

of a character not yet attained by those of any other nation, and as such they are the foundation and safeguards of the national prosperity. For every dollar expended on an institution like the Imperial Institute at Charlottenburg, the people receive the rich dividends that come from supremacy in the physical sciences which exalt human industry and constitute the permanent wealth of nations.

As the institute at Charlottenburg represents the needs of the practical and business interests of the whole community, so would the recognition of engineering and mechanics at the agricultural colleges represent the needs of many farmers and progressive agriculturists.

MEXICAN CLIMATOLOGICAL DATA.

Through the kind cooperation of Señor Mariano Bárcena, Director, and Señor José Zendejas, vice-director, of the Central Meteorologico-Magnetic Observatory, the monthly summaries of Mexican data are now communicated in manuscript, in advance of their publication in the *Boletin Mensual*; an abstract translated into English measures is here given in continuation of the similar tables published in the MONTHLY WEATHER REVIEW during 1896. The barometric means have not been reduced to standard gravity, but this correction will be given at some future date when the pressures are published on our Chart IV.

Mexican data for August, 1897.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.	
			Max.	Min.	Mean.			Wind.	Cloud.
Artega (Coahuila)...	Feet.	Inch.	° F.	° F.	° F.	%	Inch.		
Barousse	5,414	.....	80.1	59.2	74.1	.....	7.56		
Collima	1,656	.....	83.3	59.4	72.7	.....	5.71		
Leon	5,934	24.30	85.2	55.4	67.6	68	3.55	ssw.	e.
Linares (New Leon) ..	1,188	.....	101.3	65.2	81.5	.....	8.98	se.	
Magdalena (Sonora) ..	4,948	.....	91.4	77.9	85.5	.....	7.95	ne.	ne.
Merida	50	29.93	97.3	69.8	82.2	75	10.53	e.	
Mexico (Obs. Cent.) ..	7,472	23.10	79.7	51.8	69.5	69	6.06	nw.	ne.
Mexico (E. N. de S.) ..	.....	23.04	79.3	47.3	62.1	59	6.07	ne.	
Monclova (Coahuila) ..	1,926	.....	100.8	71.6	83.7	.....	5.48		
Monterey	1,626	28.20	104.0	61.0	82.2	68	5.76	e.	w.
Moravia (Seminaro) ..	6,401	24.00	77.5	77.5	60.1	73	4.19	se.	e.
Oaxaca	5,164	25.08	89.8	54.0	73.7	76	6.48	nw.	e.
Parras (Coahuila) ..	3,986	.....	90.9	64.8	76.3	.....	8.46		
Puebla (Col. Cat.) ..	2,168	23.37	81.7	48.2	70.3	46	10.19	ne.	ne.
Queretaro	6,070	24.21	84.2	57.8	66.2	65	5.37	e.	
Saltillo (Col. S. Juan) ..	5,399	24.82	87.8	60.8	73.0	70	4.06	n.	n.
San Luis Potosi	6,202	24.17	85.5	57.2	66.0	70	3.56	e.	ese.
Sierra Mojada (Coah) ..	.....	.....	85.7	54.1	77.4	.....	3.74		
Tampico (Hos. Mil.) ..	88	29.92	91.4	73.8	82.0	79	8.64	se.	se.
Toluca	8,612	21.95	77.4	48.2	59.4	79	5.22	e.	
Torreon (Coahuila) ..	3,720	.....	100.9	71.8	84.9	.....	7.09		
Trejo (H. d. S., Gto.) ..	6,011	.....	73.4	.....	.....	.....	11.05	se.	
Vaqueria (Coahuila) ..	.....	.....	89.6	56.1	72.9	.....	11.10		
Zacatecas	8,015	22.55	78.1	49.6	62.4	70	7.28	e.	e.
Zapotlan (Seminaro) ..	5,125	25.08	84.7	59.0	71.1	71	5.95	se.	se.

CLIMATOLOGICAL DATA FOR JAMAICA, W. I.

Through the kindness of Mr. Maxwell Hall, of Montego Bay, Jamaica, the meteorological service of that colony has acceded to the request of the Editor for the prompt communication of an abstract of the very interesting climatological records of that highly important West Indian service. The climatological summary for August, 1897, furnished by Mr. Hall, through his assistant, J. F. Brennan, of the Meteorological Office, is reproduced in the following table.

The stations Kings House, Hope Gardens, and Stony Hill Reformatory are near Kingston, and are not supplied with mercurial barometers. The barometric pressures, as given for these Jamaica stations, are reduced to the standard instru-

mental temperature (32° F.) and standard gravity (latitude 45° and sea level), and all except Hill Gardens are also reduced to sea level. The thermometers are exposed in Stevenson screens, and their readings have been corrected for instrumental errors. The wind movement is measured by Robinson anemometers, assuming the factor 3. The amount of cloud is given in tenths of the whole sky; the lower clouds are for the most part fracto-stratus; the middle clouds, cumulus; and the upper clouds, cirrus or cirro-stratus.

The observations at 7 a. m. and 3 p. m. at Kingston and Hill Gardens are also communicated in detail by Mr. Hall, but are not published at present, although eventually this may be done, as Hill Gardens is, like Blue Mountain, an interesting mountain station, for comparison with its near neighbors, Castleton Gardens and Kingston. If a mountain summit station can be obtained this also will be published. Many details with regard to the climate of Jamaica will be found in Mr. Hall's contributions to the official handbook published by the Government of that island in 1881.

The important mutual relations between the meteorology of the West Indies and the southern portion of the United States must stimulate the study of these records from Jamaica.

Jamaica, W. I., climatological data, August, 1897.

	Morant Point Lighthouse.	Negril Point Lighthouse.	Kingston.	Kings House.	Castleton Gardens.	Hope Gardens.	Stony Hill Reformatory.	Hill Gardens (Ch. Plant.)
Latitude	17° 56'	18° 16'	17° 53'	.....	18° 12'	.....	.....	18° 05'
Longitude	76° 10'	78° 23'	76° 48'	.....	78° 50'	.....	.....	76° 39'
Elevation (feet)	8	33	50	400	580	600	1,400	4,907
Mean barometer { 7 a. m.	29.956	29.954	29.965	.....	.....	.....	.....	29.955
{ 3 p. m.	29.918	29.916	29.904	.....	.....	.....	.....	29.938
Mean temperature { 7 a. m.	78.5	76.5	74.3	74.3	72.0	73.4	73.6	63.7
{ 3 p. m.	83.8	86.3	88.3	88.3	83.4	86.4	79.7	68.4
Mean of maxima	88.2	89.5	92.7	92.7	87.4	90.3	87.3	72.5
Mean of minima	73.3	74.0	68.3	68.3	67.5	70.3	68.4	60.0
Highest maximum	92	94	97	97	92	97	91	78
Lowest minimum	71	71	65	63	67	65	65	56
Mean dew-point { 7 a. m.	73.7	70.4	71.3	69.8	70.2	70.0	68.6	58.6
{ 3 p. m.	74.8	72.9	79.7	77.3	71.5	74.0	68.0	63.0
Mean relative humidity { 7 a. m.	85	83	90	90	88	88	88	88
{ 3 p. m.	75	64	74	79	68	68	81	81
Monthly rainfall (inches)	5.00	6.71	2.13	5.95	9.09	4.82	6.02	5.38
Average daily wind movement	300.5	89.5	.....	.....	.....	.....	.....	55.4
Average wind direction { 7 a. m.	ne.	ene.	n.	.....	.....	.....	.....	.....
{ 3 p. m.	ne.	ene.	se.	.....	.....	.....	.....	.....
Average hourly velocity { 7 a. m.	5.4	6.0	1.0	.....	.....	.....	.....	.....
{ 3 p. m.	8.0	12.6	7.1	.....	.....	.....	.....	.....
Average cloudiness (tenths):								
7 a. m. { Lower clouds	2.9	0.3	.....	.....	.....	.....	.....	.....
{ Middle clouds	2.2	1.0	0.5	.....	.....	.....	.....	.....
{ Upper clouds	1.7	6.0	3.5	.....	.....	.....	.....	.....
3 p. m. { Lower clouds	2.6	3.6	1.5	.....	.....	.....	.....	.....
{ Middle clouds	1.3	3.5	1.1	.....	.....	.....	.....	.....
{ Upper clouds	1.0	1.9	4.0	.....	.....	.....	.....	.....

CYCLONE IN NICARAGUA.

A report from Mr. M. J. Clancy, United States Consular Agent at Bluefields (received through Mr. Thomas O'Hara, United States Consul at San Juan Del Norte), states:

On August 15 a cyclone passed over the banana district on the Bluefields River and destroyed 20 per cent of the plants and suckers.

On account of the widespread misuse of the word "cyclone" it may be questioned whether this refers to a tornado or to the smaller West Indian hurricane or to such destructive winds as accompany thunderstorms.