

**Ombrological almanac : an essay on anemology and ombrology ... with a weather almanac for 1849 ... / by Peter Legh.**

**Contributors**

Legh, Peter.  
Royal College of Surgeons of England

**Publication/Creation**

London : W.&T.P.; Walker, 1849.

**Persistent URL**

<https://wellcomecollection.org/works/s7gkwrqe>

**Provider**

Royal College of Surgeons

**License and attribution**

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

**wellcome  
collection**

Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>





OMBROLOGICAL ALMANAC.

AN ESSAY *2*

ON

ANEMOLOGY AND OMBROLOGY,  
THE  
ONLY POSSIBLE THEORY FOR WEATHER CALCULATIONS

WITHOUT THE MYSTERIOUS ARTS,

WHOLLY FOUNDED ON THE PRINCIPLE OF

THE ATTRACTION OF THE HEAVENLY BODIES,

INCLUDING THE

SATELLITES OF THE GREAT PLANET JUPITER,

MECHANICALLY AND CHEMICALLY ACTING ON THE ATMOSPHERE,

AND GASES KNOWN TO BE ELIMINATED FROM THE EARTH,

WITH A

WEATHER ALMANAC

FOR

1849.

THE WEATHER CALCULATIONS CAREFULLY REVISED; THE ASTRONOMICAL  
POSITNIOS BEING TAKEN FROM THE NAUTICAL ALMANAC.

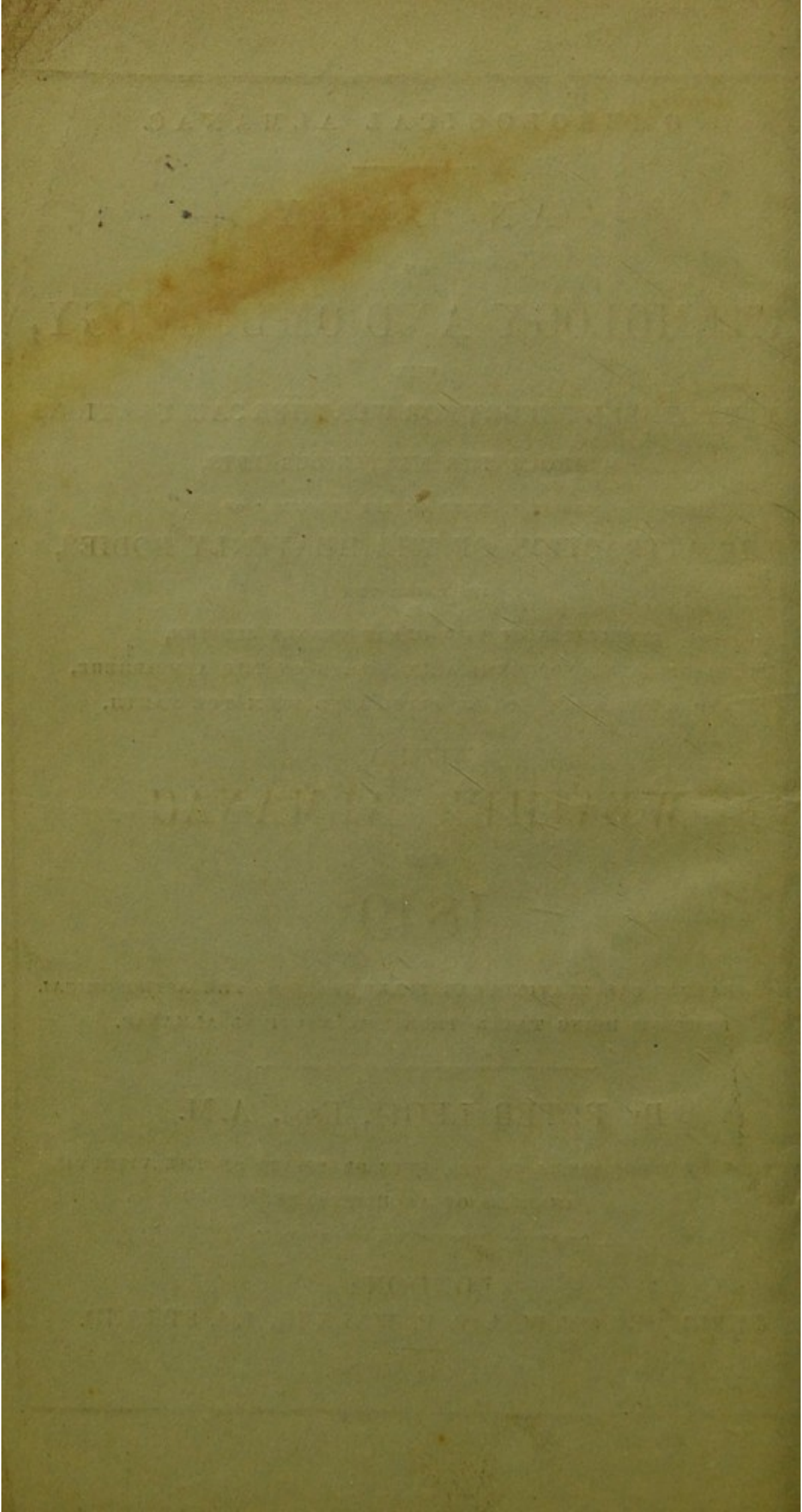
By PETER LEGH, Esq., A.M.

AUTHOR OF "THE MUSIC OF THE EYE; OR ESSAYS ON THE VITRUVIAN  
ANALYSIS OF ARCHITECTURE."

LONDON:

PUBLISHED BY W. & T. P. WALKER, 196, STRAND.

*Price One Shilling.*



OMBROLOGICAL ALMANAC.

---

AN ESSAY

ON

ANEMOLOGY AND OMBROLOGY,

THE

ONLY POSSIBLE THEORY FOR WEATHER CALCULATIONS

WITHOUT THE MYSTERIOUS ARTS,

WHOLLY FOUNDED ON THE PRINCIPLE OF

THE ATTRACTION OF THE HEAVENLY BODIES,

INCLUDING THE

SATELLITES OF THE GREAT PLANET JUPITER,

MECHANICALLY AND CHEMICALLY ACTING ON THE ATMOSPHERE,

AND GASES KNOWN TO BE ELIMINATED FROM THE EARTH,

WITH A

WEATHER ALMANAC

FOR

1849.

THE WEATHER CALCULATIONS CAREFULLY REVISED; THE ASTRONOMICAL  
POSITIONS BEING TAKEN FROM THE NAUTICAL ALMANAC.

---

By PETER LEGH, Esq., A.M.

AUTHOR OF "THE MUSIC OF THE EYE; OR ESSAYS ON THE VITRUVIAN  
ANALYSIS OF ARCHITECTURE."

---

LONDON:

PUBLISHED BY W. & T. P. WALKER, 196, STRAND.

*Price One Shilling.*

## CONTENTS OF THE ESSAY.



<i>Section.</i>	<i>Page.</i>
2 Electricity .....	
3 The Currents of Electricity.....	8
4 The Formation of Veins of Metal, Stones, &c. ....	9
4 The Formation of Atmosphere, Gases, Clouds, and Rain	10
6 The Atmospheric Stratum .....	11
7 The Nitrogenous or Refractive Belt of Gases.....	12
8 The Remote Hydrogenous Belt.....	13
9 The Analysis of Rain, Snow, &c.....	14
10 The Sun .....	14
11 The Moon.....	15
12 Conjunction of Planets and the Moon.....	16
13 Conjunctions and Oppositions of Planets and the Sun ...	17
14 Conjunctions & Approximations of Planets among themselves	17
15 Conjunctions of the Sun and Moon, or Eclipses of the Sun	18
16 Conjunctions of Jupiter and its Satellites.....	18
17 Fogs, Mist, Pale Blue Sky, &c.....	19
18 Hills.....	19
19 Tides .....	20
20 Earthquakes .....	21
21 Casualties, Thunder, Hail, &c .....	21
22 Aurora Borealis .....	22
23 Comets .....	23
24 The Seasons.....	24
25 Anemology .....	25
26 The Cause and Direction of the Wind .....	26
27 Instant Indications of Weather.....	28

## ADDRESS TO THE READER.

---

THE principles upon which the Weather Almanac has been calculated, have now been *experimentally* proved by its results, so that it remains only in the following Essay to explain and prove those principles theoretically.

### *The Benefit to Science.*

By sound principles, thus established, parallel cases can alone be traced, cause referred to effect, the very few and slight remaining difficulties cleared up, and the mystification of designing men made to bend before the simple schemes of true philosophy; while the variety from every new planetary coincidence opens to the student the most interesting fields of investigation.

### *The Credibility of Weather Calculations.*

\* There is, however, one argument, which those who disbelieve the possibility of weather calculations, require to have elucidated; it is said, if some places are more rainy than others, how can one calculation apply to all. The answer is extremely simple; the calculation is of the time, not the quantity of rain; if you escape some or all the rain, (if correctly calculated,) it is because you are on the leeward side of some hill or island, that protects you; therefore *fair days* ought generally to be *more correctly* calculated than rainy.

### *The limits of the Calculations.*

The whole Earth being affected by planetary attraction, as well as radiation of heat from the Sun, whose effect diminishes to the North and South poles, the difference of latitude or climate will be the chief reason why ombrological calculations do not prove right often further than ten degrees round Greenwich, after making the necessary allowances for difference of time, the locality near



sea, hills, rivers, lakes, &c. assuming noon and midnight or generally rather after them, as the periods of calculation. Nothing also would be more easy than to calculate hurricanes in the tropics, (*v. Sect. 24,*) or Earthquakes, (*v. Sect. 20;*) but this almanac is confined to *Britain*.

### *Exceptions, &c. &c.*

We must still bear in mind, that the first and last quarters of the moon, marked Q, are sometimes uncertain; that when clouds exist there may be sudden rain; (*v. Sect 12;*) that thunder and hail cannot always be calculated, (*v. Sect. 21,*) though they frequently may; that though perhaps all planetary conjunctions produce whirlwinds in the tropics, and may produce earthquakes and thunderstorms near hills, yet that in other localities the effect is generally only clouds, wind, and rain; that wind not observed on the Earth may be seen to exist in the motion and forms of clouds above us.

### *The present state of the Science.*

Some of the Ptolemaic theorists, both with and without *mysterious names*, being likely to make undue claims, it should be noticed, that MR. LEGH, author of the Ombrological Almanac, *first* proved to the Meteorological Society what was not so completely admitted by a few of the members, the impossibility of trines, quartiles, and other Ptolemaic angles affecting the weather. He *first* showed them how much the Gases had to do with it; *first* discovered the ombrological influence of the satellites of Jupiter: *first* calculated with any success the direction of the wind; *first* made the ombrological division of the planets into proximate and remote, as necessary to the calculation of wind and rain; and if any other *real improvements* have ever been made, he shall be most happy to notice them and their authors; but though probably some weather calculators may have profited by his public statements, the public would have most confidence in the improver himself.

# EXPLANATION.

## AS TO OMBROLOGICAL SIGNS.

♌ means Conjunction : ♉ Opposition : ☾ Moon : ☉ Sun : ○ Full Moon : ● New Moon : Q the first and third Quarters of the Moon : § the Approximation of the Satellites of Jupiter, (see Sec. 16 :) Ap. Apogee: Per. Perigee: *p.* after Noon: *a.* before Noon: *n.* noon; and *m.* midnight. Th. Thermometer: Bar. Barometer: \* in the fifth column with the solar Conjunctions, High Water at London Bridge, and Leith, in Scotland, at Noon: D in the same column, High Water at Liverpool and Dublin at Noon: Ecl. Eclipse: in. inches: pt. parts: deg. Degrees: q. a Doubtful Influence: ! Remarkable, Excessive, or numerous. The sign in the seventh column refers to the second, fifth, and sixth columns. The first number means the hour, the second the minute.

## AS TO OMBROLOGICAL RESULTS.

Fair, without Rain: Rain, mostly rain: Ch., or Changeable, Sh., or Showery, shorter periods of rain: Sp. r., Spots of Rain, or the least of all Showers: Cl. Clouds, either remote or near, if the latter, and dark, rain is possible: Fog, the whole lower air dense: Th. Thunder: Sn. Snow: Fr. Frost: Sl. Sleet.

## AS TO ANEMOLOGY.

Gen., Gentle Wind, Frsh., Fresh Wind, something less than brisk: Brsk., Brisk Wind: Stng., Strong Wind: Stg! Very Strong Wind: Stg!! a Hurricane, (see Sec. 25 and 26 :) N.S.E.W. beneath the above, signifies the point of the Compass the Wind is expected to blow from; V. or Var., Variable Winds; Con., Concurring Influences; S.S., Satellites of Jupiter on one side the primary, (see Section 26.)

## EXORDIUM.

---

To Heaven ! to Thee. to Thee I call  
And in the glorious sight  
Of million, million stars I fall,  
And bless thine holy light.

Let me, in Nature's mirror, track  
The mighty arm that sways  
The storm, the whirlwind, and the wreck,  
And let me bend in praise

Devoutly, may I dare to tread  
In that celestial sphere,  
Where blessed angel spirits lead  
Th'all hallowed bright career?

Yes ! yes ! tho' countless are thy ways,  
This wide eternity ;  
Transcendant in eternal praise,  
They rest on Love and Thee.

Though darkness strive to blot Thy will,  
And hide that genial sun,  
Thy light shall shine triumphant still,  
Thy love, " Thy will be done."

P.L.

ESSAY  
ON  
ANEMOLOGY AND OMBROLOGY.

---

THE science of the Weather having been enshrined for centuries in the most mysterious delusions, and perhaps encircled with something like awfulness by the wand of Ptolemy, who, in the infancy of knowledge, A.D. 140, may have deserved the title of the Prince of Astronomers, is now, for any aid the ancients have given it, almost a new science. Ombrology, derived from *ομβρος* rain, will not only embrace the science of rain, but of all its congelations and modifications; while Anemology, derived from *ανεμος*, wind, treats of the science of wind. They, as treating of what contributes to our health, comfort, and existence, are the most useful part of Meteorology, or the Physiology of the Atmosphere, a word venerable for its antiquity, as it is described by Aristotle, B.C. 320, as a word used by the then ancients; and whose derivation in the Encyclopædia Britannica, is *μετεωρος*, sublime; no other derivation would avail, as meteors were never the cause of change of weather.

It would be a waste of time to enlarge on the errors of Ptolemy; his placing the earth instead of the Sun in the centre of the system has been long refuted by Copernicus; his supposing the Sun's heat regulated by the stars so remote as the zodiacal signs, is opposed to our physical knowledge; his division of planets into male and female, is too absurd even for modern delusionists; and his making them potent by reflecting their influences at chosen angles of trine, quartile, sextile, &c., is so entirely repugnant to common sense, and the undeviating laws of reflection from spherical bodies, that in the present advanced state of all, as well as astronomical, knowledge, and after two thousand years of failure in proof, many would think it an insult to any scientific

man to suppose him capable of believing it : we may, therefore, more profitably proceed at once to consider the fundamental principles of Ombrology, now experimentally proved ; for it is obviously of no use to find planetary positions for every phenomenon of weather, unless those planetary positions can be proved capable of affecting the weather.

## 2. *Electricity.*

Of Electricity and Heat : the former the source of attraction and solidity, the latter of fluidity and aerification : if heat has its centre, the Sun, most likely Electricity has its centre also. For this, though necessarily all conjecture, we know not how to fix upon anything more probable than the planet Saturn, with an orbit equi-distant from the centre and extremes of our system, great power of producing cold in the earth when in conjunction or near other planets, an annual revolution round the Sun of 29 years and 170 days, a singularly pale and faint light encircled by rings, brightest near the body of the planet, and accompanied by seven satellites. And we may observe here, if a constant stream of electric fluid, at the distance of Saturn, revolves round the Sun, it would pass at right angles to the solar rays ; we may thus perhaps trace the origin of that curious phenomenon, the polarization of light, and not improbably, conjointly with the Sun, one of the foci of the orbits of some comets.

## 3. *The Currents of Electricity.*

At all events so mighty an agent as Electricity cannot be confined to the terraqueous globe ; it cannot but pervade the whole solar system with a power and velocity to us inconceivable, far greater than either through the metallic strata of the Earth or the moist atmosphere of the Heavens, in the former of which it often exhibits itself in volcanoes and earthquakes, and perhaps after passing through many magnets of the earth, often terminates peacefully (as every magnet has two or more poles) in many more magnetic poles than have hitherto been discovered ; and in the latter, when intercepted by the unconducting portion of dry air, darts forth in lightning.

The Earth, owing probably to some internal materials of attraction, always presents the tropics to the Sun ; it is, however, probable, the electric fluid has its ordinary direction in the Earth from south to north : the Earth indeed is full of proofs of this ; the wide expanse of the South Sea presents its mode of access ; hence we may trace its progress, when the Earth was in a softer state, through the great promontories of America, Africa, and Cape Comorin in Asia, forming long *chains* of mountains often ending in the highest peak, or, as in Africa, diverted by a non-

conducting dry sandy desert into the adjacent mountains of Nigritia, which, therefore, were anciently called "The mountains of the God," from the prevalence there of thunder and lightning. Sometimes indeed we see the *chains* east and west; there is also a recent discovery, which shews the electric fluid may have gone in a southern direction to a volcanic island, discovered on January 28, 1841, by Captain Ross, lat. 77 deg. 32 min. south, and lon. 167 deg. east. Some cases exist of submarine *chains*, as those to the N.E. of Australia, clearly volcanic—(See *Year Book of Facts*, 1842, p. 245) which have *perhaps* saved Australia from any symptoms of volcanoes. So also the submarine *chain*, that connects Etna and Vesuvius, passes through the Lipari Islands.

The British Islands, though now free from volcanoes, still tell the history of past ages, in their mountains in broken *chains*, from Cornwall to Westmoreland, and from Cork and Kerry in Ireland, to the Highlands of Scotland, many of whose rugged tops shew how often their metals have attracted the electric fluid, and how rich they are, if search was made, as in Cornwall, where meteors fall. The analogy between granite, the great primitive rock in many mountains, and lava, an acknowledged volcanic formation, both being compounds of feld spar, quartz and mica, differently tinged by metals, and the lava always more complex in the centre of the chain than at the edges, contribute to the same proof.—(v. *Ency. Britt.*)

#### 4. *The Formation of Veins of Metal, Stones, Soil, &c.*

The multifarious ingredients that all metals are united to, still further prove what electricity has done; we find, for instance, silver united with gold, copper, iron, regulus of antimony, arsenic, baro selenite, limestone selenite, quartz, chert, flint, serpentine, gneis, agate, mica, calcareous spar, pyrites, schistus, clay, &c., and nearly most of the metallic ores. The same may be said of gold, and other metals. Whether in the fissures made by electricity, the metals have been at once fused by heat, by water, by chemical affinities, or by gaseous fumes, and deposited—and even (as in the case of coals) after the carbonic formation from vegetable matter—the deductions are obvious.

But not only metals and stones, but even soils must have been thus formed, as is evidenced by their complex ingredients. The very commonest earth, called clay, is composed of potass, soda, feld spar, Labrador spar, mica, and zeolite.—(v. *Leibig's Organic Chemistry.*) In many terrestrial formations, sulphur, which abounds throughout the world, seems to act a conspicuous part, being found mixed not only with all metals, but in the veins of primitive rocks.

### 5. *The Formation of Gases, Atmosphere, Clouds, and Rain.*

Fumes, or gases, which are almost synonymous terms, are among the next effects of electric action. The known gases are very numerous, exuding not only from the bowels of the Earth, but from the leaves of different plants, and lungs and pores of different animals; the very smell of metals, earths, animals, and vegetables, and even of their combinations and decayed products, partake of the nature of gas; indeed all gas has had a solid form, therefore the idea of M. Amontano, (*v. Dr. Thomson on Heat and Electricity,*) that air might again become solid, (once thought extraordinary,) is not only rational, but has been proved on several gases, nay, the late experiment of Dr. Payerne at the Polytechnic Institution, 1842, who remained three hours in the diving bell breathing air generated from apparently little more than a galvanic battery, proves how greatly it may be concentrated.

The quantity of mist we see rising from the Earth and Sea, is inadequate to form all the moisture that descends in rain and its congelations; hence the more probable fact is, that *gases* concocted by electricity in the bowels of the Earth, and expanded into gas by the heat of the Sun, rise in far greater quantities *invisibly* than *visibly*, and when out of the reach of the Earth and its electric and attracting convulsions, arrange themselves above according to their specific gravities; the three only gases with simple bases would be arranged thus—Oxygen and its compound, atmospheric air, lowest, then Nitrogen, then Hydrogen; it is known, that when either oxygen or atmospheric air is united to hydrogen, heat, and electricity, (of both of which there is, no doubt, abundance in the regions above,) it produces, according to the proportion in which it is mixed, either mists, clouds, precipitation of drops of water, or detonations. Now this union is brought about by the attraction of the heavenly bodies, increased by being in conjunction; so that the oxygen is drawn up, and by reciprocation the hydrogen drawn down, and according to the power at the time, either pale blue sky, which is the first symptom of gaseous mixture, or else remote clouds, or near and impending clouds, or their collision, and precipitation in rain, or transmutation into hail or snow, or otherwise, or else ignition and detonation in lightning and thunder, is the consequence. Here is the whole foundation of the Science.

It may be argued against this theory, that the tendency of gases to mix under any circumstances, has been proved by Dr. Dalton; but let it be remembered by the Ombrologist, whose science so mainly depends on attractions, that the experiments of the deservedly celebrated Dr. Dalton, admirable as they were, of putting hydrogen over oxygen, and finding after a certain time they had mixed together, were tried under the influence of the attraction of the Earth; so that the particles of the hydrogen find-

ing nothing between those of the oxygen, but caloric, or some rare combination of caloric and electricity, are naturally drawn down through them by gravity, and by reciprocity the lower are drawn up, and thus they mix together. That this is the true explanation is proved by nearly the same gases, reduced to *the liquid form*, either by compression or the abstraction of caloric, having a *less* tendency to mix, because of their additional compactness, though the attraction of the Earth exists in both cases: hence, therefore, we may infer, that if the attraction of the Earth were removed, the gases would be found in strata at heights no greater (except perhaps occasionally) than is necessary to prevent the attraction from promoting their union, and no less than is necessary for that attraction preventing their dissipating and still keeping their surfaces level in a region, when wind perhaps only partially exists; and here the nitrogenous belt, by separating the oxygen and hydrogen, prevents universal deluge or worse convulsion, admitting only enough occasionally to meet for the refreshment and benefit of the Earth. The clouds being formed, rain naturally follows whenever cold and warm clouds meet. (*v. Section 12.*)

### 6. *The Atmospheric Stratum.*

As, however, there are other gases besides the above, whose specific gravity gives them a place with those of each stratum—gases as well known to chemists as the vegetables, animals, and minerals of the Earth—it must be our business to consider them next, and for this, the tables of Warrington, and works of Professor Brande and Dr. Thompson, and the *Encyclopædia Britannica*, &c., have been consulted.

Assuming the specific gravity of atmospheric air to be one, and its refractive power to be one, *oxygen gas*, which forms about eight-ninths of water and about one-fifth of atmospheric air, has a specific gravity 1.1111, and being essential to our existence, is just sufficiently heavier than when combined with the nitrogen in the air, to be beneficial to us near the Earth.—*Sulphur vapour*, whose specific gravity is as oxygen 1.1111, may, with carbonic acid gas and other heavier gases not here named, contribute to give colour and taste and character to the animal and vegetable kingdom.—*Nitrous gas*, otherwise called nitric oxide, or the deutoxide of nitrogen, having a specific gravity of 1.0416, ranges next: as it detonates with ammonia, which ranges higher, it may form one denomination of thunder, and as it fumes red with oxygen, probably gives that red tint to clouds, either direct or reflected, often seen at setting sun, whose warmth in the far west is acting directly upon them; and perhaps also the brown tints seen in clouds at various times of day, may be accounted for in the same way. As the red indicates an attracting power, it is often a fore-runner of a



fine day; the red tint (though sometimes a reflection from the sun, volcanoes, or clouds, or fire,) can never be owing to the red rays of light prismatically separated, as some suppose; because if it did, it would partake *occasionally* of the *rainbow form*, instead of that of clouds.

From the calculations of Dr. Wollaston and others, founded on the refraction which commences in the gases above, the atmosphere extends 40 or 50 miles.

### 7. *The Nitrogenous, or Refractive Belt of Gas.*

*Nitrogen gas*, or azote, has a refractive power of 1.020, and a specific gravity of 0.9722. We know nitrogen exists in the atmosphere, in the earth, and in animal and vegetable structures: therefore, there is every probability of its existing in prodigious quantities above the atmosphere.—Next according to gravity, *Carbonic oxide*, of the same specific gravity as nitrogen, and a refractive power 1.157, exploding with an electric shock, or with oxygen gas, may cause the phenomena of shooting stars; this is more probable, because often seen after volcanic eruptions, (*v. Year Book of Facts*, 1842, p. 269,) when probably many gases arise; it is formed of one part oxygen and one carbon: a meteor being seen 70 miles high, (*Phil. Trans.* 978. No. 360,) may point out the height of this gas.—*Olefiant gas* of the same specific gravity as the two former, with a refractive power of 2.302, is composed of two parts carbon and one hydrogen, and as it burns yellow, may, from mere warmth in those remote regions give that green tint to otherwise blue sky often seen a little above the horizon. It may be a question, whether the great refractive power of this and certain other gases may not entirely change our ideas of the distance of all the heavenly bodies.—*Hydrocyanic gas*, specific gravity 0.9374, formed of one part nitrogen, one carbon, and two hydrogen, being a deadly poison, can fortunately only be formed and exist at night, as it is decomposed by light.—*Ammoniacal gas*, with a specific gravity, according to Professor Brande, of 0.76, and a refractive power 1.309, formed of three parts hydrogen and one nitrogen, ranges next; it destroys animal though it is beneficial to vegetable life; and hence, eliminated from the fissures of Vesuvius and Etna, it contributes so greatly to their fertility; it might also be collected from gas works, for the same useful purpose, in the towns of Europe.—*Water vapour*, with a specific gravity of 0.623, probably concludes this second belt of gases. To assign limits to this belt, is of course, only a conjecture; its necessary thickness in separating hydrogen from oxygen, and the calculation of Bergman, probably from observations on clouds, that the atmosphere was 468 miles high, induce one to suppose it not much less than 500 miles high,

8. *The Remote Hydrogenous Belt.*

The lowest of these lighter gases, called by Professor Brande the *Bihydroguret of carbon* with a specific gravity of 0.5554, can only exist at all during the night, as, like hydrocyanic acid, before named, it is decomposed by light. Its mischief is terrestrial, being the well known fire damp of coal mines. One species of *carburetted hydrogen* (of which there are several) and *carbon vapour*, the former with a specific gravity of 0.4861, the latter of 0.4166, may be found in small quantities next. *Hydrogen gas*, with a specific gravity of 0.0694, and a refractive power of 0.479, from its being disengaged from water and metals, particularly iron, which forms so large a feature in the contents of the Earth and its products, probably exists above to a very great extent, as its lightness and affinity for electricity, (an electrical machine being actually excited by it,) would cause it continually to exude invisibly from the Earth and ascend to its level; and as it burns blue even on the Earth, its mere union with caloric in the empyrean region may form the beautiful blue of the sky; indeed the very word empyrean, derived from burning, shews this to be a very ancient opinion. Here probably its powers are unlimited; its affinity for electricity may carry it with that fluid (*see Section 3*) occasionally back again through the centre of the Earth to restore that which is dissipated from its surface; the same affinity and its own lightness may carry it through the solar system; it very probably forms what are called the Zodiacal lights; it may even enter the Sun itself at the parts we call spots, which seems more probable than what some have supposed, that gas escapes at those parts; because the attraction of a body so immense as the Sun is more probable than repulsion; indeed, if it was the latter, it would be with such force that no ring would be seen round the spots, as we know there is, exhibiting the portions not yet entered into them; it may, thence, in the great scheme of circulation, come forth again from the surface of the Sun, as it did from that of the Earth; it may, in fact, like the oil of a lamp, enter and radiate from it; its affinity for caloric may contribute to the heat, which radiates so much more from the planets near than those remote from the sun; it may even, in collected masses, be mistaken for Comets themselves or their tails. The attraction of the Earth must, however, retain a large proportion round it; and when we consider all the circumstances of the case, we can hardly suppose this last belt so little as 1000 miles in density at the Equator, though it merges, perhaps, as all gases are likely to do, into something less than the Equatorial thickness at the North and South poles.

9. *The Analysis of Rain, Snow, &c.*

Snow has been called the poor man's manure; the presence of nitrogen, ammonia, and carbon, which in passing through are necessarily retained in its downy formations, easily accounts for this, as well as for the poison of snow water, so notorious in the mountainous countries of Switzerland, Derbyshire, &c. The fogs, and the small rains in Europe, as Leibig (*see his Organic Chemistry*) has proved by analysis, also contain ammonia, and perhaps the perpetual rain in tropical regions might bring down much from these poisonous gases, and impregnate the rivers, so that not only may the fatalities of many of the Niger expeditions, but even the diarrhoea and other complaints, often attributed by travellers to sour wines, arise from the water only, which if boiled and cooled in a wide vessel, so as to evaporate these gases, might have been rendered wholesome.

As the conjunctions of the heavenly bodies, as observed in section 5, are capable of producing the principal phenomena of Ombrology, if planets are formed of different ingredients, they may attract different kinds of gas, and precipitate them in hail, rain, &c., so that by the analysis of these precipitates, and of the water which is suspended in the atmosphere during each independent conjunction with the Sun, we may actually arrive at strong argument for ascertaining the materials of which each planet is composed; and if these analyses were made under different circumstances and seasons, in the torrid and temperate zones, in the vicinities of different metals, &c., we may open a field for some of the most interesting researches in science, and become anxious to invite chemists to the investigation.

In this investigation we should of course be obliged to consider many other gases heavier than those just named, and which form quite another subject. Perhaps, however, the records we have of red snow and rain, may be traced to some volcanic emanation in the neighbourhood, so also may the cases of hailstones with brown kernels, mentioned in the *Philosophical Transactions* No. 203, &c.

10. *The Sun.*

In discussing the influence of the heavenly bodies, we naturally begin with that mighty orb, the Sun, whose radiance so gladdens and contributes to our existence. The heat of the Sun, according to the best opinions, is derived from an atmosphere around it of both light (which travels in our atmosphere 200,000 miles in a second of time) and heat; the rays of solar emanations, in passing through the hydrogen, nitrogen, and oxygen, would exhibit either heat, coolness, or that benign influence which is most beneficial to us, according to the respective capacities of each gas for caloric;

and as nitrogen is least susceptible of heat, we find the temperature diminish, as we ascend mountains or in balloons.

The principal effect of the Sun is exhibited in the production of Summer and Winter, and the intervals of Spring and Autumn; which will be discussed further on, when we have seen the nature of principles which modify them. The perigee and the apogee of the Sun, though retained in the Almanac, seem to have but little power on the weather.

### 11. *The Moon.*

The Moon, which is the only satellite of the Earth, from its proximity to it, being only removed  $60\frac{1}{2}$  semi-diameters of the Earth, has a more immediate and steady influence on its weather than the planets, and were it not smaller than any of them but the Asteroides (having a diameter of 2,180 miles,) its influence would be pre-eminent; it is, however, supposed to be more often the participator of convulsions itself during conjunction with planets, than the cause of convulsions on the Earth.

As it has been calculated that the Sun, though possessing twenty-three million times the mass of the Moon, has, by being about four hundred times more remote, only about one-third of her influence in causing tides—(*Ency. Brit.*)—we may presume its relative influence in affecting the weather may be about the same, as far as attraction is concerned.

The Moon reflects the light of the Sun, and when what we call full or wholly illuminated, exhibits attractions so obvious, drawing clouds and warmth to itself, and if nothing prevent, leaving the Earth cool, dry, and fair, that we might almost imagine it was made of tourmeline, a fossil which has equal parts of argill and Silex, less than a third part of calcareous earth, and less than a fourth of iron in its composition, and which has the power, when heated, of exhibiting at one extremity a positive, at the other a negative state of electricity; and what is very curious, in the process of cooling changes and vacillates from positive to negative, with as much uncertainty as is seen in the weather at the first and last quarters of the Moon.—(*v. Dr. Thompson on Heat and Electricity, pp. 423, 429.*) Other materials have the same power in a less degree.

That the full Moon attracts warmth from the atmosphere and every thing else, may be proved by placing two thermometers, one in the Moon's beams and the other out of them, both out of doors—the latter will stand highest. Hence, at full Moon, the Earth is, *ceteris paribus*, cooler than at new.

The new Moon, whose power over the weather in England is neither great nor certain, particularly in summer, gives generally an opposite effect to that of full Moon. This arises from the

Earth going through the same phases to the Moon, that the Moon does to the Earth; and though the Earth is about thirteen times greater than the Moon, its powers on its own atmosphere is equal in every direction, and therefore not producing an effect on it.

Hence also we see, the Earth being an isolated conductor, and therefore capable of electrical changes, (*v. Singer on Electy.* p. 237,) at full Moon is *often* positively electrified, at new Moon negatively; though this, and all planetary causes of electric variation, if the empyrean is ever positive, (*see Sec. 3.*) is liable to both doubts as well as exceptions, arising from the interception of large clouds, which must necessarily be always positive, though within four hundred feet the air is negative; (*see Meteorological Journal, p. 263*;) though almost always we find the first and third quarters are the periods of change of weather, and often see the thermometer *actually falling* on the very day of the first quarter, and rising on that of the third; and in the tropics these periods often produce storms. The period of perigee and apogee of the Moon may perhaps increase or diminish the effect of any other co-existing influence.

### 12. *Conjunction of Planets and the Moon.*

It is noticed, Section 8, and it is not new to Astrologers, whose observations are to be respected, though their theories may be wrong, that there is a decided difference in the effect of all planetary conjunctions—that those of the three remote planets, Jupiter, Saturn, and the Georgian, obviously produce more cold than the others. Whether that is owing to clouds of heated hydrogen gas being then abstracted further by the remote planets, or to any other cause, the effect is so obvious, it becomes necessary for the *Ombrologist* to divide the planets into remote, just named, and proximate, which are Mercury Venus, Mars. (As to the Asteroides—Ceres, Pallas, Juno, Vesta—though Vesta seems to have distinct properties, nothing certain can be said.)—Now, in speaking of similar and dissimilar planets, we must unavoidably have reference to this division rather than that of Astronomers, of superior and inferior, though that is a division so necessary to astronomical observations.

The deductions following these observations are, that clouds, and even rain, from the conjunction of remote planets, produce cold; those from proximate planets warmth; that any one or more conjunction in mid-winter, by drawing clouds to the southern hemisphere, produce more or less coolness by obscuring the Sun; that when conjunctions, whether solar, lunar, or otherwise, are powerful from numbers,—the clouds are either generated at, or drawn up to such a distance, that a remote downy suffusion, pale blue sky, and greater coolness, indicate the fact, not only with remote but proximate planets. Collision of warm

and cold clouds produce rain and all its modifications, and may arise from the different temperature of the day and night, from diverse winds, mutual attraction, or change of electricity from positive to negative, and *vice versa*.

The conjunction of each individual planet seems to produce still further variety, the increased warmth from Mercury, the orange haziness of Mars, and perhaps in warm climates poisonous winds from the same, the uncertainty as to heavy or slight rain of the most remote planet, the Georgian, and perhaps hereafter other peculiarities, may present themselves; also it may be a rule in almost all cases, that whichever conjunction comes first has the greatest influence over temperature; and though not important, that the time of the greatest influence in lunar conjunctions is that of the meridian passage of the Moon.

### 13. *Conjunctions and Oppositions of Planets and the Sun.*

Solar conjunctions are so much less frequent than lunar, and particularly independent of every other influence, that it is only by noticing their effect when cotemporary with others of known probably different power, or by tracing them in the imperfect records of past ages, that any thing can be known about them; probably they produce slight warmth, and thus rain with cold influences, or in mid-winter. They also seem to increase the attraction and warmth, if any, of other conjunctions, though not producing much of their own. It is probable, they draw together any hydrogenous clouds. It also may easily be conceived, that the planets in *opposition* to the Sun may perhaps by increasing the attraction of the Earth increase its warmth on similar principles.

### 14. *Conjunction of Planets among themselves, and Approximations.*

At one time considered, as may be seen in the Hints, (p. 25,) that conjunctions of planets with each other produced no effect on the weather. The effects are certainly not of themselves at present view important, being apparently nothing more than an accumulation of clouds; but as clouds retain electricity, their accumulation may, under certain circumstances, produce thunder to any extent, and these clouds may also engender attractions to themselves in a slight degree productive of warmth, cold, and, &c. Probably conjunctions of dissimilar planets produce a water effect with or without showers, than those of similar. There is one case on record, when one and two days before a conjunction of Jupiter and Mars, a magnetic excitement seems to have prevailed all over the world.—(v. *Literary Gazette*, No. 13.) Time perhaps will develop more facts. The approxi-

mations to these conjunctions no doubt produce some effect but what may be deemed near enough to attract must be determined by the judgment and experience of the Ombrologist.

15. *Conjunction of the Sun and Moon, commonly called Eclipses of the Sun.*

It is obvious an eclipse of the Moon, being only the shadow of the Earth upon it can have little or no effect upon the weather: an eclipse of the Sun, however, partakes of the nature of other conjunctions, and clouds are perhaps always generated, which, by obscuring the Sun, cause cold; but the want of clear independent cases makes it doubtful whether the barometer is really raised or not by them; the temperature is undoubtedly sometimes lowered; for when occurring during the winter, severe frosts have occurred

16. *Conjunction of Jupiter and its Satellites, and Approximations thereto.*

Jupiter being by far the largest planet in the solar system, and of those planets that have satellites, the nearest to the Earth, during the multifarious configurations of its satellites produces effects, which, though not powerful in convulsions, are so in the distribution and modification of clouds and rain. These satellites are said never to come into conjunction with each other: whether this is really the case, or only a *deceptio visus* from a highly refractive atmosphere round the planet, is immaterial. All the satellites are, (relatively speaking to all other heavenly bodies,) though near each other, sufficiently varied in distance from their primary to produce, during their approximations, whether superior or inferior, all attractions that affect our atmosphere. This approximation is expressed in the Almanac by the mark S, and figures representing the sum of the numbers of Jupiter's diameters that each satellite is removed from its primary at noon and midnight, added together; what power that number expresses can only be ascertained by constant practice in the Ombrologist.

There is so marked a difference in the appearance of the satellites, that as this difference may possibly arise from the special composition of each, producing its own proper chemical effect, which may hereafter be discovered, it is desirable here to notice it. The first or nearest satellite is the most bright, evidently not from its size, because it is the second in magnitude; perhaps, therefore, from some electric emanations from proximity. The second satellite is of an ash colour, and is the smallest. The third is the largest, and rather bright, perhaps principally from its size. The fourth satellite is rather red, and the third in size. The third satellite appears to me to have some influence in pro-

moting wind, when at its greatest elongation; so also does the approximation of the first to the third, at greater relative distances than the others. This, however, remains to be proved.

### 17. *Fogs, Mist, Pale Blue Sky.*

It can hardly be doubted, that fogs and mist near the Earth, clouds at different distances from it, and the pale blue sky remote from either, arise from principles very analogous—either in imperfect union of moisture with atmosphere or gas, or of one gas with another, their weight, position, and specific gravity being modified by either that of the gas that forms them, or the quantity of caloric they hold in suspension.

The fog, called by some the stratus or prostrate cloud, is often caused by the exhalations of the Earth, (which are invisible during the heat of the day) being deprived of caloric, and therefore transparency and buoyancy, by the cool of the evening, and then precipitated in moisture. As heat and moisture are both essential to it, it is most frequent in valleys, or over shallow waters or marshy ground, after a warm day.

Those Fogs which are more general and extensive in their range, seem to arise sometimes in the wane of warm and cold influences, with an excess of the former. Sometimes they come three or four days after much rain has ceased, and the Sun begins to draw forth the moisture of the Earth. They seem to be maintained by the Sun not having power enough to abstract them, or rain not being heavy enough to reduce them. Sometimes they are frozen; and sometimes, as in London and other large towns, are impregnated with smoke and animal exhalation, as not to be readily removed by any power.

Pale blue sky is a phenomenon we have very little opportunity of examining; it may often be seen with remote and even proximate clouds, and sometimes merging gradually into pure blue sky. Pure blue sky over the heavens scarcely ever occurs in this climate, or even an approach to it, for two days together, or once a month.

### 18. *Hills.*

The first observable property of Hills is to divert the winds, so that among hills, as among streets in a town, winds often blow in different ways in adjacent places. There is actually a scale drawn of these variations in Liverpool and Manchester, in the *Morning Herald* of June 19th, 1839, stating, that when the wind is N. W. at Manchester, it is N. in Liverpool; when N. in Manchester, it is N. E. in Liverpool; when N. E. at Manchester, it is E. at Liverpool; when E. at Manchester, it is S. E. at Liverpool; of course



the S. W. or sea wind comes at the same time to both towns, as there are no hills to prevent it.

Another property of hills is to attract clouds to them, with different powers, according to the size and number; if rather numerous but only moderately high, they attract frequent rain throughout the neighbourhood, being high enough to attract, and not high enough to retain them; hence Kendal in Westmoreland, and Moffat in Dumfreisshire, and various other places are noted for rain.—(See end of Section 27.) If the hills are very numerous they produce more uncertainty than rain, for as the wind varies most among hills, every one of them has an equal chance of attracting clouds; hence the uncertain weather in Wales, and the Highlands of Scotland, on days on which a sufficiency of clouds are formed, though in a correct Weather Almanac a day calculated *fair* ought to be as true a guide among hills as elsewhere. If the mountains are very high as well as numerous, they retain the clouds, either condensed, or deposited in the form of snow, till by the contact of warmer clouds they are dissolved, and pour down the sides in brooks and rivulets. In extreme cases they do this to such an extent, as to prevent rain altogether, as on the west of the Andes, whence the water comes down in streams, which produce the most gigantic rivers in the world, as the Amazon, which has two hundred tributary streams as large as the Nile or Danube.

### 19. *Tides.*

In this country, which is an island, the extent of surface the tide covers gives it great importance; the atmosphere over the sea, being necessarily more moist than overland, is brought with the tide, particularly at noon and in warm weather, in the form of clouds, and these precipitated by collision in very gentle rain. The high tides at London Bridge and Leith, though so far apart, being nearly at the same time when they occur at noon, are noted in the Almanac by a star\*; the same also at Liverpool and Dublin by a D.—It is said there is a point in the German Ocean, between London and Leith, where there is no tide.—The difficulties of tide calculations, from channels and creeks, are well known. The tide at Shoreham is generally about eight hours and a half before that at London Bridge. The uncertainty of tide calculations, however, not only arises from channels, estuaries, &c., but often from the influence of uncalculated winds, which source of error, it is hoped, will be finally wholly surmounted.

The greater the sea, the higher the tide rises, from the obvious reaction of so great a body of waters; it even rises higher in the Pacific than in the Atlantic, (if high tide is compared with low water mark of each,) though the Atlantic is actually the highest,

from the trade wind blowing the water to the shores of America and the West Indies. The tide also rises higher in the West than the East of England.

### 20. *Earthquakes.*

Earthquakes, though not so frequent in this country, in places where they are more common, that is, warm or tropical and mountainous countries, may probably be anticipated at any powerful and warm planetary conjunctions, and about the time of the meridian passage of the Moon.—A remarkable proof of this is recorded in the *Macclesfield Courier*, of upwards of 100 shocks of Earthquake being felt between the 23rd and 30th of November, 1841, at Zanté, during which Jupiter on the 23rd, Mercury on the 24th, Saturn on the 25th, and Mars on the 26th, were successively in conjunction with the Moon. The Ombrological Almanac being, however, intended for the use of this country, does not of course, notice effects that occur abroad, particularly as there are some ingenious meteorologists, who dedicate themselves to their readers with these speculations. Some Earthquakes obviously arise from the transit of electricity, others from the explosion of either gases, fumes, or fluids; which, if they are generated by electricity, seem also to derive their *greatest force* from solar heat, because the inhabitants of countries where they occur are known to expect their recurrence and provide against it, after the period of a solar day, twenty-four hours. The air is calm before a shock, as the electric fluid passes through the earth instead of the air.

### 21. *Casualties, Thunder, Hail, &c.*

The strongest proof, next to the success of its calculation, of the sound principles illustrated in section 5, on which Ombrology is necessarily founded, arises from the fact that thunder never can be caused by any thing but an explosion of gases; the mere transit of electricity never produces more than a slight crackling even against boards or in jars that might reverberate it, and certainly nothing to account for such an overwhelming noise; and as we see—(section 7)—water vapour ranges so near hydrogen, its oxygen may there produce the phenomena of thunder, as often as clouds arrive at that height, in addition to what may be generated in various other ways in strata far below down to the very Earth, generally excited by the electric spark or lightning; if without this, giving wind, as even the old Astrologers discovered.—(v. *Villsford's Nature's Secrets*, p. 112.)

In most cases probably electricity, in the form we call lightning, is the exciting cause. It seems all clouds are electrical;—

(*Phil. Trans. Vol. 49, p. 144*;)—and, therefore, when very large by mutual attraction, which may be often a mere casualty, they are eminently electrical, and if the air between them is very dry, lightning doing more or less damage according to its direction (or being with or without rain,) and thunder, restoring the equilibrium of temperature by the explosion of gases, necessarily follow; hence, therefore, very tedious showers and storms may occasionally, as far as locality is concerned, be mere casualties, though not without warning from the accumulation of clouds, and also a possibility of anticipating that they will occur in some place or other, from the previous dryness, and from some celestial influence sufficient for electrical excitement at the time; though of course as the drought may be in some distant locality, it is not always obvious to the observer. In thunder the vastness of the report shews that there must be an enormous quantity of oxygen gas exploding with the hydrogen. The frequent distant peals dwindling to nothing, which, from recorded proofs of simultaneous effects elsewhere, must be equally tremendous with what we hear, subdued to us in sound, and apparently subsequent in time, from distance, prove that only portions of oxygen are drawn up to portions of hydrogen, and that therefore the nitrogenous belt must be of prodigious extent to separate the remainder from *deluging* or *annihilating* the whole world. It is obvious, therefore, that only in certain cases can thunder be calculated.

Hail is often also another casualty; though, as it arises from a collision when the clouds are very high, it will be more frequently found after full moon, and any powerful attraction from numbers of conjunctions, than at any other time.

## 22. *Aurora Borealis and Meteors.*

Though facts are still wanting to establish certainty as to that beautiful phenomenon, the *Aurora Borealis*, some observations seem desirable. Its electric origin excited by celestial attraction is proved by several cases: the *Aurora Borealis* described as the grandest in 1790, on April 12,—(see *Philoso. Trans.*)—was three days after the first quarter of the Moon; that on February 23, 1784, three days after an eclipse of the Sun; lately also, September 25, 1841, it occurred three, four, and five days after consecutive lunar conjunctions.

All these cases, besides others coming about three days either after some attracting influence, or the first or last quarter of the Moon, seem to shew the *Aurora Borealis* to be a slight remnant of some previous electrical effect. The empyrean, as argued in section 3, probably at all times easily transmits the electric fluid, while the atmosphere of the Earth requires heat and moisture to give it that power; hence, therefore when a portion of electricity

having passed through the Earth, arrives at the North Pole, the departure to the empyrean regions of that which is not spent on the Earth itself, or forced out in volcanoes, though perhaps at first with force enough to go like lightning to its destination, yet when that force is diminished by expenditure, its last efforts are checked by the unconducting medium around it, and it can only pass over the surface of the atmospheric stratum southward, occasionally forming in the various clouds of conducting gases it meets floating in the nitrogenous stratum, those vivid illuminations, till it reaches the empyrean itself. Some meteors seem very analogous to it.

The above theory is in some measure proved by the corruscations proceeding in every direction but to the North, except in some very few cases of immense power—(v. *Phil. Trans.* vol. 80, p. 32,) and also by its being mostly observed in the Northern regions; its electrical nature may be inferred by an electrical machine being increased in force during its existence, and also by the vacillation of the mariner's compass during the time.—(v. *Phil. Trans.* vol. 58, p. 86; and *Brewster on Magnetism*, p. 244, &c.) If the weather is moderately cold, the arch will be very much to the North; if intensely cold, it will be nearly vertical before it is most brilliant, because the non-conducting regions of atmosphere are, in the latter case, more extensive, though since, when it is coldest near the Earth, it is not necessarily coldest in the upper strata of the atmosphere, where warm clouds may exist, it is easy to see, that this circumstance, combined with the attraction of the Earth, may account for its appearing sometimes near the zenith at new moon. Perhaps observations on the height, position, extent, and dimensions of the Aurora Borealis, might tend as much as any thing, with observations at the same time on the thermometer and barometer, to throw light on the extent of super-atmospheric gases.

### 23. Comets.

Comets, which have long ago been determined not to be meteors but solid bodies, so seldom make their appearance, that were it not for their considerably increasing the heat of the weather during their presence, they might be deemed not more influential than the Aurora Borealis; the cause of their intense heat, which heat has been calculated and admitted by numerous writers, has given rise to much difference of opinion. Sir Isaac Newton thought Comets like a burning coal surrounded by a dim light, and that the tail, which projects in a direction from the Sun, was a vapour, as if from positive ignition; and others have observed they are brightest when near the Sun. All this suggests the idea, that by constant fusion some may have been

burned out and annihilated; for we know of one, that of 1618, which was broken into several pieces, whilst within view of the Earth—(*Enc. Brit.*)—Some may have been recently brought to view, as is the case with some of the fixed stars; with so much uncertainty, therefore, it seems unnecessary here to enter very fully into the discussion of the great number, no less than 450, (*Ency. Brit. Astr.*) that are supposed to exist, besides others whose identity involves still greater doubt; though perhaps the periodic returns of some of the Comets may have been correctly calculated by Dr. Halley and others, as well as their velocity, which Sir Isaac Newton, in one instance, computed at 880,000 miles in an hour. It seems, however, quite possible that gaseous fumes may have sometimes been mistaken for Comets. If hydrogen forms the empyrean, (*v. section 8*) any ignitable gas, as carburetted hydrogen, being red hot, having escaped the attraction of the Earth by some convulsion, would attract to itself more hydrogen gas, which would prevent its evaporation, whence the centre gas would seem to form the nucleus, the accumulated hydrogen the tail; it might thus enter the Sun. Of course, if the departure from the Sun of any apparent Comet is clearly proved by observation, it should be pronounced a true Comet, but not otherwise.

#### 24. *The Seasons.*

The distance and size of the different planets, the numbers in conjunction at once, or with one, two, three or more days between the times both of the day and year of the conjunctions, the position of the planets as to the meridian, the clouds that are likely to interpose, the state of the moon and tides, and the changes that arise from the combination of all these circumstances, cause difficulties of calculation, which can only be surmounted by experience and attention, and which point out that the division of the year into seasons cannot be quite satisfactory. Indeed, our own experience shews us, that we have some years in which there are no summer, and others in which there is no perceptible winter. But as the moon has so much influence at the full and new quarters in producing cold and warmth, I have chosen, in the division of the Seasons, to have reference to that circumstance rather than the usual mode of being ruled wholly by the Sun, though the latter must of course be the main guide.

Hence, perhaps, Summer, or the greatest influence of the Sun, begins about three days after that full moon nearest which the period of daylight begins to be sixteen hours long, or about May or June: perhaps it ends about three days before that full moon nearest which the period of daylight begins to be about twelve hours long, or in the middle of September.

Perhaps Winter, or the least influence of the Sun, begins about

three days after that new moon nearest the time when the period of daylight is reduced to eight hours, or the middle of December, and ends about three days before that new moon nearest the time when the period of daylight increases to twelve hours long.

As the solar and lunar cycles are periods of years depending on the Sun and Moon, though only remotely connected with the weather, they are inserted in the Almanac, and may be thus explained; the lunar cycle is a period of nineteen years, in which the sun and moon return to near the same part of the heavens. The Christian era began the second year of this cycle; therefore, by adding one to any date, A.D., and dividing by nineteen, the quotient is the number of cycles since the Christian era, and the remainder is the advancement in the present lunar cycle, and usually called the Golden number. The solar cycle is a period of twenty-eight years, in which the Sun returns to the same sign and degree in the ecliptic.

### 25. *Anemology.*

As Anemology, like Ombrology, arises from the influence of the heavenly bodies acting on the gases (*see section 5*) or atmosphere, there must often be wind when there is rain, and hence we have the common expression of "blowing up for rain."—Clouds, however, sometimes come together by a gentle attraction to each other, or for the hills, towns, &c., when there is no rain and no wind; while at other times the wind is so violent that it prevents the rain: such circumstances cause a broad distinction between the science of Anemology and Ombrology. Wind is nothing more than a rush of air to supply a void, formed either by rarefaction from heat—or by gases taking a smaller space from being converted into mist or rain, or in forming some of the compound gases.

That many winds arise from celestial influence is proved by referring to the strongest cases of wind, the hurricanes in the tropics; and here, though thousands of cases might be given, a list from the useful and laborious work of Lieutenant-Colonel Reid, to which I have added, in italics, the celestial influence which caused each storm, added to the statement of the author himself, (p. 33) of their being accompanied by electric matter to a great extent, will be more than ample evidence. At page 14, August 15, 1830, a storm is recorded, and we find *the Sun eclipsed on the 17th.* P. 26, August 10, 1831, a storm, and *the Moon in conjunction with Mercury on the 8th.* P. 36, a storm, September 3rd, 1835, and *Mercury in conjunction with the Sun on the 30th August,* and a *Comet* at the same time. P. 48, a storm, July 26, 1837, and *Venus in conjunction with Jupiter* the same day, and *Mercury with the Sun on the 28th.* On the two hurricanes of the 5th and 8th July, 1837, *the Moon was in conjunction with Mars on the 5th and*

*with Saturn on the 8th.* P. 75, a gale on the 16th August, 1837, and the *Georgium* was in conjunction with the Moon the same day. P. 76, a storm, August 21, and *Jupiter* in conjunction with the Sun the same day. P. 149, a hurricane, February 23, 1824, and the *Georgium* in conjunction with the Moon on the 24th. A gale, January 19th, 1834, and *Jupiter* in conjunction with the Moon on the 17th. P. 155, a hurricane, March 6th, and *Saturn* in conjunction with the Moon the same day. P. 216, a storm, January 10th, and *Jupiter* in conjunction with the Moon the same day, and *Mars* with the Moon on the 13th. P. 247, a storm commences January 31st, and the *Georgium* was in conjunction with the Moon on the 29th.

Perhaps the most remarkable, from the number of consecutive conjunctions, are the cases of storm in p. 251, &c., January 2nd, 1837, *Moon* in conjunction with *Saturn*, on the 4th with *Venus*, on the 7th with *Mercury*, and on the 9th with the *Georgium*. These evidences being far more than necessary, being all from one volume, where not a vestige of celestial influence is hinted at by the author, put the question beyond a doubt. The reason why hurricanes are so frequent in the West Indies, may perhaps be traced to the vast mountains of America. In England we seldom have to record even strong wind, seldom what can be fairly called a storm.

### 26. *Cause and Direction of the Wind.*

Telescopic observers inform us that a prevailing wind may be discerned on *Jupiter* and other planets, by the direction of the clouds; the same thing no doubt exists on this earth; for if we could look at it as a spherical body at a distance, the Equator where the trade winds exist, would present the greatest surface to our view, and the East or trade wind appear to be the prevailing wind while the S. W. wind so common in England, and all other local and casual winds, having generally a minor velocity, and a locality seen more in perspective, would be unobserved.

The East wind, therefore, may be considered the great mundane current, extending, as we know, frequently very far both North and South of the tropics, though seldom felt in these northern latitudes, except immediately after the Spring equinox, when the advancing sun increases the heat on this side the tropics and the heat is not yet permanently checked by the winds of the Western sea or North Eastern mountains. East wind also occurs when there is a sufficient warm planetary influence, and yet not so much as to prevent that constant upward current of the air and electricity that is observed at the Equator. East wind then is caused by the rush of air to places heated by the Sun or by any warm and strong influence, and from what will appear presently if there had been land instead of sea to west of Europe, it would have existed as much in the Autumn as the Spring.

The S. W. wind with much of W. in it, so constant in England, is perhaps nothing more than a very extensive European sea breeze; and therefore, generally, except when much excited by planetary influence, of much less force than the East wind, being only caused by the sea air rushing to the land, which is warmer, as radiating more heat than the water. It has been observed by aeronauts, indeed our own observations on the motions of the clouds would prove it, to become N. W. when very high; because there the attraction of the land is diminished, and probably, finally the wind too carried on with the main East wind; whether the great American range of mountains, acting on the elasticity of the air reverberating the East wind, has any thing to do with Westerly winds, may be a question. As this S. W. wind, perhaps, always exists in Europe in a greater or less degree, when not intercepted, any slight planetary commotion from contending influences increases its power.

The North West and North East winds arise, perhaps, from attraction, caused by that principle which is found to exist in the tropics, just alluded to in speaking of the East wind, the upward current of electricity observed to exist sometimes at the Equator—(v. *Nicholson's Ency.*)—which draws air to it, probably with most force when the attraction is sufficiently strong, as at full moon or several co-existing conjunctions, whether it is E. or W. of the North, depends on the previous influence. A very powerful attraction seems to abstract wind in Europe, though this is a point which requires more investigation.

The South Wind, so seldom direct, seems decidedly to be a part of a large whirlwind, on the principle of Colonel Reid, and as he has only traced that principle in the tropics, so we seemingly can only trace this wind in warm weather; its revolving nature of course produces a collision of clouds, and, therefore, rain and change, nor can it be often foretold.

The S. E. wind comes sometimes after East wind; but these, as well as all other modifications can only depend on the circumstances and peculiar planetary influences at the time. *Observations on the winds all over the world would tend to prove many philosophical points which now seem obscure, particularly if we found a reciprocity or analogy between the winds in the Northern and Southern Hemispheres, making allowances for the South Sea, promontories, bays, mountains, &c.* The first and third quarters of the Moon often make winds variable.

Though perhaps all planetary conjunctions cause wind in the tropics, this does not seem to be the case in England, where hurricanes seldom occur. Here the cases of strong, brisk, fresh, and gentle wind can only be traced to contending warm and cold influences, or the satellites concentrated sufficiently remote from Jupiter to attract in opposite directions, which produce an excite-



ment of the atmosphere. These will appear on inspection of the Almanac and the Explanation in the beginning, being marked SS.

Besides the winds named above, there are some quite local, therefore so numerous, that it would be inconsistent in this short essay to trace them; they arise from the attraction of mountains, large towns, or warm shores, presented immediately to the sea. It is enough to observe, that the sea breeze is said generally to blow from 9 in the morning, increasing till 12, and then gradually die off about 5 *p.m.*, and to be succeeded by a land breeze, originating in the re-action, from the elasticity that naturally belongs to air.—(*v. Phil. Trans. Vol. 41, No. 458.*) All these circumstances interfere with Anemological calculations in some vicinities, though all being of minor force, give way to the prevailing influences. Some misunderstanding may also arise from calculated winds not being perceived on the earth, but only in the curl cloud above.

As the velocity of the wind is noticed in the Almanac, it may be remarked, that wind going one mile an hour is scarcely perceptible; at four to five miles gentle and pleasant; at 20 to 25 brisk; at 30 to 35 high; at 40 to 45 very high; at 50 a storm; at 80 a hurricane; at 100 still more powerful, destroying trees, buildings, &c. It may be here also observed that some winds (see the beginning of Section 25) arising from the attraction of gases, when the union is complete in fog or rain, the wind often ceases.

### 27. *Instant Indications of Weather.*

It is useful to persons interested in the weather to know some of the daily or instant indications of the weather, as far as these are known, as drawn from the animal and vegetable kingdom. The *Diosemcia* of Aratus, and a modern treatise in the Quarterly Journal of Meteorology, by Mr. Gutch, Treasurer of the Meteorological Society, may be read with benefit. There is not room, however, in this Essay, to notice more than those indications that may be drawn from the subjects we have been discussing.

Clouds, round at the top, called by some cumulus, or staken cloud, perhaps 10 to 20 miles high, are rising, and indicate absence of rain just for the time; when small, numerous, and freckled, like a mackerel's back, they are still higher, perhaps from 20 to 100, and about to dissolve into a rarer medium, and still more indicate fair weather. These often mix with pale blue sky.

The horizontal, or wane cloud, a modification of the stratus or prostrate cloud, (Section 17,) indicates almost visibly the means by which gases, before unperceived, are formed into cloud; these often at length degenerate into the nimbus or rain cloud, large heavy, and jagged below, a sure indication of rain, and if more

dilated and pale, of snow, and perhaps less than from one to ten miles high. The clouds in wisps, called cirrus or curl cloud, indicates wind. When a cloud breaks, a storm is likely in the direction in which the break occurs.

The barometer rising with fair, and falling with rainy weather, indicates by its rapidity or slowness, the probable duration of the weather that coincides with it. Though wind causes the barometer to fall, how the quantity of atmospheric air is increased or diminished is not easy to explain unless the abstraction of the upper strata of gases leaves certain clouds to precipitate and unite with the atmosphere, which before added nothing to its gravity. The barometer rises most in Easterly winds: how the atmosphere is thus increased is also obscure.

After several days of fair, a slight influence produces a change. Dust rising in the air in the country, indicates rain, because it is caused by unsettled winds. Clouds in warm weather may often turn to rain at night, when precipitated by cold. The unusual glittering of the stars portends rain.—(*Woodhouse's Supplement to Every Almanac.*) This no doubt arises from the process then going on, of gases combining together.

In addition to the remarks in Section 18, it may be observed that Devonshire is rainy, because its hills first attract the clouds from the S.W. winds; for the same reason, Bath and Bristol, being to leeward of those hills, are more free from rain; for similar reasons the coasts of Hampshire and Sussex will have more rain than Surrey; the counties to the South West as well as the North West of England, have more rain than the rest, as they are exposed to the S.W. wind of the Atlantic; on the other hand, Norfolk, Suffolk, Lincolnshire, Durham, Northumberland, &c., will have less rain, it having been exhausted on the lands to the South West. In fact, on a map in which the mountains and small hills are marked out, we may very nearly point out correctly the rainy and dry localities by their situation. The smallest rise of ground will make a very great difference; indeed we shall find several places in and about even London, (and much more where there are hills,) having different quantities of rain, though only a mile or two apart. Every scientific man, therefore, looks forward to the completion of some maps of this country, where the accurate delineation of every rise of ground may establish those important arguments that may tend to the promotion of science.

PETER LEGH.

*Norbury Booth's Hall, near Knutsford, Cheshire.*

## COMMON NOTICES.

*Golden Number 7—Solar Cycle 10.*

### JANUARY.

- 6 Epiphany.
- 11 Hilary Law Term begins.
- 13 Cambridge Lent Term begins.
- 15 Oxford Lent Term begins.
- 30 Martyrdom of K. Charles I.
- 31 Hilary Law Term ends.

### FEBRUARY.

- 4 Septuagesima Sunday.
- 18 Quinquagesima Sunday.
- 20 Cambridge Lent Term divides.
- 21 Ash Wednesday.
- 25 Quadragesima—1st Sunday in Lent.

### MARCH.

- 1 St. David.
- 17 St. Patrick.
- 25 Annunciation, or Lady Day.
- 30 Cambridge Lent Term ends.
- 31 Oxford Lent Term ends.

### APRIL.

- 1 Palm Sunday.
- 6 Good Friday.
- 8 Easter Sunday.
- 15 Low Sunday.
- 16 Easter Law Term begins.
- 18 Oxford and Cambridge Easter Terms begin.
- 23 St. George.

### MAY.

- 8 Easter Law Term ends.
- 13 Rogation Sunday.
- 17 Ascension Day — Holy Thursday.
- 22 Trinity Law Term begins.
- 24 Birth of Queen Victoria.
- 26 Oxford Easter Term ends.
- 27 Pentecost — Whit-Sunday — Camb. Easter Term divides.
- 29 Restoration of K. Charles II.
- 30 Oxford Trinity Term begins.

### JUNE.

- 3 Trinity Sunday.
- 7 Corpus Christi.
- 12 Trinity Law Term ends.
- 20 Accession of Queen Victoria.
- 21 Proclamation.
- 24 St. John Baptist—Midsummer Day.

### JULY.

- 3 Oxford Act — Cambridge commencement.
- 6 Cambridge Easter Term ends.
- 7 Oxford Trinity Term ends.

### AUGUST.

- 13 Birth of Dowager Queen Adelaide.

### SEPTEMBER.

- 29 St. Michael—Mich. Day.

### OCTOBER.

- 10 Oxford and Cambridge Michaelmas Terms begin.

### NOVEMBER.

- 2 Michaelmas Law Term begins.
- 5 Gunpowder Plot.
- 9 Birth of the P. of Wales.
- 12 Cambridge Mich. Term divides.
- 26 Michaelmas Law Term ends.
- 30 St. Andrew.

### DECEMBER.

- 2 First Sunday in Advent
- 16 Cambridge Mich. Term ends.
- 17 Oxford Michaelmas Term ends.
- 21 St. Thomas.
- 25 Christmas Day,

THE TENTH YEAR

OF THE

OMBROLOGICAL

WEATHER ALMANAC.

---

A.D. 1849.

---

# OMBROLOGICAL ALMANAC.

## JANUARY, 1849.

Day of Mo.	Ombrological Influences.					Time of Influence.	Anemological Influences.		Barometer.
	The Moon.	♄ Noon.	♄ Midnt.	♃ and ♄	♃ and ♄		Day.	Night.	
				♃ and ♄	♃ and ♄				
1	.	.	.	.	♃	.	Con	Con	
2	Q	.	.	♃ per	♄	Q 7 38 a.—♃ 2 6 a ♄ 5 21	Con	Con	
3	.	12½	12½	.	.	.	.	.	
4	.	17	15½	.	.	.	SS	SS	
5	.	11	12½	.	.	.	SS	SS	
6	.	11	7½	*	♄	.	SS	SS	
<b>S</b>	per.	10½	16½	♂ ♂ ♃	.	♃ per 3 a.	.	.	
8	○	17½	.	♀ sup	.	○ 10 50 p.—♀ 8 13 p.	.	.	
9	.	.	.	♀ ♂ ♃	.	.	.	.	
10	.	17	18	D	.	.	.	.	
11	.	.	.	.	♄	♄ 6 15 a	.	.	
12	.	18	.	.	.	.	SS	SS	
13	.	15	8	♀ ♂ ♃	.	.	SS	SS	
<b>S</b>	.	4½	12½	♃ ♃ ♂ ♃	.	.	.	.	
15	.	13	15½	♄ ♂ ♃	.	.	SS	.	
16	Q	.	.	.	.	Q 6 54 a.	SS	.	
17	.	.	14½	.	.	.	.	.	
18	ap.	.	.	.	.	♃ ap. 12 0 m.	.	.	
19	.	.	.	.	.	.	.	.	
20	.	.	14½	.	♀ ♃	.	SS	.	
<b>S</b>	.	10½	12	♄ stat.	♂	♄ 12 0 n. ♂ 7 14 p.	.	.	
22	.	12	9½	*	.	.	SS	SS	
23	.	13½	14½	.	.	.	SS	.	
24	●	15	10	♄ ♂ ♃	.	● 10 3 a.	SS	SS	
25	.	.	.	.	♀	♀ 11 37 a.	.	.	
26	.	.	.	D	.	.	.	.	
27	.	.	.	.	.	.	SS	SS	
<b>S</b>	.	14½	17½	.	♀ ♃ ♃	♀ 1 14 a.—♃ 3 7 a.	.	.	
29	.	18½	16½	♀ ♂ ♃	♄	♀ ♃ 2 39 a.—♄ 11 28 p.	Con SS	Con SS	
30	.	16	12	.	.	.	SS	.	
31	Q	9½	5½	.	.	Q 4 42 p.	SS	.	

OMBRONOLOGICAL ALMANAC.

JANUARY, 1849.

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night.		In the Day, from 9 A.M. to 4 P.M.	Evening, Night, and Morning.
fresh	fresh	7 50	fair, frosty, showers possible .	fair, frosty sleet
brisk	fresh	7 52	fair, frosty, sleet. . . . .	fair, frosty, sleet.
. . .	. . .	7 54	small, rain or sleet possible, mostly fair.	showers of sleet.
fresh	fresh	7 54	perhaps fair . . . . .	showers very slight .
fresh	fresh	7 54	perhaps fair, pale blue a.m. .	showers very slight.
. . .	. . .	7 56	fair, hazy horizon or foggy . .	fair, frosty showers
. . .	. . .	7 58	fair, some pale clds, hazy horizon	fair
. . .	. . .	8 0	fair, pale blue sky, hazy. . .	fair, stars well seen
. . .	. . .	8 2	fair with spots of rain, or sleet possible, hazy.	slight showers.
. . .	. . .	8 4	showers, perhaps hail, some pale blue sky a.m.	showers
. . .	. . .	8 6	fair, blue sky, frost. . . . .	fair, star light, frost shooting stars.
fresh	fresh	8 8	fair, pale blue sky, frost, slight showers.	slight showers.
h. var.	fresh, var.	8 10	fair, cloudy, misty. . . . .	fair, slight sleet.
. . .	. . .	8 12	small rain or sleet, mostly fair.	sleet or snow.
l. var.	. . .	8 14	small rain or sleet, mostly fair.	sleet or snow.
l. var.	. . .	8 16	fair, cloudy, pale blue, showers possible.	showers.
. . .	. . .	8 20	fair . . . . .	fair
. . .	. . .	8 22	fair . . . . .	fair
. . .	. . .	8 24	fair, some pale blue, varied clouds	fair
l. Ely.	. . .	8 28	fair, some pale blue, varied clouds, rather hazy horizon,	fair, few stars seen
l. Ely.	. . .	8 30	fair, rather foggy, spots of rain pale yellow sun-set.	fair, cloudy, white frost.
. Ely.	fr. N. Ely	8 32	fair, pale clouds, slight showers possible.	showers.
. Ely.	gn. N. Ely	8 36	fair . . . . .	fair.
. Ely.	fr. N. Ely	8 38	pale suffusion, broken clouds .	showers,
. . .	. . .	8 42	fair, somewhat hazy, blue zenith extensively.	fair, night and morning white frost.
. . .	. . .	8 44	fair, showers possible p.m. . .	fair.
little	gentle.	8 48	fair, very slight showers . .	showers.
. . .	. . .	8 50	fair, showers p.m. . . . .	showers.
l. Nly	. . .	8 54	snow, showers and frosty, hail somewhere.	snow, showers, frosty
l. var.	. . .	8 58	fair, spots of rain or showers.	fair,
y. var	. . .	9 0	fair. . . . .	fair.

no wind is named, little or none is expected, except from local circumstances.  
 present state of the science, the direction of wind cannot be depended on.

# OMBROLOGICAL ALMANAC.

## FEBRUARY, 1849.

Day of Mo.	Ombrological Influences.					Time of Influences.	Anemo-logical Influences.		Barometer. in pt	
	The Moon.	☾ Noon.	☾ Midnt	☉and☽	☾ and ☽		Day.	Night.		
1	.	9	14	. . .	.	. . . . .	SS	.		
2	.	17½	.	. . .	.	. . . . .	SS	SS		
3	per.	.	.	. . .	†	☾ per 9 p. . . .	SS	.		
<b>S</b>	.	15	.	. . .	.	. . . . .	.	.		
5	.	.	.	♂ ♂ ☾	.	. . . . .	.	.		
6	.	.	.	☾ * ♂ ☉	.	☾ 9 9 p. . . .	SS	.		
7	☉	14½	8½	. . .	☾	☉ 11 15 a.—☾ 10 52 a.	Con	Con		
8	.	9	9	♀ gr.elong.	.	♀ 11 29 p. . . .	SS	Con		
9	.	13½	15½	♀ ♂ ☾ D	.	. . . . .	Con	SS		
10	.	.	.	. . .	.	. . . . .	Con	SS		
<b>S</b>	.	14½	16½	♂ ♂ ♀ ☽ ♂ ☽	.	. . . . .	.	.		
12	.	19½	.	. . .	.	. . . . .	.	.		
13	.	18	.	. . .	.	. . . . .	.	.		
14	.	.	15	♀ stat	.	♀ 10 6 a. . . .	.	.		
15	Q ap	11½	13½	. . .	.	Q 4 2 a.—ap. ☾ 7 p.	Con	Con		
16	.	16½	11½	. . .	♀	. . . . .	SS	SS		
17	.	13	12½	☽ ♂ ♀ ☽ ♂ ♀	♀	☽ ♀ 10 p. . . .	SS	.		
<b>S</b>	.	14½	9½	. . .	.	. . . . .	SS	.		
19	.	14½	.	. . .	♂	♂ 11 21 p. . . .	SS	.		
20	.	.	.	☾ ♂ ☾	.	. . . . .	.	.		
21	.	.	.	*	.	. . . . .	SS	.		
22	.	15½	16	. . .	.	. . . . .	.	.		
23	●	.	16	☉ ecl.invis. ♀ ♂ ♀	♀	● 1 29 a.—☉ 2 a.m. ♀ 2 57 a. ♀ ♂ 1 33 a.	Con	Con		
24	.	.	13½	♀ inf. ♀ ♂ ♀	♂	♀ 1 41 a. ♂ 3 10 p.	SS	Con		
<b>S</b>	.	10	5½	D	.	. . . . .	Con	.		
26	.	10	15½	♀ ♂ ☽ ♂ ♀ ☽	♂ ♀	♀ ☽ 1 5 a. ♂ 7 5 a ♀ 12 39 n.	SS	SS		
27	.	13½	.	. . .	.	. . . . .	SS	.		
28	.	.	.	. . .	.	. . . . .	.	.		

OMBROLOGICAL ALMANAC.

FEBRUARY, 1849.

Velocity & Direction of the Wind.		Length of Day. H. M	Effect on the Weather.	
Day.	Night.		In the Day, from 9 A.M. to 4 P.M.	Evening, Night, and Morning.
gentle	. . .	9 4	fair . . . . .	fair
fresh	fresh	9 6	fair, some pale blue a.m. . .	fair
fresh	. . .	9 10	fair, hazy, pale blue extensively.	fair, frosty
. . .	. . .	9 14	fair, rather hazy, slight showers	fair, showers.
. . .	. . .	9 18	fair, hazy, slight showers, . .	fair, showers
gentle	. . .	9 20	fair, slight showers possible . .	fair
fresh	fresh	9 24	fair, probably frost . . . . .	fair, probably frost
N. Ely.	fresh	9 28	fair, perhaps frost, very slight sh.	fair perhaps frost & sleet.
N. Ely.	fresh	9 32	spots of sleet, or slight showers mostly fair	slight sleet, mostly fair
N. Ely.	. . .	9 36	showers, mostly fair . . . . .	showers
. . .	. . .	9 40	small rain or sleet . . . . .	sleet
. . .	. . .	9 42	slight showers, partly fair . .	showers
. . .	. . .	9 46	fair . . . . .	fair
. . .	. . .	9 50	fair, rather hazy . . . . .	fair
fresh, var.	fresh, var.	9 54	fair, some freckled clouds . .	fair, slight showers
fresh, var.	fresh, var.	9 58	fair, slight showers . . . . .	showers
fresh	. . .	10 2	small showers frequent . . . .	showers
. . .	. . .	10 6	showers and hazy . . . . .	showers
. . .	. . .	10 10	fair, foggy, or hazy, red sun-set	red sun-set, fair night,
. . .	. . .	10 14	fair . . . . .	white frost in the mn. fair,
gentle	. . .	10 18	fair, slight showers possible, . .	fair, showers
. . .	. . .	10 22	fair, . . . . .	fair showers
fresh	fresh	10 26	fair, with showers . . . . .	slight showers, frosty
fresh or gusty	fresh or gusty.	10 30	fair, with sh. hail somewhere	snow, showers, frosty
. . .	. . .	10 34	fair, very slight showers, perhaps hail	slight showers
fresh,	fresh	10 38	showers morning and evening	showers
fresh	. . .	10 42	fair noon just possible	fair, showers
. . .	. . .	10 46	fair, cloudy . . . . .	fair, cloudy



# OMBROLOGICAL ALMANAC. MARCH, 1849.

Day of Mo.	Ombrological Influences.					Time of Influences.	Anemological Influences.		Barometer. in pt
	The Moon	♄ Noon.	♄ Midnt.	♁ and ♃	♁ and ♀		Day.	Night	
1	Q	.	.	♀ gr. elong	...	Q 12 3 n. ♁ per. 5 a.	SS	.	
2	per	.	.	...	†	♀ 12 m.	SS	.	
3	.	.	.	...	...	...	SS	.	
<b>S</b>	.	16½	13½	...	...	...	.	.	
5	.	9	6½	...	...	...	.	.	
6	.	10½	14½	♂ ♀ ♁	♄	♄ I 33 p.	SS	.	
7	.	.	16	*	...	...	SS	.	
8	.	17¾	18	♀ stat.	♁ ecl. vis.	♀ 9 9 a.	SS	.	
9	○	.	.	♀ ♀ ♁	...	○ 1 2 a.	.	.	
10	.	.	.	♀ peritretion	♁ ♀ ♁	♀ 8 a.	.	.	
<b>S</b>	.	.	16	D	...	...	.	.	
12	.	13½	14½	♁ ♁ ♀ ♁	...	...	Con	Con	
13	.	12½	10	♀ ♀ ♁	...	...	SS	Con	
14	.	13	12¾	...	...	...	SS	SS	
15	ap	13	14	...	...	♁ ap. 4 p.	SS	SS	
16	Q	15	16½	...	...	Q 12 38 m.	.	.	
17	.	18¾	.	...	♀ ♀	...	SS	.	
<b>S</b>	.	.	.	♁	...	♁ 12 35 n.	SS	.	
19	.	.	.	♄ ♀ ♁	...	...	.	.	
20	.	17	16½	...	...	...	SS	.	
21	.	.	13½	...	♂	♂ 2 46 a.	SS	.	
22	.	9½	5	♀ gr. elong	♀	♀ 11 30 a — ♀ gr. elong	SS	.	
23	.	9¾	14½	*	...	12 9 m.	Con	Con	
24	●	15½	.	...	♁	● 2 5 p — ♁ 5 47 a.	SS	.	
<b>S</b>	.	.	17	...	♁	♁ 5 30 p	.	.	
26	.	.	.	D	♁	...	SS	.	
27	per	.	.	...	♀	♁ per. 11 a. — ♀ 2 25 p.	SS	.	
28	.	.	.	...	...	...	SS	.	
29	.	13½	13	...	...	...	SS	.	
30	.	8½	8	...	†	...	.	.	
31	Q	6½	14	...	...	Q 6 58 a.	.	.	

OMBROLOGICAL ALMANAC.

MARCH, 1849.

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night.		In the Day, from 9 A.M. to 4 P.M.	Evening, Night, and Morning.
fresh Ely.	. . .	10 50	fair, hazy horizon . . . . .	fair
fresh, Ely.	. . .	10 54	fair, hazy, some pale blue . .	fair a.m. white frost.
fresh, Ely.	. . .	10 58	fair, hazy horizon, showers scarcely possible.	fair, showers possible
. . .	. . .	11 2	fair, flying showers, . . . . .	fair, showers
. . .	. . .	11 6	fair . . . . .	fair
fresh	. . .	11 10	fair, frosty, some pale blue sky	fair, frosty, starlight
fresh	. . .	11 14	fair, slight showers . . . . .	showers
fresh	. . .	11 18	fair, pale clouds. . . . .	fair
fresh, var.	. . .	11 22	showers, hazy . . . . .	showers
. . .	. . .	11 26	small showers, pale broken clouds, hazy	showers
. . .	. . .	11 30	fair, with slight showers . .	fair, slight showers
fresh	fresh	11 34	small showers or spots of rain, fair	small showers
fresh, Sly.	fresh	11 38	fair mostly, at p.m. probably quite fair.	fair
fresh	fresh	11 42	fair . . . . .	fair
fresh	fresh	11 46	fair . . . . .	fair
. . .	. . .	11 50	fair, cloudy . . . . .	fair
fresh	. . .	11 54	fair, very slight showers . . .	fair, slight showers
fresh, Sly.	. . .	11 58	fair, rather pale blue sky, frosty, spots of rain or slight showers	fair, stars seen, frost
. . .	. . .	12 2	fair, slight showers possible, and hail.	fair, showers
. . .	. . .	12 6	fair, slight showers possible and hail.	fair, showers
fresh, Ely.	. . .	12 10	fair, hazy, milder, winter should end.	fair, showers
fresh, Ely.	. . .	12 14	fair, hazy, spots of rain. . .	fair, slight showers, sleet frosty
fresh, Ely,	fresh, Ely.	12 18	showers, with hail . . . . .	showers
fresh	. . .	12 22	fair, showers near hills, some pale blue	showers, frosty
. . .	. . .	12 26	fair, small showers near hills .	small showers, frosty
fresh, E.	. . .	12 30	fair, slight showers. . . . .	fair, showers
fresh, E.	. . .	12 34	fair, large clouds, . . . . .	fair, slight showers
fresh, E.	. . .	12 38	fair . . . . .	fair
fresh, E.	. . .	12 42	fair, pale clouds, hazy, horizon	fair
. . .	. . .	12 46	fair, hazy, pale clouds . . .	fair, white frost, shooting stars.
. . .	. . .	12 50	fair, slight showers, perhaps hail some where.	showers.

OMBROLOGICAL ALMANAC.

APRIL, 1849.

Day of Mo.	Ombrological Influences.					Time of Influences.	Anemo-logical Influences.		Barometer. in pt
	The Moon	☿ Noon.	♁ Midnt.	♂ and ♀	♁ and ♀		Day.	Night.	
<b>S</b>	.	.	.	.	.	.	SS	.	
2	.	18	17½	.	♁	♁ 4 42 p.	SS	.	
3	.	.	17	.	.	.	SS	.	
4	.	.	.	♂ ♂ ☾	.	.	.	.	
5	.	18	14½	*	.	.	.	.	
6	.	12½	10½	♀ ♂ ☾	.	.	Con	Con	
7	○	7½	14½	♁ ♂ ☾	.	○ 3 49 p.	Con	.	
<b>S</b>	.	17	16	♁ stat.	.	♁ 1 35 p.	SS	SS	
9	.	12½	15½	D	.	.	.	.	
10	.	16	18	♀ ♂ ☾	.	.	SS	.	
11	.	.	.	♀ ♂ ♁	.	♀ ♁ 4 9 p.	SS	SS	
12	ap	.	15½	♁	.	☾ ap. 10 a.—♁ 7 13 a.	SS	.	
13	.	16½	16½	.	♀	.	.	.	
14	.	14½	13	.	♀	.	SS	.	
<b>S</b>	Q	14½	10½	.	.	Q 7 7 p.	SS	.	
16	.	5½	7½	♁ ♂ ☾	.	.	.	.	
17	.	12	15½	.	.	.	SS	SS	
18	.	18½	.	.	.	.	SS	.	
19	.	.	16	.	♂	♂ 4 14 a.	Con	Con	
20	.	17	.	*	♁	♁ 9 27 p.	Con	Con	
21	.	.	.	♀ stat.	♀	♀ 11 30 a.—♀ 12 48 m.	SS	SS	
<b>S</b>	●	.	18	.	♁	● 11 54 p.—♁ 6 4 a.	SS	.	
23	.	11½	7½	♀ stat.	♁	♀ noon.—♀ ♁ 7 43 p.	.	.	
24	per	9½	10	♀ ♂ ♁ D	♀	☾ per. 10 a.—♀ 3 28 p.	.	.	
25	.	14½	16½	.	.	.	SS	.	
26	.	17½	12½	.	.	.	.	.	
27	.	8½	.	.	♁	.	.	.	
28	.	.	.	.	.	.	Con	Con	
<b>S</b>	Q	.	.	.	♁	Q 2 17 p.—♁ 11 13 p.	SS	SS	
30	.	13½	12½	.	.	.	.	.	

Locality & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night		In the Day, from 8 A.M. to 5 P.M.	Evening, Night and Morning.
sh var.	. . .	12 54	fair, flying showers possible. .	fair, showers
SWly.	. . .	12 58	fair, blue sky, frosty . . . .	fair, starlight, frosty.
SWly.	. . .	13 2	fair, pale blue, hazy horizon .	fair, stars seen
SWly.	. . .	13 6	fair, pale sky . . . . .	fair
. . .	. . .	13 10	fair . . . . .	fair
h var.	fresh var.	13 14	fair, with showers . . . . .	fair, slight showers
h var.	. . .	13 18	small showers pale broken clouds	small showers
h Ely.	fresh SEly	13 22	fair, cool . . . . .	fair, frosty
. . .	. . .	13 26	fair, slight showers possible . hail etc.	fair showers possible
gentle	. . .	13 30	fair, slight showers just possible hazy pale sky	fair, showers possible
h Sly.	fresh Sly.	13 34	fair, variable temperature hazy small showers	fair, frosty, showers
h Sly.	. . .	13 36	small rain, pale sky. . . . .	showers
. . .	. . .	13 40	fair, slight showers possible .	showers
h Sly.	. . .	13 44	fair, slight showers possible .	fair, with showers
h Sly.	. . .	13 48	fair, cloudy, slight showers, .	fair, showers
. . .	. . .	13 50	fair, lurid hazy . . . . .	fair
gentle	gentle	13 56	fair, slight showers possible .	fair
fresh	. . .	14 0	fair, slight showers possible .	fair
h Ely.	fresh Ely.	14 4	fair rather hazy, showers . .	fair, showers
h Ely.	brisk Ely.	14 8	showers slight, mostly fair .	showers
h Ely.	brisk Ely.	14 12	fair intervals, broken clouds, slight showers, hail	showers
h Ely.	. . .	14 14	fair, spots of rain or small shows.	fair, slight showers
. . .	. . .	14 18	fair slight showers, cloudy . .	slight showers
. . .	. . .	14 22	fair cloudy, . . . . .	fair
h Ely.	. . .	14 26	fair . . . . .	fair
S. E.	. . .	14 30	fair . . . . .	fair
. . .	. . .	14 34	fair, hazy, pale clouds . . . .	fair, slight showers
h Ely.	fresh Ely	14 38	fair, rather hazy, shrs. just possible	showers
h var.	fresh var.	14 42	fair, slight showers just possible	fair, showers
. . .	. . .	14 44	fair . . . . .	fair

OMBROLOGICAL ALMANAC.  
MAY, 1849.

Day of Mo.	Ombrological Influences.					Time of Influence.	Anemological Influences.		Barometer in pt	d
	The Moon.	♄ Noct.	♄ Midnt.	♃ and ♄	♃ and ♄		Day	Night.		
1	.	12½	10½	. . .	.	. . . . .	.	.		
2	.	8½	9½	. . .	.	. . . . .	.	.		
3	.	13	14½	♀ sup.	.	♀ 7 43 p. . . .	SS	SS		
4	.	13	15½	♃♂♄♃	.	. . . . .	SS	SS		
5	.	17½	17½	*	.	. . . . .	.	.		
<b>5</b>	.	.	.	. . .	.	. . . . .	SS	SS		
7	○	.	17½	♀♀♃♄♃	.	○ 7 6 a. . . . .	Con	Con		
8	.	17½	16½	♀♃♄♃♀ perihel. stat	♀	♃ 5 51 a — ♃ st. noon ♀ 1 32 p ♃ per 10 35p.	.	.		
9	ap	15½	15½	D	.	♃ 9 p. . . . .	.	SS		
10	.	15½	12	. . .	.	. . . . .	.	.		
11	.	.	.	. . .	♀	. . . . .	.	.		
12	.	12	14	♀ inf.	♀	♀ 5 28 p. . . .	.	.		
<b>13</b>	.	18	.	♄♄♃♃	.	. . . . .	SS	.		
14	.	.	17	. . .	.	. . . . .	.	.		
15	Q	.	18	♃	.	Q 10 30 a ♃ 12 m.	SS	.		
16	.	18	17½	. . .	.	. . . . .	SS	.		
17	.	.	.	. . .	.	. . . . .	.	.		
18	.	12	10½	. . .	♂♃♄♃	♂ 3 18 a. — ♃ 12 5 n.	.	.		
19	.	5	.	. . .	♃	♃ 6 53 p. . . .	.	.		
<b>20</b>	.	10½	16½	*	.	. . . . .	SS	.		
21	.	.	14	. . .	♀	♀ 6 22 a. . . .	.	.		
22	● per	17½	15½	. . .	♃	● 7 36 a. ♃ per 6 p.	SS	.		
23	.	18½	.	. . .	♀	♀ 4 40 p. . . .	SS	.		
24	.	.	.	D	.	. . . . .	.	.		
25	.	17½	16	♂♄♃♄	♄	♄ 11 8 p. . . .	.	.		
26	.	13½	11	. . .	.	. . . . .	Con	Con		
<b>27</b>	.	7½	10½	. . .	♄	♄ 10 37 a. . . .	SS	.		
28	Q	15	12	. . .	.	Q 11 23 p. . . .	SS	.		
29	.	15	16½	. . .	.	. . . . .	SS	.		
30	.	15	16½	. . .	.	. . . . .	.	.		
31	.	.	.	♃♄♃♄	.	. . . . .	.	.		

For Feasts, Fasts, &c. see Common Notices, page 30.

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night.		In the day, from 6 A.M. to 7 P.M.	Evening, Night, & Morning.
. . .	. . .	14 48	fair . . . . .	fair
. . .	. . .	14 50	fair, warmer . . . . .	fair
fresh var.	fresh var.	14 54	fair, pale blue sky, rather warm	fair
fresh var.	fresh, var.	14 58	slight shwrs., pale clouds, mostly fair	showers partly fair
. . .	. . .	15 2	showers . . . . .	showers
fresh	fresh	15 4	fair, with showers . . . . .	fair, showers
fresh var.	fresh var.	15 8	fair, cool, pale clouds, slight shrs.	showers
. . .	. . .	15 10	fair, some blue sky, yet showery	fair, with showers
. . .	fresh	15 14	showers at noon, perhaps hail somewhere.	showers
. . .	. . .	15 18	fair . . . . .	fair
. . .	. . .	15 20	fair, thunder, . . . . .	fair
. . .	. . .	15 24	fair, pale clouds, & pale blue.	fair, stars seen
sh Ely.	. . .	15 26	fair . . . . .	fair, showers
. . .	. . .	15 30	fair, slight showers possible and thunder	fair, showers
le, var Ely.	. . .	15 32	fair, slight showers possible .	fair
ar. Ely	. . .	15 36	fair . . . . .	fair
. . .	. . .	15 38	fair, very small showers just pos.	showers
. . .	. . .	15 42	showers . . . . .	showers
. . .	. . .	15 44	fair, small rain, perhaps hail .	small rain
fresh	. . .	15 48	fair, showers . . . . .	fair, showers
. . .	. . .	15 50	fair, clouds remote, pale sky, uncertain showers.	fair, uncertain showers
a, E.	. . .	15 52	fair, warm, spots of rain or hail	fair, showers
le E.	. . .	15 54	fair, rather warmer, perhaps hail	fair
. . .	. . .	15 58	showers, cloudy, fair rather hazy perhaps thunder	showers
. . .	. . .	16 0	showers, cloudy, mostly fair perhaps thunder.	showers
Wly.	fr. S. Wly.	16 2	fair, slight shrs. perhaps thunder	fair, showers
Wly	. . .	16 4	fair, slight showers possible some blue sky	fair, slight showers stars seen.
y var.	. . .	16 6	fair . . . . .	fair
y. var	. . .	16 8	fair . . . . .	fair
. . .	. . .	16 10	fair . . . . .	fair
. . .	. . .	16 12	fair, pale sky, hazy . . . . .	fair

OMBROLOGICAL ALMANAC.  
JUNE, 1849.

Day of Mo.	Ombrological Influences.					Time of Influences.	Anemo-logical Influences.		Barometer.	
	The Moon.	☿ Noon.	♁ Midnt.	♃ and ♄	♅ and ♆		Day.	Night.	in	pt
1	.	.	.	♀ stat.	.	♀ 6 21 p.	SS	.	.	.
2	.	.	16½	♃ ♂ ☾	.	.	SS	.	.	.
<b>S</b>	.	9½	16½	♀ gr. elong *	.	♀ 6 54 p.	Con	.	.	.
4	.	17	14½	♀ ♂ ☾	.	.	SS	SS	.	.
5	○	8¾	12	♁ ♂ ☾	.	○ 11 26 p.	Con	.	.	.
6	ap	13	5½	.	.	☾ ap. 3 p.	SS	.	.	.
7	.	17	.	♀ ♂ ☾	♀	.	SS	.	.	.
8	.	.	.	.	♃	.	.	.	.	.
9	.	.	.	.	.	.	.	.	.	.
<b>S</b>	.	15½	18	♃ ♂ ☾	.	.	.	SS	.	.
11	.	.	.	.	.	.	SS	.	.	.
12	.	15½	13½	.	.	.	SS	.	.	.
13	Q	13½	5½	.	.	Q 10 24 p.	SS	.	.	.
14	.	9½	15½	.	♃	♃ 11 53 p.	Con	Con	.	.
15	.	18	16	.	♂	♂ 11 52 p.	Con	Con	.	.
16	.	.	.	.	♁	♁ 6 2 a.	SS	.	.	.
<b>S</b>	.	12½	.	♀ ♂ ☾	♀	♀ 9 23 a.—♀ 7 20 p.	.	.	.	.
18	.	.	.	*	.	.	.	.	.	.
19	.	.	16¾	.	♁	.	.	.	.	.
20	●	17	10½	.	.	● 2 19 p.—☾ per 5 a.	.	.	.	.
21	per	11½	10½	♂ ♂ ♁	♀	♂ ♁ 7 8 a.—♀ 12 9 n.	SS	.	.	.
22	.	12½	12½	D	.	.	SS	.	.	.
23	.	13	17½	.	♃	.	Con	Con	.	.
<b>S</b>	.	13½	15½	.	♃	♃ 2 27 a.	Con	Con	.	.
25	.	.	.	.	.	.	SS	SS	.	.
26	.	.	.	.	.	.	SS	.	.	.
27	Q	.	14	.	.	Q 10 43 a.	.	.	.	.
28	.	15½	16½	♃ ♂ ☾	.	♃ 10 56 a.	.	.	.	.
29	.	17	10½	♂ ♂ ☾	.	.	SS	.	.	.
30	.	10	13½	♀ inf.	.	♀ 7 23 a.	.	.	.	.

Velocity & Direction of the Wind.		Length of Day. H. M	Effect on the Weather.	
Day.	Night.		In the day, from 6 A.M. to 7 P.M.	Evening, Night, & Morning.
fresh	. . .	16 14	fair, rather warm . . . . .	fair
gentle	. . .	16 16	fair, rather warm . . . . .	fair
fresh, N.E.	. . .	16 18	fair, rather warm . . . . .	fair
N.E. var	fresh N.E. var.	16 20	fair, pale clouds, slight showers	fair, showers
fresh Nly. var.	. . .	16 22	fair, pale clouds, slight showers	slight showers
fresh Nly.	. . .	16 24	fair, slight thunder showers possible	fair, showers possible
fresh	. . .	16 24	fair, hazy, small showers . .	fair, small showers
. .	. . .	16 26	fair, hazy, very small showers possible, summer should begin	fair, slight showers
. .	. . .	16 26	fair, rather warm . . . . .	fair, perhaps thunder
. .	fresh	16 28	fair, thunder possible, some pale blue sky	fair, thunder
fresh	fresh	16 28	fair . . . . .	fair, showers
. .	. . .	16 30	fair . . . . .	fair, showers
fresh	. . .	16 30	fair, slight showers possible .	slight showers
fresh	fresh	16 32	showers, mostly fair . . . . .	showers
S. Wly.	fr. S. Wly.	16 32	showers . . . . .	showers
S Wly.	. . .	16 32	small rain and irregular, perhaps hail somewhere	small rain
. .	. . .	16 34	fair, blue sky and large clouds, spots of rain	stars seen, fair, slight showers
. .	. . .	16 34	fair, cloudy, small showers .	fair, showers
. .	. .	16 34	fair, hazy, thunder possible, slight showers	fair, with showers
. .	. . .	16 34	fair, warm . . . . .	fair, warm
gentle	. . .	16 34	fair, warm, slight shwrs. possible	fair, with slight shwrs. warm
h, S.E.	. . .	16 34	fair, less warm, perhaps thunder	fair, warm, sheet lightning
fresh	fresh	16 34	showers, perhaps thunder, and hail somewhere	showers
fresh	fresh	16 34	showery, then fair . . . . .	fair
Wly.	fresh Wly.	16 34	fair . . . . .	fair
Wly.	. . .	16 34	fair . . . . .	fair
. .	. . .	16 32	fair, cloudy . . . . .	fair, cloudy
. .	. . .	16 32	fair, slight showers, hazy . .	slight showers
fresh	. . .	16 30	fair, slight showers, hazy . .	slight showers
. .	. . .	16 30	fair, pale blue sky, warm, red sun-set, spots of rain	slight showers



OMBROLOGICAL ALMANAC.

JULY, 1849.

Day of Mo.	Ombrological Influences.					Time of Influences.	Anemo-logical Influences.		Barometer.	
	The Moon	☽ Noon.	☽ Midnt.	☉ and ☽	☾ and ☉		Day.	Night.	in	pt
<b>S</b>	.	9½	11	☉ ap.	.	. . . . .	SS	.		
2	.	17	.	♀ ♂ ☾	.	. . . . .	SS	SS		
3	ap	.	.	☉ ♂ ☾	♀	☾ ap. 8 a. . . . .	.	.		
4	.	.	.	♀ ♂ ☾	♂	. . . . .	Con	Con		
5	○	15½	.	.	.	○ 1 28 p. . . . .	Con	Con		
6	.	.	.	.	.	. . . . .	SS	.		
7	.	15½	12½	♂ ♂ ☾	.	. . . . .	SS	.		
<b>S</b>	.	8½	3½	☽ ♂ ☾	.	. . . . .	.	.		
9	.	10½	17½	.	.	. . . . .	SS	.		
10	.	17	17	.	.	. . . . .	.	.		
11	.	17¾	.	♀ stat.	.	♀ 11 5 a. . . . .	.	.		
12	.	16	.	.	♂	♂ 7 59 a. . . . .	SS	Con		
13	Q	.	.	.	♂	Q 7 7 a. ♂ 2 24 p.	Con	Con		
14	.	.	.	.	♂	♂ 5 50 p. . . . .	Con	Con		
<b>S</b>	.	15½	12	.	.	. . . . .	.	.		
16	.	12¾	13¾	.	♀	♀ 3 1 p. . . . .	SS	SS		
17	.	12¼	10¾	*	☉	. . . . .	.	.		
18	per	12	15	.	♀	☾ per. 2—♀ 12 14 n.	SS	.		
19	●	11½	.	.	.	● 9 15 p. . . . .	.	.		
20	.	.	.	.	.	. . . . .	SS	Con		
21	.	.	.	♂ stat. D	♂	♂ 2 32 a—♂ 9 13 p—	Con	Con		
<b>S</b>	.	.	14½	♀ gr. elong	.	♀ 4 48 a. . . . .	Con	Con		
23	.	17	.	.	.	. . . . .	SS	SS		
24	.	.	13½	.	.	. . . . .	SS	SS		
25	.	12	10	.	.	. . . . .	.	.		
26	Q	7½	14½	♂ ♂ ☾	.	Q 12 35 m. . . . .	SS	.		
27	.	18	13½	.	.	. . . . .	SS	.		
28	.	.	.	.	.	. . . . .	.	.		
<b>S</b>	.	.	15¾	♂ ♂ ☾	.	. . . . .	.	.		
30	ap	.	.	.	♀	☾ ap 7 p. . . . .	.	.		
31	.	.	17½	♀ ♂ ☾	♂	. . . . .	SS	SS		

For Feasts, Fasts, &c, see Common Notices, page 30.

OMBROLOGICAL ALMANAC.

JULY, 1849.

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night		In the Day, from 6 A.M. to 7 P.M.	Evening, Night and Morning.
fresh	. . .	16 28	fair . . . . .	fair
fresh	fresh	16 26	fair . . . . .	fair
. . .	. . .	16 26	fair, pale clouds, hazy, warm, slight showers possible	fair, slight showers
fresh var.	. . .	16 26	fair, fewer clouds, hazy, warm, slight showers possible	fair, slight showers
fresh var.	. . .	16 24	fair, pale clouds . . . . .	fair
fresh	. . .	16 22	fair . . . . .	fair
gentle	. . .	16 22	fair, pale sky, rather warm . . . . .	showers
. . .	. . .	16 20	fair, small showers, rather warm perhaps hail	showers
gentle	. . .	16 18	fair, rather warm . . . . .	fair
. . .	. . .	16 16	fair, rather warm . . . . .	fair
. . .	. . .	16 14	fair . . . . .	fair
fr. Nly.	fresh Nly.	16 12	fair . . . . .	fair
fresh var.	fresh var.	16 10	small showers . . . . .	small showers
fresh var.	fresh	16 8	fair, warm, hazy, slight showers	fair, stars seen
. . .	. . .	16 6	fair, cloudy, rather warm . . . . .	fair, rather warm
fresh Ely.	fresh Ely.	16 4	fair, unless thunder showers occur, and hail	fair, showers
. . .	. . .	16 2	fair, slight showers, or spots of rain	fair, slight showers
fresh Ely.	. . .	16 0	fair, with clouds remote . . . . .	fair
. . .	. . .	15 58	fair, warm, some pale blue . . . . .	fair, warm
gentle NE. fr N. W.	gentle	15 54	fair, less warm, showers p.m. sharp, perhaps thunder	fair
N. Ely.	fr. N. Ely.	15 52	slight showers, seldom fair, perhaps thunder	showers
fr. N. Ely.	fr. N. Ely.	15 50	fair . . . . .	fair
N. Ely.	fr. N. Ely.	15 48	fair, unless thunder occurs . . . . .	fair
N. Ely.	fr. N. Ely.	15 44	fair . . . . .	fair
. . .	. . .	15 42	fair . . . . .	fair
gentle	. . .	15 40	fair, pale blue sky . . . . .	fair, misty
fresh	. . .	15 36	fair, small showers possible . . . . .	fair, small showers
. . .	. . .	15 34	fair, cloudy, small shwrs. possible	showers possible
. . .	. . .	15 30	fair, hazy . . . . .	fair
. . .	. . .	15 26	fair, hazy, pale blue, freckled clouds	fair, sheet lightning
fresh	gentle	15 24	fair, hazy, pale blue . . . . .	fair

OMBROLOGICAL ALMANAC.  
AUGUST, 1849.

Day of Mo.	Ombrological Influences.					Time of Influence.	Anemological Influences.		Barometer. in pt	
	The Moon.	☿ Noon.	♁ Midnt.	♃ and ♄	♅ and ♆		Day.	Night.		
1	.	12	12	♃ stat.	. . .	♃ 12 noon . . .	.	.		
2	.	9	7	*	. . .	. . . . .	.	.		
3	.	12	16½	♀ ♂ ☾	. . .	. . . . .	Con	Con		
4	○	14½	13½	♃ † ♂ ☾	. . .	○ 3 52 a. . . .	Con	Con		
<b>S</b>	.	17	15	. . .	. . .	. . . . .	SS	.		
6	.	16½	.	D	. . .	. . . . .	.	.		
7	.	.	.	. . .	. . .	. . . . .	.	.		
8	.	17½	.	. . .	♃	♃ 12 58 n. . . .	.	.		
9	.	13½	13	. . .	♃	♃ 8 12 p. . . .	Coa	Con		
10	.	12½	13	. . .	. . .	. . . . .	Con	Con		
11	Q	13½	6½	. . .	. . .	Q 1 32 p. . . .	SS	Con		
<b>S</b>	.	12½	11½	. . .	♂	♂ 8 33 a. . . .	Con	SS	Con	
13	.	10	15½	♀ stat.	. . .	♀ noon . . . .	.	.		
14	.	.	.	. . .	♀ ☽	♀ 11 50 p. . . .	SS	.		
15	per.	.	.	. . .	. . .	. . . . .	SS	.		
16	.	.	12½	♀ sup *	† ♂ ♃	♀ 2 2 p. † ♃ 5 20 p.	.	.		
17	.	17½	.	. . .	. . .	. . . . .	.	.		
18	●	18	10½	☉ ecl. invis ‡ stat	♀ ♃ †	● 5 32 a.—☉ 5 59 a.—♀ 10 26 a. ‡ noon—♃ 1 5 p	SS	SS		
<b>S</b>	.	10	5½	. . .	. . .	. . . . .	SS	.		
20	.	7½	11½	♀ ♂ ♃	. . .	♀ ♃ 5 6 p. . . .	.	.		
21	.	16½	17	D ♀ ♂ †	. . .	♀ † 7 17 a. . . .	SS	.		
22	.	18	.	♃ ♂ ☾	. . .	. . . . .	.	.		
23	.	.	16½	. . .	. . .	. . . . .	.	.		
24	.	18	.	. . .	. . .	. . . . .	.	.		
25	Q	.	17	. . .	. . .	Q 4 55 p. . . .	SS	.		
<b>S</b>	.	18	15	♃ ♂ ♂ ☾	. . .	♃ 3 48 p. . . .	SS	SS		
27	ap.	11½	9	. . .	♀	☾ ap. 11 a. . . .	.	.		
28	.	13½	12½	☽ ♂ ☾	‡	. . . . .	SS	SS		
29	.	12½	15½	♀ ♂ ☾	. . .	. . . . .	SS	SS		
30	.	15½	15	. . .	. . .	. . . . .	.	.		
31	.	15½	.	*	. . .	. . . . .	.	.		

For Feasts, Fasts, &c., see Common Notices, page 30.

OMBROLOGICAL ALMANAC.  
AUGUST, 1849.

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night.		In the Day, from 6 A.M. to 7 P.M.	Evening, Night, and Morning.
. . .	. . .	15 20	fair . . . . .	fair
. . .	. . .	15 18	fair . . . . .	fair
fresh, var.	fresh, var.	15 14	fair, warm, heat drops, pale clds.	fair, slight showers
fresh, var.	fresh, var.	15 12	fair, pale broken clouds, slight showers	showers.
fresh	. . .	15 8	fair, slight showers possible .	fair, showers
. . .	. . .	15 4	fair, perhaps thunder and hail, or sharp showers	fair, showers
. . .	. . .	15 2	fair . . . . .	fair,
. . .	. . .	14 58	fair . . . . .	fair.
fresh	fresh	14 54	fair, small showers possible p.m.	fair, slight showers,
fresh,	fresh	14 52	fair, slight showers . . . . .	fair, showers
fresh	fresh	14 48	fair, slight shwrs. possible, cloudy	fair, showers.
fresh, Ely.	fr. Ely.	14 44	fair, hazy . . . . .	red sun-set, fair, star-light
. . .	. . .	14 40	fair, hazy, warm gleams, uncertain showers	fair, stars seen, uncertain showers
N. Ely,	. . .	14 38	fair, clouds and blue sky, warm showers	fair, stars seen, warm slight showers
N. Ely.	. . .	14 34	fair, showers possible, and thndr.	showers
. . .	. . .	14 30	fair, slight showers . . . . .	showers
. . .	. . .	14 26	slight showers, perhaps thunder	showers
fresh, Nly.	fresh, Nly.	14 24	many showers, though slight generally	showers
fresh Nly.	. . .	14 20	slight showers, perhaps thunder	showers
. . .	. . .	14 16	fair, hazy, perhaps thndr. shwrs.	fair, showers
fresh	. . .	14 12	fair, small showers, hazy . .	showers
. . .	. . .	14 8	fair, pale clouds, hazy, slight showers possible	fair
. . .	. . .	14 4	fair, . . . . .	fair showers
. . .	. . .	14 0	fair . . . . .	fair
fresh	. . .	13 56	fair, cloudy . . . . .	fair
fresh, var	fr. Sly var.	13 54	fair, with spots of rain or hail, pale sky, hazy	very slight showers
. . .	. . .	13 50	fair, slight showers, hazy, perhaps thunder	fair slight showers,
S. Wly.	S Wly.	13 46	fair, hazy, slight showers . .	fair, showers
S Wly.	S Wly	13 42	fair, pale clouds, hazy . . .	fair
. . .	. . .	13 38	fair, summer should end . .	fair
. . .	. . .	13 34	fair, slight showers possible . .	fair, slight showers

OMBROLOGICAL ALMANAC.  
SEPTEMBER, 1849.

Day of Mo.	Ombrological Influences.					Time of Influences.	Anemo-logical Influences.		Barometer. in pt
	The Moon	☿ Noon.	♁ Midnt.	☉ and ☿	♁ and ☿		Day.	Night.	
1	.	.	.	‡	♁ ‡ ☿	‡ 9 28 p. . . .	SS	Con	
<b>S</b>	○	.	.	☾ ecl.	. . .	○ 5 17 p. . . .	Con	SS	
3	.	17½	11½	♀ ☿ ☾	. . .	. . . . .	Con	Con	
4	.	15	16½	D	♁	♁ 4 43 p. . . .	Con	Con	
5	.	13	11½	. . .	. . .	. . . . .	SS	.	
6	.	10½	11½	. . .	♁	♁ 1 2 a . . . .	Con	Con	
7	.	9	16	. . .	. . .	. . . . .	Con	Con	
8	.	.	16½	. . .	. . .	. . . . .	Con	Con	
<b>S</b>	Q	.	.	. . .	♂	Q 6 55 p. — ♂ 6 43 p.	SS	SS	
10	.	.	15	. . .	. . .	. . . . .	Con	Con	
11	per	.	.	. . .	☾	☾ per. 10 a. . . .	SS	.	
12	.	.	.	. . .	. . .	. . . . .	SS	SS	
13	.	16½	12	. . .	♀	♀ 3 26 p. . . .	SS	.	
14	.	4½	8½	*	. . .	. . . . .	.	.	
15	.	14½	13½	. . .	♁ ‡	♁ 12 5 n, . . . .	SS	.	
<b>S</b>	●	.	.	. . .	. . .	● 4 1 p. . . . .	SS	.	
17	.	.	.	♁ ☿ ☾	. . .	. . . . .	.	.	
18	.	.	.	D	♀	♀ 9 5 a. . . . .	.	.	
19	.	.	.	. . .	. . .	. . . . .	SS	SS	
20	.	.	.	. . .	. . .	. . . . .	SS	.	
21	.	10½	8½	. . .	. . .	. . . . .	.	.	
22	.	13½	9	. . .	. . .	. . . . .	.	.	
<b>S</b>	.	10½	15½	♂ ☿ ☾	♀	. . . . .	SS	.	
24	Q	17	13½	. . .	♁	Q 11 23 a. — ☾ ap 6 a.	SS	SS	
25	ap	13	.	. . .	. . .	. . . . .	.	.	
26	.	.	.	. . .	. . .	. . . . .	.	.	
27	.	.	.	♁ ☿ ☉	. . .	♁ 7 p. . . . .	.	.	
28	.	18	12½	♀ ☿ ☾	. . .	. . . . .	SS	.	
29	.	15½	14½	♁ ♀ ☿ ☾	. . .	. . . . .	Con	.	
<b>S</b>	.	12½	11½	Qgr. elong *	. . .	♀ 11 56 a. . . .	SS	Con	

OMBROLOGICAL ALMANAC.  
SEPTEMBER, 1849.

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night.		In the Day, from 8 A.M. to 5 P.M.	Evening, Night, and Morning.
fresh, var.	fresh var.	13 30	fair, pale clouds, hazy, slight shwrs. pale yellow sunset	fair, spots of rain
fresh var.	fresh, var.	13 28	fair, slight showers . . . . .	showers
fresh var.	fresh, var.	13 24	fair, very slight showers possible	showers
fresh var.	fresh, var.	13 20	fair, pale some blue sky . . .	fair, frosty, stars seen
fresh var.	. . . . .	13 16	fair. . . . .	fair, shooting stars
fresh	fresh	13 12	fair, small showers . . . . .	showers
fresh	fresh	13 8	fair, small showers . . . . .	fair, showers
fresh	fresh	13 4	fair, hazy horizon . . . . .	fair
fresh	. . . . .	13 0	fair, hazy . . . . .	fair
gentle	. . . . .	12 56	fair, hazy, spots of rain or small showers.	fair, showers
. . . . .	. . . . .	12 52	fair, rather slight showers, perhaps thunder	fair, showers
sh, Ely.	brisk E.	12 48	fair, cloudy, slight showers . . .	fair, cloudy, showers
sh, Ely.	. . . . .	12 44	fair, large clouds, . . . . .	fair, cloudy
. . . . .	. . . . .	12 40	fair, slight showers, hazy . . .	showers
sh Ely.	. . . . .	12 36	slight showers . . . . .	showers.
sh, Ely,	. . . . .	12 32	fair, slight showers possible . . .	fair, showers
. . . . .	. . . . .	12 28	fair, pale clouds, slight showers	fair, showers
. . . . .	. . . . .	12 24	fair, warm, rather hazy, pale blue sky, perhaps thndr. hail, &c.	fair
sh Ely S. E.	fresh, Ely.	12 20	fair, warm . . . . .	fair.
sh Ely S. E.	. . . . .	12 18	fair . . . . .	fair
. . . . .	. . . . .	12 14	fair . . . . .	fair
. . . . .	. . . . .	12 10	fair . . . . .	fair
W.SW	. . . . .	12 6	fair, unless thunder occurs . . .	fair, showers
. var.	gen. var.	12 2	fair, rather foggy, spots of rain, or small showers	fair, slight showers
. . . . .	. . . . .	11 58	fair, showers possible . . . . .	fair, showers
. . . . .	. . . . .	11 54	fair . . . . .	fair
. . . . .	. . . . .	11 50	fair, hazy, pale blue . . . . .	fair
sh var.	gen. var.	11 46	fair, slight spots of rain . . .	slight showers.
sh var.	gen. var.	11 42	fair, very small showers . . .	slight showers.
sh N.E.	fresh, N.E.	11 38	fair, cloudy, slight showers . . .	fair, slight showers

# OMBROLOGICAL ALMANAC. OCTOBER, 1849.

Day of Mo.	Ombrological Influences.					Time of Influences.	Anemological Influences.		Barometer. in pt
	The Moon.	☾ Noon.	☾ Midnt.	☉ and ☽	☽ and ☾		Day.	Night.	
		☾	☾	☉ ☽ ☾	☽ ☾				
1	.	11	14 $\frac{3}{4}$	. . .	☾	☾ 9 19 p. . . .	Con	Con	
2	○	13	15 $\frac{3}{4}$	. . .	.	○ 5 33 a. . . .	SS	Con	
3	.	14	14 $\frac{1}{2}$	☿ ☽ ☾	☽	☽ 6 51 a. . . .	.	.	
4	.	.	.	D	.	. . . . .	SS	SS	
5	.	.	.	. . .	.	. . . . .	SS	.	
6	per.	17 $\frac{3}{4}$	15	. . .	.	☾ per 10 a. . .	.	.	
<b>S</b>	.	17	12 $\frac{1}{2}$	. . .	♂	♂ 10 7 p. . . .	Con	Con	
8	Q	17	17	. . .	.	Q 12 44 m. . . .	SS	Con	
9	.	9 $\frac{1}{2}$	9 $\frac{1}{4}$	♀ ☉ ☽	☽	♀ ☽ 11 28 p. . . .	Con	Con	
10	.	9 $\frac{1}{4}$	14 $\frac{1}{2}$	. . .	.	. . . . .	.	.	
11	.	14 $\frac{1}{2}$	.	. . .	.	. . . . .	SS	SS	
12	.	.	.	. . .	.	. . . . .	.	.	
13	.	.	16 $\frac{1}{2}$	♀ stat	☽ ♀	♀ 4 30 a.—☽ 5 a.— ♀ 11 19 a.	SS	.	
<b>S</b>	.	.	16 $\frac{1}{2}$	*	.	. . . . .	.	.	
15	.	.	.	☽ ☽ ☾	.	. . . . .	SS	.	
16	●	18	.	. . .	.	● 5 13 a. . . .	.	.	
17	.	10 $\frac{3}{4}$	9 $\frac{1}{2}$	☽ ☽ ☉	♀	♀ 6 47 a.—☽ 7 13 p	.	.	
18	.	8 $\frac{1}{4}$	12 $\frac{1}{2}$	D	.	. . . . .	.	.	
19	.	15 $\frac{3}{4}$	16 $\frac{1}{2}$	. . .	.	. . . . .	SS	.	
20	.	14 $\frac{3}{4}$	14	. . .	.	. . . . .	.	.	
<b>S</b>	.	18	16 $\frac{3}{4}$	♂ ☽ ☾	♀	. . . . .	.	.	
22	ap	.	.	. . .	♀	☾ ap 3 a. . . .	SS	SS	
23	.	.	16 $\frac{1}{4}$	♂ ☉ ♀	.	♀ ♀ 6 58 p. . . .	.	.	
24	Q	14 $\frac{1}{4}$	17	♀ inf.	.	Q 7 3 a.—♀ 5 p. . .	.	.	
25	.	13	14 $\frac{1}{4}$	. . .	.	. . . . .	SS	.	
26	.	12 $\frac{3}{4}$	10 $\frac{1}{2}$	☽ ☽ ☾	.	. . . . .	SS	.	
27	.	9 $\frac{3}{4}$	10 $\frac{3}{4}$	♂ ☽ ☾	.	. . . . .	.	.	
<b>S</b>	.	15 $\frac{1}{4}$	15 $\frac{1}{4}$	♀ ☉ ☾	.	. . . . .	.	.	
29	.	.	.	*	☽	☽ 3 47 a. . . .	SS	.	
30	.	.	.	♀ ☉ ☾	☽	☽ 2 36 p. . . .	SS	.	
31	○	.	.	. . .	.	○ 4 46 p. . . .	.	.	

For Feasts, Fasts, &c., see Common Notices, page 30,

OMBROLOGICAL ALMANAC.  
OCTOBER, 1849.

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night.		In the Day, from 9 A.M. to 4 P.M.	Evening, Night, and Morning.
fresh Nly.	fresh Nly.	11 34	fair, with hail and thunder some-where	fair, frosty
fresh Nly.	fresh Nly.	11 30	fair . . . . .	fair, frosty
. . . . .	. . . . .	11 26	spots of rain, mostly fair, but hazy	small rain or sleet
fresh	fresh	11 22	showers . . . . .	showers
fresh	. . . . .	11 18	fair . . . . .	fair, shooting stars
. . . . .	. . . . .	11 14	fair . . . . .	fair, shooting stars
fresh var.	fresh var.	11 10	fair, hazy, blue zenith . . . .	fair, stars seen
fresh var.	fresh var.	11 6	slight showers, fog or haze . .	fair
fresh var.	fresh, var.	11 2	showers, small and broken . .	showers, rather frosty
. . . . .	. . . . .	10 58	fair, very slight showers . .	fair, slight showers
N. Wly	fr. N. Wly.	10 54	fair, slight showers . . . . .	fair, showers
. . . . .	. . . . .	10 50	fair very slight showers . . . .	fair, slight showers
sh Nly.	. . . . .	10 46	fair, slight showers, or spots of rain	slight showers
. . . . .	. . . . .	10 44	fair, cloudy, showers possible	showers.
sh Nly.	. . . . .	10 40	fair, pale sky . . . . .	fair
. . . . .	. . . . .	10 36	fair, slight showers possible, . .	fair, slight showers
. . . . .	. . . . .	10 32	fair, rather hazy . . . . .	fair
. . . . .	. . . . .	10 28	fair . . . . .	fair,
sh Ely.	. . . . .	10 24	fair . . . . .	fair
. . . . .	. . . . .	10 20	fair . . . . .	fair
. . . . .	. . . . .	10 16	fair, hazy . . . . .	fair
l. Ely.	fr. N. Ely.	10 12	fair, hazy horizon . . . . .	fair
. . . . .	. . . . .	10 18	fair rather hazy, slight showers spots of rain	fair, slight showers
. . . . .	. . . . .	10 4	fair, pale blue sky . . . . .	fair
. . . . .	. . . . .	10 0	fair . . . . .	fair
sh Ely.	. . . . .	9 58	fair . . . . .	showers.
. . . . .	. . . . .	9 54	fair, very slight showers . . . .	showers.
. . . . .	. . . . .	9 50	perhaps fair . . . . .	showers,
fresh	. . . . .	9 46	fair, cold, if not frosty . . . .	fair, frosty
little	. . . . .	9 42	fair, small showers . . . . .	fair, frosty, showers
. . . . .	. . . . .	9 40	fa r . . . . .	fair, frosty showers



OMBROLOGICAL ALMANAC.  
NOVEMBER, 1849.

Day of Mo.	Ombrological Influences.					Time of Influences.	Anemo-logical Influences.		Barometer. in pt
	The Moon.	☿ Noon.	♁ Midnt.	♃ and ♄	♅ and ♆		Day.	Night.	
		☿	♁	♃	♅				
1	.	14½	16	. . .	.	. . . . .	SS	.	
2	per	17	17½	♀ stat. D	.	☾ per 11 p—♀ 7 12 a	SS	SS	
3	.	8¾	9½	. . .	.	. . . . .	.	.	
<b>S</b>	.	9½	8¾	. . .	♂	♂ 3 10 p. . . . .	.	.	
5	.	13	.	. . .	♁	. . . . .	SS	SS	
6	.	.	17½	. . .	.	. . . . .	.	.	
7	Q	.	.	. . .	.	Q 8 22 a, . . . . .	.	.	
8	.	.	.	. . .	.	. . . . .	.	.	
9	.	.	.	♂ stat. ♀ hr. elong	♃	♂ 4 6 a.—♀ 4 37 p.— ♃ 7 7 p.	Cen SS	Con	
10	.	17	15½	. . .	.	. . . . .	Con	Con	
<b>S</b>	.	.	11½	♃ ♂ ☾	♁	. . . . .	Con	Con	
12	.	9	13½	*	♀	♀ 11 59 a, . . . . .	SS	.	
13	.	18	16	. . .	♀	♀ 4 29 a . . . . .	SS	.	
14	●	17½	.	. . .	.	● 9 13 p. . . . .	.	.	
15	.	17½	.	. . .	.	. . . . .	SS	.	
16	.	.	.	D	.	. . . . .	.	.	
17	.	.	16¾	. . .	.	. . . . .	.	.	
<b>S</b>	ap	16	13¾	♂ ♂ ☾	♀	☾ ap. 9 p. . . . .	.	.	
19	.	13½	12¾	. . .	♃	. . . . .	.	.	
20	.	15½	10	. . .	.	. . . . .	SS	.	
21	.	8¾	11½	. . .	.	. . . . .	SS	.	
22	.	14	17	. . .	.	. . . . .	SS	.	
23	Q	19½	.	♃ ♂ ☾	.	Q 2 24 a. . . . .	.	.	
24	.	.	17½	. . .	.	. . . . .	.	.	
<b>S</b>	.	.	18	♁	♃	♃ 11 43 a.—♁ 12 noon	.	.	
26	.	.	.	. . .	♁	♁ 11 33 p. . . . .	.	.	
27	.	.	17	♀ ♂ ☾	.	. . . . .	SS	SS	
28	.	12	9½	*	.	. . . . .	SS	.	
29	.	10½	13½	♀ ♂ ☾	.	. . . . .	SS	SS	
30	○	16	.	. . .	.	○ 3 25 a. . . . .	SS	.	

OMBROLOGICAL ALMANAC.  
NOVEMBER, 1849

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night.		In the Day, from 9 A.M. to 4 P.M.	Evening, Night, and Morning.
gentle	. . .	9 36	fair . . . . .	fair
fresh	fresh	9 32	fair, mild . . . . .	fair
. . .	. . .	9 28	fair, foggy . . . . .	fair
. . .	. . .	9 24	showers few, foggy . . . . .	showers a.m. and p.m.
rather fresh Ely.	fresh Ely.	9 22	showers possible, perhaps fair . . . . .	frosty showers
. . .	. . .	9 18	fair, flying showers . . . . .	fair, shooting stars, showers
. . .	. . .	9 14	fair . . . . .	showers
. . .	. . .	9 10	fair, small showers . . . . .	fair, showers
N. Ely.	fresh	9 6	fair, frosty, much blue sky . . . . .	fair, frosty, starlight
fresh	fresh	9 2	slight showers . . . . .	slight showers
fresh	fresh	8 58	fair, cloudy, hazy, slight showers . . . . .	fair, cloudy, showers
sh Ely.	. . .	8 56	fair, rather hazy, and cloudy . . . . .	fair, cloudy, showers
sh Ely.	. . .	8 52	fair, clouds more remote . . . . .	fair, showers
. . .	. . .	8 50	fair, remote clouds, pale blue . . . . .	fair
sh Ely.	. . .	8 46	fair, remote clouds, pale blue . . . . .	fair, shooting stars
. . .	. . .	8 42	fair . . . . .	fair, shooting stars
. . .	. . .	8 40	fair, winter should begin . . . . .	fair
. . .	. . .	8 38	fair, hazy . . . . .	showers
. . .	. . .	8 34	fair, hazy, freckled clouds . . . . .	showers
fresh	. . .	8 32	fair . . . . .	fair
gentle	. . .	8 28	fair . . . . .	fair
rather fresh	. . .	8 24	fair . . . . .	fair
sh then gentle	. . .	8 22	fair, rather cloudy and hazy . . . . .	fair
. . .	. . .	8 20	fair, slight showers . . . . .	slight showers .
. . .	. . .	8 18	fair, small showers . . . . .	fair, frosty showers
. . .	. . .	8 16	much small rain . . . . .	fair, frosty, showers
var.	fr. var.	8 14	fair, hazy . . . . .	fair
var.	. . .	8 12	fair, hazy . . . . .	fair
var.	fr. var.	8 10	fair, hazy, pale sky . . . . .	fair
var.	. . .	8 8	fair . . . . .	fair, stars seen

OMBROLOGICAL ALMANAC.  
DECEMBER, 1849.

Day of Mo.	Ombrological Influences					Time of Influence.	Anemological Influences.		Barometer in pt
	The Moon.	☿ Noon.	♃ Midnt.	♁ and ♀	♂ and ♀		Day	Night.	
1	per	13½	16½	. . .	♂	☾ per 4 a.—♂ 6 23 p.	SS	.	
<b>S</b>	.	17¾	16½	♀ ♂ ☾ D	.	. . . . .	.	.	
3	.	18	.	. . .	.	. . . . .	.	.	
4	.	.	.	. . .	.	. . . . .	SS	.	
5	.	16¾	15½	♃ stat.	.	♃ 9 36 a. . . . .	SS	.	
6	Q	14½	10	. . .	.	Q 6 52 p. . . . .	SS	SS	
7	.	11	14	. . .	♃	♃ 6 39 a. . . . .	Con	Con	
8	.	12½	11½	. . .	♁	. . . . .	SS	SS	
<b>S</b>	.	13½	15½	♃ ♂ ☾	♁	. . . . .	Con	Con	
10	.	14	17½	. . .	.	. . . . .	.	.	
11	.	.	.	. . .	.	. . . . .	SS	.	
12	.	.	.	*	♀	7 44 p. . . . .	SS	.	
13	.	.	15	. . .	.	. . . . .	.	.	
14	●	15½	14½	. . .	♀	● 3 37 p.—♀ 8 24 a	.	.	
15	.	.	13¾	♂ ♂ ☾	.	. . . . .	SS	.	
<b>S</b>	ap	5¾	10¾	D	♀	☾ ap. 6 a. . . . .	.	.	
17	.	10¾	13½	. . .	♃	. . . . .	.	.	
18	.	17	.	. . .	.	. . . . .	.	.	
19	.	.	16½	♀ sup.	.	♀ 9 41 a. . . . .	.	.	
20	.	.	17	. . .	.	. . . . .	.	.	
21	.	19½	.	♃ ♂ ☾	.	. . . . .	.	.	
22	Q	.	17½	. . .	♃	Q 7 40 p.—♃ 8 13 p.	SS	SS	
<b>S</b>	.	12¾	10½	. . .	.	. . . . .	.	.	
24	.	8½	7¾	. . .	♁	♁ 8 7 a. . . . .	.	.	
25	.	11¾	18	. . .	.	. . . . .	SS	SS	
26	.	14¾	13	. . .	.	. . . . .	SS	.	
27	.	16	17	♀ ♂ ☾ *	.	. . . . .	.	.	
28	.	.	.	. . .	♂	♂ 1 19 p. . . . .	.	.	
29	○	.	.	. . .	.	○ 2 p.—☾ per 4 p.	.	.	
<b>S</b>	per.	15½	15½	♀ ♀ ♂ ☾	.	. . . . .	.	.	
31	.	13¾	13½	♃ ♂ ☾ D	.	. . . . .	.	.	

OMBROLOGICAL ALMANAC.

DECEMBER, 1849

Velocity & Direction of the Wind.		Length of Day. H. M.	Effect on the Weather.	
Day.	Night.		In the Day, from 9 A.M. to 4 P.M.	Evening, Night, and Morning.
. . .	. . .	8 6	fair, somewhat foggy, small showers, red sunset	fair, shooting stars slight showers.
. . .	. . .	8 4	fair, pale clouds, hazy . . .	fair, rather frosty
. . .	. . .	8 2	fair, uncertain showers . . .	fair, rather frosty, uncertain showers
fresh	. . .	8 0	fair. . . . .	fair
fresh	. . .	7 58	fair . . . . .	fair
fresh	fresh	7 56	fair, slight showers possible .	fair, showers possible
isk var.	fresh var.	7 54	fair, slight showers p.m. storm of wind	showers, frosty
isk var.	fresh, var.	7 54	slight showers, storm of wind .	showers, slight frost
. . .	. . .	7 52	slight showers frequent . . .	showers, slight frost
. . .	. . .	7 52	fair, rather threatening, perhaps slight showers	fair, showers
sh, Ely.	. . .	7 50	fair, cloudy . . . . .	fair, showers
sh, Ely.	. . .	7 50	fr., some blue sky, spts. of rn. pale sun-set, large clds. perhaps hail	fair a.m., and p.m. frosty
. . .	. . .	7 48	fair, cloudy, and hazy . . .	fair, white frost a.m.
. . .	. . .	7 48	fair. pale clouds, pale blue sky	fair, white frost a.m.
sh, Ely,	. . .	7 46	fair, misty . . . . .	fair, cold
. . .	. . .	7 46	fair, pale broken clouds, hazy .	small showers
. . .	. . .	7 46	fair . . . . .	fair
. . .	. . .	7 44	fair . . . . .	fair
. . .	. . .	7 44	fair, some pale blue sky . .	fair, stars well seen
. . .	. . .	7 44	fair . . . . .	fair
. . .	. . .	7 44	fair, pale clouds, spots of sleet ,	slight sleet
fresh	fresh	7 44	fair, frosty, spots of sleet in some places	slight sleet, frosty
. . .	. . .	7 44	fair, frosty . . . . .	fair, frosty
. . .	. . .	7 44	fair, frosty, slight sleet possible	fair, frosty, shooting stars
resh	fresh	7 44	fair . . . . .	fair, showers
resh	. . .	7 46	fair . . . . .	fair, showers
. . .	. . .	7 46	fair, pale clouds, foggy . . .	fair, slight showers
. . .	. . .	7 46	fair, rather foggy, slight showers	fair, white frost, slight showers, sleet
. . .	. . .	7 48	fair, frosty, slight sleet, pale broken clouds	fair, frost and sleet
. . .	. . .	7 48	fair, cloudy, hazy . . . . .	showers a m., and p.m. frosty
. . .	. . .	7 48	fair, cloudy, hazy, sleet possible	showers a.m., and p.m. frosty

LONDON:  
C. ARMAND, PRINTER, 46, RATBONE PLACE, OXFORD STREET.



