

annoying. There are also other insect pests, two species of which cause much damage to the rice crop, and another has, as before mentioned, practically destroyed the coffee industry. Bees of three varieties are found. Butterflies, beetles, spiders, and many other forms of insect life are seen in great profusion.

Climate.—The climate of the Philippine Islands is tropical, that is, it is characterized by high and steady temperature and an abundant rainfall. Statistically it is known mainly from the excellent series of meteorological observations made by the Jesuit fathers at their Observatory of Manila. Through the instrumentality of the same institution observations have been made in or collected from other localities in the archipelago; but, unfortunately, in most instances these observations are for short periods, or are so much broken that their value as climatic data is seriously impaired. With the exception of Manila, temperature observations of sufficient length and continuity are available for but two places: Aparri, in north Luzon, and La Carlota, in the island of Negros. The mean temperatures of these two places are shown in Table I.

TABLE I.—MEAN TEMPERATURES (FAHR.) OF APARRI, N. LUZON, AND LA CARLOTA, NEGROS.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Aparri (ten years' record).....	74°	75°	77°	80°	82°	83°	82°	82°	81°	80°	77°	74°	79°
La Carlota (eight years' record).....	78°	79°	80°	82°	82°	81°	82°	82°	81°	80°	77°	74°	80°

The climate of Manila and vicinity is shown in detail in Table II.

TABLE II.—CLIMATOLOGICAL DATA FOR MANILA.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Temperature (F.)—													
Mean monthly.....	77	78	81	83	84	84	82	81	81	80	79	77	80
" of warmest.....	79	81	82	85	87	87	82	82	82	82	81	80	82
" coolest.....	74	76	79	81	82	81	79	80	79	79	77	75	79
Highest recorded.....	91	96	96	100	98	95	94	94	95	94	94	92	100
Lowest.....	60	61	65	66	71	70	70	69	71	69	63	60	60
Mean maximum.....	86	87	90	92	92	90	87	87	88	86	85	85	85
" minimum.....	69	68	72	74	76	75	75	75	74	73	71	71	71
Greatest daily range.....	17	18	18	18	16	14	12	12	14	13	14	14	14
Greatest.....	13	17	17	18	14	12	12	12	14	13	14	14	14
Least.....	4	5	4	8	4	3	3	3	3	3	3	2	2
Humidity—													
Mean relative, per cent.....	77	73	71	70	75	80	84	85	82	80	80	80	78
" absolute, grains per cubic foot.....	7.75	7.60	7.90	8.42	9.27	9.39	9.33	9.53	9.33	9.24	8.59	8.06	8.75
Wind movement in miles—													
Mean daily.....	98	115	132	145	144	138	182	165	192	111	94	93	134
Prevailing wind direction.....	N. E.	E.	E.	S. E.	S. E.	S. E.	S. W.	S. W.	S. W.	N. E.	N. E.	N. E.	53
Cloudiness, per cent.....	45	37	35	32	47	65	74	68	72	58	54	53	53
Days with rain, number of.....	4.3	2.2	3.4	3.5	9.2	13.4	12.1	19.8	20.7	14.4	11.3	8.4	135
*Rainfall in inches—													
Mean monthly.....	1.15	.47	.65	1.11	4.30	9.68	14.70	13.88	15.01	7.47	4.92	2.09	75.43
Greatest.....	7.59	1.97	3.94	5.37	10.11	25.81	29.71	43.20	61.43	23.65	15.27	13.67	129.98
Least.....	.02	.00	.00	.00	.00	.98	5.28	5.15	2.00	.90	1.17	.01	35.65

*Rainfall record for thirty-two years, 1865-96. Other data for seventeen years, 1880-93, with exception of mean maximum and minimum daily ranges, which are for fourteen years.

Temperature.—The average temperature of the year at Manila is 80° F. In describing the climate of Manila the year may be divided into a hot season, an intermediate season, and a cool season. April, May, and June constitute the hot season, with an average temperature for the three months of 83°; July, August, and September, the intermediate season, with an average temperature of 81°; and October to March, inclusive, the cool season, with an average temperature of 79°. May is the hottest month of the year, having an average temperature of 84°, and December and January are the coolest months, with average temperatures of 77°. The highest thermometer reading so far recorded is 100°. The lowest

reading ever recorded is 60°. For comparison with other tropical and subtropical places, see tables in articles *Cuba* and *Hawaii*.

Humidity.—The average relative humidity is 78 per cent. The average absolute humidity is 8.8 grains per cubic foot. The humidity is greatest during the months of July, August, and September when its average is 84 per cent., and least during March and April when its average is 70 per cent.

Rainfall.—The average rainfall, from a record of thirty-two years, is 75.43 inches. The year is usually divided into a rainy season and a dry season, although the Spaniards characterized the seasons epigrammatically as "*seis meses de polvo, seis meses de lodo, seis meses de todo*" (six months of dust, six months of mud, and six months of everything). The wet season begins with June and extends to October, inclusive, during which 80 per cent. of the total rainfall occurs. The dry season takes up the rest of the year during which but 20 per cent. of the rainfall occurs. The month of September has the largest average rainfall, 15.01 inches, and February the smallest average fall, 0.47 inch. The heaviest

in the month of September. It is not unusual for the months of February, March, April, and May to pass with

rainfall ever recorded in any one month is 63.43 inches no rainfall whatever. A consideration of the record of thirty-two years reveals the fact that there are many departures from the average rainfall, and in some instances the departures are remarkable. For example, in one year as much as 129.98 inches fell and in another year as little as 35.65 inches. Still more remarkable, however, are the departures from the averages of individual months. In the case of September, before referred to as the month of greatest rainfall, as little as but two inches has fallen.

The rainfall varies much in other places in the archipelago. From an inspection of Table III, it will be observed that the rainy season is not synchronous in all

TABLE III.—RAINFALL STATISTICS AT SEVERAL STATIONS IN THE PHILIPPINES.

Stations.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Vigan (ten years' record).....	0.0	0.0	0.17	0.14	3.50	8.55	21.09	11.38	19.14	6.94	2.56	0.01
Punta Santiago (twelve years' record).....	.26	.01	.22	.18	3.90	7.36	14.48	9.45	12.68	4.76	4.01	2.25
Albay (six years' record).....	9.21	6.61	9.02	6.11	7.40	8.18	10.47	9.53	11.81	8.35	11.85	17.99
Aparri (nine years' record).....	9.09	3.89	1.88	1.07	2.03	2.29	5.08	6.85	9.53	11.25	9.48	10.39
San Isidro (ten years' record).....	.02	.26	.78	.02	8.27	7.59	13.36	11.14	14.22	7.01	4.02	2.03
Tayabas (seven years' record).....	4.88	1.92	2.37	.94	3.96	3.49	3.80	2.91	4.59	9.41	11.15	7.70
Sulu (five years' record).....	4.06	1.83	1.74	3.29	9.59	5.68	5.74	4.63	5.89	6.46	5.02	6.30
Cebu (six years' record).....	3.60	2.05	2.52	.83	4.03	7.53	6.33	6.53	6.50	6.67	4.58	6.77

parts of the archipelago. Indeed, it is practicable by moving from place to place to have rainy or fair weather almost as one chooses. In Table III, the stations of Vigan and Punta Santiago are on the western coast of Luzon, Albay on its southeastern extremity, and Aparri on its northern coast. San Isidro and Tayabas are in the interior of Luzon.

Storms.—Thunder storms are of frequent, almost daily, occurrence during the wet season. The electrical display and the rainfall of these storms are much more intense than in the storms of temperate latitudes. However, but little damage results. The most destructive and most dreaded storm of the eastern waters is the typhoon, a cyclonic storm similar in respect to origin, course, and season, and destructiveness to all things in its path, to the West India hurricanes of the Atlantic. The season of maximum typhoon prevalence is from June to October.

Health.—One of the most interesting questions pertains to the health of Europeans and Americans in the archipelago. Unfortunately, no satisfactory answer can be given at present. Spanish sanitary arrangements in the tropics have been notoriously bad, and much of the ill-health prevalent in the Philippines must be attributed to the absolute neglect of the most elementary principles of sanitation. With due attention to the ordinary laws of hygiene, it appears reasonable to expect considerable improvement in the health of both the native and the foreign population. The prevalent infectious diseases are typhoid and malarial fevers, dengue, beri-beri (confined almost exclusively to natives), and smallpox. Intestinal diseases are common and dysentery is especially prevalent, more so during the wet season than during the dry. Notwithstanding the high atmospheric temperature and great degree of humidity, heat stroke is infrequent. Col. Charles R. Greenleaf, U. S. A., chief surgeon, Division of the Philippines, states "that heat stroke so much feared in the tropics is practically unknown here, men drop out in the march overcome by the heat, but fatal stroke and lasting heat exhaustion are very rare." Table IV., arranged from the report of the Sur-

ent to accommodating themselves to the unusual climatic conditions. The consideration of the subject of clothing suitable for the tropics cannot be taken up here, but it is a matter of much importance to persons contemplating sojourns in equatorial climates. (See article on *Military Hygiene*, in the present volume.) Persons having experience in the islands appear to be united in advising the wearing of light flannels next to the body. Much stress is laid on the importance of protecting the abdomen at night by the use of a light binder. Another point upon which it is imperative to insist is the use of pure water, that is, water that has been made pure by adequate filtration or by boiling. Strict attention to the drinking-water is perhaps the keynote to the situation.

W. F. R. Phillips.

MANITOU SPRINGS.*—El Paso County, Colorado.

POST-OFFICE.—Manitou Springs. Hotels: Barker, Cliff House, Manitou House, mansions and numerous boarding-houses.

ACCESS.—Via Denver and Rio Grande Railroad and Colorado Midland Railroad.

Manitou is situated six miles west of Colorado Springs, immediately at the foot of Pike's Peak. Here are located the celebrated effervescent soda and iron springs which in early days gave the name of springs to the town of Colorado Springs. An electric railroad, with cars at frequent intervals, unites the two places. The town of Manitou Springs contains a permanent population of more than 2,000 souls, which number is augmented during the summer months by about 125,000 visitors from all parts of the United States and from foreign countries. Dame Nature was in a fanciful mood when she fashioned the topography of this wild and rugged region. Few similar areas of the earth's surface present a greater number and variety of weird, grotesque, and romantic features than are to be found in the vicinity of Manitou Springs. The scope of this work allows us to enumerate only a few of the more prominent points of interest within a few miles of the place. Iron Springs and hotel,

TABLE IV.—RATIO OF SICKNESS PER THOUSAND OF MEAN STRENGTH OF REGULAR AND VOLUNTEER ARMIES, IN THE PHILIPPINES, 1900. (MEAN STRENGTH, 66,882.)

Cause.	Ratio of sick.	Ratio of deaths.	Cause.	Ratio of sick.	Ratio of deaths.
Smallpox.....	3.68	1.69	Diarrheal diseases, other.....	476.26	1.24
Dengue.....	49.63	.00	Enteritis.....	20.66	.40
Typhoid.....	10.71	2.11	Bronchitis.....	32.29	.00
Malaria, intermittent.....	717.83	.00	Pneumonia.....	2.35	.49
" remittent.....	153.56	.36	Pleurisy.....	4.11	.07
" pernicious.....	2.84	1.23	Consumption.....	4.89	1.18
Gastritis.....	45.78	.04	Heat stroke.....	2.05	.09
Dysentery, acute.....	83.62	3.07	Measles.....	4.69	.09
" chronic.....	44.83	4.77			

geon-General, U. S. A., 1901, shows the chief causes of sickness among the soldiers, which may be considered as most likely to be affected by the prevalent climatic and the existing sanitary conditions, and which may be taken as a fair indication of the diseases most common among the native and the foreign populations. The general consensus of expert opinion is that Americans in the islands are prone too much to over-eating and are too indiffer-

one mile; Rainbow Falls and Grand Caverns, one mile and a quarter; Crystal Park, three miles; Garden of the Gods, three miles; Glen Eyrie, five miles; Monument Park, by rail seven and one-half miles, North Cheyenne Canyon, eight and one-half miles; South Cheyenne Can-

*So called by the Indians ("Manitou," the Great Spirit), to whom the springs were known for many generations.

yon, nine miles; Summit of Pike's Peak (via cogwheel railroad), twelve miles. In addition to these well-known localities there are scores of canyons, caves, waterfalls, and charming nooks which the sojourner may seek out for himself. The railroad journey to the top of Pike's Peak is one never to be forgotten. The view from the immense height of 14,147 feet is almost appalling in its scope and grandeur. A post-office for the benefit of tourists is maintained at the apex of the Peak by the national Government during the summer season. It has been well described as the loftiest post-office in the United States. The meteorological conditions at Manitou and Colorado Springs are very favorable to invalids, the climate being dry and the temperature even and not subject to sudden changes. The winter months are mild and pleasant—so mild, indeed, that excursions are almost daily made to the neighboring canyons and glens, where outdoor picnics are held with as much safety to health as in the summer.*

Within the town limits are nine cold springs, which are divided into two groups: (1) the Soda Springs which resemble in taste and properties the well-known Apollinaris water; and (2) the Iron Springs. These springs are controlled by the Manitou Mineral Water Company, and, in addition to the immense local consumption by visitors, the waters are bottled and sold to dealers throughout the United States. The Manitou ginger-ale and Manitou soda-water also have an extensive sale, and an inspection of the immense bottling establishment of the company is one of the features of a visit to the resort. The waters of two principal springs, as analyzed by Prof. Elwyn Waller, Ph.D., analytical chemist, New York City, were found to contain:

MANITOU SPRINGS.

ONE UNITED STATES GALLON CONTAINS:		
Solids.	Manitou. Grains.	Navajo. Grains.
Sodium chloride.....	23.94	23.79
Potassium sulphate.....	10.68	15.35
Sodium sulphate.....	11.14	10.93
Sodium carbonate.....	40.69	42.30
Lithium carbonate.....	.71	.61
Calcium carbonate.....	69.08	69.33
Magnesium carbonate.....	16.68	16.04
Iron oxide.....	.02	.02
Alumina.....	.07	.10
Silica.....	2.49	2.46
Total.....	175.47	182.23

Both contain free carbonic-acid gas.

The waters of these springs are especially recommended in dyspepsia. During the author's sojourn at the springs, he had abundant opportunity to test the virtues of the Soda Springs in his own person and in that of one of his travelling companions. A glass of this water will almost instantly give relief in pyrosis, acid eructations, or flatulence, and its habitual use prevents the recurrence of these disagreeable symptoms. They are further of decided benefit in renal and bladder disorders. The waters of the Soda Springs, being clear, sparkling, and very palatable, form an excellent table beverage. The iron waters are highly beneficial in debility, in early phthisis, and in anemia and chlorosis. Numerous excellent hotels and boarding-houses are maintained at Manitou Springs. The visitor will find all the arrangements for his comfort and well-being equal to any that may be found at a first-class Eastern resort.

MANNA.—"The concrete, saccharine exudation of *Fraxinus ornus* L. (fam. *Oleaceae*)" (U. S. P.). Numerous other varieties of manna than this, the official one,

* Dr. L. D. Seabee gives us the following temperatures for the winter months: November, 48°; December, 43°; January, 40°; February, 48°; March, 50°; April, 64°. These records were made at 12 noon. At 6 P.M. the temperature was twelve to fifteen degrees lower. There was no rain from November 11th to March 15th.

are known, and some of them will be noticed at the close of this article.

This, the manna-ash of Italy, Sicily, Asia Minor, etc., is a small, graceful tree, with smooth gray bark, slender branches, odd pinnate leaves, and the characteristic inflorescences and fruit of the genus. It grows to about twenty feet in height, and is often cultivated, both in and beyond its natural habitat, for ornament, but does not yield manna excepting in Southern climates. In Sicily, whence most of the manna of the present time comes, the trees are regularly cultivated for this purpose, being planted in rows in "orchards," and allowed to grow unmolested until the stems are nearly as large as the leg. Then the tapping is begun, and repeated every summer for a dozen or more years, until the tree is exhausted. The usual method is to make a transverse cut through the bark near the base of the trunk, and to follow it each day with another, about an inch higher up than the last, during favorable weather. It is done in the middle of the summer, and hot, dry days are essential to success. The sap exudes from these cuts—a thick, syrupy, very clear, and sweet liquid—and soon concretes on the bark of the trunk, or on leaves, sticks, straws, etc., laid for it. These lumps are either cut or "flaked" off, great care being taken not to get any of the bark, and in this state they constitute the highly prized "Flake-manna," which is graded in sizes. The exuding tears often drop to the ground, and sometimes form large masses at the base of the trunk. This, with the scrapings from the trunks, is assorted into inferior grades, "small flake," "sorts," "cake manna," etc., some of which are very impure.

DESCRIPTION.—Manna suitable for medicinal use is thus described in the Pharmacopœia: "In flattish, somewhat three-edged pieces, occasionally eight inches (20 cm.) long, and two inches (5 cm.) broad, usually smaller; friable; externally yellowish-white, internally white, porous, and crystalline; or in fragments of different sizes, brownish-white, and somewhat glutinous on the surface, internally white and crystalline; odor, honey-like; taste sweet, slightly bitter, and faintly acrid. On heating 5 parts of manna with 100 parts of alcohol to boiling, and filtering, the filtrate should rapidly deposit separate crystals of mannit. Manna consisting of brownish, viscid masses containing few or no fragments of a crystalline structure should be rejected." There is much opportunity for economy in purchasing a good grade of manna, without selecting the very high-priced flakes, which are superior in appearance only.

COMPOSITION.—Fine qualities of this drug contain seventy or eighty per cent. of mannit (C₆H₁₂[OH]₆), a sweet, crystalline, sugar-like, peculiar substance, also found in other sweet saps. There are also traces of *fraxin*, a neutral bitter substance which is found in the bark of several other species of ash, and which injuriously affects the quality.

ACTION AND USE.—The best (not bitter) specimens of manna contain nothing of importance besides this mannit. They are not poisonous or deleterious in any quantity, and exert on the human body simply the influence of a very gentle catharsis. Manna has been for a long time a favorite laxative for infants and children, on account of its pleasant taste, but it is becoming scarcer and is used less and less frequently. Dose (adult), from 25 to 50 gm. (̄i. ad ̄iiss.), which may be taken in substance or dissolved in water. The only official preparation is the compound Infusion of Senna (*Infusum Sennæ Compositum*, U. S. P.), made as follows: Senna, 6 parts; manna, 12 parts; sulphate of magnesium, 12 parts; fennel, bruised, 2 parts; boiling water, 80 parts; water. Macerate, strain, and add water enough to make 100 parts—a cathartic.

The name "manna" has been applied to a number of sweet exudations from trees and plants which grow in various parts of the world. *Fraxinus excelsior* L., the common European ash, like many others of the genus, yields a sweet sap, and is said to yield a little manna in Sicily. Allhagi manna, from a small leguminous plant of

India, is in small, roundish, hard tears. Tamarisk manna, from Arabia and Persia, is also in small tears. "Shir Khist" is from a species of *Cotoneaster*, collected in India: oak manna, from several species of oak, and Briançon manna, from the larch. None of these has, however, in European markets, any importance as compared with the variety here described. Henry H. Rusby.

MARDELA SPRINGS.—Wicomico County, Maryland. **POST-OFFICE.**—Mardela Springs. Hotel. This resort is located on the Baltimore, Chesapeake and Atlantic Railroad, twelve miles west of Saulsbury. Under the name of Barren Creek Springs they have been used for medicinal purposes for many years. There is much charming scenery in the neighborhood, and the atmospheric conditions during the summer months are of a very desirable character. The location is about two hundred feet above the sea-level. Messrs. Taylor and Bacon, of the springs, supply us with the following analysis by Prof. P. B. Wilson, of the Baltimore University School of Medicine:

ONE UNITED STATES GALLON CONTAINS:	
Solids.	Grains.
Silica.....	1.28
Arsenious acid.....	Strong trace
Ferric oxide (iron sesquioxide).....	11.50
Alumina.....	.34
Sodium chloride.....	.78
Calcium carbonate.....	1.35
Magnesium carbonate.....	.04
Calcium sulphate.....	.01
Sodium carbonate.....	Trace
Total.....	15.30

The water is a strong chalybeate. It is a very efficient tonic and diuretic, and contains sufficient arsenic to give it valuable alterative properties. It promotes the appetite, aids the digestion, and increases the general powers of nutrition. It is highly recommended by physicians of Baltimore in cases of weakness and irritability of the bladder, anemia, and chlorosis, dyspepsia, chronic cystitis, and urethritis, and in amenorrhœa, leucorrhœa, and other functional disorders of the female pelvic organs when due to debility. The water is found in the Baltimore markets. James K. Crook.

MARIENBAD.—"This is a well-known Bohemian spa, lying in a pleasant valley, surrounded by forest-covered hills, not far from Carlsbad. Its elevation is about 2,000 feet above the level of the sea. There are eight springs known as the Kreuz-, Ferdinands-, Carolinen-, and Ambrosius-Brunnen, and the Wald-, Wiesen-, Rudolfs-, and Marien-Quelle. Of these the most important are the two first mentioned. The following is the composition of four of the springs, according to analyses made at different times by different chemists. The proportions of the solid constituents are given in grams per litre.

	Kreuz-brunnen.	Ambrosius-brunnen.	Wald-Quelle.	Rudolfs-Quelle.
Sodium sulphate.....	3.873	0.275	1.06	0.11
Potassium sulphate.....	.054	..	.20	.02
Sodium chloride.....	1.257	.075	.37	.06
Sodium carbonate.....	.965	.115	1.00	.14
Calcium carbonate.....	.556	.270	.38	1.12
Magnesium carbonate.....	..	..	.40	.67
Aluminum carbonate.....	.405	.200	..	..
Lithium carbonate.....	.005	..	..	..
Strontium carbonate.....	.001	..	..	..
Manganese carbonate.....	.040	.035	.02	.04
Ferrous carbonate.....	Trace.	..	Trace.	.07
Manganous carbonate.....	.001	..	..	.03
Aluminum and calcium phosphates.....	.007	.050	.10	.01
Silicic acid.....	..	..	..	..
Bromides, fluorides, organic matters, etc.....	Traces.	Traces.	Traces.	Traces.
Total solid constituents.....	7.174	1.020	3.53	2.27

"The springs all contain a certain proportion of carbonic-acid gas. They are employed for the greater part internally. The Marienquelle, however, is used for bathing; it is very weak in solid constituents, containing only 0.182 part per thousand, but is pleasantly carbonated. "The waters of Marienbad are prescribed in cases of abdominal plethora, gout, hemorrhoids, chronic dysentery, hepatic congestion, etc., occurring in well-to-do individuals accustomed to indulge rather freely in the pleasures of the table. They are also very useful in obesity, and are especially recommended in affections associated with the menopause. The waters of some of the springs have considerable reputation in the treatment of neuralgia and of chronic catarrhal troubles of the respiratory organs and bladder. Ordinary baths are not much employed, though gas- and mud-baths are made use of to some extent. The season at Marienbad lasts from the beginning of May to the beginning of October. The climate is not mild, yet not disagreeably raw. The waters are exported in very large quantities. This spa is much frequented, the average number of guests each year being 21,000.*"

[Obesity is "the great specialty here," and corpulence stalks abroad on every hand. When one, however, has rid himself of his superabundant adipose tissue, great care must be paid to the diet, else the "too, too solid" fat will not remain melted. The accommodations are abundant and good; there is an English and Scotch church service, and there are over forty doctors. Marienbad is reached from London via Cologne, Nuremberg and Eger in thirty hours.—Edward O. Otis.]

MARIETTA, GEORGIA.—Situated in the northwestern part of the State, twenty miles from Atlanta, at an elevation of from 1,100 to 1,200 feet above sea-level. It is a town of some 3,384 inhabitants, with a dry sandy soil, and an invigorating climate with a large proportion of sunny days. In 1888, there were 263 sunny days, and 102 rainy or cloudy days. For the same year the average minimum and maximum monthly temperatures, the extremes of temperature, and the rainfall were as follows for the months of October to May.

	Average minimum temperature of month. Degrees.	Average maximum temperature of month. Degrees.	Maximum temperature. Degrees.	Minimum temperature. Degrees.	Rainfall. Inches.
October.....	49	64	77	37	3.93
November.....	44	58	75	26	4.38
December.....	34	49	64	18	4.97
January.....	36	49	72	12	3.10
February.....	40	54	69	10	4.00
March.....	39	58	77	19	9.81
April.....	52	73	82	42	1.68
May.....	57	74	85	41	5.13

The average yearly temperature is 57.66° F.

There are no humidity statistics known to the writer, but at Atlanta, twenty miles distant, the average relative humidity, as ascertained from observations taken at 8 A.M. and 8 P.M., is 71.8 per cent., with an average mean yearly temperature of 60.7° F.

It is said to be a breezy region, but there are no wind storms or fogs. Malaria does not exist here. There are two hotels, well kept, quiet, and comfortable, good boarding-houses, and a few houses for rent. The summer climate is also said to be "delightful," and the place is much resorted to at that season. Marietta is easily reached from New York and Washington via the Great Southern mail route. Edward O. Otis.

MARJORUM. See *Labiatae*.

MARKASOL is bismuth borophenate, an antiseptic dusting powder. W. A. Bastedo.

* From the former edition of the HANDBOOK.