U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU,

CO-OPERATING WITH THE

MARYLAND STATE WEATHER SERVICE

Established by an Act of the General Assembly of the State of Maryland, 1892,
and Maintained in Connection with

The Johns Hopkins University and the Maryland Agricultural College.

CENTRAL OFFICE, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD.

PROF. WM. B. CLARK, Johns Hopkins University, Director.

PROF. MILTON WHITNEY, Maryland Agricultural College, Secretary and Treasurer.

DR. C. P. CRONK, U. S. Weather Bureau Meteorologist in Charge.

VOL. II. MONTHLY REPORT OF OBSERVATIONS, SEPTEMBER, 1892. NO. 6.

Weather.

The month, in Maryland, the District of Columbia and Delaware, opened with fair, cool weather and northerly winds. A well-defined cyclonic storm had just passed down the St. Lawrence Valley, and a great area of high barometer was advancing from the West, its eastern border already including the Middle Atlantic coast. The wave of high barometric pressure moved slowly eastward and, as the result of its presence, there were four bright days. On the 2nd, the center of the wave passed to the east of Maryland, the winds became southerly and the temperature began to rise. The winds flowing out of the high area and turning in the same direction as the hands of a watch were drawn northward, on the west side of the area, towards a storm which had moved down from the Northwest.

On the 5th and 6th, scattered showers occurred, but the rain area followed the storm-center instead of preceding it, and the rainfall was due as much to the indraught of cold air from the succeeding wave as to the depression itself. The wave of high pressure, above mentioned, reached the Middle Atlantic coast on the 6th and the weather was perfectly fair on the following day. But an unsettled condition supervened; the isobars became irregular, and a few local showers occurred on the 8th and 9th.

As the high area moved off the coast and another storm approached from the Northwest, the weather, as a natural consequence, became, from the 9th to the 12th, gradually warmer. The 10th, 11th and 12th were generally fair, and it is probable that but light showers would have occurred had it not been for the decided storm which developed on the Gulf coast during the 11th and 12th, and moved, thence, in a northeasterly course to the St. Lawrence Valley, bringing heavy and welcome rains to all sections of the country east of the Mississippi. The rain in this region came, for the most part, on the 13th and 14th. On the 15th, a high area from the West brought fair weather, which endured till the 21st. The temperature was raised on the 18th by the passage of a low area to the northward, but it fell again on the 19th upon the approach of a decided cool wave from over the Lake Region.

A few light showers occurred on the 21st, and they became more general on the 22nd and 23rd, occurring on the western slope (a not infrequent occurrence) of the last mentioned wave of high atmospheric pressure. Local showers also occurred on the 24th and 25th, resulting from a depression which passed over the Lake Region to the St. Lawrence Valley on those dates.

A vast atmospheric wave followed the depression last referred to. On the morning of the 26th, this wave, with its center over Iowa, extended from British America to the Gulf of Mexico and from the Rockies to the Alleghanies. It brought cooler and fair weather, which prevailed to the close of the month.

The distribution of the monthly rainfall is shown by the table, "Daily Precipitation for September, 1892," page 50; and the map, page 51, exhibits the variation, in depth, of the total monthly fall. As the average precipitation for the month, judging from the normals at Washington and Baltimore, should be between 3.50 and 4.00 inches, for most sections, it will be noticed that September, like August, was, generally, a dry month, three or four stations, only, reporting normal amounts, or above. The northern central portion of Maryland was decidedly the most fortunate, and one station there,

Mt. St. Mary's College, reported 5.52 inches. The least reported was from Solomon's, 1.57 inches. Norfolk, Va., reports only 1.33 inches, so that the precipitation appears to have shaded off in that direction.

The month was somewhat cooler than the average September; the usual September hot spell failed to materialize. The variations in mean temperature are shown by the lines on the map, page 51.

CROPS.

The week ending September 5th was too dry. The weather was very favorable for the saving of fodder and for other farm work with the exception of wheat seeding, but crops, generally, suffered from drought.

The scattered showers which came during the week ending September 12th, greatly benefited late crops, but not enough rain fell to put the ground in proper condition for seeding. The cutting of corn progressed favorably and it was reported that on many farms an average crop would be secured. Wheat threshing was in progress in Western Md., and the grain was turning out well. Apples, there, were reported better than anticipated, peaches as excellent, and garden truck of fair quality, though below the average in amount.

During the week ending Sept. 19th, pastures and fall crops were saved by the timely rains. Corn and tobacco cutting were in progress in Southern Maryland; buckwheat threshing was in progress in Western Maryland, and the yield was reported as from 10 to 12 bushels per acre on good land. In Eastern Maryland, the fodder was reported as about all saved in good condition, and corn was being cut.

At the close of the week ending September 26th, wheat and rye seeding were progressing. Tobacco, corn, pastures, and all late crops had been much benefited by the moderate rains of the week.

When the month closed the tomato season was about over, the corn mostly cut, tobacco nearly all housed, and fall seeding completed in many sections. Light frosts had occurred, but no damage from them was reported. Winter wheat was already up, in some places. Potatoes were reported poor in southern sections and in Delaware, and fruit and vegetables as plenty in Western Maryland.

The Eastern Shore of Maryland as a Health Resort for Consumptives.

Lord Bacon was the first to recommend elevated situations as being conducive to health, owing, as he thought, to the purity of the air in such situations. In support of this theory he cites the rising grounds of Arcadia and Ætolia, and other parts of Greece, where the inhabitants are reported to have lived long. The celebrated Pallas also informs us that in a province of Russia he saw many old people in the elevated districts, whereas in the plains of that very neighborhood they were not distinguished for longevity.

In the face of many facts to the contrary, it is quite evident that Lord Bacon's theory has no substantial foundation, at least so far as the prevalence of consumption is concerned. In point of health certain low lands of Italy were superior to either the mountains of Greece or the elevated districts of Russia, for in the seventy-sixth year of the Christian era, when a census of the people was made, there were two hundred and sixty-five persons beyond one hundred years of age in that part of Italy which lies between the Po and the Apennines. Sir James Clark says that consumption is not a common disease in either Pisa or Venice, but it frequently exists in the elevated districts of the country.

Topographical peculiarities do not always account for the predominant characteristics of climate, nor convey to the mind of the casual observer a correct appreciation of their sanitary influence. Thus it might be rationally inferred, from the marshy aspect which surrounds the city of Venice, that intermittent fever and bronchial affections would be the prominent diseases of the place, whereas it is, in truth, the resort of such as have elsewhere imbibed the pernicious poison of these disorders. Dr. Scoresby Jackson says: "In the early stages of consumption and in some chronic bronchial affections, Venice may be recommended."

The Kirgis Steppes of Asia, which is below the level of the sea, enjoys almost complete immunity from consumption; and from statistics furnished by a number of intelligent physicians and other persons, it is safe to assert that the peninsula of Maryland, known as the "Eastern Shore," a large area of which is only a few feet above sea level, furnishes one of the grandest atmospheres for persons suffering with pulmonary affections to be found in the world. Many physicians practising in this section of the State testify that consumption is an exceedingly rare disease among the native residents, and that in all forms of bronchial affections the climate is very generally beneficial, especially in cases where there prevails great irritability of the bronchial mucous membrane. Nothing is more common than to meet with bronchial diseases which, after having been benefited by a short residence on the Eastern Shore, are aggravated by a visit to the

high lands, and again relieved by a return to this locality. In incipient consumption the Eastern Shore of Maryland may be considered the most favorable place of residence in America.

After all, however, it is with climates as with other things, trustworthy evidence as to what they have accomplished is the most valuable. In this connection I quote from the opinions of medical practitioners and others of extensive experience residing on the peninsula.

Dr. Davidson says: "Consumption, either hereditary or acquired, is comparatively rare on the peninsula among the native population, and while many have come here from northern latitudes with this disease in various stages of development, we do not know of a case that was not promptly ameliorated by the change, and in many cases the most remarkable cures have been effected in persons who were pronounced hopelessly ill."

Dr. A. P. Sharp, of Rock Hall, Kent County, Md., writes: "Most of the inhabitants in this neighborhood are engaged in the oyster and fishing business, which compels exposure to all kinds of weather, and I am surprised to find that both young and old are entirely free from the usual coughs and the pulmonary complaints so common in other places. During my residence of over twenty years here I have never seen or heard of a single case of consumption among the rising population, and hundreds have grown to manhood and womanhood in the time. The question has often occurred, 'To what agent can this peculiar condition be traced?' I have made repeated experiments with ozone paper, and have never failed to find that the paper would be soon decomposed, showing that the atmosphere was heavily charged with this element, which is now being so extensively used in lung and other troubles."

Hon. George W. Bishop, M. D., long a leading practitioner in one of the lower counties of the Eastern Shore, informed the writer that a case of consumption occurred some years ago in the person of an old lady who resided in the town in which he practised medicine, and "so rare and unusual was the disease in that locality that many persons visited the patient from mere curiosity, to see what they had never before seen,—a case of consumption."

It would seem that the climate of this peninsula derives a great deal of its value from its neutral properties, from its being neither too hot nor too cold, and from its possessing neither the irritating qualities of a dry climate nor the depressing ones of an atmosphere surcharged with dampness. The atmosphere of the Eastern Shore is comparatively dry, and there are no fogs or piercing winds of any consequence. As at Nice and other winter resorts in the south of Europe, winds from various quarters sometimes sweep over the peninsula with considerable vehemence; but they are always of short duration, and never so severe as the *mistral* of Southern France and Italy, which sometimes lasts from three to nine days, and beneath which organized beings of any class shrink in dismay. Excessively cold winds are rarely felt on the peninsula, the westerly currents or cold winds from the Blue Ridge Mountains being considerably modified by passing over the waters of Chesapeake Bay. The warm winds coming from the Gulf Stream, only about fifty miles distant, find uninterrupted admission and exert a permanent and highly beneficial influence, which cannot be overestimated, inasmuch as they serve to dry the soil and constantly bring fresh supplies of pure air, which serves to maintain the atmosphere in a healthful condition. The average number of rainy days on the Eastern Shore is 83, and the average rainfall south of 39° north latitude is 34.25 inches.

In estimating climates according to their humidity, Vivenot, a German hydrologist, adopts the following classification:

1. Dry climate	(a)	Excessively dry, 1–55% relative humidity.
	(b)	Moderately dry, 56–70% relative humidity.
2. Moist climate	(a)	Moderately moist, 71–85% relative humidity.
	(b)	Excessively moist, 86–100% relative humidity.

The mean *relative humidity* of the Eastern Shore, representing the amount of water contained in the air at a given temperature, being about 56, it ranks as a "moderately dry" climate, and this is corroborated by other tests. Iron does not rust easily and clothes dry rapidly in the open air. Lucifer matches do not readily become soft and useless, and wearing apparel rarely becomes limp under the influence of the ordinary atmosphere.

There can be no doubt that the waters of Chesapeake and Delaware Bays which flank the peninsula on the west and east respectively, and the Atlantic Ocean lying to the south of it, exercise considerable influence on its temperature. To these circumstances, coupled with the peculiar course of the Gulf Stream and its near approach (fifty miles) to the coast-line of Maryland, may be attributed the comparative mildness of the winters of the Eastern Shore, as compared with localities in the same latitude. In this connection it should be remem-

bered that in chronic diseases of the chest it is the great heat-producing organ that is involved, and that in measuring the amount of heat required in a given case, due allowance must be made for the deficiency, and no preconceived ideas concerning the asthenic nature of the disease should be permitted to seduce us into sending a poor exhausted invalid to freeze amid the snows of Minnesota or Colorado, or to swelter in the almost tropical climate of Florida.

Formerly the water-supply of the peninsula was drawn almost entirely from shallow wells, and the water was necessarily of an inferior quality, containing, in addition to decomposed organic matter, in many instances, no doubt, the malarial bacilli of *Tommasi crudeli*. But of late years this trouble, for the most part, has been overcome by the sinking of artesian wells, which afford an abundance of pure and healthful water, and, as a result, whole towns and districts where malaria used to manifest itself are now free from attack. In addition to the direct evidence as to the hygienic importance of pure water, there is a large amount of indirect evidence leading to the conclusion that most of the malaria that formerly existed among families on the Eastern Shore of Maryland was the direct result of using impure water. Certain it is, the locality is now comparatively free from malaria and is, on the whole, a healthy place of residence.

With respect to the permanent residence of individuals, the Eastern Shore of Maryland offers many advantages. Land is cheap, easily cultivated and very productive, and withal there is a ready market in either Philadelphia, Baltimore or Washington City for everything raised. The principal inducement for families to prefer a residence on the Eastern Shore, above most other places, are economy of living, proximity to the large cities of the East, the comparative facilities for the educating of children, and the easy, unrestrained and refined tone of society. And nowhere can one procure the luxuries of life, such as fish, oysters, clams, crabs, terrapins, ducks, fruits, melons, berries, etc., at so low a rate as on the peninsula; while house-rent, the keep of carriages, horses, servants, etc., are in many of the towns little more than half the expense which they would be in other places.

—Dr. C. W. Chancellor, in *The Times and Register* (Phila., Sept. 17, 1892).

Monthly Summary.—September, 1892.

Temperature (degrees).—Mean monthly, 65.9. Highest monthly mean, 69.5, at Kirkwood, Del. Lowest monthly mean, 63.2, at New Market. Highest temperature, 98, at Edgemont, on the 4th and 5th. Lowest temperature, 40, at Boettcherville, on the 8th. Greatest local monthly range, 52, at Edgemont. Least local monthly range, 25, at Jewell. Mean monthly range, 37.9. Mean maximum, 65.9. Mean minimum, 56.3.

Precipitation (in inches).—Average, 3.05. Greatest amount, 5.82, at Frederick. Least amount, 1.75, at Solomon's.

Wind.—Prevailing direction, southeast. Total movement in miles, Baltimore, 4867; Norfolk, Va., 5311; Washington, D. C., 3908.

Thunderstorms.—At Barron Creek Springs, on the 25th; at Cumberland *a*, on the 25th; at Darlington, on the 25th; at Dover, Del., on the 25th; at Fallston, on the 25th; at Frederick, on the 8th; at Jewell, on the 25th; at Leonardtown, on the 25th; at Mt. St. Mary's, on the 13th; at Solomon's, on the 14th.

Halos.—*Lunar*, at Barron Creek Springs, on the 2nd, 21st.

Halos.—*Solar*, at Solomon's, on the 17th.

Meteors.—At Barron Creek Springs, on the 24th; at Solomon's, on the 12th.

Frost.—At Frederick, on the 2nd.

Average number of cloudless days, 19; partly cloudy days, 6; of cloudy days, 5; rainy days (.01 of an inch or more), 6.

Local verification of weather and temperature signals for September, reported by displaymen:

Weather - - - - -	92.9 per cent.
Temperature - - - - -	97.6 " "
Average - - - - -	95.2 " "

Notes by Observers.

Baltimore.—13th, wind storm from the S.E. 14th, light fog; wind storm from the N.W. 26th, wind storm from the N.W.

Barron Creek Springs.—2nd, bank settles down over sun at rising. 3rd, bank settles down over sun at rising; halo of moon, 9 P. M. 4th, slightly smoky at 7 A. M. and 7 P. M.; high tides continue. 7th, 8th, 9th, slightly smoky. 10th, light fog, 5.30 A. M. to 7 A. M., then smoky; distant lightning in N.W., 9 P. M. 11th, smoky, 7 A. M.; rain frog crying, 6.30 P. M.; high tides still continue. 13th, smoky, 2 P. M.; rain frog crying, 8 P. M.; distant thunder S.E., 8.30 P. M. 14th, distant thunder and lightning in S.E., 4 A. M. to 5 A. M.; rain frog crying, 5 P. M.; very heavy wind most of the night. 15th, smoke from neighborhood fires. 16th, distant lightning in N.W., 9 P. M. 17th, light fog, 6 A. M.; rain frog crying. 18th, 19th, heavy fog till 9 A. M. 20th, 21st, solar halos with parhelia on each. 23rd, light fog, 6 A. M. to 8 A. M. 24th, distant thunder in S.E., 1 P. M.; meteor with long trail going S.W., 8 P. M. 25th, northeast clouds, 5 A. M.; thunderstorm, accompanied by rain, and hail as large as hickory nuts. 26th, mosquitoes unusually thick, continuing till end of month.

Cumberland *a*.—The weather for this town has been remarkably good, but rather warmer by day than the normal. No frost. Thunderstorm on the 25th. Some few cases of typhoid fever and diphtheria, but none sufficient to retract the name of excellent. Garden truck and fruit abundant and good, except a little stunted by the drouth. Apples knotty and not fair, but will doubtless improve as the late varieties come in. Ground slightly moist on surface, but hard and dry below. Streams and springs clearing a little, but they have continued red for a longer period, I think, than ever known at this time of the year. The water has a very unpleasant smell, as if stale.

Darlington.—25th, thunderstorm from N.E., accompanied by hail as large as peas.

Fallston.—25th, about 4 A. M., a severe thunderstorm, accompanied by rain and hail. Some stones were gathered after a few minutes, which were very regular, nearly round and solid, and about one inch in diameter. They were more regular than I ever saw before, but, possibly, the irregularities had melted. The mean temperature, at this point, for the past twenty years, 67.2°; coldest in 1871, 61.3°; warmest in 1881, 61.3°. Mean rainfall during September, at this point, for the past twenty-two years, 4.84 inches; most in 1876, 12.95 inches; least in 1884, .23 of one inch.

Frederick.—2nd, light frost. 8th, thunderstorm. 14th, heavy rain during night, 4.07 inches. Greatest precipitation in twenty-four consecutive hours, 4.53 inches.

Jewell.—25th, about 4 A. M., a severe thunderstorm, accompanied by rain and hail the size of peas.

Leonardtown.—25th, thunderstorm from N., 7 A. M.

Mt. St. Mary's.—13th, severe thunderstorm.

Solomon's.—12th, a very bright meteor, N. to S.E., 8.02 P. M. 14th, thunderstorm, 3.20 A. M., W. to E.; distant lightning in S.E., 8.10 P. M. 17th, solar halo. 18th, dense fog in the morning, lasting till 7.30 A. M. 22nd, distant lightning, N.E., 10 A. M. 25th, electrical storm, 5 A. M. to 9.25 A. M., N.E. to S.; hail of large size about twelve miles from station.

a, Howard Shriver.

MONTHLY SUMMARY OF REPORTS, SEPTEMBER. 1892.

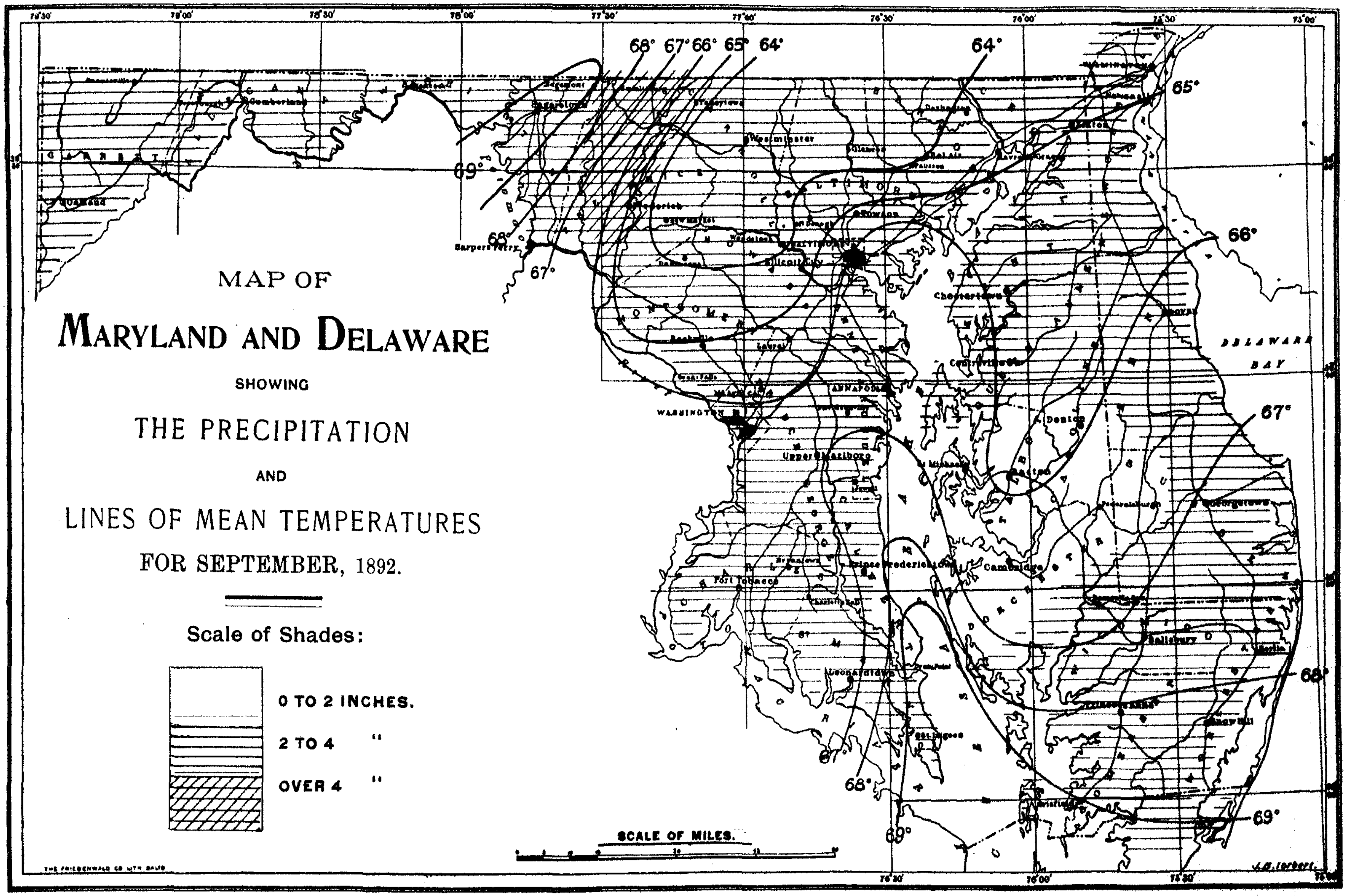
Stations.	Counties.	Altitude above Sea in feet.	Latitude.	Longitude.	†Barometer. Monthly Mean.	Barometer. Maximum. Height.	Barometer. Maximum. Date.	Barometer. Minimum. Height.	Barometer. Minimum. Date.	Temperature. Monthly Mean.	Mean of Maximum.	Mean of Minimum.	Maximum. Degrees.	Maximum. Date.	Minimum. Degrees.	Minimum. Date.	Monthly Range.	Total Precipitation.	Clear Days.	Fair Days.	Cloudy Days.	Rainy Days. (.01 inch or more.)	Prevailing Wind.
Baltimore	...	179	39°17′	76°36′	30.171	30.420	8	29.738	13	66.0	74.8	57.7	88	5	49	15	39	2.36	19	6	5	9	S. E.
Barron Ck. Springs	Wicomico.	25	38°30′	75°39′	....	....	..	....	..	66.7	76.2	57.2	84	5	48	16	36	2.08	18	8	4	3	S. E.
Boettcherville	Alleghany	....	39°39′	78°48′	....	....	..	....	..	64.0	75.7	52.3	88	4, 5, 25	40	8	48	2.90	....	....	....		....
Cumberland (*a*)	Alleghany	650	39°39′	78°46′	31.076	30.441	8	29.752	14	66.6	76.2	57.0	87	4	47	28	40	2.25	....	....	....	5	....
Cumberland (*b*)	Alleghany	700	39°39′	78°45′	....	....	..	....	..	64.0	72.8	55.3	83	25	45	7	38	2.36	23	2	5	5	W.
Darlington	Harford	300	39°39′	76°14′	....	....	..	....	..	64.2	74.1	54.3	85	5	45	30	40	2.77	....	....	....		E.
*Distribut'g Res., D. C.	....	....	38°52′	77° 0′	....	....	..	....	..	65.6	....	....	84	12	50	30	34	4.85	....	....	....	6	....
Dover, Del	Kent	....	39° 9′	75°31′	....	....	..	....	..	66.3	75.4	57.3	87	5	49	27	38	2.71	25	3	2	4	S. E.
Easton	Talbot	35	38°42′	76° 6′	....	....	..	....	..	65.7	75.5	55.9	85	17	47	30	38	1.84	17	9	4	8	E.
Edgemont	Washington	....	39°45′	77°29′	....	....	..	....	..	69.2	81.8	56.7	98	4, 5	46	27	52	....	....	....	..	....	....
*Failston	Harford	450	39°31′	76°24′	....	....	..	....	..	63.7	....	....	85	5	48	27	37	3.28	....	....	....	5	....
Frederick	Frederick	280	39°24′	77°18′	....	....	..	....	..	65.4	75.4	55.5	88	5	47	2, 7, 30	41	5.82	21	5	4	7	....
*Great Falls	Montgomery	....	39° 0′	77°14′	....	....	..	....	..	65.3	....	....	86	5	47	27, 28	39	2.04	....	....	....	7	....
*Jewell	Anne Aru'del	....	38°44′	76°36′	....	....	..	....	..	67.8	....	....	80	5	55	16, 27	25	3.08	26	1	3	7	....
*Kirkwood, Del	New Castle	....	39°35′	75°40′	....	....	..	....	..	69.5	....	....	88	5, 24	56	2	32	....	....	....	....	5	....
Leonardtown	St. Mary's	....	38°18′	76°40′	....	....	..	....	..	66.2	75.5	56.8	84	19	51	15, 27	33	2.29	22	4	4	4	S. W.
McDonogh	Baltimore	535	39°23′	76°44′	30.179	30.425	8	29.761	13	64.4	73.6	55.1	84	5	49	2, 27, 30	35	3.32	....	....	....	8	....
Mt. St. Mary's	Frederick	720	39°41′	77°21′	30.183	30.402	3	29.770	13, 14	67.2	75.3	59.2	85	5, 25	48	30	37	5.52	14	9	7	5	N. W.
*New Market	Frederick	500	39°23′	77°18′	30.176	30.421	30	29.717	13	63.2	....	....	86	5, 23	48	7, 11	38	3.77	16	5	9	5	W.
*Receiving Res., D. C.	....	....	38°52′	77° 0′	....	....	..	....	..	66.0	....	....	83	5	51	30	32	4.10	....	....	...	6	....
Seaford, Del	Sussex	....	38°40′	75°35′	....	....	..	....	..	66.8	78.2	55.4	90	5	44	30	46	1.81	....	....	....	2	....
Solomon's	Calvert	20	38°19′	76°27′	....	....	..	....	..	69.2	76.2	62.2	84	5, 19	54	27	30	1.75	15	6	9	7	S. E.
Taneytown	Carroll	....	39°40′	77° 9′	....	....	..	....	..	....	....	....	....	....	....	....	....	2.44	....	....	....	6	....
Washington, D. C.	....	112	38°52′	77° 0′	30.180	30.430	30	29.720	13	66.0	76.2	56.0	88	5	48	30	40	3.35	15	7	8	8	E.
Woodstock	Howard	392	39°20′	76°49′	30.186	30.430	30	29.726	13	63.5	73.6	53.4	85	5	44	30	41	3.53	18	7	5	6	N. W.
‡Norfolk, Va.	....	43	36°51′	76°17′	30.170	30.390	30	29.810	13	71.0	77.0	64.0	84	5	53	28	31	1.33	16	9	5	5	N. E.
Averages	....	....	....	....	30.179	....	..	....	..	65.9	75.7	56.3	...	....	..	....	37.9	3.05	19.1	5.5	5.3	5.8	....

* Extremes of temperature from observed readings. † Readings reduced to sea-level. ‡ Omitted in computing means.

DAILY PRECIPITATION FOR SEPTEMBER, 1892.

STATIONS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Baltimore	....	....	....	....	....	.01	....	....	.24	....	T	....	.39	.85	.01	....	....	....	....	....	.09	.27	.31	T	.16	....	....	....	....	....	....	2.36
Barron Crk. Spr.	....	....	....	....	....	....	....	....	....	....	....	....	....	.83	....	....	....	....	....	....	....	....	.36	....	.89	....	....	....	....	....	....	2.08
Boettcherville	....	....	....	....	.20	....	....	....	....	....	....	....	1.60	....	....	....	....	....	....	....	....	.50	.30	....	.30	....	....	....	....	....	....	2.90
Cumberland (*a*)	....	....	....	....	.55	....	....	....	....	....	....	....	.90	....	....	....	....	....	....	....	....	.38	.22	....	....	.20	....	....	....	....	....	2.25
Cumberland (*b*)	....	....	....	....	.32	....	....	....	....	....	....	....	1.06	....	....	....	....	....	....	....	.36	.20	....	....	.22	....	....	....	....	....	....	2.26
Darlington	....	....	....	....	....	....	....	....	....	....	....	....	1.20	.03	....	....	....	....	....	....	....	.51	....	....	1.03	....	....	....	....	....	....	2.77
Dist. Res. D. C.	....	....	....	....	....	.18	....	....	.03	....	....	....	....	1.75	....	....	....	....	....	....	....	.58	2.25	.06	....	....	....	....	....	....	....	4.85
Dover, Del	....	....	....	....	....	.03	....	....	....	....	....	....	....	.76	....	....	....	....	....	....	....	....	.84	....	1.08	....	....	....	....	....	....	2.71
Easton	....	....	....	....	....	.12	....	....	.07	....	....	.08	....	.65	.21	....	....	....	....	....	....	.19	.28	....	.21	....	....	....	....	....	....	1.84
Fallston	....	....	....	....	.13	....	....	.02	....	....	....	T	....	1.93	....	....	....	....	....	....	....	.65	....	....	.50	....	....	....	....	....	....	3.28
Frederick	....	....	....	....	.36	....	....	.20	....	....	....	....	.46	4.14	....	....	....	....	....	....	....	.25	.41	....	....	....	....	....	....	....	....	5.82
Great Falls	....	....	....	....	....	.05	....	....	.05	....	....	....	....	.61	.08	....	....	....	....	....	....	.54	.62	.06	....	....	....	....	....	....	....	2.04
Jewell	....	....	....	....	....	.12	....	....	.10	....	....	....	.90	T	....	....	....	....	....	....	....	....	1.60	....	.36	....	....	....	....	....	....	3.08
Leonardtown	....	....	....	....	....	T	....	....	.07	....	....	....	....	1.31	....	....	....	....	....	....	....	....	.88	.03	....	....	....	....	....	....	....	2.29
McDonogh	....	....	....	....	.51	....	....	.41	....	....	....	....	1.4	.05	.10	....	....	....	....	....	.02	.80	.42	....	....	....	....	....	....	....	....	3.32
Mt. St. Mary's	....	....	....	....	....	....	....	....	....	....	....	....	4.38	.62	....	....	....	....	....	....	T	.37	.09	.06	....	....	....	....	....	....	....	5.52
New Market	....	....	....	....	.57	....	....	.60	....	....	....	....	1.70	.20	....	....	....	....	....	....	.70	....	....	....	....	....	....	....	....	....	....	3.77
Rec. Res. D. C.	....	....	....	....	.14	....	....	....	.05	....	....	....	....	1.32	....	....	....	....	....	....	....	.51	2.03	.05	....	....	....	....	....	....	....	4.10
Seaford, Del	....	....	....	....	....	....	....	....	....	....	....	....	....	.94	....	....	....	....	....	....	T	T	....	....	.87	....	....	....	....	....	....	1.81
Solomon's	....	....	....	....	....	....	....	.04	....	....	T	....	.25	.43	....	....	....	....	....	....	.12	.13	.35	....	.25	....	....	....	....	....	....	1.57
Taneytown	....	....	....	....	.09	....	....	.20	....	....	....	....	1.80	.20	....	....	....	....	....	....	....	....	.05	.10	....	....	....	....	....	....	....	2.44
Washington, D. C.	....	....	....	....	T	.13	....	....	.02	....	....	T	.47	.79	.01	....	....	....	....	....	.18	.46	1.49	....	....	....	....	....	....	....	....	3.55
Woodstock	....	....	....	....	.53	....	....	.03	....	....	....	....	2.11	.18	....	....	....	....	....	....	.31	.37	....	....	....	....	....	....	....	....	....	3.53
Norfolk, Va.	.13	....	....	....	.53	....	..	....	....	....	....	T	.12	.23	....	....	....	T	....	T	T	T	.03	....	.76	....	....	....	....	....	....	1.33

NOTE.—"T" indicates a trace of rain or snow.


MAP OF
MARYLAND AND DELAWARE
SHOWING
THE PRECIPITATION
AND
LINES OF MEAN TEMPERATURES
FOR SEPTEMBER, 1892.
Scale of Shades:
0 TO 2 INCHES.
2 TO 4 "
OVER 4 "
SCALE OF MILES.
68° 67° 66° 65° 64°
64°
65°
66°
67°
68°
69°
Harpers Ferry
Cumberland
Hagerstown
Westminster
Frederick
Ellicott City
Towson
Rockville
Laurel
WASHINGTON
ANNAPOLIS
Upper Marlboro
Port Tobacco
Leonardtown
Chestertown
Centreville
Denton
Easton
Cambridge
Prince Frederick
Salisbury
Princess Anne
Snow Hill
Berlin
Georgetown
DELAWARE BAY