Numerical strength of the Weather Bureau, July 1, 1904.

At Washington, D. C.:		
Classified	169	
Unclassified	14	
		183
Outside of Washington, D. C.:		
Classified	476	
Unclassified	11	
		487
Total commissioned employees		670
Additional employees outside of Washington, D. C.:		
River observers	230	
Storm-warning displaymen	236	
Cotton-region observers	141	
Corn and wheat region observers	135	
Rainfall observers	71	
Fruit and wheat region observers	19	
Sugar and rice region observers	9	
Total noncommissioned employees		841
Total paid employees		*1,511
Voluntary observers		3,367
Voluntary crop correspondents		13,406
Total numerical strength		18,284

Distribution of commissioned force.

In Washington, D. C.:

Accounts Division	13	Library	3
Barometry and research work	3	Meteorological Records Division	15
Climate and Crop Division	7	Miscellaneous mechanical work	4
Editor, Monthly Weather Review	2	Publications Division	45
Executive work	19	Supplies Division	9
Forecast Division	16	Telegraph Division	11
Instrument Division	10	Under captain of the watch	26

Outside of Washington, D. C.:

66 stations with 1 employee	=	66	employees.
47 stations with 2 employees	=	94	employees.
31 stations with 3 employees	=	93	employees.
17 stations with 5 employees	=	85	employees.
14 stations with 4 employees	=	56	employees.
4 stations with 6 employees	=	24	employees.
4 stations with 7 employees	=	28	employees.
4 stations with 8 employees	=	32	employees.
1 station with 9 employees	=	9	employees.
188		487	

Salaries paid in the classified and unclassified grades.

Grades.	July 1, 1904. Station.	Washington, D. C.
CLASSIFIED GRADES.		
Highest salary	$3,000	$5,000
Lowest salary	360	450
Average salary	1,007	1,216
UNCLASSIFIED GRADES.		
Highest salary	720	720
Lowest salary	300	240
Average salary	541	534

Average salary for all (station and Washington, including the Chief of Bureau), $1,029.

The foregoing table of salaries does not include employees on duty at substations (storm-warning displaymen, river observers, etc.), whose compensation ranges from $5 to $20 per month, and whose tour of service would average less than one hour a day.

METEOROLOGICAL RECORDS.

The routine work of recording the date of receipt of each meteorological form, examining and correcting same, tabulating the data contained therein for publication in the MONTHLY WEATHER REVIEW, and Annual Report of the Chief of Weather Bureau; preparing error letters for the several forms; charting data from regular and selected voluntary stations for the several charts in WEATHER REVIEW, and from which to prepare text; compiling data in compliance with requests from different Federal Departments and bureaus, including different divisions of the Weather Bureau; for State, county, and city officials; civil engineers, lawyers, physicians, health and pleasure seekers, numerous commercial concerns and purposes, and for certification under the seal of the Department has continued throughout the year.

INFORMATION SUPPLIED THE PUBLIC.

During the year 887 requests for data were answered, occupying in their preparation from a few minutes to days—sometimes as many as five to twelve. Besides this there were 90 calls for certified data, requiring 257 sheets, this not including a request from the sanitary district of Chicago, which required about one thousand hours to compile and verify the data, the work being performed by persons not connected with the Weather Bureau, and paid for by the sanitary commission.

Owing to the limited clerical force and the demands upon the time of clerks for more important duties, it was found necessary to adopt a new policy in connection with requests for certified data, viz: when there was a Weather Bureau office in the city in which applicant resided and the data were desired for that place the request was complied with, and in the letter of transmittal it was suggested to the applicant that he arrange to have future needs for such data filled by process of subpœna duces tecum served upon the official in charge of the station.

For requests for data which did not require certification from persons residing in a place where there is a Weather Bureau station, the applicants were referred to the local office and informed that they would be granted access to the records and allowed to extract the desired data. During the last few months applicants for information contained in climate and crop publications were referred to the local section directors.

IMPROVEMENTS IN SERVICE.

A scale for determining, without computation, wind velocities from the triple register sheets, devised and used by Mr. Arthur Thompson for several years past, was adopted as the standard gage for station use and the necessary drawings made from which to have plates engraved for the purpose of printing the scales and issuing them to all stations.

All instructions for the preparation of meteorological forms, which heretofore have appeared on the backs and covers of the several forms, and in various other places, were revised and assembled in one publication under the caption, "Instructions for preparing meteorological forms, division of meteorological records circular, 1904." In this circular have been brought together all instructions for preparing meteorological forms, which will do away with the printing of instructions on the several forms, be a great convenience to observers, and render unnecessary the destruction of editions of forms which have become obsolete because of amendments to instructions relative thereto and the issue of new editions of the forms, thereby saving the expense of printing new editions. The circular will be issued each year, amended to date as far as practicable.

Under the supervision of the official in charge of the division, Mr. Eric Miller codified and practically rewrote the Instructions to Observers, in future to be known as "Station Regulations."

Negotiations are under way to obtain a large number of charts of the very best procurable types of clouds, with a view of having them mounted in a neat and attractive manner for issue to stations and for sale to teachers of meteorology and physical geography and others. It is believed they will meet a popular want and their sale be large.

*This total embraces all paid employees in the Bureau on July 1, 1904, including the Chief of Bureau, but excluding employees on furlough for three months or more.

RECOMMENDATIONS CONCERNING APPROPRIATIONS FOR 1905.

It is recommended that the appropriations for the fiscal year beginning July 1, 1905, be the same as those for the current fiscal year, with the following exceptions:

An increase of $1000 per annum, from $2000 to $3000 per annum, in the salary of the chief of the Climate and Crop Division is urgently recommended. This official has charge of the climate and crop service of the Bureau. He writes the weekly National Crop Report and supervises the reports issued by State section directors. For many years his work has been of such a high order and has so commended itself to the agricultural and commercial industries of the country as to reflect credit upon the public service. In order that these reports, which frequently influence the price of the products of the farm, may command the confidence of the public, it is essential that there be assigned to the work an official whose integrity, as well as whose ability, is so high as to be above suspicion. The present incumbent has made no request for advancement, but I am firmly of the opinion that it would be a wise economy, as well as a just action, to recognize his many years of valuable and faithful public service by making the increase in salary herein recommended.

It is also recommended that the salary of the assistant chief of the Division of Accounts of the Department of Agriculture be increased from $2000 to $2500 per annum. This official, who is appropriated for in another part of the bill making appropriations for the support of the Department of Agriculture, serves, under the joint direction of the Disbursing Officer of the Department and the Chief of the Weather Bureau, as disbursing clerk of the Bureau. For nearly ten years I have had the benefit of his valuable assistance in handling the fiscal affairs of the Bureau. I have implicit confidence in his integrity and know that his ability as an accountant is of the highest order. If the committee in Congress would look into the manner in which his many and important duties are performed, I believe that they would agree with me that his long and faithful service should be rewarded by the advancement in his salary that is now recommended. The Disbursing Officer of the Department joins me in this recommendation. There is no part of the work of the Weather Bureau that requires higher executive and business ability than that performed by this officer.

GENERAL CLIMATIC CONDITIONS.

By Mr. W. B. STOCKMAN, Chief, Division of Meteorological Records.

ARMOSPHERIC PRESSURE.

The mean pressure for the year was high over the Middle and South Atlantic and east Gulf States, Mississippi and Missouri valleys, Ohio Valley and Tennessee, extreme southern portion of the Lake region, northern coast of California, and Oregon, with the crest showing average readings of 30.10 inches over West Virginia.

The mean pressure was low over southwestern New Mexico, Arizona, southern Nevada, and southeastern California, with an average minimum mean reading of 29.89 inches at Yuma.

The annual mean pressure was below the normal in northwestern California, western and northern Oregon, Washington, the northern portion of Idaho, and western and southeastern Montana; also over the extreme southwestern portion of California. In all other districts it was above the normal, with the greatest departure, +.05 inch, at Bismarck, N. Dak., and Moorhead, Minn. The greatest negative departures did not exceed —.03 inch.

TEMPERATURE.

The mean temperature for the year was below the normal in the districts from extreme western Florida, northeastern Mississippi, northestern Arkansas, central Missouri, eastern Nebraska, and central Minnesota eastward to the Atlantic Ocean; also in western North Dakota. In all other districts the mean for the year was above the average.

As a rule the departures were quite marked and ranged from —2.0° to —3.6° in the New England and Middle States, upper Ohio Valley, southeastern upper Lake region, and lower Lake region; and +2.0° to +3.4° generally over the slope and Plateau regions. The greatest negative departures occurred over central New England, and the maximum positive departures in southeastern Idaho.

The mean temperature for the year was as low as any other since the beginning of record at Minneapolis, Minn., North Head, Wash., Block Island, R. I., and Washington, D. C.; 0.1° lower than any preceding year at Parkersburg, W. Va.; 0.2° lower at Lincoln, Nebr., New Haven, Conn., and Wilmington, N. C.; 0.3° lower at Duluth, Minn., and Hannibal, Mo.; 0.5° lower at Nantucket, Mass., Baltimore, Md., and Columbia, Mo.; 0.8° at Evansville, Ind.; 0.9° at Portland, Me., and Sault Ste. Marie, Mich.; 1.0° at Richmond and Wytheville, Va.; 1.2° at Narragansett, R. I., and Harrisburg, Pa.; 1.4° at Northfield, Vt.; 2.1° at Scranton, Pa.; 2.5° at Binghamton, N. Y.; 2.6° at Houghton, Mich., and 2.9° at Syracuse, N. Y.

East of the west Gulf States and the Missouri River, maximum temperatures of 100°, or higher, rarely occurred. Minimum temperatures of —40°, or lower, occurred in northeastern New York, northwestern New England, northwestern Wisconsin, northern Minnesota, northern North Dakota, and northeastern Montana.

PRECIPITATION.

The annual precipitation was below the normal in the Gulf and Atlantic States, except southeastern Florida, in the Ohio Valley and Tennessee, except central Indiana, in the Lake region, except about eastern Lake Ontario and southern Lake Superior, in the Mississippi Valley, except northeastern Missouri and extreme southeastern Iowa, in the central and upper Missouri Valley, western North Dakota, the northern and southern slope and Plateau regions generally, the north Pacific coast, and the extreme south Pacific coast. In the remaining districts the precipitation was above the normal.

In the Gulf States, portions of the Middle Atlantic and South Atlantic States, and in the Ohio Valley and Tennessee the deficiency was very marked, and ranged from —10.0 inches to —25.6 inches, the greatest deficiencies, —20.0 inches, or more, being reported from the northeast coast of North Carolina, and in portions of Alabama and Tennessee. Excesses ranging from +5.0 inches to +11.3 inches were reported from northern Missouri, northeastern Kansas, southeastern Florida, northwestern California, and southwestern Oregon.

Droughty conditions obtained to some extent at certain portions of the year in some of the Southern and Western States. A very severe, widely extended, and long-continued drought obtained in the Southern and Middle Western States in the late summer, fall, and in places well into the winter. In Virginia it began in August and continued through November. In North Carolina a very severe drought obtained in many central counties in May, which was broken during the last two days. Drought conditions again obtained in September, continued through October, and were broken on November the 3d and 4th. This was the longest drought on record in the State continuing from forty to sixty days at a number of stations. It was most severe in the western portion.

In South Carolina May was droughty, the north-central and