather of the University of Texas. As Mr. Alexander Deussen is now giving three lessons a week in elementary meteorology it appears most feasible to let the present arrangement stand for the remainder of this college session and for me to arrange to deliver a few lectures to the students as a whole on the U. S. Weather Bureau and its work. It is believed that such lectures would be helpful as matters of general information and would serve to bring the course in meteorology more prominently before the student body.

Mr. W. S. Belden, Section Director, Vicksburg, Miss., reports that during May and June he delivered a series of five lectures before the junior and senior classes of St. Francis Xavier's Academy on the following subjects:

- (1) Temperature and pressure of the atmosphere.
- (2) Winds and moisture of the atmosphere.
- (3) Atmospheric optics.
- (4) Cyclones, anticyclones, hurricanes, and tornadoes.
- (5) The weather map and weather forecasting.

The lectures were freely interspersed with experiments and illustrations.

#### THE NEW EDITION OF HANN'S METEOROLOGY.

The great demand for the Lehrbuch published by Hann in 1900-1901 has given occasion for the preparation and publication of a second edition, of which the first five parts have already been published by C. H. Tauchnitz, in Leipsic, Germany. So far as we have noticed, the illustrations and charts of the second edition do not differ materially from those of the first; indeed there was little occasion for a change in this respect, except in regard to the results of the more recent observations of hail and clouds, or the international work with kites and balloons in the free atmosphere. On the other hand the text shows everywhere the revising hand of the author, introducing innumerable changes in order that it may represent the latest additions to our knowledge. The historical development of observational meteorology has been given so fully in the first edition, and especially in the standard Lehrbuch by E. E. Schmidt (Jena, 1860) that Hann has rightly appreciated the fact that the great need of the present moment is a clear statement of the physics and mechanics of the atmosphere, that is to say, the problems of heat, moisture, and motion, and the rationale of the never-ending complexity of our atmospheric phenomena. Although Hann has made statistical climatology such a prominent part of his life work as to have revolutionized our knowledge of the subject, yet he has been able to devote equal attention to the underlying philosophy, and step by step has built up a systematic theory or in some cases has completed the structure that others had begun. His second edition differs from the first by the omission of many bibliographical notes in fine print and by the use of larger type for the main body of the text, it is therefore much less wearisome to the eye and it is easier to follow the trains of thought. If the preceding edition was an encyclopedia or a compilation of all that the author had read during his preceding forty years of activity, the new edition on the other hand is a digest of the present condition of our knowledge, and, therefore, especially adapted to the use of students in universities and of teachers who give special attention to meteorology.

The English speaking public has often asked for an English edition of the original German work; in fact the Editor undertook this work with a brave heart, but after a few weeks realized that we could find no publisher for it, and that in fact those who are able to use such a translation are probably also well enough acquainted with the German language to prefer the original. But as regards the present edition, which will embrace about 600 pages as compared with the 800 of the previous edition, there can be no doubt but that an English

translation will be welcomed by students and teachers throughout the world. It is greatly to be hoped that by assigning each chapter to some competent student for translation the German publisher may secure the most prompt publication possible, so that this work may exercise throughout England, America, and their colonies the good influence that it is bound to exert among the German speaking peoples.

So far as published the new edition consists of an introduction of 24 pages; Book I, pages 25-125, five chapters on the temperature of the solid and fluid portions of the earth's surface and of its atmosphere; Book II, pages 126-156, four chapters on atmospheric pressure and its variability; Book III, pages 157-275, four chapters on the aqueous vapor of the atmosphere; Book IV, pages 276-362, five chapters on the movements of the atmosphere or dynamic meteorology. Book V, the disturbances of the atmosphere, or the daily weather, storms, cyclones, etc., brings us to the last page, 432, of the fifth part. This corresponds closely to page 542 of the first edition and shows approximately the ratio of condensation in the two editions. Evidently the omitted bibliographic notes in fine print have often been replaced by additions of new material. At this rate one more part will bring us to the end of the volume, at something more than 600 pages.

As the price of the new edition, unbound, will amount to about eighteen marks or \$4.50 when complete, it will be quite within the means of every college library and enthusiastic teacher. Either Stechert or Lemcke and Büchner, the well-known importers in New York, N. Y., will obtain copies at the shortest notice. But, as above said, an English edition is imperative. No one can ask that another with the genius of Hann shall repeat the great labor that he has performed for the science to which his life is devoted. Rarely has any branch of science presented a similar instance of 50 years of continuous devotion of every energy of one person to the herculean task of bringing order out of chaos; throwing the light of reason upon the art of observing and studying one special line of natural phenomena. Most meteorologists, so-called, have divided their attention between that subject and some other branch of science, but Hann has from the beginning devoted himself to meteorology alone.

#### CONTRIBUTIONS TO THE PHYSICS OF THE FREE ATMOSPHERE.

The great extension that has been given to the use of balloons and kites in aerial research is well known to all readers of the MONTHLY WEATHER REVIEW. The work of Abercromby with the kite balloon in 1885 and 1887, Teisserenc de Bort with sounding balloons about 1887, the Weather Bureau and the Blue Hill Observatory with kites about 1894, has led this subject to be taken up by almost every nation of Europe, and it is seen to be the most important branch of atmospheric investigation. By voluntary agreement on the part of individuals and national weather bureaus certain dates have been agreed upon for simultaneous ascensions and the results of this work have been published in greatest detail at the expense of the German Government in a series of volumes known as "Veröffentlichungen," or the "Publications of the International Commission for Scientific Research by means of Balloons, Kites, Mountain Stations, and Cloud Observations." Four volumes of this character have been published for the years 1899-1903, but as it did not seem proper that Germany should bear the whole expense of the international work it has been agreed that beginning with the work of 1904 the publication shall be at the joint expense of all nations and individuals that are willing to contribute to it. Accordingly contributions and subscriptions may be sent to Prof. H. Hergesell, Strassburg, Germany, as president of the international committee.

A publication distinct from the preceding was initiated in 1904 under the title of "Beiträge," or "Contributions to the