

In concluding these remarks attention is called to a certain source of error in testing aneroids that does not appear to have been mentioned hitherto, and if not noticed or guarded against may have an appreciable effect on results. Any sudden change in the air pressure under the receiver of a pump inevitably heats or cools the gas dynamically, in consequence of which there is a most pronounced and real "after effect" in the pressure of the air within the receiver. In my own experience I have been very greatly surprised at the slow-

ness with which the gas acquires its stationary temperature and the magnitude of this effect on the resulting stationary pressure. The slow rate of pressure change adopted by Dr. Chree, namely, one inch in five minutes, in all probability eliminates any error of this kind, but the point is not mentioned, and it is just possible that the results of the older observations and of investigations made without due regard for this effect may be somewhat in error in consequence.

NOTES BY THE EDITOR.

THE OMAHA CONVENTION OF WEATHER BUREAU OFFICIALS.

On several previous occasions conventions of Section Directors of State Weather Services have been held, to the great advantage of the individuals and the Service, and it was, undoubtedly, a wise innovation when the Chief of the Weather Bureau decided to expand this idea and call for a general convention of Weather Bureau officials of every grade. The convention was of a thoroughly cosmopolitan character, every section of the country was represented, and every class of men. There was a large sprinkling of voluntary observers, an encouraging number of the younger employees, and several of the oldest and most venerable. Three men were present from the class of 1871, but the classes that were most prominently in evidence were those of 1881-83. The official report will show that the long programme was attacked and faithfully followed up, although the work had to be done too rapidly for comfort, owing to the loss of a day. The photograph of the group of seventy members remains as a visible embodiment of the fraternal intercourse, the social pleasures, and the intellectual profit of a meeting that will always remain vividly impressed upon the memories of all who were present as one of the most delightful events of official life. If it were not for the expense we are sure that every one would attend such a convention every year. Many inquiries were made for those who could not be present; both we and they lost much by their absence. The enthusiasm of all who took part in the discussions was remarkable; every one had some positive results of his own local experience to communicate for the benefit of the others. The diversity of ideas impressed one with the conviction that everywhere the work of the Weather Bureau is being adapted to special local conditions and that a hard and fast rule for the whole country would, oftentimes, work inconvenience or injury. One learned not to be so intolerant of the views of others and so positive that his own ideas will suffice for all occasions. The new devices submitted by Townsend of Philadelphia and Sims of Albany at their own expense and the new principle in meteorology brought forward by Hammon of San Francisco excited deep interest.

By its rather early adjournment the convention, unfortunately, missed the telegram inviting us to a special excursion to Lincoln, Nebr., where we should have inspected the relations of the Service to the State University. May we be more fortunate next time! In a few cases some general expression of opinion was uttered by the convention but, as a whole, the sentiment that pervaded it seemed to be to the effect that no business, properly so-called, need be transacted, as we were brought together at the call of the Chief to confer with him. Consequently, no vote was taken as to the time and place of the next meeting, that being a matter that can be left with Professor Moore; nevertheless, a hearty acclamation followed the pleasant rivalry between Hammon and Pague in advocacy of San Francisco, Cal., and Portland,

Oreg., respectively. On the whole, the general conclusion must be that such conventions are essential to the welfare and strength of our meteorological service. Scattered as we are, widely over the whole country, we get but little opportunity for personal intercourse, we pursue our studies alone and with difficulty, little items of daily practice and of meteorological theory that would be quickly settled by conference with some neighboring observer, give us unnecessary trouble. The annual convention is a clearing-house, where we may balance accounts, discuss ideas, settle perplexities, dissipate the troubles of official life, burn our bridges, and take a new start.

THE WEATHER AND THE SUGAR CROP.

In the MONTHLY WEATHER REVIEW for August, 1897, page 354, we have given the general relation between annual rainfalls and sugar crops in the Island of Mauritius for the years 1880 to 1895, as quoted from the annual report of the Royal Alfred Observatory for the year 1895, by Mr. F. F. Claxton, who is now the director succeeding Dr. Meldrum who resigned September 30, 1896, on account of failing health, after a term of twenty-two years in the service. Since that date the reports for 1896 and 1897 have been received, from which we extract the following table showing the relation between the annual sugar crop of the whole island and the rainfall. The sugar crop is the result of the growth of the previous fifteen or eighteen months, beginning with the planting in September of the second year previous. The following table gives the total rainfall for those months during which the cane of the respective crops has been growing. It is an average for four stations, viz, Pamplemousses, Gros Bois, Cluny, and Union Bel-Air, which fairly represent the sugar districts:

Years of harvest.	Total sugar crop.	Rainfall during growth.
	Kilograms.	Inches.
1880.....	119,731,492	68.99
1881.....	117,809,610	78.68
1882.....	116,719,997	118.37
1883.....	120,396,858	84.08
1884.....	127,784,339	75.55
1885.....	115,299,030	77.13
1886.....	102,376,271	57.25
1887.....	124,073,140	80.18
1888.....	132,172,968	125.40
1889.....	124,564,951	108.71
1890.....	130,220,273	88.94
1891.....	113,813,075	96.61
1892*.....	68,718,573	88.78
1893.....	139,751,610	80.39
1894.....	118,793,319	88.11
1895.....	142,645,722	96.11
1896.....	152,677,973	106.58

* Destructive hurricane.

For the crop of 1897 the corresponding rainfall was the lowest on record, and in fact, scarcely one-half of the normal amount, and the sugar crop was exceedingly poor; but the exact figures are not at hand to be inserted in the above table. If we rearrange the above figures in the order of the