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Were You Born Under a Lucky Star?

A COMPLETE EXPOSITION OF THE SCIENCE OF ASTROLOGY

Adapted from the Four Books of Ptolemy, the Astronomer, on the Art of Reading the Stars : : :

By A. ALPHEUS

"We hold there is more truth in astrology than in astrologers."

—Sir Thomas Browne



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WERE YOU BORN UNDER A LUCKY STAR?

HUMAN CRYSTALLIZATION.

So many eminent men, eminent both in science and literature, have been secretly interested in astrology of late years, that we may not unreasonably expect before long a public movement toward a scientific investigation of the observed facts in connection with it. And then we may hope that the ordinary man will not burst into peals of laughter at the very mention of the word "astrology" as he does today.

There are several elements which militate against the serious study of astrology. The first and greatest is the almost utter lack in this day of anything approaching a scientific knowledge of mind and emotion. Astrology presumes to point out how mind and emotion are molded. But we must understand mind before we can reasonably go on to an investigation of the causes which made it so. What do the scientists know of love, the most powerful of human emotions! How very small is our knowledge of the natural processes of human observation and deduction! What little we do know, came down to us chiefly from the Greeks. Indeed, we may say that our knowledge of the intellectual processes and

the commonest emotions of a human being are of the most elementary kind.

And this confusion of knowledge has introduced into astrology vital mistakes. Personally I have never seen a scintilla of evidence to suppose that the positions of the planets in any way determine human events except in determining the crystallization of human character at birth. But in attempting to account for events in a life, no distinction has been made between those events which are the result of character and those which come from quite different causes. For instance, an astrologer foretells that a child should die of drowning in his sixth year. But it is not the event that he really can say anything about, only the disposition of the child to meddle with water at that age. The child will very likely fall into the water, as in a case I have in mind, but astrology had no possible means of knowing that some one would fish him out before he was drowned. A certain horoscope indicated the character for a lawyer, who at a certain period of his life would have an inclination toward female clients. If at that time he had such a distinguished client, it was by no means the stars that brought that client to him. His disposition naturally led him to associate himself with whatever eminent female criminal client might then have need of a lawyer. Again, many people have died violent deaths for which there seems no reason in the horoscope. It simply illustrates the fact, as I personally believe it to be, that there are two kinds of fate—the one in a man's own character, the other in circumstances outside. With those outside circumstances astrology has nothing to

do, though indeed it often seems to have much because we do not understand, with our limited psychology, the difference between the events which result from a man's own nature and those which come from wholly exterior circumstances.

The second great obstacle in the path of a scientific investigation of astrology is the fact that it is almost entirely in the hands of those mystics who either call themselves "artists," or else apply to themselves the adjective "esoteric," whatever that may mean. It is of course impossible for the scientist to consider seriously that ethereal fluid which emanates from the stars and penetrates man's being, or to indulge in rhapsodies over the spiritual harmony of the universe. These terms and theories no doubt foreshadow and correspond with actual discoveries and facts; but they mean nothing to the scientists. In short, a scientific theory of astrology is necessary before the scientist will be tempted even to investigate the facts observed.

But we will pass to another obstacle in the path of astrology, though to our mind really the slightest of all, the charlatan fortune-telling for so many ages associated with it. Even if the whole claim of astrology were fully admitted, foretelling a man's future would be an impossibility because of the multiplicity of known elements (let alone the unknown) which go to make that future. In astronomy allowance always has to be made for comets and world-explosions. Infinitely greater allowance would have to be made in the realm of astrology, so infinitely complicated is it in comparison with astronomy. It is not for fortune-telling that we wish to

investigate astrology; but if it is a true science even in possibility, how greatly would that fact serve to revolutionize our view of erring fellow-beings, and of a thousand other things!

But we do not believe that the known charlatanism associated with astrology would operate to prevent honest scientific men from investigating the meaning of observed facts. Charlatanism characterized mesmerism and hypnotism, but scientific men have redeemed this latter subject from the region of fancy and made it scientific.

Another reason for much of the absurdity in ancient astrology was the small knowledge of astronomy then possible. For instance, the discovery of Uranus has in a moment accounted for grave discrepancies which the ancients found in many horoscopes.

We stated above that one great obstacle in the path of a scientific future for astrology was our lack of knowledge of the human mind. There is one branch of the study not open to that objection, however—the effect of the heavenly bodies on health. We have a whole learned profession devoted to the study of physiology and the welfare of the human body. The medical profession should therefore be prepared to investigate the facts of astrology as affecting the human body in health or illness. It is from the physiological point of view chiefly that our investigation can at present be conducted. Here we have an infinite possibility of obtaining facts, and when it is stated that a man has typhoid fever or measles, there is no doubt about it. Facts

there are in plenty to prove that human disease has a direct connection with various combinations of stars and planets in certain positions. If any one doubt the existence of the facts he has only to look into the cases that lie easily before him. There are not a score, but thousands, and out of a thousand cases one can come to a fairly accurate conclusion concerning facts, after making ample allowance for coincidences.

But granting certain facts as patent, what explanation can you give? asks the scientist. The penetrating influence of Karma is not a satisfactory answer.

Taking the facts before us, let us proceed to deduce an hypothesis, if not a theory. First, let us state a few facts and then make a natural deduction.

Facts: Certain stars or planets on the point of rising, at the time of birth have been observed to be connected with certain types of physique.

Certain effects have been observed to be associated with combinations of planets in certain positions of the zodiac when their light reached the earth so as to form an angle of sixty or one hundred and twenty degrees (the favorable aspects of the sextile and trine); certain results quite the reverse have appeared to follow angles of light of ninety degrees and one hundred and eighty (square and opposition aspects).

All these influences are ascribed to the moment of birth and the time immediately following.

The angle which the light of any single planet formed to the earth in the latitude and longitude of birth is said to affect the being of the child in certain definite ways (as in the first thirty degrees to produce secret

enemies of its own nature, thirty to sixty degrees, friends, etc.).

We assume these statements to be facts. Having satisfied ourselves that there is a certain amount of truth in them, for lack of time we leave the proof of the facts to others.

Deductions: It is known that minerals crystallize on these angles. It is known that animal life originates in microscopic cells, at first formless, which gradually go through a process similar to crystallization, and that in some way in these invisible cells all human qualities of mind or body are latent. Let us therefore assume that at the moment of birth these elemental human cells begin to crystallize, and that the form of their crystallization is determined by the conditions of light, heat, electricity, or gravitation produced by heavenly bodies at the moment.

The crystallization is probably a progressive process; the first crystals determine the shape of the body, the ones formed later being connected with qualities more subtle, which lie latent during certain years until maturity brings them into play. Thus some hours after birth may be sown the seeds of brain fever to occur in middle life.

But is it light, heat, or electricity, or gravitation which determines the mode of crystallization, or a combination of one or more or all?

It may be the condition of the magnetism of the earth caused by the angle which that portion of the earth forms to the sun. This theory is supported by the fact that the sun is observed to have certain influ-

ences when posited in certain signs of the zodiac. In the course of centuries the stars in Aries and the other signs have moved back thirty degrees, but the sign which begins at the vernal equinox and the others in succession, have not been observed to change their influence. It would therefore seem that the light of the stars, which had changed, was not the fundamental cause, but the angle which the sun formed to the magnetic poles of the earth, which had not changed.

It may be the varying density of the atmosphere caused by the attraction of the heavenly bodies for the air about the earth. Thus, the moon as it passes about the earth raises tides. It doubtless also raises a tide of air, and the planets may raise smaller tides, thus affecting the density of the air. Also it is known that the point at which minerals crystallize is determined by the pressure, among other elements. This might possibly account for the influence of the sun and moon when placed in varying signs of the zodiac; but this and the preceding theory leave many things unaccounted for. The irregular effect of humidity in varying the density of the atmosphere would seem almost wholly to discountenance the theory of varied pressure. Gravitation may act in a more direct way, however, though there is far less reason to suppose that gravitation has anything to do with human crystallization than there is for believing light or magnetism to be the controlling force.

Light and heat are merely varying lengths of ethereal vibration, and even the chemical rays are essentially the same in character as both heat and light. Mineral crystallization we know depends on two things,

pressure and temperature; that is, the balance of the expansive and repressive forces. We naturally look for corresponding elements in human crystallization. Either gravitation, atmospheric density, or the magnetic condition of the earth (which of these it would be hard to say) corresponds to pressure, and we may easily suppose that the chemical and other rays correspond to heat, a coarser variety of the same thing.

It is well known that light has a powerful influence over life—the two are often spoken of as almost synonyms. The healthy child must be reared out of doors in the sunlight. Darkness invariably produces disease, even when there is plenty of heat.

In recent experiments with the cathode, or so-called X-rays, the stimulating effect on animal life of these rays was noticed in several cases. A mouse which had been kept under water an hour was resuscitated while being photographed. Edison's young men assistants were able to work in these rays for forty-eight hours at a time without weariness. Similar observations were reported elsewhere. But this only goes to show the tremendous influence of light on life—light in all its varieties, from heat to the invisible chemical rays.

The process of mineral crystallization is this: When the liquid or supersaturated solution reaches a certain temperature and condition of pressure, and the impulse to crystallize has been given in some way, geometrical crystals are formed, not at one spontaneous burst, but in more or less rapid degrees, and the process may be arrested by the change in temperature caused by heat arising from the process itself.

The child in the womb may be regarded as a mineral held in solution; at birth the impulse of crystallization is given and the process takes place during the hours and days immediately ensuing; the beginning of the process determines the general direction or tendency of the result, and later effects take a secondary place, or one that manifests itself only when the first crystals have served their day and given place to maturing elements held in check while they existed.

We may suppose that the form or nature of these crystals is very largely determined by the state of vibration of the ether in its higher forms. Chemical or other rays coming at a certain angle might harmonize with each other easily and produce a favorable ethereal atmosphere; while rays coming at other angles would interfere with each other, either neutralizing each other or producing irregular vibrations of the ether.

Ptolemy said that Saturn was cold and Mars was hot. It may be assumed that the rays coming from them have in the one case a lower and in the other a greater rate of vibration (or the reverse) than the mean most favorable to human development, while the benefic aspects of Jupiter may be the result of the fact that the rays from him have a medium rate of vibration most in harmony with the development of the human crystal.

It is well known that the character of the light coming from the various planets varies greatly, the light of the sun being most comprehensive. Most of the light coming from the planets is reflected; but what rays are reflected and what are absorbed depends wholly on the character of the planet and its atmosphere.

Planets in conjunction with the sun are observed to lend to the light of the sun their own character, which is in accord with the general laws of ethereal vibration.

There is just one grave objection to the light theory. The position of the signs of the zodiac and of the sun in relation to them should mean the combined effect of the light of the fixed stars above the earth at any given moment. But if by the precession of the ecliptic the position of the signs in the heaven has changed thirty degrees, and no corresponding change of effect of the signs so altered has been observed, it is obvious that the light of the stars originally in the sign had nothing to do with the effect of the sign on human life. This strongly suggests that the second element in human crystallization, corresponding to pressure in the case of minerals, is the magnetic condition of the earth according to its position in reference to the sun. Also we know that the light of most of the fixed stars is like that of the sun, and being direct and comprehensive is not so productive of variation as the irregularly reflected light from the planets, including the moon. Still, the light of the stars at various angles, taking into consideration that we are dealing with the total effect of all stars above the horizon, may have a combined effect which has been only slightly varied by the accident of the change of the signs of the zodiac, an effect which has therefore not been duly observed. But undoubtedly we have here a strong argument for the existence of some other element than light rays in effecting crystallization.

As far as I am aware, the theory of human crystallization has never before been definitely presented. Ptolemy spoke of the various planets and luminaries as being associated with different degrees of heat and humidity. Thus, Saturn was dry and cold, Mars dry and hot, the sun dry, the moon moist, etc.; and likewise he connected the winds coming from various quarters with different planets by a very far-fetched analogy. And he clearly states that the moment of generation or copulation must be far more important than the moment of birth; but since the first is almost impossible to determine, the latter has to be taken for convenience as the starting point. Evidently human crystallization had never entered his mind.

Heredity has been so much talked of in recent years that one of the best modern writers, Mr. Hiram Butler, author of "Solar Biology," tries to account for every characteristic by the condition of the minds of the parents at the time immediately preceding birth. In the first place, it is safe to say that he never had the slightest opportunity to observe how the minds of the parents were directed at the time of birth. And besides that, what we know of heredity would lead us to believe that the molding forces begin to operate long before the time of birth, and at times so very various and from causes so diverse that one could by no stretch of imagination connect them with the merely momentary positions of planets at the instant of birth.

If we adopt the theory of crystallization, it will scarcely be possible to go farther in definite knowledge. All the other matters I have mentioned are merely analo-

gies to give vrai-semblance to the theory as a good working hypothesis. And while looking for analogies, it would be well to consider the very interesting phenomena of the interference and polarization of light. Two reflected rays coming to a single point from mirrors a little less than 180 degrees apart produce on a screen bands of darkness alternating with bands of light; that is, at certain points the two rays destroy each other. Doubtless the light from planets in opposition or conjunction would exhibit the same phenomena. It is well known that the process of crystallization—that is, the arrangement of the molecules of a substance in certain regular orders—is easily interfered with. For instance, if water is violently agitated it may be reduced several degrees below the freezing point before it congeals. The same is true if it is left absolutely quiet.

The interference of polarized light is even more interesting than that of ordinary light, for by its aid beautiful and varying bands of color are produced. Moreover, when light is reflected from a polarized surface, polarization is complete only when the beam comes from a fixed angle, the angle of polarization.

What subtle qualities the particles in a human crystal may receive from light coming to it from two sources at an angle of sixty degrees or one hundred and twenty, human ingenuity will never penetrate in all probability; and yet we have quite as much chance of confirming our theory as we had for confirming the theory that light is a transversal vibration of an invisible ether. Ether is but a theory; and human crystallization may be quite as good a theory for purposes of investigating the

strange effects produced on human character by positions and combinations of heavenly bodies.

If this theory is adopted it will be observed that it makes no place for horary astrology; that it does not account for the happening of events, but clearly recognizes that there is an outside series of influences wholly disconnected with the stars—or no more connected than everything in life is connected with everything else, for there is no force but is directly or indirectly convertible into any other. Thus the theory of evolution and heredity is not in the least interfered with, while we have a wonderful explanation for the acknowledged differences of individuals born under the same external influences. We thus have in astrology an explanation of human individuality; at least we get a glimpse of the individualizing forces, while our studies in the past have been chiefly of unifying forces.

Note. Dr. J. Heber Smith, writing in the Arena, calls attention to the fact that if a metal disc is supported at the center and is made to vibrate by a violin bow, it vibrates in sections of thirty degrees, as may be seen by sand springled over it.

CHAPTER I.

PTOLEMY AND MODERN SCIENCE.

Astrology seems to have made no progress since the days of Claudius Ptolemaeus, who wrote nearly two thousand years ago, and his "Tetrabiblos" is undoubtedly the best text-book on the subject existing today. Modern astrologers, notably Kepler, have introduced some changes, and made large claims, which Ptolemy did not venture to do. He said specifically that the science of astrology does not enable any man to predict particular events, and there are certain things which no rational man would think of foretelling. His method of prediction was precisely that of the modern doctor, who says that a disease will run a certain length of time, that a certain constitution must have care or it will break down, that from external appearances one man should make a good blacksmith, another a good orator, and so forth. The positions of the stars help us to analyze more subtle physical conditions, not subject to external observation. But the whole ground of prediction is simply a knowledge of the physical, mental and moral condition of a human being from birth. If we know that the germs of hereditary consumption exist in a child from birth, we can predict that he will die of the disease, and may judge the time with tolerable accuracy. And if we know the mode of crystallization, we have as it were a chart of latent germs.

Ptolemy seems to have been interested in astrology first of all and chiefly as a means of predicting the weather. What truth there may be in that branch of the subject I have never had time to investigate; but I judge that Ptolemy hit it about as often as the government meteorological bureau today. His next source of interest came from the fact that astrology was generally used by physicians; and indeed it has been used by this profession until very recently. From this he proceeded to character, and the inferences that may be drawn from a knowledge of character as to future conditions of health, wealth, success in business, marriage, etc.

Ptolemy explained everything by temperature and humidity. He had a mass of observation before him. From this he developed his rational theory, which was to explain everything by temperature and moisture in analogy with the change of the seasons, and he admitted nothing that did not square with his theory, and no doubt he drew inferences from the theory as to what the facts ought to be.

But every branch of science has made such tremendous progress since Ptolemy's day, that I assume that if he were living now he would entirely recast his theory, correct his methods of procedure, discard certain elements, adopt others, and so bring the "Tetrabiblos" up to date. As (for certain apparent reasons) he is unable to do this work, I have presumed to attempt the task. I know something of modern scientific facts and theories, and I take it for granted that Ptolemy was an authority on ancient astrology. So between Ptolemy and modern science, I trust the reader may be interested.

It may be objected that the microscope has not yet revealed any minute crystals in protoplasm, but that primary cells seem to be constructed on a basis of their own. My reply is that no one has seen molecules, much less atoms. But the theory that they exist is the best explanation of the facts before us. So I say that the assumption that human beings crystallize at birth much as minerals crystallize, accounts for the actually observed facts of astrology better than any other theory we are able to evolve. No doubt in two thousand years this theory will be as antiquated as Ptolemy's of temperature and humidity. But in the meantime I trust it will have served its purpose.

For the purposes of our theory I assume that before birth the child is like a saturated solution, and that its first gasp after birth sets the process of crystallization to going, and this process continues for several weeks. A multitude of minute crystals are formed, one on top of the other, of course most rapidly at the moment of birth and during the minutes and hours immediately succeeding, and then less slowly during the three months following. These crystals are perhaps arranged in cylindrical groups, and in the course of time become flattened out. The baby, we know, is round in every limb and feature, while the old man finds that eyeballs, bone, muscle, are flattened. This flattening process may bring the successive sets of crystals into play, so that the crystals formed an hour, a week, or a month after birth would come into play at corresponding periods later in life. It seems probable that all the chief crystals are formed on the first day, and these are modi-

fied or remodified on the succeeding days. Or still more likely, the chief crystals are formed within a few minutes of birth, and receive their corresponding modifications as the earth turns on its axis, or (as it appeared to the ancient) as the heavenly bodies rise and set.

Furthermore, I conceive that crystallization is most rapid while the sun is shining, and also that the moon helps very materially in the process. So if a child is born at midnight the crystallization proceeds very slowly until dawn, and he develops his powers correspondingly late in life. The best time to be born would therefore be in the morning, and it is remarkable that a very large proportion of eminent men were born during the forenoon, as for instance, Napoleon, Gladstone, Dumas, Frederick the Great, Sir Joshua Reynolds, George Washington, S. T. Coleridge—to take a variety of characters at random, whose horoscopes I happen to have before me.

CHAPTER II.

THE NECESSARY KNOWLEDGE OF ASTRONOMY.

Only an elementary knowledge of astronomy is necessary in order to cast a horoscope. As every one knows, the sun is the center of the solar system, and about it revolve seven major planets (Mercury, Venus, Mars, Jupiter, Saturn, Uranus and Neptune), besides the earth. There are some unimportant smaller ones also. They all move round the sun at different rates of speed, Mercury getting around most quickly, and Neptune least. They all move in the same direction, and in a tolerably fixed plane called the ecliptic, the circle of which is divided into twelve equal spaces called the Signs of the Zodiac. The point in the heavens where the sun appears to be when it crosses the equator on its journey northward (in March) is taken as a fixed point to count from, and is called Aries. It changes slightly from year to year, but only a very little. And it will be observed that it is both on the equator and on the ecliptic. The plane passing through the equator is a fixed plane in the heavens (that is, very nearly fixed), and the plane of the ecliptic, that is of the zodiac, which is another fixed plane in the heavens, forms an angle to it of 23° 27′, or thereabout, and they both pass through the center of the earth, and cut each other on a straight line, at one end of which is the first point of Aries, and at the other end the first point of Libra. In the sky as

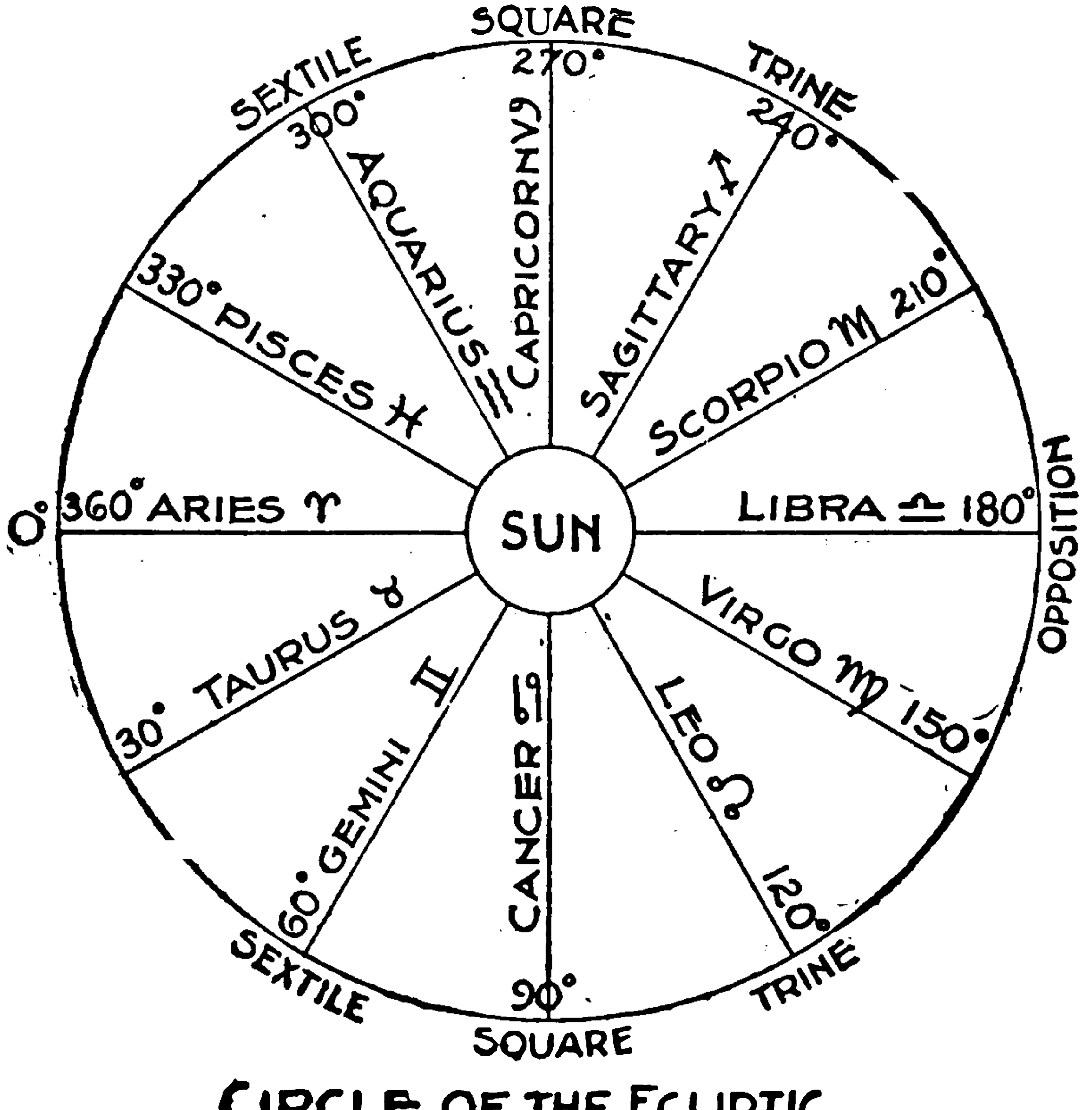
we see it at any point on the earth, the equator is a curve parallel to that which the sun appears to take in passing from sunrise to sunset. In winter the sun is south of it, and the number of degrees north or south is called the declination. On the days of the equinoxes, twice a year, the sun passes directly along the line of the equator in the sky as it appears to us. Of course the daily movement of the moon and planets is like that of the sun, and their distance north or south of the equator is their declination.

But the movement of the sun and planets from day to day, week to week, month to month, is along the line of the ecliptic, and the curve of the ecliptic as we see it in the heavens appears to be very erratic. On the two equinoctial days the sun rises at the first point of Aries and the first point of Libra, exactly on the equator; and exactly in the middle of the eastern horizon and sets exactly in the west, and on such days at sunrise or sunset the ecliptic forms an arch like the equator, only higher or lower. At the spring equinox it will curve over the equator at sunrise and below at sunset. But in the summer the sun rises farther around to the north, and also sets farther to the north, so traveling considerably more than half way round the horizon; but as the farther it has to travel the longer it takes, so the days are longer when it rises north of the eastern point and sets north of the western than they are when it rises and sets south. The differences in the lengths of the arcs which the sun describes at various seasons of the year are called the ascensional differences, and depend on the latitude.

Now every point in the zodiac corresponding to the position of the sun in the zodiac at various times in the year, will rise and set all the year round just as the sun rises and sets on the different days. So some signs of the zodiac in these north latitudes (and the reverse is true in the southern) are above the horizon no longer than the sun is in mid-winter, and others are above the horizon as long as the sun in mid-summer, and if planets happen to be in Cancer, for instance, they too rise early and set late.

We are now prepared to erect a horoscope. There are two ways in which we may do it, first by taking the sun as a center, and second by taking the earth as a center. The first is called heliocentric (from the Greek meaning sun-center), and the second geocentric (from the Greek meaning earth-center).

Ptolemy supposed the heavenly bodies all revolved around the earth, and of course he knew nothing about a heliocentric astrology. As, however, most of our light and heat comes from the sun, it is clear that the condition of the light coming from the sun must be very important. No doubt the positions of the planets about the sun do much to determine this condition. We shall do well, therefore, to consider the heliocentric horoscope first. This is more easily calculated than the geocentric, and furnishes us a convenient method of calculating the geocentric afterward. Most books on astrology require references to an astrological almanae for the geocentric positions of the planets; but such an almanac is very expensive, and the chart published in this book furnishes an easy way of calculating



CIRCLE OF THE ECLIPTIC.

FIG. 1

the positions for ourselves within a degree, which is sufficiently accurate.

The astronomical calculations required by astrology are by no means easy. It would be a boon to the average reader if some learned astronomer, with all his tables and books at hand, would make the mathematical and astronomical calculations for us. Such a person might establish a bureau that would furnish these calculations, made with perfect accuracy, and at an expense of but a few cents, and thereby save us much time and study. But until such a bureau is established we must patiently work out the calculations as best we can.

To cast a horoscope we must know the year, month, day, and hour of birth, and the latitude and longitude of the place of birth. The latitude and longitude may be found by looking in a map, in which the longitude will be found at the top of the page and the latitude at the side. Take the longitude west from Greenwich, not from Washington. If the hour is not known, take some convenient hour in the part of the day in which the birth occurred. If nothing is known beyond the day of birth, all calculations based on the houses will have to be omitted.

First, let us see how to erect a heliocentric horoscope.

We will draw a circle and place the sun in the center. The circumference we will divide into twelve equal parts, and mark each part with one of the signs of the zodiac, as in Fig. I.

To fix the position of the earth, we must look oppo-

site the date of birth in the table (No. 1) giving the longitude of the sun for any year. This longitude is the same within a degree on a given day each year. The position of the earth will be 180 degrees from that of the sun, and may therefore be found by adding 180 degrees to the longitude of the sun if that longitude is less than 180 degrees, or subtracting 180 degrees if the longitude of the sun is more than 180 degrees. Write this position of the earth in the chart, using the sign of the zodiac and the number of degrees in that sign. This may readily be seen by looking for the longitude of the earth in Table 8, and taking the degrees of the zodiacal sign in the adjoining column.

To find the positions of the planets, look first for the longitude of the given planet on the first of January next preceding or next following the date of birth, whichever is nearest (see Table 7). Then count the exact number of days from the day of birth to Jan. 1. In the table giving the longitude of Mercury for one cycle of its orbit (Table 4), find the longitude given for Jan. 1. Then count backward or forward, according as the Jan. 1 selected is before or after the date of birth, as many days as you have found to intervene between Jan. 1 and the date of birth. When you have counted to the end without exhausting your days, go back to the beginning and keep on counting until you have reached the day required. The longitude in the table opposite this day will be the longitude of Mercury required. In case the hour of birth is not near Greenwich noon, a slight correction should be made to the longitude given in the table. Greenwich noon will be (if you are born in the

United States) several hours earlier than your noon. Just how many may be found by dividing the longitude of the place of birth by 15, since the sun rises just fifteen degrees in the sky each hour. Thus, noon in longitude 75° will be five hours later than noon at Greenwich, for which all calculations are made. Therefore noon at. Greenwich will be at seven o'clock in the morning. If you were born at or near seven o'clock, no correction will be needed. But if the hour of birth is, say, seven o'clock in the evening, an additional half day will have passed, and you should take a longitude half way between the longitude for the day you have found and the next day. So if the time is any other number of hours, take the proper proportion of the change for 24 hours and add or subtract, as the case may be.

The position of Venus may be found in the same way, but an additional difficulty appears. It takes Venus 224 days and nearly 17 hours to make one revolution around the sun. So if you have to count past the end of a cycle back to the beginning again you will have about two thirds of a day over. So to the longitude given in the table in a case like that you must add the correction given at the end (see Table 5).

The positions of the other planets will be found more easily. No corrections for hours need be made with any of them, since their motion is so slow that the change in a few hours does not amount to much.

As before, find the longitude in the table of longitudes for the nearest first of January (Table 7). Count the number of days to the date of birth.

In a column adjoining the longitude you will find

the daily motion of the planet for the same day. You will see that it is either more or less than the next following year. It usually varies in regular proportion from year to year, and the daily motion at the date of birth may be found by adding to or subtracting from the motion on Jan. 1 that proportion of the change in the daily motion which your number of days from Jan. 1 bears to 365 days. The average daily motion for the period you are calculating may be found by adding the daily motion for Jan. 1 and that found for the date of birth, and dividing by 2. Thus, if the daily motion of Mars is found to be 38′ on Jan. 1, 1887, and 26′ on Jan. 1, 1888, and you wish to find the daily motion for Nov. 1, you subtract 26 from 38, leaving 12; then as ten months intervene between Jan. 1 and Nov. 1, you take ten twelfths of 12, or 10. Subtract 10 from 38, leaving 28, and you have the daily motion on Nov. 1. The average daily motion for the period of time between Jan. 1, 1888 (the nearest Jan. 1) and Nov. 1, will be 26 plus 28 divided by 2 equals 27. Multiply 61 days, the number between Nov. 1 and Jan. 1, by 27 and you have the number of minutes the planet had moved in this time. As there are 60 minutes in a degree, you find the number of degrees by dividing your total by 60. In this case you have a very small fraction over 28 degrees. Subtract 28 degrees from the longitude of Mars on Jan. 1, 1888, and you have the true longitude for Nov. 1, 1887. (The position of Mars may be calculated more accurately, however, by means of Table 6.)

The positions of all the other planets may be found

in exactly the same way. As a general thing, the average daily motion may be computed mentally.

We now have our heliocentric horoscope complete, and may proceed to draw deductions from the various angles which the planets make with each other and with the earth.

We will next proceed to erect the geocentric horoscope. This may be done approximately by means of the two charts.*

The chart showing the orbits of the earth, Mars, Venus, and Mercury gives the correct eccentricities of these orbits. By the preceding calculations you have determined the exact longitude of each of the planets with regard to the sun. Pass a ruler or straight edge from the center to the required degree in the outer circle, and mark the orbit of the given planet where the edge of the ruler intersects it.

Then put a long needle through the center of the Geocentric Circle, and stick the point of the pin into the point you have marked as the position of the earth. See that the cross line of the geocentric circle is exactly parallel with any of the cross lines in the chart. This may be tested by noting whether the gauge shows the same distance between the two lines at either end as it does in the middle. Now stick another pin into the geocentric circle so as to keep it firmly in place, and pass a ruler from the earth center to the point where any given planet is located. Read the geocentric longi-

*Before using these charts it would be well to mount them carefully on cardboard. The Geocentric Circle may also be mounted on light cardboard, and the small space near the middle guage should be neatly cut out.

tude on the circumference of the geocentric circle. If the geocentric circle covers up the position of any planet so that it cannot be seen, take it off and pass a ruler from the earth center to the position of the planet, and make another mark along the edge of the ruler at any convenient point that can be seen when the geocentric circle is laid on the chart. This new point will do as well in determining the geocentric longitude as the position of the planet itself, and the longitude may be found by passing a ruler from the earth center to this point, and reading the degrees at the point the ruler crosses the geocentric circle.

The chart for Jupiter, Saturn, Uranus and Neptune may be used in the same way, except that the earth circle is made to vary in size, while the orbit of the different planets remains the same and is identical with the circle of degrees. Locate each planet in its proper degree in this outer circle. Then find the longitude of the earth, and pass a ruler from it to the sun center. Make a light mark at each place the ruler crosses the small inner circles. To find the geocentric position of Jupiter, place the geocentric circle on the earth center marked on the larger of the inner circles, and proceed as with the other chart. To find Saturn, place the geocentric circle on the earth center marked in the next largest circle, etc.

We now have the geocentric longitude of all the planets. The longitude of the sun may be found approximately by looking in the table of the sun's longitude opposite the day of the month of birth. We may find the geocentric position of the moon in much the

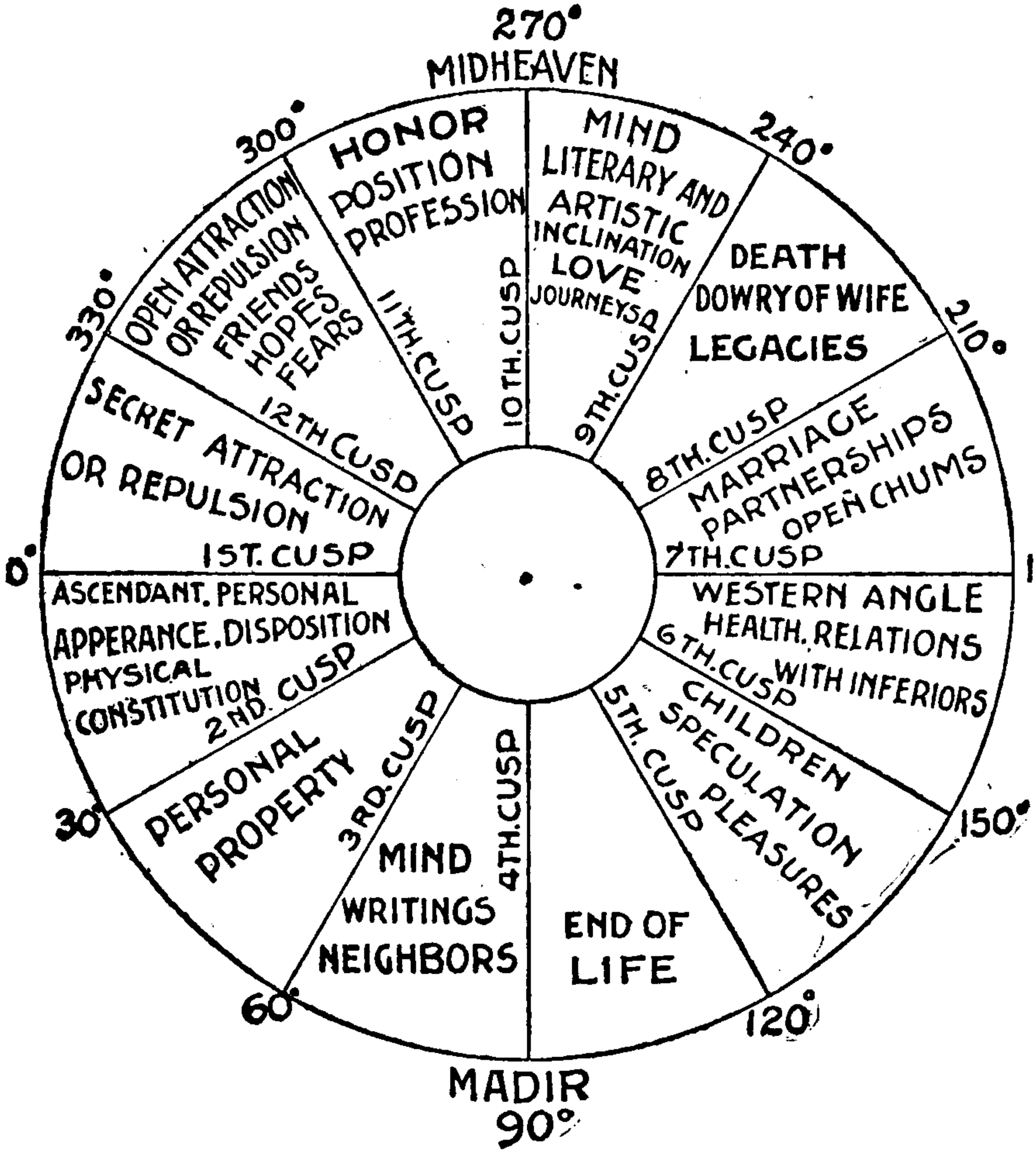

270°
MIDHEAVEN
300°
HONOR
POSITION
PROFESSION
MIND
LITERARY AND
ARTISTIC
INCLINATION
240°
330°
OPEN ATTRACTION
OR REPULSION
FRIENDS
HOPES
FEARS
11TH.CUSP
10TH.CUSP
JOURNEYS
9TH.CUSP
DEATH
DOWRY OF WIFE
LEGACIES
210°
12TH CUSP
SECRET ATTRACTION
OR REPULSION
1ST. CUSP
8TH.CUSP
MARRIAGE
PARTNERSHIPS
OPEN CHUMS
7TH.CUSP
0°
180°
ASCENDANT. PERSONAL
APPERANCE. DISPOSITION
PHYSICAL
CONSTITUTION
2ND. CUSP
WESTERN ANGLE
HEALTH. RELATIONS
WITH INFERIORS
6TH.CUSP
CHILDREN
SPECULATION
PLEASURES
5TH. CUSP
30°
PERSONAL
PROPERTY
3RD.CUSP
MIND
WRITINGS
NEIGHBORS
4TH.CUSP
END OF
LIFE
150°
60°
120°
MADIR
90°

FIG. 2

same way that we found the heliocentric positions of the planets. The moon revolves around the earth once in 27 days, 7 hours and 43 minutes. In Table 3 we may find the longitude of the moon for two different dates in each year. Find the number of days between the date of birth and the nearest given longitude. Then enter the table of the longitude of the moon for one cycle (Table 2), and find the longitude given for the nearest date, and count forward if the date of birth follows the selected date, or backward if the date of birth precedes the selected date, till you have counted as many days as intervene. You will remember that each time you pass the end of the cycle and go back to the beginning and vice versa, you must add the correction. Then find the proportion of the change in longitude for one day that corresponds to the number of hours before or after actual noon at Greenwich and add or subtract that. As the moon changes so rapidly, the calculation should be made to the exact hour.

Before entering our longitudes in a circle or chart, we must determine the houses.

Draw a circle with the earth at the center. Divide this into twelve equal parts of 30 degrees each by drawing lines from the center to the circumference (see Fig. 2). We are now ready to place the longitude of the point of the zodiac ascending at the moment of birth, and it should be written on the line that points to the middle of the left hand side. From this we pass down and around to the right, then over to the left again, exactly in the opposite direction to the hands of a watch. The sun and planets by the daily motion of the earth

appear to move through the heavens in the opposite direction, or the same as the hands of a watch. Their yearly motion is the same as the signs of the zodiac.

Under the head "sidereal time" in Table 1, you will find the sidereal time (or star time) for each day in one year. Owing to the variations in the lengths of the different years caused by leap year, the sidereal time each year is slightly different; but given the right starting point, it proceeds each year in the same ratio, as may be seen in the table. In another table (No. 7) you will find the sidereal time for Jan. 1 of each year. Find the nearest sidereal time given in the table of sidereal time to that for Jan. 1, noting the exact amount of the difference, whether more or less. Then count the number of days between Jan. 1 and the date of birth. Opposite the last day you will find the sidereal time required. To this add (or subtract) the difference noted at the beginning. You may also make a correction for the difference between sidereal time and mean time corresponding to the hours before or after Greenwich noon. After that slight correction has been made (always amounting to less than four minutes) add to or subtract from the total sidereal time the hours and minutes of the moment of birth before or after noon at the place of your birth. (Be careful not to take Greenwich noon in this case. The sidereal time given is for noon at the point of your birth.) The result will be the true sidereal time for the hour of your birth.

The tables (No. 12) of houses for three different latitudes in the United States are given at the back of this book. Select the table for the latitude nearest your own

latitude. Find the sidereal time of the hour of your birth, and opposite you will find the longitude of the cusps (or beginnings) of six of the twelve houses. The longitude of the cusps of the other six may be found by taking the same number of degrees in the sign opposite each of the first six, and placing on the cusp that comes directly opposite. The signs that are opposite may be seen in Fig. 1. You will note, also, that sometimes signs are intercepted. Thus in Fig. 5 the sign of ♌ is intercepted between the sign of ♋ and the sign of ♍. This means that the intercepted sign is wholly included in the house in which it occurs, while the house also takes in parts of two other signs.

The circle before us represents the circle of the heavens passing directly over our heads through the zenith, and directly under the earth. The ascendant represents the point rising in the east at the moment of birth, and the cusp opposite the ascendant, or the beginning of the seventh house, represents the point setting in the west at the moment of birth.

We still have one more matter to determine, and that is the declination of the sun and various planets.

The sun is supposed to have no latitude. Its declination is practically the same each year, and may be found in the column adjoining the longitude given for each day of the year (Table 4). The declination of the moon and planets differ from that of the sun for any given longitude (geocentric longitude alone is to be considered) only to the amount of their latitude. The latitude of the moon and planets is the number of degrees by

which the plane of their orbit differs from the plane of the ecliptic.

To find the declination of any planet or the moon, take the degrees of geocentric longitude and look for the nearest corresponding longitude of the sun. Note the declination of the sun given opposite this longitude, and whether it is plus or minus. Add (in the algebraic sense) this declination and about half* the latitude for the date of birth. By algebraic sense, we mean that you must notice the marks of plus and minus. If both are plus or both are minus, you add the two numbers together and give the sum the same mark of plus or minus that the two added had. If one is plus and one is minus, the algebraic sum is equal to the difference of the two numbers, to which you must give the plus or minus mark of the larger of the two.

The latitude of the planets is given for Jan. 1, and to find the latitude for the date of birth you must add or subtract the proportion of the difference representing the change for one year in order to find the true latitude

The latitude of the moon and the planets Mercury and Venus may be found more accurately by taking the latitude given in the table with the longitudes for the nearest Jan. 1 or other date, and entering the table giving the longitude and latitude for a single cycle. Find the given latitude and count the number of days intervening between Jan. 1 or other given date and the date

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*It is difficult to get the declination very exactly in this way, because the apparent declination as seen from the earth is variously affected by the latitude. If the exact declination is desired, it is advisable to refer to the Nautical Almanac of the date of birth.

of birth. The latitude opposite the last day will be the correct latitude. You would think that the latitude should be the same for each succeeding revolution of a given planet; but we find that it varies slightly from year to year. So the true latitude is not always that opposite the true longitude as given in the table.

The above directions will be fully illustrated in Chapter VIII.

We now have all the astronomical data that will be required. We therefore proceed to the interpretation of our horoscope.

CHAPTER III.

THE SUN AND THE ZODIAC.

Having perfected the celestial chart described in the preceding chapter we have done with astronomy and turn to astrology, which is the science of interpreting what we have before us. First we will consider the sun, and see what it may mean alone and of itself when situated in the various signs of the zodiac.

The sun gives all kinds of light, from the actinic rays down, and especially a large amount of heat. It may be presumed that the process of crystallization is most rapid while the sun is above the earth. If it has not yet risen, crystallization is probably retarded until it does rise. So we may regard the sun as the great intensifier of whatever star or planet it may be situated with. And first of all it intensifies the influence of the special signs of the zodiac.

The influence of these signs is doubtless due partly to the fixed stars in each, partly to the situation in regard to the equator, affecting gravitation and the molecular arrangement dependent on gravity, and partly to the situation in regard to the magnetic poles. This last supposition is the only explanation I can make of the fact that certain signs seem associated with certain countries not in the order of their latitude.

The fixed stars have moved back some thirty degrees since the time of Ptolemy, and as far as they affect the

nature of the sign, the sign has probably changed since his time. So I take the nature of the signs as a whole from a modern writer instead of Ptolemy. Mr. Hiram Butler, author of "Solar Biology," has made a special study of the significance of the signs by direct observation, and in each case I have myself verified his conclusions.

The signs* are divided into four groups, of three signs each, one hundred and twenty degrees apart, or the space of four signs. Beginning with Aries and taking every fourth sign we have

THE FIRE TRIPLICITY—Aries (♈), Leo (♌), and Sagittarius (♐). Persons born when the sun is in either of these are invariably active, impetuous, generous, energetic, and not liable to infectious diseases.

Beginning with Taurus and taking every fourth sign we have

THE EARTH TRIPLICITY—Taurus (♉), Virgo (♍), and Capricorn (♑). Persons born when the sun is in either of these are reserved, fond of the good things of earth, often musical, and observers of the conventionalities of life, though not at all timid of public opinion. They are usually a stiff-necked race.

Beginning with Gemini and taking every fourth sign we have

THE AIR TRIPLICITY—Gemini (♊), Libra (♎), and Aquarius (♒). Persons born when the sun is in either of these are mentally quick and versatile, changeable and unsteady, and for the most part good writers, lecturers, and teachers, affable and adaptable.

*See Appendix A and Appendix B.

Beginning with Cancer and taking every fourth sign we have

THE WATER TRIPLICITY—Cancer (♋), Scorpio (♏), and Pisces (♓). Persons born when the sun is in either of these signs are domestic, though often unhappy in domestic relations. They are well adapted to shop-keeping, trading, farming, and so forth, and are usually good housekeepers and managers.

And now let us consider each sign separately.

1. The Fire Triplicity.

♈ The leading characteristic of those born under Aries is mental activity and mechanical ability, and they are naturally fond of music and dancing. Hence they are energetic leaders in business and society; their danger is brain disease.

♌ The leading characteristic of those born under Leo is their intensity and nobility of love. Though often impetuous and rash, they are indulged because of their undoubted nobility. They are "handy" and active, and excel in mercantile and intellectual pursuits. This is the distinctively masculine sign.

♐ The leading characteristic of those born under Sagittarius is the unfailing activity of the fire triplicity directed inward, away from society, and toward purely independent undertakings regardless of the attitude of others. They are generous, impulsive, prophetic, and high in their aims.

2. The Air Triplicity.

II. The leading characteristic of those born under Gemini is their nervous restlessness and fickleness, and artistic and intuitive bent of mind, making writers, pub-

lic speakers, commercial travellers, and society women of graceful and varied talents, but unstable, like air.

♎ The leading characteristic of those born under Libra is their keenness of mental intuition, or foresight, and great correctness of first impressions; hence they are excellent speculators in commerce.

♒ The leading characteristic of those born under Aquarius is their quiet, magnetic power over people, and hence their fondness for crowds and city life. They make natural politicians and financiers, patrons of opera and public enterprises of all sorts. This is assisted by their honorable character.

3. The Earth Triplicity.

♉ The leading characteristic of those born under Taurus is sensuousness and animal sympathy with all forms of life, balanced by a certain phlegmatic stubbornness, accompanying large avoirdupois. They seem particularly adapted for the medical profession.

♍ The leading characteristic of those born under Virgo is their keen, accurate, discriminating eye, with a somewhat materialistic cast of mind. They are very fond of music, and excel in critical literary work of all sorts, as they understand life well because of their suppressed passion.

♑ The leading characteristic of those born under Capricorn is their fondness for a free, lavish, conventional life, and large plans and schemes. Hence they are natural organizers of public enterprises and business plans, and are not happy unless they are wealthy.

4. The Water Triplicity.

♋ The leading characteristic of those born under

Cancer is their extreme personal sensitiveness, fondness for domestic life and trade and manufacture of domestic articles. This is the distinctly feminine sign, and the women are talkative, while the men are quiet and negative.

♏ The leading characteristic of those born under Scorpio is their callous and exacting nature, together with great respect for public ideas and customs and persons in high position. They are therefore admirably adapted to carry out popular ideas with a rigid thoroughness impossible under other sings, and are excellent public officials.

♓ The leading characteristic of those born under Pisces is their faithful studiousness and lack of self-confidence. They are careful, anxious, restless and thoughtful, over-conscientious, and faithful servants, affable, upright, kind, fond of history and travel.

CHAPTER IV.

THE MOON AND THE PLANETS.

The sun (☉) is considered masculine and positive, because it is the source of energy and life. The moon (☽) is considered feminine and negative, because it shines by reflected light. The greater part of the light which reaches it is reflected, and this physical fact seems closely.connected with the sympathetic and intuitive side of the mind. I believe that quick, intuitive sympathy with persons and situations depends very largely on the amount of light which the moon reflects, especially if that light reaches the earth at a good angle. Thus when the moon is full, sympathetic perception is at its maximum, and it is proportionately less as the moon is nearer the sun, either waxing or waning, and least when it is nearly on a line with the sun.

The moon is said to be one of the mental rulers, governing the sympathetic and intuitive faculties of the mind wherever it may be situated, and in a man's horoscope it is closely connected with marriage, as we shall see later.

Like the sun, but in a less degree, it intensifies the various signs of the zodiac, and in jdging the effect of the sun in any sign, we must consider it as modified by the sign the moon is in.* Thus, if the sun be in

*See Appendix C.

Sagittary and the moon be in Gemini, the native's generosity and impetuosity will go out in the direction of science, oratory, or the like, and with all his fire he will be versatile, original, and keen. But if the moon is in Cancer, his fire and impetuosity will be directed more to domestic affairs. And so with all the other signs. The sign in which the sun is will be strongest, but it will be modified by the sign in which the moon is.

The sun has the most general significance, but the moon as we have seen is somewhat specialized, and the planets are much more specialized. The planets shine largely by reflected light, but they differ enormously in the kind of light they absorb and that which they reflect. A few of the more remote probably shine somewhat with their own light. They are stronger or weaker according to the part of the zodiac they are in. For if the part of the zodiac corresponds with their natures, they are strengthened, but if it is different they are weakened.

We know seven planets beside the earth which are large enough to be considered here. Two of these were unknown to the ancients (Uranus and Neptune), and their lack of knowledge of them, especially of Uranus, threw their calculations sadly out. For instance, had Kepler known that Uranus (or Herschel, as it is sometimes called) was on the midheaven at the birth of his patron Wallenstein he might have predicted that man's death, which as a matter of fact he failed to do. Uranus especially often causes strange vagaries.

Mercury (☿) is nearest the sun, and consequently in the horoscopical chart will always be found near the

sun, as will Venus also. Mercury is the joint ruler of the mind with the moon, but it governs the active intellectual qualities, not the passive or sympathetic. From Mercury you get powers of oratory, quick thought and perception, intellectual brilliancy. The sign it is most like is Gemini, and the next is Virgo. Mercury in Scorpio gives intense, narrow mental application, and persons with this combination are adapted to continuous scientific thinking. Brain diseases are also connected with Mercury, especially brain fever and madness, while harmless lunacy is connected with the moon.

Venus (♀) is, next to Mercury, nearest the sun, and indicates a soft, graceful, voluptuous nature, usually not at all bad, but fond of dress, music, literature, and love-making. It is admirably personified in the beautiful, graceful, sweet tempered goddess the Romans called Venus and the Greeks Aphrodite. Venus is especially at home in Taurus, and in a quiet and domestic way in Pisces. In Scorpio it is vicious and sensual to a certain extent. It is closely connected with the moon, and when in conjunction it makes beautiful, languid, sweet-tempered women and effeminate men.

Next comes Mars (♂), the fiery, hot-tempered planet. Connected with Mercury it gives a touchy, violent temper; with Venus it makes passionate lovers; with Jupiter it makes brave soldiers. With Mercury also it makes mathematicians, people fond of surveying and civil engineering. People with Mars strong in the horoscope like to live out of doors. Mars is strongest in Aries, and next strongest in Scorpio.

Next comes Jupiter (♃), the strongest of the planets, though Saturn is about equally strong. Jupiter is the planet of ambition, generosity, nobleness, reverence, and it especially governs leaders of men. The man with Jupiter strong in his horoscope is almost sure to be chosen spontaneously by his comrades as their chief, and a good, kindly, high-minded chief he will be. It is easy to see that Jupiter is calculated to bring good fortune.

Saturn (♄), which comes next to Jupiter, and next to him is the largest and the brightest, is almost the reverse in nature. Saturn is represented as an old man, with skinny fingers, long nails and unkempt hair, a miser, fond of digging in the earth, mean and stingy. But Saturn is not really so bad as he is sometimes represented. He gives patience and tenacity, and makes persons born when he is strong to be economical and saving instead of recklessly generous, as Jupiter men are. Jupiter is too generous and open-handed, Saturn too miserly; but put them together and you have the best possible combination. In connection with Mercury, Saturn gives powers of continuous thought and patient application of the mind. He makes Venus reserved and modest, not wearing her heart on her sleeve. He cools the ardor of Mars and prevents in large measure the fevers that Mars excites. Favorably situated with regard to the sun he gives good business habits, and he counteracts the changeableness of the moon and her ready sympathy with everything that comes along. He is strongest in Capricorn, and after that in Aquarius and Libra.

Uranus (♅) was unknown to the ancients*, indeed it was not discovered until the beginning of the nineteenth century. It has a very important influence in a horoscope, nevertheless, and explains, as I have said, many of the difficulties of the ancients. I call it one of the blind planets, Neptune being the other, because it cannot be seen with the naked eye, and seems to act in a subtle manner, under the surface. It is strong in the horoscopes of those people who do erratic things, for which they nevertheless think they have a very good reason though others cannot understand it. A woman who is hard to understand is often under his influence, and if Uranus is connected with Venus or the moon she will be liable to have illicit love-affairs. Uranus also governs people in authority, that is in public office, and controls changes and traveling, as does the moon also. Connected with Mercury, he gives a subtle, analytic mind, highly original and independent. Such persons are likely to discover new scientific principles, and may get into trouble by not being conventional enough in their thought. He also governs public life, and hence is strongest in Aquarius for that quality, but in Gemini as regards originality of thought and intellectual invention. In Cancer he makes women unfaithful (men, too, in a less degree). A connection with the moon or Venus tends to the same thing.

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*The names of Mercury, Venus, Mars, Jupiter and Saturn were given by the ancients because the astrological influence of these planets corresponded to the supposed characters of these deities. But Uranus and Neptune were named by modern astronomers who knew nothing of astrology. So the names of these planets do not indicate their natures in any degree, as the charlatan writers on astrology would lead us to believe.

Of the influence of Neptune (♆) little is known. This planet was discovered only about fifty years ago, and its influence is evidently very much under the surface, very subtle. For myself, I think it may be connected with the highest kind of poetry. Shelley was said to have it in the strongest place in his horoscope. It may govern clairvoyants, and others of supersensitive mind. But I am not at all sure, there is so little material of observation to judge from. Perhaps one of our readers will investigate the subject. It is said to be strongest in Libra.

Saturn, Uranus, and Neptune certainly all give high powers of imagination.

A planet is said to be in its "detriment" or "fall" when it is weakest, strongest in its "own sign," and rather strong in its "exaltation." Ptolemy says the various planets are also more or less strong in the various parts of each sign. These parts he calls "terms." The following table is based on Ptolemy, but is considerably modified by the introduction of the two new planets. I have made a few changes in accordance with modern observations.

PLANET	OWN SIGN	EXALTATION	DETRIMENT
Mercury	Gemini	Virgo	Pisces
Venus	Taurus	Pisces	Libra
Mars	Aries	Scorpio and Capri.	Cancer
Jupiter	Sagittary	Pisces and Cancer	Capricorn
Saturn	Capricorn	Libra	Aries
Uranus	Aquarius	Gemini	Taurus
Neptune	Libra	Aquarius	Pisces
Sun	Leo	Aries	Aquarius
Moon	Cancer	Taurus	Capricorn

The following table of "terms" is taken from Ptolemy without alteration. Of course the two recently discovered planets are not included; but I consider the omission unimportant. Ptolemy gives his reasons for his division of the signs into these "terms," which seem to me very sound, but space forbids repeating them. As far as I have been able to observe, the table is very accurate, and it is certainly useful, for it shows the relative strength of each planet in each sign, as well as the

PTOLEMY'S TABLE OF TERMS.

Aries.	Taurus.	Gemini.	Cancer.	Leo.	Virgo.
Jup. 6 6	Ven. 8 8	Mer. 7 7	Mars 6 6	Jup. 6 6	Mer. 7 7
Mars 8 14	Mer. 7 15	Jup. 6 13	Mer. 7 13	Sat. Mer. 7 13	Ven. 6 13
Mer. 7 21	Jup. 7 22	Ven. 7 20	Jup. 7 20	Sat. 6 19	Jup. 5 18
Ven. 5 26	Sat. 2 4 24 26	Mars 6 26	Ven. 7 27	Ven. Jup. 6 25	Sat. 6 24
Sat. 4 30	Mars 6 4 30	Sat. 4 30	Sat. 3 30	Mars 5 30	Mars 6 30

Libra.	Scorpio.	Sagittary.	Capricorn.	Aquarius.	Pisces,
Sat. 6 6	Mars 6 6	Jup. 8 8	Ven. 6 6	Sat. 6 6	Jup. 8 8
Ven. 5 11	Ven. 8 14	Ven. 6 14	Mer. 6 12	Mer. 6 12	Ven. 6 14
Mer. 8 19	Jup. 7 13 Jup. 7 21	Mars 5 19	Jup. 7 19	Ven. 8 20	Mer. 6 20
Jup. 5 16	Ven. 8				
Jup. 5 24	Mer. 6 27	Sat. 6 25	Sat. 6 25	Jup. 5 25	Mars 6 26
Mer. 8			Mars		5 25
Mars 6 30	Sat. 3 30	Mars 5 30	Mars 5 30	Mars 5 30	Sat. 4 30
			Sat.		3

Note.—This table is taken from J. M. Ashmand's translation of Ptolemy's "Tetrabiblos." But I have corrected one or two obvious typographical errors.

part of the sign it is strongest in. In the first column is the name of the planet, in the second the number of degrees the planet is entitled to in that sign, and the third column shows to what degree of the sign this brings us. When a planet has a double right in a sign, two numbers are given, and when two planets have an equal right they are bracketed together.

CHAPTER V.

HOUSES AND ANGLES.

Skill in judging a horoscope consists in striking a balance between the relative strengths of all the planets. sun, moon, and signs of the zodiac. The rule should be to make a table of all these and mark opposite each its various claims to strength in the horoscope, indicating that claim by a number in each case. The planet with the strongest claim will be the ruling planet, and correspond to the strongest characteristics of the nature analyzed, and this will be modified by the others in proportion to their strength.

In the preceding chapters we have seen the relative strength of the sun and planets as determined by situation in the zodiac. There is a still more important source of strength, however, and that is situation in the "angles," as they are called. There are four angles. The top point of the chart, or cusp of the tenth house, is called the "south angle," because in the zodiac it is nearest the south point of the horizon. Directly opposite this, at the very bottom, is the "north angle," which is under the earth, and in these northern latitudes it is nearest the north point of the horizon. It is on the cusp of the fourth house. At the left of the figure, on the cusp of the first house, is the "east angle" or ascendant, which marks the place where the heavenly bodies rise. Opposite it on the right is the "west angle."

The "south angle" at the top, is called more commonly the midheaven, or *medium coeli* (M. C.), while the angle at the bottom is called the nadir or *imum coeli* (I. C.). The midheaven and the ascendant seem to me equally strong. The heavenly bodies rise at the ascendant and pass through the houses in reverse order. Of course at the moment of birth the rays are most powerful which come down direct, that is, from the midheaven. But on the other hand, those which come from the ascendant, though weaker at first, have twice as long a time to affect crystallization. I should say that the first strong bent of a man's life was given by the midheaven, and the development along the line of that bent was most determined by the ascendant. The ascendant gives obvious characteristics, the midheaven hidden. The other two angles also seem to me of equal importance, both less strong than the ascendant and midheaven. A heavenly body at the west angle pours in its light strongly for the moment of birth, but it is then immediately obscured. The nadir will rise first, though for the time being under the earth. But at the nadir a planet has an admirable opportunity to modify all the other heavenly bodies by its upward gleaming light. I conceive that a body at the nadir sends its light so that the rays meet those which come down from above the earth (of course before they reach the earth), and so modifies their light while it is still at a distance. The modified light which then meets the earth from above has a more diffused quality.

As to the relative strength of these angles, I should

rate the ascendent and midheaven at 9 each, the west angle and nadir 7 each.

The ascendant determines one's physique, height, weight, color and health*. The midheaven determines the bent of the mind, and hence the professsion and honor in life. The western angle determines the bent of the affections, and hence marriage, partnerships, and sympathies in general. It is the angle of the moon, as the ascendant is the angle of the sun. The nadir, or lower angle is the modifier. If the midheaven is called the angle of Mercury, and the ascendant the angle of the sun, this may be called the angle of all the other planets. Jupiter here lends his nature to the whole life, and in general makes great and successful men; Saturn makes a life of misfortune and narrow circumstances, but gives great poetic powers and stubborn patience under the ills that come. The other planets likewise modify life according to their nature.

But there are other angles which are very important, too, and they are the cusps of the various houses. Ptolemy considers planets above the earth in the eastern sky (that is, upper left hand quadrant of the chart) most strongly situated because they are longest above the earth. The other quadrant above the earth is probably the next strongest, and next to that the lower left hand quadrant, because it will rise before the other lower quadrant; and the weakest is the lower right hand quadrant as shown in the chart.

Of course a planet anywhere in the twelfth house is moving rapidly toward the cusp of the twelfth, which

*See Appendix D.

is the important point. Most astrologers speak of the whole house as signifying so and so. I prefer to follow Ptolemy, as I conceive his meaning to be, and speak of the angle at the cusp.

If the angle of human crystallization is sixty degrees, following the analogy of the refraction of light in mineral crystals, all the light takes effect on the horizon or angle of the ascendant, and then it gradually diminishes until at thirty degrees, or the cusp of the twelfth house, the light is all shut out. From that it gradually increases again until at sixty degrees, or the cusp of the eleventh house its effect is at the full again. Or you may say that at the ascendant and at sixty degrees above the ascendant the light strikes the human crystal on an angle, while at thirty degrees it strikes the flat middle of a face of a crystal. Ptolemy calls this angle "inconjunet," which is an admirable name for it. I would call it the blind angle. A planet at this angle certainly produces an effect, but it is hidden, under the surface. This is the angle of hidden enemies. The cusp of the eleventh, on the other hand, is the angle of friends, hopes, and all that is open and apparent. According to my theory, the midheaven should be another "blind" angle, and experience shows it to be associated with one's profession, employment, honors, etc., those things that come subtly and in ways we do not see very clearly. And so with the other angles.

The following is a summary of the influence of these angles: A planet is strong if within one or two degrees of the angles of a cusp, especially if it is moving toward the angle. The angles below the earth are very

similar in nature to those above, and may be said to modify those above, in the way that I have spoken of the nadir as a modifying angle. I will speak first of the angles above the earth.

First Cusp. This is associated with the personal appearance and disposition of the native. The whole sign on this cusp may be taken as in general indicative of this feature, but planets in the sign, or within twenty-five degrees below the angle, or in aspect to the angle, will greatly modify the appearance.

The influence of the various signs and planets is as follows:

Aries gives medium height and reddish-brown or swarthy complexion.

Taurus gives short stature and thickset body, round, and animal in appearance.

Gemini gives medium height, indifferent complexion, and an active, agile manner.

Cancer gives moderate stature, an oval face, and a weak, timid manner, lacking energy, more receptive than positive.

Leo gives large stature and build, clear complexion, and a firm, bold, courteous manner.

Virgo gives a slender form, dark ruddy complexion, and grace and agility.

Libra gives a tall and not very heavy form, fair, indifferent complexion, and an amiable, intellectual manner, with little show of emotion.

Scorpio gives short stature, thickset body, broad, coarse face, rather hard in appearance and dark. The manner is stolidly indifferent.

Sagittary makes men handsome and well-formed, sometimes bald, generally above the medium height with a commanding carriage, and free, open countenance. The manner is courteous, though often conceited.

Capricorn gives middle stature, a thin build, and a carriage not graceful. The manner may be called diplomatic.

Aquarius gives a moderately tall, well-built stature, fair complexion, and a firm, kindly, undeviating manner.

Pisces gives low stature, short limbs often stout, and a slow, uncomprehending manner, far from prepossessing.

For the disposition and further details, see the chapter on "The Sun and the Zodiac."

Jupiter gives form and qualities almost exactly like Sagittary alone. If in Sagittary it strengthens the effect.

Saturn gives dark or black hair and complexion, and a very reserved manner.

Mars gives a bright red complexion, sandy or red hair, and quick, decided manner.

Venus gives a soft glow of color and a downy appearance, almost always a fair complexion, a more or less rounded contour, and gentle, pleasant manner.

Mercury tends to less avoirdupois, and quick, intellectual manner and features.

Uranus and Neptune do not seem to change the physique very much, but if in the rising sign they affect the mind according to their natures as before described.

The moon tends to paleness, sensitiveness, and vacillating habits.

The sun gives glow and color, and the effects described for the sun in the various signs are intensified by position in this powerful angle.

Twelfth Cusp. This is next in order above the horizon, and the angle seems associated with hidden personal attraction or repulsion. Saturn or Mars here would make enemies according to their nature, and Jupiter or Venus friends. If this angle is well occupied the native will be called "magnetic," if badly occupied replusion will take the place of attraction; but both will be hidden and inexplicable.

Eleventh Cusp. This is the open angle, and if well occupied gives friends of the nature of the planets occupying, and also hopes and general outward happiness. If badly occupied it signifies false friends and fears.

Tenth Cusp. This angle is associated with general success in life and the nature of the employment.

Ninth Cusp. This is another open cusp, and is said to be associated with writings, publication, religion, and science, and has great influence on the mind and inclinations.

Eighth Cusp. This is another blind angle. It is said to be associated with legacies and dowry, which means, I suppose, one's hidden, peculiar relations in the matter of wealth.

Seventh Cusp. This is an open angle, said to be connected with all one's open relations with people in general. The married partner is characterized here, and all kinds of open friendly and hostile relations are determined.

Sixth Cusp. This is said to be connected with serv-

ants and persons in subordinate positions, and to show the part of the body affected by disease.

Fifth Cusp. This angle is said to be connected with one's children and one's speculations, and in general the native's pleasures. It will be observed that it is in opposition to the cusp of friends and hopes.

Fourth Cusp. This is the important angle of the nadir, and is said to be connected with the end of life, as the midheaven is with the beginning.

Third Cusp. This angle is said to be associated with short journeys, letters, writings, and the mental faculties in general. It is in opposition to the Ninth.

Second Cusp. This is said to indicate one's pecuniary prospects. It is in opposition to the Eighth.

I do not think that the significance of these angles is very well understood. If strictly analyzed they should correspond to certain qualities of the mind in each case, which qualities in turn may affect the events indicated. The significances given above I know in a general way to be correct. Others commonly given I have omitted because I have not proved them. For instance, the midheaven is said to show the mother's affairs and the nadir the father's. This matter of relationship will be spoken of in a subsequent chapter. There is a very curious link here.

OTHER ANGLES.

The above angles have been counted from the eastern horizon toward the west. Ptolemy seems to me to point out clearly, though not in so many words, the significance of angles counted from the south toward the north along the meridian. These angles are found by

adding the declination of the heavenly body to the difference between the latitude of the place and ninety degrees. It is obvious that every degree you go from the equator toward the north, the equator will seem to sink in the heavens a degree toward the south. If you take from ninety degrees the number of degrees it has sunk (that is, the latitude) you will have left the number of degrees it is above the horizon. If the heavenly body is north of the equator it will be just so many more degrees above the horizon, and if south of the equator just so many degrees less.

So when the body passes the meridian it will be a certain number of degrees above the horizon on exactly the same kind of a circle as that through the zenith on which the cusps of the houses are marked. Now, I do not know much about these angles, having only deduced them from my crystallization theory. But I should say that sixty degrees was the open and obvious angle, the apparently strong angle, and thirty degrees was the blind angle, while other degrees above or below would vary in proportion.

In the horoscope analyzed in Chap. VIII. Mars is not particularly strongly situated according to the calculations of most astrologers. But I know it to be very strong in the nature of the native. His lifelong motto has been, "I was ever a fighter, so one fight more, the last and the best"—a slight modification of a line in a poem of Browning's. Mars is situated at about sixty degrees from the southern angle. This open angle agrees with the open nature of Mars and accounts for its strength in the native.

I conceive Mars, Venus and Mercury to be best at an open angle, Jupiter, Saturn and Uranus at a blind angle, though perhaps Jupiter is equally strong at either.

CHAPTER VI.

ASPECTS.

The Hindu astrologers base everything on the exact degree of the ascendant. In their system a difference of twenty seconds will produce widely differing results. They seem to me to carry their devotion to the influence of the zodiac (with them a fixed zodiac, not reckoned from the vernal equinox) to an extreme that must largely vitiate their system. It is simply impossible to know the time of birth nearer than a minute.

Western astrologers, on the other hand, have equally exaggerated the effect of aspects. They have invented a multitude of new aspects, radically contrary to the theory of Ptolemy. The great Kepler's name is attached to some of these new aspects, but for all that I have never been able to believe in them. There may be a system of crystallization on the quintile system; that is, dividing the circle into five equal parts, of 72 degrees each. In that case 72 degrees would correspond to the ordinary sextile, 144 degrees to the trine, and 36 degrees to the "inconjunct" angle of Ptolemy. There may be other crystals with still other angles of crystallization. But in mineralogy the same system of crystallization is preserved absolutely, whatever other irregularities there may be.

According to Ptolemy there are four aspects, as follows:

The sextile, or 60 degrees.
The trine, or 120 degrees.
The square, or 90 degrees.
The opposition, or 180 degrees.
To these may be added conjunction.
The sextile and trine are relations between two open angles or two blind angles, or at least between two rays of the same degree of intensity. The square is a relation between an open angle and a blind angle, or at least between rays of opposite intensities; and the opposition, though between angles of the same kind, leads to direct interference of light when the light coming from either side is of opposite character. Besides, in addition to interference in the case of the opposition aspect, one angle is increasing in light, the other diminishing (on the principle of the blind and open angles).

There is still another aspect of importance, and that is the conjunction. In this case the light is mingled before it reaches the earth. Sometimes the mixture is harmonious, sometimes it is a union of opposites that hate each other and the result is not of the best.

There are also two ways in which to ascertain how many degrees apart two heavenly bodies are. It may be counted on the circle of the zodiac, or that circle over the earth passing through the zenith, on which the cusps of the houses are calculated. It is very easy to reckon in the zodiac, for every aspect will be between bodies which have the same number of degrees of longitude in a sign. Thus 5 Gemini is in square with 5 Virgo, and in opposition with 5 Sagittary. It is also in trine with

5 Libra and in sextile with 5 Leo. And so in other cases.

But an aspect does not need to be exactly on the degree to count. Each planet and the sun and moon have what is called an "orb of influence" within which its rays are effective in forming an aspect. These orbs of influence are as follows:

Sun	**17°**	**Moon**	**12°**	**Jupiter**	**10°**	**Saturn**	**9°**	**Venus**	**8°**
Mars	**8°**	**Uranus**	**8°**	**Mercury**	**8°**	**Neptune**	**7°**		

To ascertain if two bodies are in aspect, add their orbs together and divide by two. If the result is greater than the amount either lacks of forming an exact aspect they are said to influence each other. But of course the degree of strength depends on the nearness to the exact point of aspect.

Aspects are also various in strength as they are made from different signs. They are strongest from the so-called

Cardinal and Movable Signs: Aries, Cancer, Libra, and Capricorn. They are next strongest from the

Fixed Signs: Taurus, Leo, Scorpio, and Aquarius. They are weakest from the

Common Signs: Gemini, Virgo, Sagittary, and Pisces.

Each of these sets of signs are in square and opposition to each other, so that a trine or sextile aspect would be from signs different in power, and accordingly that planet is strongest which is from the strongest sign (other conditions being equal).

Astrologers usually speak of the trine and sextile as good, and the square and opposition as evil, aspects, just

as they speak of Saturn, Uranus, and Mars as the Infortunes or Malefics, and Jupiter, Venus, and the sun as the Fortunes (also the moon and Mercury when not afflicted). The evil aspects are called "affliction."

In a sense this division into good and evil is true, but only in a very restricted sense. Happiness and health come from the golden mean. Now Jupiter and Venus are not far from that golden mean, while Saturn goes to extreme reserve and coldness of nature and Mars to extreme heat. But set Mars against Saturn and the average is the mean, too. Mars means courage, high spirit, daring. Too much is a bad thing, just as too much stubbornness and miserliness is bad, though we call patience and thrift virtues, both of which come from Saturn. And too much of the golden mean makes insipidity, and too much generosity is foolhardiness. Jupiter if not restrained by Saturn makes the spendthrift, who is as bad as the miser.

So in regard to aspects. The square and opposition aspects between Saturn or Mars and the sun or moon, or between the first two and Jupiter or Venus, make sad havoc, because two antagonistic forces contend for the mastery, and they are equally balanced because they come from signs of equal power. But the square and opposition aspects between Jupiter or Venus, two planets not in conflict, or between Jupiter or Venus and the sun or moon are helpful rather than the reverse. There is always a little fluctuation produced by these aspects, a little irregularity, which is not apparent in the trine and sextile. And even the bad aspects of the bad planets are not altogether bad. Out of such come poets

with their fine imaginations. And though they have rather a hard time of it in the world because of the struggle against opposing forces, still it is this contention that strikes out the divine fire, and some people think the reward is worth the hardship.

The trine and opposition are respectively about twice as strong as the sextile and square.

The relative strength and importance of the various planets is about proportioned to the number of degrees in their orb of influence. Thus the sun is strongest, next the moon, next Jupiter, next Saturn, etc.

In judging the meaning of an aspect, consider the natures of the planets, see (all things considered) which planet is strongest, and so average the result.

Aspects between the sun and any planet affect the health, and hence the business prospects. Depression or irregularity in the vital functions always interferes with business, while vigor, buoyancy, and hope make business go merrily.

Aspects between the moon and any planet affect the feelings, the emotions. Extremes of feeling make people go crazy, and excess in any direction causes unhappiness. Thus too much Saturn produces depression and melancholy, too much Mars makes a rash, tumultuons temperament. Too much Uranus causes vagaries, eccentricity, too much independence, and often illicit connections between men and women. Too much Jupiter makes reckless generosity, the spendthrift. Too much Venus makes an over-fondness for luxury, and all the sweet, soft things of life. But Mercury and the

moon seem always to get on well together, as they are indeed joint rulers of the mind.

The moon is very sensitive to other planets, and Mercury equally so. Qualities of intellect depend very largely indeed on the aspects to Mercury. Aspects of any kind from Jupiter or Venus produce mental activity, Jupiter in the direction of ambition, politics, government, etc., Venus toward art, music, and beauty however expressed. Uranus produces originality of a very marked kind, hence scientific thinkers; Saturn poetic inspiration of the melancholy order. A peculiar thing is that the square or opposition of Saturn to the moon produces anguish of fear. Such people suffer frightfully from timidity, and insanity often results. The favorable aspects give great patience and continuity of thought, especially valuable to scientific men; for while Uranus gives originality it makes the mind wander. The aspects of Neptune to the moon probably give powers of supersensitive perception.

The aspects of Mars and Saturn seem largely to offset each other's influence, uniting courage with endurance. Mars with Venus gives sensual passion, with the sun liability to fevers, with Uranus violence in individual opinion, with Jupiter warriors.

The aspects of Jupiter are such as one may easily imagine, but the ill aspects of the extreme planets are highly unfavorable to business success, the attainment of social position, and general happiness of the even, temperate kind.

Venus and Mars harmonize, though their union does cause heated passion. Venus affected by Uranus causes

improper unions between men and women, not through badness of heart, but rather from independence of behavior. Saturn restrains the ardors which Mars increases, and makes women cold and chaste and lacking in affection. The favorable aspects of Jupiter and Venus produce adaptability to please the other sex and fit for social life in general, marriage in particular.

Aspects of Uranus with Saturn mean little, except that they increase eccentricity and affect unfavorably the houses or angles they happen to be in.

As to the aspect of conjunction, the student must judge for himself. Such aspects may be considered favorable for the most part, and their evil comes from excess of the quality. Thus if Saturn is in conjunction with the sun, there is an excess of the quality of Saturn in the nature, melancholy, and depression, and tendency to lingering illnesses. But this excess may easily be offset by other considerations and the result be only persistence, endurance, and a steadfast, thrifty nature, not too gay.

Similar in every way to the conjunction is another aspect of a different kind, the parallel of declination. The same declination, either north or south, it matters not, produces a union of the influences of the two bodies. It is found by a simple comparison between the declinations found for the day of birth, and operates within three degrees. From what Ptolemy says of the strength of aspects from planets in signs "beholding each other," I judge that parallel of declination on the same side of the equator is much the stronger.

Aspects are usually reckoned on the circle of the eclip-

tic by the difference in longitude. But aspects may also be reckoned on the mundane circle, which we see represented by the houses. We may note them by getting the relative position in each house and find the difference in degrees, reckoning each house as 30 degrees instead of the number of degrees between the cusps.

RETROGRADE PLANETS.

As the earth moves faster than some planets and slower than others, there are times when the planets seem to move backward in the ecliptic. At such times the planets are said to be retrograde. The planets whose orbits are greater than that of the earth will be retrograde when the earth in its orbit comes near them, and, by its greater speed, passes them. Mercury and Venus will be retrograde when they come near the earth and by their greater speed pass it.

When a planet is retrograde its influence is greatly intensified for good or evil.

CHAPTER VII.

PREDICTION.

The most interesting phase of astrology is that of prediction, yet of course it is the most difficult and the most uncertain. To predict from the configuration of the stars no doubt requires a certain special talent, a peculiar kind of judgment. Ptolemy says only persons gifted by the gods can predict particulars, in any case.

Briefly to summarize what may be predicted and what not be, we may say:

1. Outside circumstances as modifying a man's condition in life cannot be predicted. The planetary conditions of light, etc., affect only the man's nature, and only so far as a man's fortune is determined by his own nature and characteristics can we hope to have any knowledge of it.

2. But a man with a talent for picking out bad situations, choosing rascals for friends, and failing at the right moment to seize the offered opportunity, will seem to be the victim of circumstances when in reality his fortune is the direct result of his own nature.

3. Speaking particularly, however, it would seem that a man's nature changes with his maturity, and that not in any regular way. At certain times of his life he has a tendency to waywardness, at another perhaps to rheumatism, at another he is very unlucky in business.

These tendencies of his nature can be foretold by a method explained by Ptolemy, with a certain amount of precision.

There are two distinct methods of forecasting the tendencies of a man's nature in the successive periods of his life, and to these, I think, should be added a third. The first is called that of primary directions (and to calculate them we must know the exact moment of birth); the second, that of secondary directions. Primary dircetions correspond to the apparent changes in the positions of the planets due to the revolution of the earth during the two or three hours succeeding birth; the secondary directions to the changes that take place from day to day during the few weeks after birth. In primary directions, the movements of the heavenly bodies through one degree of space, or during four minutes of time, corresponds to one year of life; and in secondary directions the changes of one day (during which the sun moves in the heavens one degree) correspond to the changes of one year of life. To make use of secondary directions, set up a new horoscope for each fifth, seventh or ninth day after birth and compare that with the original horoscope.

In the study of primary directions the most important point to observe is that the positions of the planets in the radical horoscope are taken as the basis for calculating the relations brought about by the changes. Of course as the earth turns on its axis all the heavenly bodies move at the same rate, and in two or three hours their relative positions change very little. But their positions with regard to the positions they had at the mo-

ment of birth change in the most simple and natural manner.

First, let us consider what we have. Longitude is measured in the circle of the ecliptic, or zodiac, the main celestial circle, and undoubtedly trines, squares, sextiles, etc., are most correctly measured by degrees in this circle. Latitude is measured in degrees north and south of this circle; but the variation of the planets in their movement about the sun from this great celestial circle of the ecliptic is not very great. Then the circle that passes through the middle of the earth, or the equatorial circle, is fixed in the heaven, and is inclined to the circle of the ecliptic at an angle of 23° 27′. Time (hours and minutes) is measured on this circle by the apparent daily revolution of the heavenly bodies, and in astronomy we call the position of a planet in relation to this equatorial circle its right ascension. Of course, the planets are often a considerable number of degrees north or south of the equatorial circle, according to their position in the zodiac, as well as according to the heliocentric latitude. This distance from the equatorial circle is called declination, and the point corresponding to the planet, used in calculating its place for determining the right ascension, is found by dropping a perpendicular from the planet to the plane of the equator.

Now let us consider the heavens as seen from the earth. Here we have another great circle to consider, the horizon. If we should think of the south point of the horizon as the south pole of the heavens, as we observe them from our particular position on the earth, and the north point of the horizon as the north pole, and

through these two points pass meridians, of course we should have a series of circles spherically parallel to the horizon. The circle passing through the zenith perpendicular to these we call the mundane circle.

At the equator the equatorial circle passes directly through the zenith, at right angles to the horizon, and all the planets move straight over the earth, whatever their declination. They may be a little north or a little south of the zenith point, but they rise straight up from the horizon to the zenith meridian, and their change of place is easily measured by the difference of right ascension. But as we go north or south, the equatorial circle is inclined to that circle which passes directly through our zenith and is no longer perpendicular to the horizon and its set of suppositious meridians, and the distance of a planet from the zenith meridian, as measured in the mundane circle, is accordingly altered.

Now for the purposes of primary directions, two stars are in the same position when they are in the same "horizontal" meridian. Of course the zenith "horizonal" meridian and the zenith geographical meridian are identical; the greatest variation is at ninety degrees from this zenith meridian common to both, and the error of position, as counted by right ascension, steadily decreases as a planet nears the meridian, either above or below the earth. The arc of direction, accordingly, is the time (expressed in degrees) required for a planet to move in the daily motion of the earth from its position in one "horizonal" meridian to its position in another passing through the point in the zodiac that will make the desired trine or square or whatever it may be.

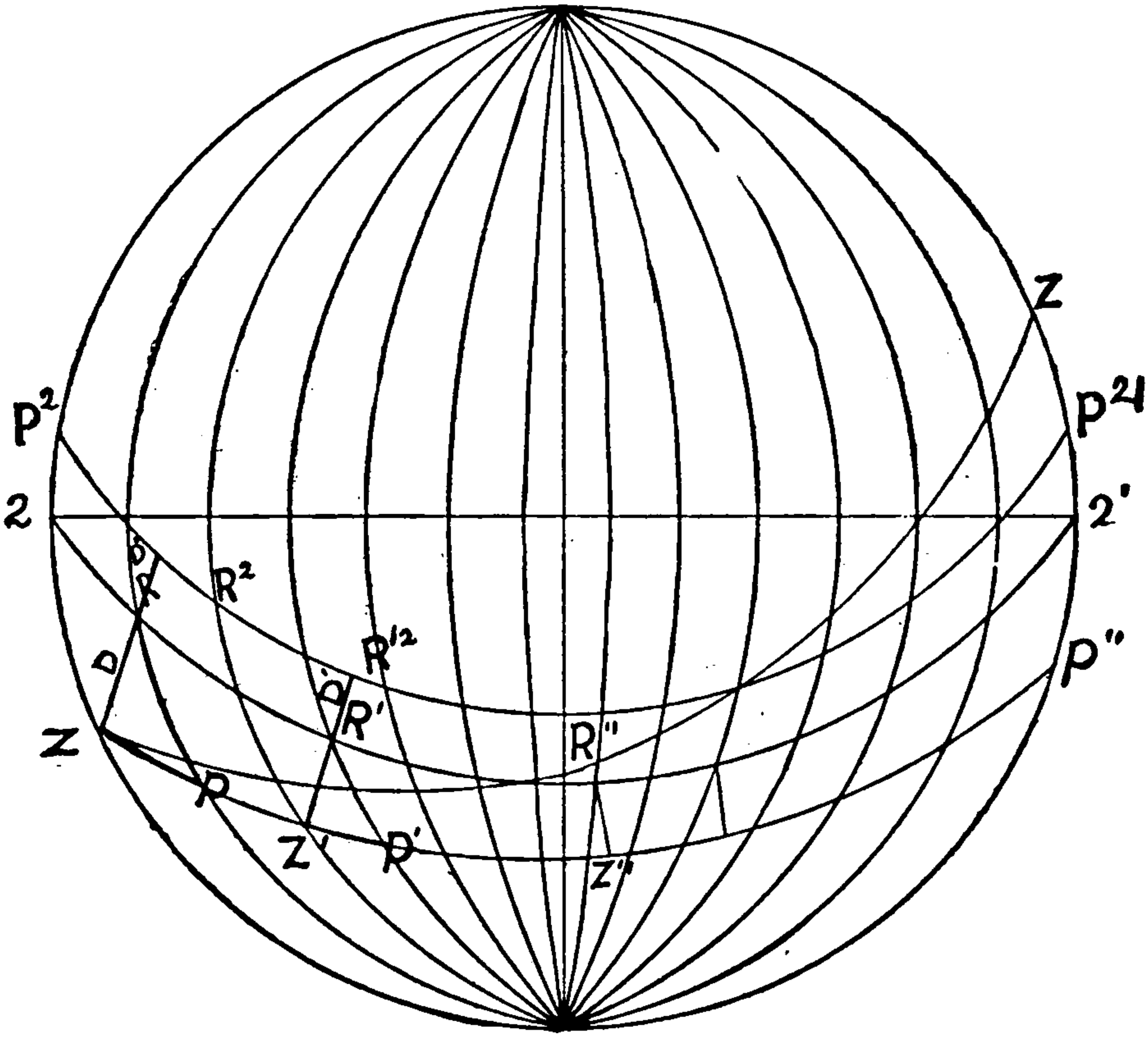


FIG. 3.

To calculate directions we must have the exact position of the planet in relation to an "horizonal" meridian. This position will vary from the position in right ascension by an amount seen in the right angle triangle Z R P (Fig. 3).

At the horizon this correction is identical with the "ascensional difference" of a point in the zodiac with a given declination, and may be found from a table of ascensional differences (see Table 10).

But the correction decreases as the planet nears the the zenith, until at the zenith it disappears. So we take that proportional part of the ascensional difference which the distance of the planet from the zenith meridian is to ninety degrees. If the planet is thirty degrees from the meridian the correction is only one-third of the full amount; if sixty degrees, it is two-thirds of the full amount.

To state the same thing differently—a star on the equator travels at a uniform rate of speed, or rather appears to from the earth, the real motion being the rotation of the earth on its axis. But when the star is either north or south of the equator it travels on a parallel circle like PP′, and from the earth appears to lag behind or to gain, according to circumstances. If the star has south declination, in northern latitudes it will appear to fall behind while under the earth, until at ninety degrees from the meridian it has fallen behind the full amount of the ascensional difference. The ascensional difference in latitude 45° is practically the same as the declination, since in our right angle triangle (" taken at ninety degrees from the meridian instead

of as shown in the figure), angle ZRP equals angle ZPR, and hence side ZP equals side ZR. that is, the declination. But as the star approaches the meridian the perpendicular ZR swings round as in R′ Z′, and then after passing the meridian begins to swing away again. Now degrees on PP are exactly the same as on QQ; that is, it takes just as long to pass ten degrees on PP as on QQ, and of course to pass from Z to Z′ requires longer than to pass from R to R′. RR′ is the difference in right ascension between two fixed degrees of the zodiac; but ZZ′ is approximately the arc of direction, that is, it takes the time indicated by the degrees in ZZ′ for the star to move from its actual position at Z to its actual position when in the zodiacal degree corresponding to R′. So in calculating an arc of direction we take the difference in right ascension, and then add or subtract the degrees the star will lose or gain in passing from one right ascension to another. Above the earth, if the star is of south declination, the path will be ZZ′, in which case the correction has to be added. If the declination is north, the path will be R^2 R'^2, in which case the arc is shorter than the arc of right ascension, and the correction has to be subtracted. Under the earth the conditions are just reversed—or rather at more than ninety degrees from the meridian, whether actually under the earth or not. If a star on its path seems to gain time above the earth, it will lose the same amount under, and so with the reverse.

To find the correction, according to Ptolemy's method, follow this rule as the simplest statement of the case:

If the movement of a planet is between any two of the cardinal angles, find the difference in right aseension between the planet indicated and the position of its aspect. Find what part this is of ninety degrees, and take the same proportional part of the ascensional difference as the correction, to be added or subtracted according as the declination is north or south, and above the earth or below, as explained above. If the planet moves across one of the angles, the parts must be calculated separately.

In directing to conjunction, subtract the right ascension of one planet from that of the other. (Given the geocentric longitude, the right ascension may be found by Table 11.) To the difference in right ascension add the correction—or subtract if so required.

In directing to an aspect, find the degree of the zodiac in which the aspect takes place. The right ascension of this degree may be found by Table 11. The difference between the right ascension of the planet and that of the place of the aspect is to be corrected by the rule as above given, and the sum or difference will be the arc of direction.

The arc of direction in primary directions as explained above is measured on the mundane circle. The arc of direction in the case of secondary directions is measured on the ecliptic. But the author has proved the efficacy of directions measured by the actual arc due to movements along the equator. In directing to a conjunction or opposition the process is a simple one. In the case of a conjunction we simply subtract the right ascension that is lesser from that which is greater. In

the case of an opposition we add 180 degrees to the right ascension of the heavenly body to which another planet or luminary is to be directed, and find the difference of right ascension.

But in the case of a trine, square or sextile, to the final result add one-fourth (approximately) of the difference in declination between the place the planet starts from and that to which it moves. In the rotary motion of the earth every heavenly body moves away from the circle of the zodiac, since that circle is inclined to the circle of the equator, or the circle parallel to the equator on which every heavenly body appears to move in its rotation about the earth. Of course after ninety degrees it begins to come back again; but since all arcs of direction are under ninety degrees, the body has to move a little farther than the zodiacal degree of the aspect, or the degree of right ascension corresponding, before it can really come to a place 120 degrees, or 90 degrees, or 60 degrees from the place of the planet to which direction is desired. Also a still further correction is necessary, especially with sextiles and sometimes with squares. If the difference in declination above described is 11 degrees, one degree should be added to the arc in addition to the above one-fourth, and for any number of degrees more or less than eleven, a fraction more or less than one should be added corresponding to the proportionate relation of their squares. Thus, the square of 11 is 121. If the difference in declination is 5, of which the square is 25, we take that proportionate part of 1 which 25 is of 121, practically one-fifth. If the difference in declinations is 15, of which

the square is 225, which is approximately one and four-fifths times 121, we add one and four-fifths.

When the aspect to which direction is made is a square we add one-fourth of the change in declination just the same, and also one degree for every 14 degrees of declination, and fractional parts in proportions to the squares as shown above.

In the case of a trine aspect, only the one-fourth of the change in declination need be added. The other correction in this case becomes too small for notice.

The methods given for determining the arc of direction are only approximations; but they are more nearly correct than the method given by the professional astrologers, which, with all its complicated mathematics, is also merely an approximation. Particular events indicated by directions are likely to follow the aspect, rather than come before or exactly at the time of it, though closely following directions of a contrary nature may counterbalance. The thing most certainly indicated is the condition of one's health.

In order to determine the strength of a direction by any of these methods we must first determine to what extent the direction is aided or retarded both by secondary directions and by transits of the planets over their own places or the places of other planets at the actual time in life when the direction should operate. Transits may be determined by counting up the degrees the planet has moved in the given time. Mars moves round the sun, or through the entire zodiac, in about 687 days, or 1.88 years; Jupiter in 11.86 years; Saturn in 29.46 years; Uranus in 84.02 years; Neptune in 164.6

years. The others move so rapidly their transits are not important (see Table 9). We should also consider whether the sign of the aspect and the term of the sign strengthen or weaken the power of the planets forming the aspect. And the strength or weakness of the planets in the zodiacal horoscope must always be given full weight. Aspects from weakly placed planets are weak and from strongly placed planets are strong.

In considering health, the prorogator must be chosen. This is the sun by day and the moon by night, or according to some the sun for a man and the moon for a woman, if either luminary is in a prorogatory place. The chief prorogatory place is the ascendant, 25 degrees below and 5 above; next the midheaven, or tenth house; next the western angle, 25 degrees above and 5 below; and lastly the eleventh house and the ninth. If one of the luminaries only is found in either of these positions, it is to be chosen, whether sun or moon. If neither is so found, a planet must be taken, which, all things considered, is strongest in the horoscope, especially the ascendant. If the prorogator come into conjunction, square, or opposition, and sometimes even sextile or trine, with Mars or Saturn, an illness may be anticipated, according to the nature of the planet and the place in the zodiac. A similar relation with Uranus causes mental depression, and often suicide. Such relations with Jupiter and Venus have a much less marked effect, and the favorable relations almost always improve the health.

But more important still are aspects, directions and

transits, with respect to the ascendant. Primary directions to the ascendant are always important.

Thus Saturn in conjunction with the ascendant would bring a lingering illness, Mars a fever. And the part of the body affected would correspond to the sign of the zodiac in which the aspect occurs.

The signs of the zodiac govern the various parts of the body as follows:

Aries, the head; Taurus, the neck and throat; Gemini, the chest and respiratory organs; Cancer, the breast and stomach; Leo, the heart, veins and back; Virgo, the bowels; Libra, the liver and kidneys; Scorpio, the genital and urinary organs; Sagittary, the hips, thighs and nerves; Capricorn, the knees; Aquarius, the lower legs and joints; Pisces, the feet.

Uranus produces suicide and sudden and uncommon deaths and mental depression; Saturn consumption, colds, rheumatism, and tedious illnesses; Jupiter, liver troubles, pleurisy, indifferent blood, and sometimes apoplexy, but only in bad aspects, while in good he improves the health; Mars causes fevers, bladder and kidney troubles, rupture of blood-vessels, smallpox, accidents, burns, bites, scalds, and death by child-birth; the sun causes weak sight, brain diseases, weakness of the heart and back, and palpitation; Venus benefits the health unless much afflicted, when she may cause flatulency and disorders of the genitals, matrix, and veins; Mercury causes phthisis, madness, imbecility and fits; the moon causes weak sight, madness, trouble with menses, phthisis, cancer, and stomach troubles.

For health consider not only the ascendant, but also

the sixth house, and bad aspects to the sun and moon, whether prorogator or not.

For general success in life—that is, position, honors, and so forth—consider the midheaven especially; also Jupiter and the sun. If Saturn be connected with the sun in the radical horoscope, when Jupiter and the sun come into square or opposition there is sure to be ill-success in business.

For marriage, consider the seventh house, and also aspects of Venus. Venus in trine, sextile, or conjunction with Jupiter or the midheaven is likely to produce marriage, especially in a woman's natus.

For children and their prospects consider the fifth and eleventh houses. Gemini, Leo, and to some extent Virgo, are said to be barren signs; Cancer, Scorpio, and Pisces are fruitful.

For further rules see Chapter X.

THE HOROSCOPES OF BABIES.

One piece of prediction and study which ought to be studied with great care and accuracy is that of forecasting the lives of babies. In India the moment of birth is watched with the greatest care and timed by three different clocks. Then the astrologers cast the horoscope. Many of us do not know at exactly what moment we were born, and so can never be sure we have our horoscope right. We should see that the future generation is not under this handicap. Given the exact moment of birth, directions of all kinds may be studied with much more certainty of success.

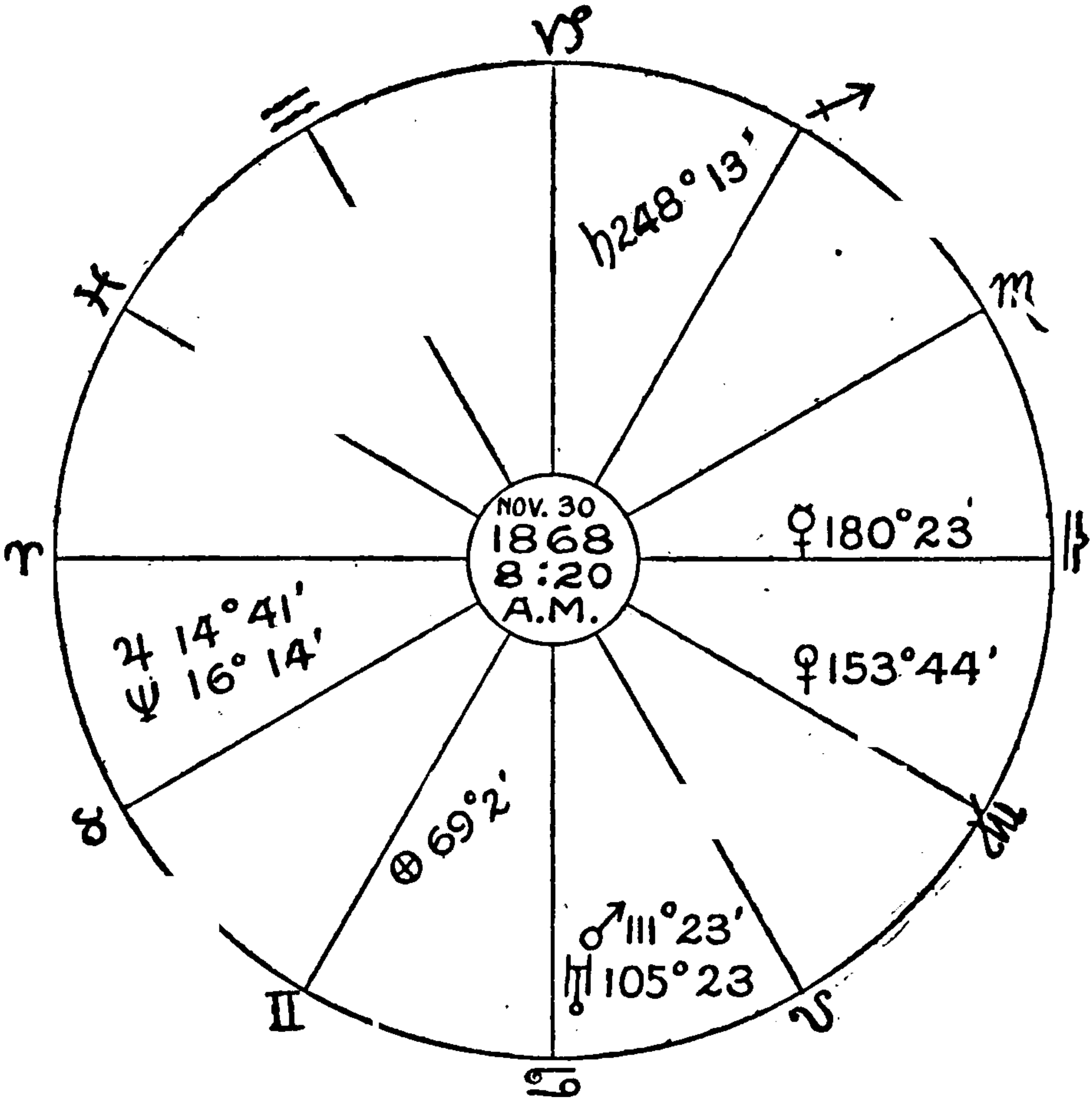

♈
♓
♒
♑
♐
♏
♎
NOV. 30
1868
8:20
A.M.
h 248° 13'
☿ 180° 23'
♀ 153° 44'
♂ 111° 23'
☊ 105° 23
⊗ 69° 2'
♃ 14° 41'
♆ 16° 14'

FIG. 4.

CHAPTER VIII.

EXEMPLIFICATION.

By way of illustration of the general method of casting a horoscope, there follows the horoscope of the author of this book as calculated and interpreted by a friend.

The date is Nov. 30, 1868, 8:20 a. m. mean time. The place was a small town in Michigan, Latitude 43°, Longitude 85°.

Had the birth been in these later years, the clock would have shown standard time, which in this case would have been a minute later. Eastern standard time is true mean time for longitude 75°, central standard time is true mean for longitude 90°, mountain standard time for longitude 105°, and Pacific time for longitude 120°. If the nativity is at a point between these longitudes the true mean time may be found by adding or subtracting one minute for each four degrees between the longitude of the place of birth and the longitude of the standard used at that place.

Some knowledge of the character may be found without any mathematical calculations. Look in the table in Appendix A, in which you will see that on Nov. 30 each year the sun is in the sign of Sagittarius. In Chapter III we may read the description of character given for the sun in Sagittary.

In Table 1 we may find the exact longitude of the sun for Nov. 30. As 1868 is a leap year, one day will have been inserted between Jan. 1 and Nov. 30, so we must take the figures given for Dec. 1, since this table is arranged for a common year. We find this to be the 335th day of the year; sun's longitude 249° 2′, or 9° 2′ in Sagittary, and we may note that the sidereal time is 16 h. 40 m. 6 s., and the declination is —21° 49′.

The heliocentric position of the earth will be just 180° less than the apparent longitude of the sun, or 69° 2′. We draw a circle and mark it off like Fig. 4, and insert the earth in its proper position.

We will next find the heliocentric positions of the planets, beginning with Mercury. We look in Table 7 for the position of the nearest January, that is, Jan. 1, 1869. Noon of Jan. 1, 1869, will be just 32 days later than noon of Nov. 30, 1868. We find the position of Mercury for Jan. 1, 1869, to be 277° 41′. In Table 4 we find that the nearest longitude given is 276° 11′, which is 1° 30′ less than that with which we wish to start. Since we are taking a later date and are counting back, we count back 32 days in the cycle of Mercury, and find longitude 178° 53′, latitude +5° 14′. As we started with a longitude smaller by 1° 30′ than was required, we must add this difference to our final result and we get 180° 23′, which we enter in our heliocentric figure.

We find that the position of Venus Jan. 1, 1869, is 205° 25′, and by looking in Table 5 we find 205° 31′, which is so near that no correction is needed. Counting back 32 days we find longitude 153° 44′, which we enter in our figure, and latitude +3° 19′.

The position of Mars for Jan. 1, 1869, was 126° 1′. We find in Table 6 the nearest longitude is 127° 27′, with a difference of 1° 26′ from that we wish. Counting back 32 days, or two intervals of 16 days each, we come to 112° 59′. After subtracting our correction of 1° 26′ we have the heliocentric longitude of Mars 111° 23′, which we enter in our figure. The latitude is +1° 40′.

We find the position of Jupiter Jan. 1, 1869, to be 17° 35′, daily motion 5′ 30″. Multiplying this daily motion by 32, we get 176′ or 2° 56′, which we must subtract. The result, 14° 41′, we enter in our figure. Had the time been greater, we should have assumed an average daily motion between the Jan. 1 following and the Jan. 1 preceding, as explained in Chapter II. The latitude we may assume to be —1° 18′, which will be correct to within half a minute.

The position of Saturn on Jan. 1, 1869, was 249° 11′, the daily motion 1′ 50″. Multiplying the daily motion by 32 we get a correction of 59′, which we subtract, giving the correct longitude as 248° 12′. The latitude is +1° 43′.

The position of Uranus was 105° 23′, daily motion 44″. Multiplying the daily motion by 32, we get a correction of about 23′, and subtract this from the longitude given. We enter 105° in our figure, and note the latitude as +0° 25′.

The position of Neptune is 16° 26′, daily motion 22″. Multiplying by 32 we get a correction of 12′, and enter 16° 14′ in our figure.

We now have our heliocentric horoscope complete, and may proceed to our geocentric.

First, we should find the cusps of the houses, as shown in Fig. 5. In Table 7 we find the sidereal time for 1868 to be 18 h. 41 m. 43 s., which differs from that for Jan. 1 in Table 1 by 1m. 34s. We therefore subtract this from the sidereal time which we got (on the preceding page) in Table 1, and have 16 h. 38 m. 28 s. as the true sidereal time for mean noon at Greenwich.

The sidereal time at noon in longitude 85° will be about 1 m. more than this, since 85° corresponds to 5 h. 40 m. of mean time, and in that time the sidereal time will lose about 59s., nearly a minute. The following table will help in correcting when careful work is desired:

CORRECTION FOR SIDEREAL TIME.

Hours.....	**1**	**2**	**3**	**4**	**5**	**6**
Correction	**10s**	**20s**	**30s**	**40s**	**50s**	**1m**
Hours.....	**7**	**8**	**9**	**10**	**11**	**12**
Correction	**1m9s**	**1m19s**	**1m29s**	**1m39s**	**1m48s**	**1m58s**
Hours.....	**13**	**14**	**15**	**16**	**17**	**18**
Correction	**2m8s**	**2m18s**	**2m28s**	**2m38s**	**2m48s**	**2m57s**
Hours.....	**19**	**20**	**21**	**22**	**23**	
Correction	**3m7s**	**3m17s**	**3m27s**	**3m37s**	**3m47s**	

Our time is 8:20 a. m., which is 3 h. 40 m. before noon. The loss of sidereal time in this period is just about enough to counterbalance the gain between the meridian of Greenwich and 85°, so no correction need have been made. If the hour of birth had been, say, 10 o'clock in the evening, the total correction in sidereal time would have been that for a period of 5 h. 40 m. plus 10 h., nearly 16 h. This correction would have been 2 m. 38 s., an important matter.

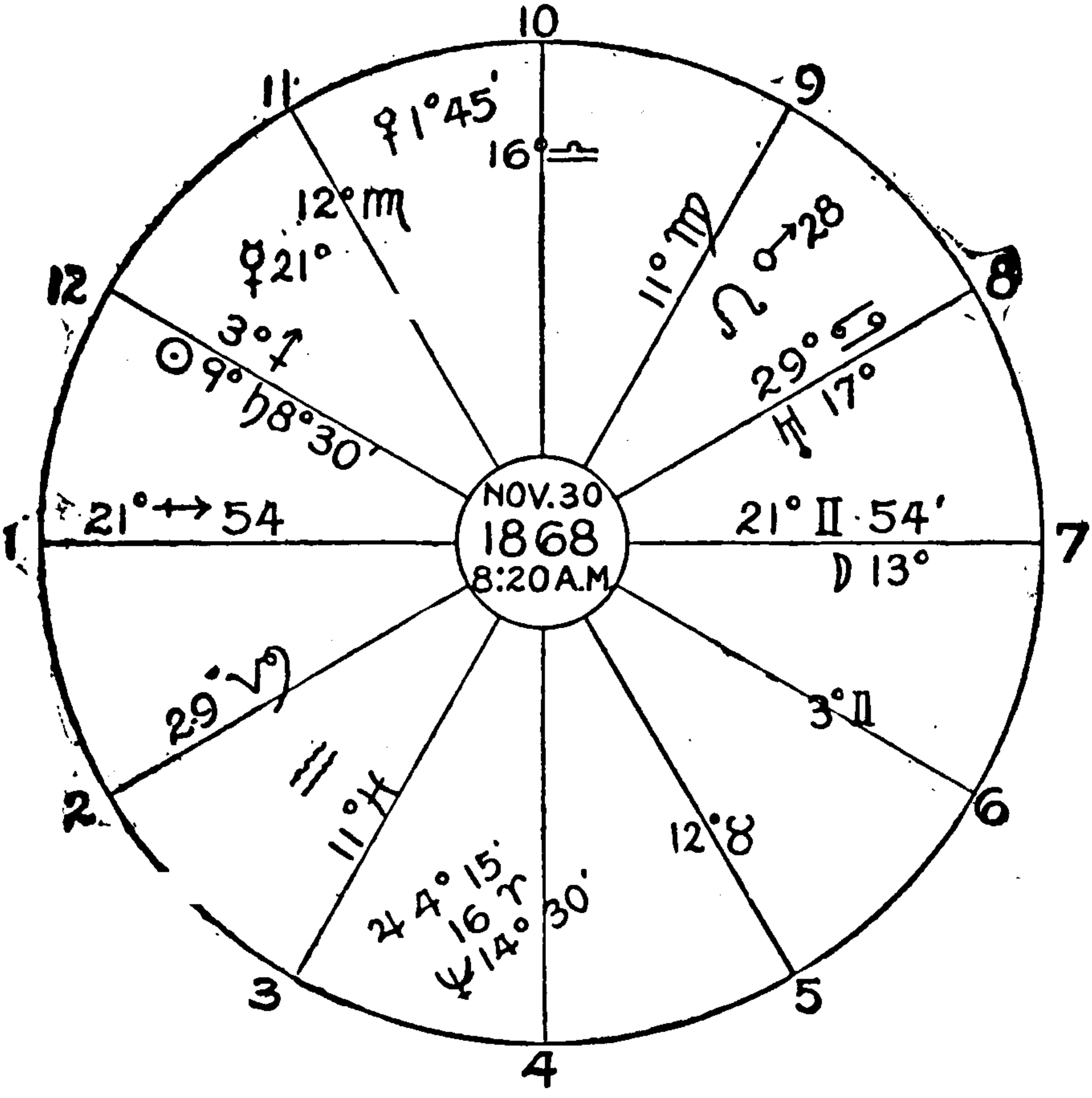

10
11
9
12
8
1
7
2
6
3
5
4
NOV. 30
1868
8:20 A.M
☿ 1°45'
16° ♎
12° ♏
☿ 21°
3° ♐
☉ 9° ♑ 58° 30'
21° ♓ 54
29° ♈
♃ 11°
♄ 4° 15'
16 ♈
♆ 14° 30'
11° ♉
☊ 28
11° ♊
29° ♋
☽ 17°
21° ♊ 54'
☽ 13°
3° ♊
12° ♌

FIG. 5.

We subtract our time before noon, that is 3 h. 40 m., from the sidereal time of 16 h. 38 m. 28 s., giving us 12 h. 58 m. 28 s. as the sidereal time of the moment of birth. In Table 12 we find the nearest sidereal time to be 12 h. 58 m. 5s., and we proceed to take the cusps of the houses given for latitude 40°. We observe, however, that the ascendant for latitude 35° is greater, decreasing between latitude 35° and latitude 40° by 3° 15′. Between latitude 40° and latitude 43° (the latitude given) there will be a further decrease of at least three-fifths of this amount. In these higher latitudes the change becomes more rapid even. The true ascendant will be found in Fig. 5. We easily get the cusps of houses 2, 3, 11 and 12, by proportion from latitude 40° and latitude 35°, and observe that the cusp of the 10th house is the same for all latitudes.

Having entered the cusps of these six houses in our figure, we enter the same degree of the opposite sign on each opposite cusp and complete our figure as seen in Fig. 5. We find Aquarius and Leo are not represented, and put them in between the cusps of 2 and 3 for the first, and 8 and 9 for the second.

We now take our Heliocentric Chart No. 1, and by laying a ruler on it so that the straight edge will pass exactly by the middle of the sun and longitude 69° on the outer circle, we may mark the earth's orbit at the exact point the earth was situated on Nov. 30, 1868. In like manner we may mark on their respective orbits the positions of Mercury, Venus, and Mars. After passing a long slim needle through the center of the Geocentric Circle at the point where the scale meets the

cross line, we stick the needle down on the orbit of the earth at the exact point where the earth is located. We soon see that the geocentric circle covers the positions of Mercury and Venus, and take it off while we pass a ruler from the position of the earth past the position of each of these planets, and mark a point farther along which will not be covered by the circle. Once more placing the geocentric circle in position we make sure that the cross line is exactly parallel to the cross lines of the chart. On the scale, at each end we may see that one end is no higher than the other from the nearest cross line. We then pass our ruler from the earth center to the points we have marked for each of the planets, and read the degrees on the margin of the geocentric circle. In this way we get 21 ♏ for Mercury, 1½ ♏ for Venus, and 28 ♌ for Mars. At this point it is best to take the degrees in each *sign*. These we enter in our figure, as in Fig. 5.

We next take Heliocentric Chart No. 2, and passing our ruler from the center to 69° on the outer circle, we proceed to mark the point at which our straight line crosses each of the smaller inner circles. Then we place the needle point in our geocentric circle on the point we have marked on the earth circle for Jupiter, and see that the cross line of this circle is exactly parallel with one of the cross lines in the heliocentric circle. We pass our ruler from the center of the earth to 14½° on the outer circle, reading the degrees at which the straight line passes the geocentric circle.

We next place the center of the geocentric circle

on the earth positions for Saturn, Uranus, and Neptune, entering the results in our figure.

We now have the positions of all our planets and the sun. The position of the moon alone remains to be found.

In Table 3 we find the position of the moon on Jan. 1, 1869, to be 141° 7′, latitude +0° 21′. Referring to Table 2 we find 139° 30′ as the nearest longitude, the difference being 1° 37′. The longitude found is for day 11.5 in the cycle, so in counting back we must count to every .5. This will be an entire cycle and five days more, so we simply count back five days and find 68° 20′. In passing the bottom of the table we were told to add 3° 41′, which we do, getting 72° 1′; and also our other correction of 1° 37′, giving us 73° 38′. We may take 4° 30′ as the approximate latitude.* Assuming that the change of the moon's position in the 3 h. 40 m. before noon will offset the 38′, we may take 13 ♊ as the approximate longitude. In calculating primary directions, the latitude will throw the position to be reckoned 2° farther on, or to 15 ♊.

The declinations of the planets may be found by the method suggested in Chapter II., but it is better to take them from the nautical almanac when a copy is within reach.

The true declinations may be seen in the following table:

---

*Note. The latitude of the moon changes from year to year, and in 1869 it was about half a minute less for the same degree of longitude than it was in 1887, the year from which the cycle table was adapted.

DECLINATION.

☉	21° 45′	South.	♅	22° 41′	North.
☿	16° 54′	South.	♆	4° 16′	North.
♄	20° 9′	South.	♃	0° 23′	North.
♀	10° 17′	South.	♂	14° 15′	North.
☽	18° 7′	North.			

We are now ready to judge our horoscopes. In the heliocentric horoscope there is little to observe except the aspects of Jupiter and Uranus, and of Jupiter and Saturn. There is a square with Uranus and a trine with Saturn. As Jupiter is the ruling planet, these are significant. The square with Jupiter shows that the native has no magnetism in ruling over his fellow men, and will never make any money through public favor or good fortune. The trine with Saturn, however, suggests making money from sheer economy and good management, and success in the direction of the serious imagination. Money may be made through land, or speculations that do not require contact with and influence over the native's fellow men.

In our geocentric horoscope we find the following aspects:

ASPECTS.

☉ △ ♃	☽ ☌ ♄	♃ △ ♄
☉ △ ♆	☽ P ♄	♃ △ ♅ mun.
☉ ☌ ♄	☽ ✶ ♆	♃ △ ☿ mun.
☉ ☌ ☽	☽ △ ♀ mun.	♅ △ ☿
☉ P ♅	☽ □ ♃ mun.	♄ △ ♆
☉ P ♄	☽ ✶ ♂ mun.	♂ ✶ ♀ zod. and mun.
		♆ ☌ I.C
		♆ □ ♅
		♂ P ☿
		♂ □ ☿

P indicates parallel of declination—that is, the decli-

nation is the same within a degree or two, whether north or south. This is a favorable aspect.

First we wish to see what planets are strongest, and the proportion of their strength. Sagittary ascends, and Sagittary is the house of Jupiter. Other things being equal the "lord of the ascendant" will be the ruling planet. In this case Jupiter is situated near the nadir, a fortunate place. Looking in Ptolemy's table of terms (see Chapter IV), we see that the first six degrees of Aries belong to Jupiter, though Mars and Mercury have the most degrees. Whence we conclude that Jupiter though only fairly strong on his own account will help Mars and Mercury; that is, strengthen their power if in aspect with them, or when in aspect by direction. In the same table we find that the degree of the ascendant is in the term of Mars. So Jupiter will not be so strong there as this planet. But we see that Jupiter is within 4° of trine with the sun and Saturn, in mundane (that is, counting 120° on the circle of houses) trine with Mercury, mundane trine with Uranus, and mundane square with the moon. On the whole Jupiter is decidedly the ruling planet, but being at the nadir and for other reasons he is a modifier; that is, he lends his strength to the others in proportion to their strength.

We see Saturn in close conjunction with the sun, and both are in opposition with the moon, though not very closely. This looks as if Saturn should be very strong in the horoscope, and perhaps very unfortunate. But on examination we find that this is not without offsets. The angle of the ascendant is influenced by planets 25° below the horizon and 5° above. So Saturn and the

sun are out of range. Then, too, Saturn, according to Ptolemy's table, is just between the terms of Jupiter and Venus, his exact opposites, and he has only 6° in the sign any way. Saturn is more favorable in Sagittary than in any other sign. As a matter of fact, in the history of the native Saturn made the beard black, which otherwise would have been brown, and when by transit he passed the ascendant in the thirty-first year the native had a lingering illness. In disposition, Saturn has given reserve to a naturally hot and affectionate disposition. It will have been observed, of course, that Saturn has no bad aspects of importance to rouse him, except a distant square to Mars, his opposite and restrainer, and that he is helped by the trine of Jupiter. Mars counterbalances Saturn, preventing weakness of the lungs, etc. When Mars came into trine with the ascendant by direction in the native's twelfth year, our subject had the measles.

We next observe that Mercury is the ruling planet of the midheaven, and by referring to Ptolemy's table of terms, we find that he is in his own term. He also rules the descendant or western angle, in Jupiter's term, and the nadir or lower angle is in the term of Mercury. He is just above the sun in the heaven, which gives him strength according to Ptolemy. More than this, he is in trine with Uranus, a highly favorable relationship for judging human character and motive, for the study of the occult, and for mathematics as an imaginative science. His position in Scorpio in the terms of Jupiter and Venus gives great tenacity of mind and patience in thought.

Having determined the leading planets and their strength, we may take up the horoscope in detail. The general description of the physical appearance of the native is correctly given under Sagittary in Appendix D, and we find much the same under the description of the sun in Sagittary in Chapter III. Saturn in the sign gives a black beard, however, and Mars not far from trine with the ascendant gives red hairs among the black in the beard. The skin is light, the eyes blue, and the native began to be bald at twenty-five.

See also description under the proper moon sign in Appendix C.

Next let us consider the profession. For this we look to the 10th house, and see that Venus determines the choice. But Mercury rules the sign and the term of the sign, while Saturn is strong in the sign. Jupiter is in opposition to the early degrees of the sign, in the third house. The third house suggests authorship. Mercury gives the powers of mind suitable for authorship, and the trine of Uranus gives the power to study human nature successfully. Venus is in sextile with Mars, which indicates fondness for and influence over women. Venus gives also grace and love of beauty, and fondness for color. All these things favor the profession suggested.

Venus is also the prorogator of life, suggesting that devotion to his profession will be coincident with the native's life and probably have much to do with his death.

Next, let us look for the wife. For this we examine the seventh house and the moon. We see Uranus in the

seventh house, applying to conjunction with the moon. The character of the wife must therefore be that of Uranus, namely magnetic, fond of people, original and likely to do unexpected things. The sign on the cusp is ruled by Mercury, and hence we may expect a brilliant wife of a rather eccentric character. Marriage should come in the first half of life. (See Ptolemy in Chapter X.)

In conclusion, let us examine a few important directions. Secondary directions may be chosen in examining the moon and Mercury, which move rapidly, the moon making the entire circuit in less than 28 days, which correspond to so many years. The mind on its sympathetic side is ruled by the moon, and when it comes into relation with Mercury it is likely to cause success in mental effort. The moon also causes travel. By referring to our table of the moon cycle, and starting with 73°, we see that to travel to the position of Mercury in 231° would require about eleven days. Mercury would also have moved several degrees in that time. We may consider both the original position of Mercury and its succeeding position. At eleven years of age the native left home and went away to school, where he attained marked success, and in the year or two succeeding made a brilliant record in school work. The moon would pass Jupiter in about twenty days. At twenty years of age the native left school and experienced his first burst of ambition in life. At about the age of eleven Mercury coming in conjunction with the ascendant would help the brilliancy in school indicated by the moon coming in conjunction with Mercury. The

moon and Mercury will both meet at about the position of the ascendant, two years later, and this was indeed the period of greatest success in school life. At the same period Jupiter came into trine with Mercury by primary direction, as well as by the method of calculation on the equatorial circle.

Let us now direct the ascendant by primary direction to conjunction with Saturn. An illness should be the result. To be accurate, we should find the difference in right ascension by Table 11, but as the distance is short the difference in longitude will be sufficiently accurate. Thus difference is a little over 13°. The aseensional difference for the declination of this longitude (23° 10′, which we find by Table 1) is half way between 21¼ and 23; let us say 22. Dividing 90° by 13, we get approximately 7, which means that we must subtract from 13 one-seventh of 22, or three. This gives the age of 10. It corresponds to the death of the father.

We note here that there is a curious relationship between the horoscopes of the members of a family. It is so close, so very remarkable (as has been proved in many cases), that we find a curious harmony between astrology and heredity. And this makes it reasonable that we may find the death of father or mother so surely in every horoscope.

Let us next direct Venus to the ascendant in order to find at what age the native chose his profession in life. By looking for the ascensional difference corresponding to the declination of Venus we find 9½°. The proportional part of this is approximately 2, making the age between 17 and 18. Up to this time the native had

no thought of being an author, but rather expected to make use of his mathematical talents in engineering. But at about this age a complete change came about.

Directing Jupiter to the square of Saturn and the sun by the third method of directions, we come upon a period of great financial reverse. A train of bad directions follows at this time. First is the square of Jupiter to the moon; then his square to the sun and Saturn; and finally the transit of Saturn over its position at birth, which occurred in the thirtieth year and caused a financial fiasco. We have already referred to the illness caused by the passage of Saturn over the degree of the ascendant in the thirty-first year.

We have calculated these directions very loosely, because we do not wish to lead the student to take them too seriously. Something may be gained from them; but as the exact moment of birth is known but inexactly in most cases, and our knowledge of methods of calculating directions is hazy, nothing very certain can be known.

In any case, a bad direction is not to be looked on as an absolute fate. It is only a tendency which may often be overcome by determined effort.

CHAPTER IX.

THE USES AND DIFFICULTIES OF ASTROLOGY.

The great, the really overwhelming, difficulty with astrology lies in the fact that half its value lies in our power to interpret human nature. Unless we know how the mind of man works, astrology makes no revelation to us. To those supersensitive people who by a strange exaltation of their faculties seem to read the very soul of life, even when they are totally uneducated, astrology serves as a rough guide which enables them to make predictions which stagger our very senses. And for the same reason the most astute reasoner and man of infinite learning fails in the art of astrology (if we may so speak of it) just because he lacks that fine, delicate intuition which enables him to follow the complex fluctuations of human thought, feeling, and life in general.

The case is the same with art and literature, for the most learned man cannot paint a picture or write a novel of value unless he has the unanalysable, intuitive knowledge of human nature, which is a gift of the gods, as Ptolemy puts it. So in precisely the same way, prediction in astrology may be called an art, because it requires the delicate imagination of the novelist or artist to discover accurate truth in the rough indications which our knowluedge of the heavens afford.

But here we are concerned only with the scientific side of astrology, the side that the ordinary man can

understand and utilize for practical purposes. And to start with we may as well say clearly and distinctly that he cannot make predictions, except of the most general kind. Nevertheless astrology has enormous uses. A very small principle is often a good basis for very many practical inventions.

The first great use of astrology is in the fact that it gives us a general key to our own characters. It is impossible for us to judge ourselves by our own feelings, and for very many of us self-judgment under any circumstances is doubtless an impossibility from the fact that we are too much prejudiced in our own favor. But there are some candid souls who really do wish to understand their powers and capabilities, and astrology will, if rightly used, enable them to do that.

But astrology is also a key to the characters of others, and here it can be of the utmost use. How many parents would not give half they possess to understand their children, to know accurately their tendencies, their weaknesses, their secret abilities! How many men would not like to have some reliable chart of the character of those other men with whom they are going into partnership in business! How many men and women about to marry would not like to know more of each other than the glare of a few nights in a ball-room makes at all possible!

And then there is the matter of personal friendship! How many friendships begin in sunshine and end in a deep cloud of disappointment! And then what unaccountable attractions there are between men and women! Astrology on the scientific theory I have set

forth gives a most striking key to such anomalies as love at first sight and hatred at first sight. And I will take occasion here to explain this most interesting application of the science.

When the crystals are really formed and hardened with years, we suppose that they cause the ether passing through them to vibrate at a certain rate, so that each person goes about the world radiating from himself ethereal vibrations of a certain definite kind, just as we know that he goes about giving out a peculiar and definite odor, which is not always pleasing. We know that peoples whose odor is different one from the other, as Mongolians and Caucasians, or Ethiopians and Caucasians, find each other disagreeable, and in the same way people whose subtle vibrations of nerve and body, transmitted by the ether, are different, experience a repulsion, while harmony of these vibrations produces a pleasurable attraction. To this law, too subtle for direct human observation, we find a key in astrology. A man whose moon is exactly on the same place in the heavens as the sun of a woman will be sure to fall in love with her and she with him. If his sun is on the place of her Saturn she will probably hate him, experiencing all the feelings of coldness and reserve indicated by Saturn's nature; and the man may fall in love with her while hating himself for doing it. Mars on Jupiter will produce a strange, spontaneous attraction which will lead to fiery quarrels. Any planet, good or bad, exactly on the place of the same planet in another horoscope will produce sympathy in the side of the nature indicated by the planet.

But the range of mutual influence is still greater than that indicated by conjunction. Harmony is produced by the sun or moon being in trine or sextile with the sun or moon in the horoscope of the other. If in the case of a marriage the sun in one is in trine or sextile to the moon in the other, and the moon in the second has a similarly favorable aspect to the sun in the first, the couple are very likely to live together extremely happily. Also if the midheaven, western angle, nadir, or asecndant of one is on one of these angles in the other, harmony is produced. But if the ascendant in one is in square to the ascendant in the other the reverse is true. The square or opposition of antagonistic planets is sure to produce trouble, and sometimes the trine or sextile of opposing planets does not result well, though generally it is not a bad thing.

In very intimate relations several of these testimonies should occur. In the case of my wife, her Mars is exactly on mine, and both are in conjunction with the fixed star Regulus. Her Venus is very near mine. Her Jupiter is in conjunction with her moon very nearly on my midheaven, exactly in sextile to my sun. Her sun is in exact sextile with my Mercury and very nearly in sextile with my moon.

Saturn is also harmoniously configurated in both. We also supply each other's defects. My sun is weak, her sun is strong; my moon is strong, her moon is weak; her Mercury is in an open angle, mine in a blind angle. And so forth. This is a most remarkable case. There is not a conflict, and every planet and the sun and moon are harmoniously related. I think above I

have mentioned all but Uranus. He is in her horoscope in exact trine with my ascendant and in sextile with my moon; my Uranus is in sextile with her sun, and her Neptune is in trine with our joint Mars. When the gods dealt out my matrimonial fate they gave me a flush. Most people should be content with a full house.

I once met a young lady who had a most marked spontaneous attraction for me, which I reciprocated. I afterward found out that her Jupiter was on my Mercury and her moon on my Venus, and her Uranus was in sextile to my moon and trine with my Mercury, and I believe some other relations. When for the first time I came into the room (a reception room filled with people) where she was she was struck with consternation at seeing the form and figure of a man she had dreamed of the night before, and instantly we became friends. Our suns and moons being unrelated we did not fall in love, but merely became most excellent friends.

Damon and Pythias and David and Jonathan must have had some such planetary configuration as the above carried to a greater extent. The strongest affection proceeds from the moon or ruling planet of the one being on the sun of the other, and vice versa.

Another circumstance of great interest to the scientific is the harmony of configuration between the horoscopes of parents and children. The ascendant or midheaven of the son is very often the nadir or western angle of the father or mother. Indeed there are many things that show that the planetary influence goes back of birth, and so militates against the theory of crystal-

lization as being the *entire* explanation. It seems as if certain parents could not bear children except at certain times, and the character and vitality of the parent seem to determine the time of birth of the child as favorable or unfavorable. I suppose that heredity is the reigning law up to the moment of birth and determines the child while in the womb, while the influence of the heavenly light gives the individual bent of character. In mineralogy we know that a poor solution will not give perfect crystals, and so poor parents will give a very inferior uncrystallized babe for the light to work upon. The amount of vitality must be hereditary, and the unborn babe must have a certain character even before crystallization gives him his sharp individualities. At the same time the process of crystallization and the law of heredity seem markedly, strangely in harmony with each other. We may say that heredity makes for similarity, crystallization for individuality. Heredity alone does not explain why children are sometimes so utterly different from their parents, though it easily explains why they are often so like.

Another practical use to which astrology can be put is in predicting or at least foreshadowing states of health. This process does not require very much of the "artistic" talent; the average man can judge fairly correctly, and the success or failure of the prediction can be easily and definitely verified. Until within a very short time, comparatively speaking, astrology was always used by physicians, and by them more than by any other class. And today it is physicians who could do most to investigate the subject, because they are

enabled to observe exactly the minute of birth, and often are so intimately connected with a family that they can follow the private history of the child for many years. One of the most eminent physicians in Boston makes use of it continually and with the greatest success. To the astonishing things he told me in his medical experience with astrology I owe my first definite interest in the study. And that first evening I met him he predicted, without even knowing the hour of my birth, that I would become to some extent a leader in astrology. I laughed at the idea, but here I find myself writing a book.

With all its difficulties and uncertainties, a "well regulated astrology," as Sir Thomas Browne calls it, should be of the greatest practical value. But first we should discountenance the fakirs, as we do the quacks in medicine.

CHAPTER X.

PTOLEMY'S RULES FOR JUDGING FORTUNE.*

Wealth.

The circumstances regulating the fortune of wealth are to be judged from that part alone which is expressly denominated the Part of Fortune; the position of which is in all cases, whether arising in the day or in the night, always as far from the ascendant as the sun is distant from the moon.

When the Part of Fortune has been determined, it must be ascertained to what planets the dominion of it belongs; and their power and connection, as also the power and connection of others configurated with them, or in elevation above them, whether of the same or of an adverse condition, are then to be observed, for, if the planets which assume dominion of the Part of Fortune be in full force, they will create much wealth, and especially should the luminaries also give them suitable testimony in addition.

In this manner Saturn will affect the acquirement of wealth by means of buildings, agriculture, or navigation; Jupiter, by holding some government position or office of trust, or by the priesthood; Mars, by the army and military command; Venus, by means of friends, by the dowry of wives, or by other gifts proceeding from women; and Mercury, by the sciences and by trade.

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*J. M. Ashmand's translation has been used for the most part.

(It may be added for modern readers that Mercury indicates law, politics, etc., as a source of wealth, and Venus art, literature, and the like, especially in combination with Mercury.)

Should Saturn, however, when thus in influence over the fortune of wealth be also configurated with Jupiter, he particularly provides wealth through inheritance, especially if the configuration should exist in superior angles, Jupiter being also in a bicorporeal sign and receiving the application of the moon; for in such a case the native will also be adopted by persons unallied to him, and will become heir to their property.

And further, if other stars of the same condition as those which rule the Part of Fortune should likewise exhibit testimonies of dominion, the wealth will be permanent; but on the other hand, if stars of an adverse condition should either be in elevation above the ruling places or ascend in succession to them, the wealth will not continue. The general period of its duration, however, is to be calculated by means of the arc of direction between the planets operating the loss and the places which give wealth.

Position in the World.

The dispositions of the luminaries and the respective familiarities exercised by the stars attending them are to be considered as indicative of position in the world. (Placidus takes the dignities from the sun and mid-heaven, according to Ptolemy.)

For example, should the two luminaries be found in masculine* signs and in angles, or even if only one of

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*Aries is a masculine sign, and so is every second sign following. Taurus and every second sign following are feminine.

them be in an angle, they being at the same time specially attended by a doryphory (planets situated in degrees of the zodiac near the luminary in question) composed of all the five planets, the sun by such as are oriental, but the moon by occidental, the persons then about to be born will consequently become kings and princes. (In regard to what is meant by attending planets, Placidus says: "You are not to observe what is generally alleged respecting the doryphory of the luminaries for dignities, namely, that the doryphory includes only those planets which are found within 30° on either side of the luminaries. Any kind of aspect of the stars to the luminaries of what kind soever are to be included; and if the aspect be made by application—that is, the star be approaching the aspect in the order of the zodiac—its power extends inwardly over the whole orb of light of the aspecting planet, and more so as the proximity is greater; but by separation it is not so. This doctrine may be seen in several chapters of Ptolemy; for an aspecting star influences the significator, and disposes him to produce effects co-natural to him, by a subsequent direction. But a star of no aspect does not predispose the significator, and produces very little or no effect of its nature by a subsequent dircetion.") And if the attendant stars should also be in angles, or configurated with the angle above the earth (midheaven), the said persons will become great, powerful, and mighty in the world; and even yet more abundantly so, provided the configurations made by the attendant stars with the angles above the earth be dexter. But when the luminaries may not be found in masculine

signs as aforesaid, but the sun only in a masculine sign and the moon in a feminine sign and only one of them posited in an angle, the other concomitant circumstances still existing in the mode above described, the persons about to be born will become mighty chieftains, invested with sovereignty of life and death.

And if the attendant stars, while the luminaries may be situated in the manner last mentioned, should be neither actually in angles nor bear any testimony to the angles, the person then born, although he will still enjoy eminence, will attain only limited dignity or distinction; such as that of a delegated governor, or commander of an army or dignitary of the priesthood, and he will not be invested with sovereignty.

If, however, neither of the luminaries be in an angle, or configurated with the angles, the persons then born will not attain any very eminent rank; yet they will take a leading part in ordinary civil and municipal affairs; but should the attendant stars have no configuration with the angles, they will then remain altogether undistinguished and without advancement; and provided, further, that neither of the luminaries be found situated in a masculine sign, nor in an angle, nor be attended by any benefics, they will be born to complete obscurity and adversity.

(Ptolemy speaks of the conditions of society in his own time when he refers to persons born under certain planetary conditions as likely to become kings and princes, or chieftains, governors, or the like. In our time this would mean, persons born under the most favorable planetary conditions would become foremost

in the social world, in politics, or in business firms or corporations; and so with the other arrangements of planetary conditions of which he speaks. Rank or dignity in our times and in our society means social position.)

The general appearance of exaltation or debasement of rank is to be contemplated, as before stated, but there are many gradations intermediate to those already specified, and requiring observation of the particular interchanges and variations, incidental to the luminaries themselves and their doryphory, and also to the dominion of the planets which compose their doryphory. For instance, should the benefics or stars of the same condition exercise the chief dominion, the dignities to be acquired will be not only more important, but also more securely established; and on the other hand, if the chief dominion be claimed by malefics, or by stars of an adverse condition, the dignities will be more subordinate and more dangerous and evanescent.

The species of dignity may be inferred by observing the peculiar qualities of the attendant stars; and if Saturn have chief dominion of the doryphory the power and authority derived therefrom will lead to wealth and profit; authority proceeding from Jupiter and Venus will be pleasurable; that proceeding from Mars will consist in commanding armies, in obtaining victories, and in overawing the vanquished, and that proceeding from Mercury will be intellectual, such as superintending education and study, and directing the management of business or in one of the learned professions.

The Kind of Profession or Employment.

The dominion of the employment or profession is claimed in two qualities, viz., by the sun and by the sign on the midheaven.

It is therefore necessary to observe whether any planet may be making its oriental appearance nearest the sun, and whether any be posited in the midheaven, especially when also receiving the application of the moon. And if one and the same planet possesses these qualifications—that is to say, makes its nearest appearance to the sun and be also in the midheaven, one alone must be elected to determine the present inquiry; and likewise though the planet should not be thus doubly qualified, but only singly, in whichever aspect, even then that planet alone must still be elected, provided itself alone should possess such single qualification. If, however, there should be one planet presenting its nearest appearance, and another in the midheaven conciliating with the moon, both must be noted; and whichever of these may have greater sway and possess greater rights of dominion, that one will be preferred. But where not any planet may be found so situated, neither making its appearance as above described, nor being in the midheaven, then that one possessing the dominion of the midheaven is to be considered as lord of the employment. It is, however, only some occasional occupation which can be thus denoted; because persons born under such a configuration most commonly remain at leisure and unemployed.

What has now been said relates to the election of the lord of the employment or profession; but the species

of the employment will be distinguished by means of the respective properties of the three planets, Mars, Venus, Mercury, and of the signs in which they may be posited.

Mercury, for instance, produces writers, superintendents of business, accountants, teachers in the sciences, merchants, bankers, in short all who live by the exercise of literature and by furnishing explanation or interpretation, as well as by stipend and salary or allowance. If Saturn bear testimony jointly with Mercury, persons then born will become managers of the affairs of others. But if Jupiter join testimony they will be painters, orators, or pleaders in arguments, and occupied with eminent personages.

Should Venus have dominion of the employment she will cause persons to be engaged in various indoor employments requiring taste, sense of color, smell, artistic proportion, etc., such as the drapery business, drugs, decoration, and the like; in fact, any employment requiring the exercise of the senses, even the sense of taste, as in the case of the wine-merchant. If Saturn add his testimony to hers, he will cause persons to be employed in matters belonging to amusement and architecture, and will also produce jugglers, charlatans, etc. But if Jupiter join testimony with Venus, persons will be advanced in honor through female interest.

Mars ruling the employment and being configurated with the sun will produce persons who operate by means of fire; for instance cooks, as well as those who work in copper, brass, and other metals, by melting, burning, and casting. If Mars be separated from the sun he will

make shipwrights, smiths, agriculturists, stonemasons. carpenters and subordinate laborers. If Saturn bear testimony in addition to Mars, persons will become mariners, workers in mills, vaults, or mines, painters of houses, keepers of beasts or cattle, cooks, butchers, and attendants on exhibitions. And if Jupiter join testimony they will be soldiers or mechanics, collectors of revenue, innkeepers, or toll-gatherers.

Further, should it happen that two arbiters of employment may be found together and provided they should be Mercury and Venus, they will then produce musicians, melodists, and persons engaged in music, poetry, or songs. They will also (especially if located in each other's dignities) become mimics, actors, makers of musical instruments, choristers and musical performers, dancers, modelers in wax, and painters. And if Saturn join testimony with Mercury and Venus, the preparation and sale of female ornaments will be added to the aforesaid occupations. But if Jupiter give testimony, the persons will become administrators of justice, guardians of public affairs, instructors of youth, and magistrates of the people.

Should Mercury and Mars together be lords of the employment, persons will become statuaries, armor-makers, sculptors, modellers of animals, surgeons, spies or informers, adulterers, busy in crime, and forgers. And if Saturn also bear testimony in addition to Mercury and Mars, he will produce assassins, highwaymen, thieves, robbers, and swindlers. But if Jupiter afford testimony he will engage persons in honorable warfare and in industry, making them cautious and diligent in

business, curious in foreign matters, and deriving profit from their pursuits.

When Venus and Mars exercise dominion together persons will become dyers, dealers in perfumes, workers in tin, lead, gold, and silver, dealers in drugs, agriculturists, and phȳsicians. And if Saturn add testimony to Venus and Mars, he will produce sextons, grave-diggers, and undertakers, and fanatics occupied in religious undertakings. But if Jupiter add testimony, the persons will become priests and clergymen, governors placed over women, and interpreters, and they will derive support from such occupations.

The properties of the signs in which the lords of the employment may be posited are also influential in varying the employment. For example, the signs of human shape (Sagittary, Aquarius, Virgo, and Gemini) promote all scientific pursuits, and such as are of utility to mankind; the quadrupedal signs (Capricorn, Leo, Taurus, and Aries) contribute to produce employment among metals, in business and trade, in house-building, and work of smiths and mechanics; the tropical and equinoctial signs (Cancer and Capricorn, and Aries and Libra) tend to give employment in translation or interpretation, in matters of exchange, in mensuration and agriculture, and in religious duties; the terrestrial and watery signs (Taurus, Cancer, Virgo, Scorpio, Capricorn, and Pisces) tend to employment in water and in connection with water, as well as in regard to the nurture of plants as to ship-building. They likewise contribute to employment in funerals, in embalming and preserving, and also in salt.

Moreover, should the moon herself actually occupy the place regulating the employment (the midheaven) and after her conjunction continue in course with Mercury, she will produce persons of extraordinary prescience.

From the foregoing rules the various kinds of employment are to be inferred, and its magnitude or importance will be manifested by the existing power of the ruling planets. For instance, if the said planets be oriental or in angles they will give the person eminence and authority in his employment; but if occidental or cadent, they will render him subordinate. And should the benefics be in elevation the employment will be important, lucrative, secure, honorable and agreeable; but, on the other hand, if the malefics be in elevation above the lords of the employment, it will then be mean, disreputable, unprofitable, and insecure.

Thus Saturn brings adverse influence in coldness or tardiness, and from a mixture of pursuits; and Mars produces opposition by audacity and publicity in enterprise; and both planets are alike hostile to proficiency and prosperity.

The general period at which any increase or diminution of the employment may take place must, again in this case also, be determined by the disposition of the stars which operate the effect toward the oriental and occidental angles.

(According to modern astrologers, Uranus inspires love of occult and abstruse and uncommon employments, the study of human nature and electricity, and publicity of pursuits; Saturn rules those connected with

land, mines, buildings and all manual labor; Jupiter rules clergymen, bankers, lawyers and legislators, merchants, and persons in power; Mars rules generals, surgeons, soldiers, chemists, engineers, naval commanders, butchers, mechanics, cutlers, and all employed among sharp instruments and fire. He gives mechanical and constructive skill. Venus is associated with musicians, artists, singers, jewelers, mercers, drapers, trades connected with fancy goods, toys, pleasures. The sun produces rulers, public functionaries, legislators, ambassadors, government officers, and those in positions of trust. Mercury rules mathematicians, secretaries, clerks, lawyers, schoolmasters, literary men, public speakers, engravers, designers, messengers, and scientific men. The moon rules the multitude, obscure people, sailors, servants, fishmongers, travelers, dealers in public commodities.)

Marriage.

The consideration of circumstances relating to marriage or the cohabitation of husband and wife as sanctioned by law succeeds to the foregoing details, and must be pursued in the following method:

With men it is to be observed in what manner the moon may be disposed, for in the first place if she be found in the oriental quadrant she will cause men either to marry early in life, or after having overpassed their prime to marry young women; but should she be situated in either of the occidental quadrants men will then marry either late in life, or to women advanced in age; and if she be found under the sun's beams and configurated with Saturn, she then entirely denies marriage.

Secondly, should she be in a sign of single form and in application to but one planet, she will cause men to marry only once; but if she be in a bicorporeal or multiform sign (Gemini, Virgo, Sagittary, Pisces), or in application to several planets, she will cause them to be married several times; and provided also that the planets which thus either by adjacency or by testimony receive her application be benefic, men will then obtain good wives; but if on the contrary the said planets be malefic, bad. For example, if Saturn receive the moon's application the wives whom he will provide will be troublesome and morose; but if Jupiter receives it they will be decorous and economical; if Mars, bold and refractory; if Venus, cheerful, handsome, and agreeable; and if Mercury, sensible, prudent, and clever. Moreover, should Venus be found connected with Jupiter, Saturn or Mercury, she will render wives provident and attached to their husbands and children; but if she be found connected with Mars they will be irascible, unsteady, and indiscreet. Thus far in reference to the marriage of men. (Uranus, discovered since the time of Ptolemy, may be said to give waywardness and uncertainty of conduct in wives. It gives liability to illicit connections and elopements; it may be, however, only a fondness for society and publicity, and a temper impossible to count on.)

In the case of women the sun must be observed instead of the moon; and should he be posited in the oriental quadrants, women will be married either in their own youth or to men younger than themselves; but if he be in the occidental quadrants they will either be

married late in life or to men who have passed their prime and are advanced in years. And should the sun be in a sign of single form, or configurated with only one oriental planet, he will cause them to enter into matrimony only once; but if in a bicorporeal or multiform sign, or configurated with oriental planets, he will then cause them to be married often. And Saturn being configurated with the sun will provide husbands steadfast, advantageous, and industrious; Jupiter, such as are honorable and noble-minded; Mars, husbands void of affection and intractable; Venus, amiable and handsome husbands; and Mercury, such as are provident and expert in business. But if Venus be found connected with Saturn she will indicate dull and timid husbands; if with Jupiter they will be good, just, and modest; if with Mars, hasty, lustful, and adulterous; and if with Mercury they will be desirous of children.

In regard to the sun, those quadrants which precede the ascending and descending points of the zodiac (that is, tenth, eleventh and twelfth houses, and the houses opposite, that is, fourth, fifth, and sixth); and in respect of the moon those which are measured from her conjunction and opposition with the sun (that is, new and full moon) to her intermediate quarters, are called oriental quadrants. The occidental quadrants are of course those included between the midheaven and the western angle, and the one opposite.

Whenever both nativities, viz., that of the husband and that of the wife, may exhibit the luminaries configurated together in concord, that is to say, either in

trine or in sextile to each other, the cohabitation will most usually be lasting, especially if the said concord exist by mutual reception in dignities; but its duration will be also much more securely established provided the moon in the husband's nativity should correspond or agree with the sun in the wife's nativity (that is, the moon in the husband's nativity in the same position as the sun in the wife's). If, however, the relative positions of the luminaries be in signs inconjunct, or in opposition, or in quartile, the cohabitation will be speedily dissolved upon slight causes, and the total separation of the parties will ensue, unless offset by favorable relations between the other planets and luminaries.

And should the configuration of the luminaries when made in concord be aspected by the benefics, the cohabitation will continue in respectability, comfort, and advantage; but, on the other hand, it will abound in strife, contention, and misfortune if the malefics be in aspect to the said configuration. In like manner, even though the luminaries be favorably configurated in concord, should the benefics still offer testimony the cohabitation will then not be entirely broken off, nor totally destroyed forever, but will be again renewed and re-established as before. But if, on the contrary, the malefics bear testimony to such discordant disposition of the luminaries, a dissolution of the cohabitation will take place, accompanied by scorn and injury. Should Mercury alone be conjoined with the malefics it will be effected by means of some public inculpation, and if Venus also be found with them, it will be on the ground

of adultery or sorcery or some similar offense (that is, divorce proceedings or scandal of some sort).

There are, however, other varieties of the married state which are to be contemplated by means of Venus, Mars and Saturn. And should these planets act in familiarity with the luminaries, the cohabitation will be appropriate and domestic and authorized by law, because Venus holds a certain affinity both to Mars and Saturn; her affinity to Mars, for instance, consists in each having exaltation in a sign belonging to the other's triplicity, and it operates in the case of youthful and vigorous persons; while her affinity to Saturn arises from their respective houses being in signs again also belonging to each other's triplicity, and relates to persons more advanced in age.

Hence if Venus be in concurrence with Mars she will produce entire love and affection in the cohabiting parties, and if Mercury also coincides with the said planets such affection will become publicly notorious. Should Venus be found in a sign mutually common and familiar, such as Capricorn or Pisces, she will affect marriages between kindred by blood, and provided she be also in the presence of the moon when the native may be male, she will cause him to connect himself with two sisters or other near relatives; but if the native be female a similar contact on her part with two brothers or near relatives will be indicated, when Venus may be also with Jupiter.

Again, if Venus be with Saturn the cohabitation will be established entirely in happiness and constancy; and if Mercury be present with them it will be profitable;

but should Mars be present, it will be unsettled, calamitous, and afflicted by jealousy. And if Mars be configurated on equal terms with Venus, Saturn and Mercury, he will effect marriage between persons of equal age; but, on the other hand, should he be more oriental, marriage will take place with a younger man or woman, and if more occidental with an older person. Should Venus and Saturn be found in signs common to each other, that is to say, in Capricorn and Libra, marriage will be contracted between persons kindred by blood.

When the aforesaid configurations, although not existing in signs of affinity to each other, should be found in feminine places they will render the parties obscene, lustful, and shameless. And should Venus and Saturn be posited in angles, they will then, if posited in the first two angles, the eastern and the midheaven, produce a total exposure of passions, and cause them to be publicly canvassed; but if in the last two angles, the western and nadir, they will produce eunuchs, or persons unprolific, and not possessing the proper channels of nature.

The passions liable to operate in males are to be considered by observation of Mars; for should he be separated from Venus and Saturn, but yet at the same time be supported by the testimony of Jupiter, he will make men pure and decorous in sexual intercourse and incline them to natural usages only; and if he attach himself to Saturn only he will then be cold in blood and dull in appetite; if, however, when Saturn and Mars may be thus connected together, Venus and Jupiter should also be configurated with them, men will then become

easily excited and eager in desire, although they will still be continent and restrain themselves in order to avoid reproach. But should Saturn be obscure, and Mars be with Venus alone, even although Jupiter be with her, men will become highly licentious and attempt to gratify their desires in every mode. And further, if Venus be found more occidental, men will connect themselves with low women, and aliens or vagabonds; but should Mars be found occidental, with women of rank, and gentlewomen; or with women living with their husbands, or under the protection of men. Thus far with regard to males.

In the case of females, Venus requires attention; for if she be configurated with Jupiter or with Mercury she will cause women to be temperate and pure in sexual intercourse; still, however, when she may be thus connected with Mercury, if Saturn be not present also, she will cause them to be easily excited to desire, although they will control their desires and avoid reproach. But should Venus be conjoined or configurated with Mars alone she will render women licentious and lustful; and if to both these planets when thus conjoined or configurated Jupiter also present himself, Mars being at the same time under the rays of the sun, women will then mingle in intercourse with persons meaner than themselves, or with aliens or vagabonds; but should Venus happen to be under the sun's rays, they will commit themselves with their superiors or masters. And further, should the planets be in feminine places or configurated femininely they will be content with their passive faculties only.

Saturn in being conciliated with such positions as those now described contributes to produce obscenity, Jupiter greater decency, and Mercury greater publicity and greater fickleness or instability.

Children.

The next point to be investigated is that concerning children; and to accomplish this, observation must be made of the planets posited in or configurated with the place on the zenith (tenth house) or its succeedant house (eleventh), which latter is called the place of the good demon. And should it happen that not any planets may be present in the said places, nor configurated with them, it will then be necessary to take into consideration such as may be in opposition thereto.

Now the moon, Jupiter and Venus are esteemed as givers of offspring; but the sun, Mars, and Saturn are considered as denying children altogether, or as allowing but few; while Mercury, being in quality common to both divisions, lends co-operation to that which he may be configurated with, and gives offspring when oriental, but withholds when occidental.

To speak briefly, if the planets which grant progeny be so posited as described and placed singly, the gift of progeny will be single only (that is, one at a birth); but should they be in bicorporeal or feminine signs, they will grant twins. So likewise if they should be in prolific or seminal signs, such as Pisces, Cancer, and Seorpio, they will grant twins or even more. And provided they should also be masculinely constituted, as well by configuration with the sun as by being in masculine

signs, they will grant male children; but if femininely constituted, female.

But although the said planets even if beneath the malefics in elevation, or even if found in barren places, or in signs such as those of Leo and Virgo, will still grant children; yet such children, thus indicated, will neither be healthy nor continue life. Should it happen, however, that the sun and the malefics may be in entire possession of the places mentioned, viz., that on the zenith or the antecedent house allotted to the good demon; and provided they be at the same time in masculine or barren signs, and the benefics be not in elevation above them, a total privation of offispring is thereby indicated; but should they be in feminine or prolific signs, children will then be granted; yet they will be liable to disease and short lived.

If, however, planets of each condition should be configurated in prolific signs, then will there ensue a loss of either all the children or only a few, or else the major part of them, in the same proportion as that in which the planets bearing testimony to either condition may preponderate on one side rather than the other; by excelling in number, or in influence in consequence of being posited more orientally, more genuinely in angles, higher in elevation or successively ascending.

When the lords of the aforesaid signs may be such as are givers of offspring and be either oriental or in places proper to themselves, the children thus granted will become eminent and illustrious; but if occidental, or in places not proper to themselves, the children thus granted will then be undistinguished and abject.

Should the said lords also be in concord with the Part of Fortune and with the ascendant, they will render the children amiable and cause them to be beloved by their parents, and to inherit their parents' substance; but if found inconjunct, and not in concord with the said parts, the children will then become odious and mischievous to their parents, and will forfeit the inheritance of their substance.

Further, should the planets which grant progeny be appropriately configurated with each other they will promote brotherly love, and mutual regard and affection among the children, but if inconjunct or in opposition they will excite in them mutual hatred, deceit, and treachery.

The general investigation regarding children is to be conducted in the foregoing method; but in order to enquire into particular circumstances consequent on the above, it will be necessary to assume, as an ascendant, the position of each planet which gives offspring, and to observe the separate schemes, drawing inferences therefrom as in the case of a nativity.

Friends and Enemies.

With respect to friendship and enmity, it may be observed that great and lasting familiarities or disagreements are respectively called sympathies and enmities, while the smaller, such as arise occasionally and subsist for a short time only, are denominated casual intimacies and strifes; the whole are to be contemplated according to the following rules:

Indications of great and lasting friendship or enmity

may be perceived by observation of the ruling places exhibited in the respective nativities of both the persons between whom friendship or enmity may subsist. It is consequently essential to observe the places of the sun, the moon, the ascendant, and the Part of Fortune; for should all these in both nativities be in the same signs, or should either all or most of them be counterchanged in position in each nativity, and especially should the two ascendants be within the distance of 17 degrees of each other, they will create fixed and indissoluble friendships. On the other hand, should they be in signs inconjunct, or in opposition, they will produce great and lasting enmity. If, however, they be not constituted in either of the angles above mentioned, but merely configurated in signs, they will then produce minor friendships, provided such configuration exist by trine or sextile; but if by quartile they will excite minor enmity, so as to take effect at certain particular times in which the friendship remains, as it were, inactive and subdued, while the malefics transit the configuration. And in a similar manner, enmity also will be softened and abated when the benefics may enter upon the configuration of any of the four places above specified.

The friendship and enmity which men bear toward each other may be classed under three general heads. One kind is suggested by spontaneous willfulness; another by the idea of profit; and another by pain and pleasure mutually excited.

And therefore should either all or most of the aforesaid places be in familiarity with each other, friendship of all the three kinds will be established; so also should

the places be entirely without familiarity, similar enmity will be established. If, however, familiarity or absence of familiarity (as the case may be), exist only as regards the places of the luminaries, friendship or enmity will then be established by spontaneous will; and friendship thus produced is the best and most secure; while on the other hand enmity so arising is, in like manner, the worst and most dangerous. The friendship or enmity consequent on the familiarity or non-familiarity of the respective Parts of Fortune will be established on the idea of profit; and that consequent on a similar disposition of the respective ascendants will arise from pain or pleasure mutually excited between the parties.

It will, however, be necessary to pay still further attention to the places in question, in order to observe whether any and what planets may be in elevation above them or in aspect to them; because among all the said places, that particular one to which any planet in elevation, or in succession, may be adjacent, whether in the same sign or in the next, will possess the more powerful influence over friendship or enmity. And whichever place may have its aspecting planets more powerfully benefic, will operate in a greater degree to advantage in friendship and to relaxation of enmity. The foregoing instructions are applicable to such friendships or enmities as are great and lasting.

But in the case of others which subsist only occasionally, and which have been defined as casual intimacies and strifes, it is essential to make observation of the motions of the planets as exhibited by each nativity; that is to say, the times are to be calculated on the

completion of which the motions of the planets of one nativity will cause them to enter on certain places of the other nativity; for it is at such periods that certain particular friendships and enmities occur, continuing for a short time, until the said ingress of the planets shall have passed over.

For instance, Saturn and Jupiter, when making ingress upon each other's places, produce friendship by certain agreements or engagements relative either to agriculture or to inheritance; Saturn and Mars create contention and treachery spontaneously entertained, liable, however, soon to grow cool; Saturn and Mercury, friendship on account of business, or profit, or some secret art or mystery.

Jupiter and Mars create friendship in the direction of affairs; and by means of dignities; Jupiter and Venus also create friendship by means of female persons, or in religious circles; Jupiter and Mercury, friendship by means of eloquence and science, and philosophical inclination.

Mars and Venus cause friendship in the course of amours, adultery, and fornication; Mars and Mercury with hatred and strife by offenses committed in business and trade.

And Venus and Mercury produce connection by means of the arts and sciences, by a mutual interest in literature, or by female persons.

It is in this manner that the planets operate in producing friendship or enmity, and their compartive intensity or relaxation of vigor is to be distinguished by

the situation of the places which they occupy, with regard to the four principal and ruling places.

With respect to servants, the sign of the evil demon (that on the cusp of the twelfth house) is considered as the place to which the disposition ruling over them must be referred, and it is to be observed what planets are in aspect to that place, both at the actual time of nativity and at that of any ingresses made upon it, or opposition to it; and also especially whether the lords of the said sign may be configurated in familiarity with the ruling places of the nativity, or not in familiarity.

Travel.

The circumstances indicative of travel are to be considered by means of the situation held by both the luminaries in respect to the angles and especially by means of that held by the moon. For, should she be descending, or cadent from the angles, she will cause journeys and changes of residence; Mars, also, if descending, or cadent from the zenith, will sometimes do the same, provided he may occupy a situation in quartile or in opposition to the luminaries. And if the Part of Fortune should happen to be placed in signs which produce traveling, the course and practice of the whole life will be engaged in foreign lands. And, further, provided the benefics superintend the aforesaid places, or ascend in succession to them, the engagements abroad will be honorable and lucrative, and the return home speedy and unobstructed; but if, on the contrary, the malefics superintend or ascend in succession to those places, the journey outward will then lead to peril and misfortune,

and the return will be replete with difficulty. But it is at the same time necessary in all cases to consider the contemperament also, and to observe such of the existing configurations as are more predominant.

It most usually happens that if the luminaries be posited in the cadent houses of the oriental quadrants, the travel will take place in the eastern or southern quarters of the world; and that if placed in the western situation or in an occidental quadrant, travel will then be prosecuted in northern and western parts, and should the signs which operate travel be themselves single in form, or should the planets having dominion of them be singly posited, the journeys will then take place after long intervals, and occasionally only; but if the said signs be bicorporeal or double in form or figure, travel will be constantly repeated and continued.

Thus when Jupiter and Venus may be in dominion over the luminaries and over the places producing travel they will render the journeys agreeable, as well as free from danger; for the traveler will be joyfully forwarded on his way by the magistrates of the country, and by the concurrent assistance of friendly persons; the state of the atmosphere will also be favorable, and he will meet with abundance of accommodation; and provided Mercury also be present with the planets above signified, utility, profit, presents, and honors will likewise be derived from the journey.

Saturn and Mars, if controlling the luminaries, and especially if placed distantly from each other so as not to act in concert, will produce great dangers, and at the same time render the journey fruitless and unavail-

ing. Should they be in watery signs the dangers will arise by shipwreck, or among deserts and wildernesses; if in fixed signs, by precipices and adverse blasts of wind; in tropical and equinoctial signs by want of food and other necessities, and by some unwholesomeness of the atmosphere; in signs of human form by robbery, trading, and various depredations; and if in terrestrial signs by the attack of wild beasts or from earthquakes. And should Mercury also lend concurrence, the traveler will incur further danger from accusations made against him, as well as from reptiles and innocuous bites or stings.

The question whether events will be advantageous or injurious in quality must, however, be further considered by observation (made in the forms already detailed) of the peculiar properties of the places in which the lords of employment, of wealth, of the body, or of rank, may be posited. And the periods at which traveling will take place are to be considered by the occasional ingress of the five planets.

(The discovery of Uranus introduces into astrology one of the most important influences in regard to travel. If Uranus be strongly posited in any part of the heavens, traveling is likely to result; but if associated in configurations described by Ptolemy he is peculiarly liable to produce travel, or incursions into new schemes and undertakings at home or in other parts if the world.)

APPENDIX A.

Key to characterizations according to the sign of the zodiac the sun is in.

Persons born between—

March 27 and April 14, will find themselves described under Aries.

April 14 and 25, will find themselves described under Aries and Taurus combined.

April 25 and May 15, will find themselves described under Taurus.

May 15 and 26, will find themselves described under Taurus and Gemini combined.

May 26 and June 16, will find themselves described under Gemini.

June 16 and 27, will find themselves described under Gemini and Cancer combined.

June 27 and July 17, will find themselves described under Cancer.

July 17 and 28, will find themselves described under Cancer and Leo combined.

July 28 and August 17, will find themselves described under Leo.

August 17 and 28, will find themselves described under Leo and Virgo combined.

August 28 and September 18, will find themselves described under Virgo.

Sept. 18 and 29, will find themselves described under Virgo and Libra combined.

Sept. 29 and Oct. 18, will find themselves described under Libra.

Oct. 18 and 29, will find themselves described under Libra and Scorpio combined.

Oct. 29 and Nov. 17, will find themselves described under Scorpio.

Nov. 17 and 28, will find themselves described under Scorpio and Sagittarius combined.

Nov. 28 and Dec. 16, will find themselves described under Sagittarius.

Dec. 16 and 27, will find themselves described under Sagittarius and Capricorn combined.

Dec. 27 and Jan. 15, will find themselves described under Capricorn.

Jan. 15 and 26, will find themselves described under Capricorn and Aquarius combined.

Jan. 26 and Feb. 14, will find themselves described under Aquarius.

Feb. 14 and 25, will find themselves described under Aquarius and Pisces combined.

Feb 25 and March 16, will find themselves described under Pisces.

March 16 and 27, will find themselves described under Pisces and Aries combined.

APPENDIX B.

DOMINION OF THE SIGNS.

		Ruling Planets		Domain
Aries ♈	March 21 to April 19	♂ and ☉	governs the head	Fire
Taurus ♉	April 19 to May 20	♀ and ☽	governs the neck	Earth
Gemini ♊	May 20 to June 21	☿ and ♅	governs the arms	Air
Cancer ♋	June 21 to July 22	☽ and ♃	governs the breast	Water
Leo ♌	July 22 to August 22	☉	governs the heart	Fire
Virgo ♍	August 22 to September 23	☿	governs the bowels	Earth
Libra ♎	September 23 to October 23	♆	governs the loins	Air
Scorpio ♏	October 23 to November 22	♂	governs the genitals	Water
Sagittarius ♐	November 22 to December 21	♃	governs the thighs	Fire
Capricorn ♑	December 21 to January 20	♄ and ♂	governs the knees	Earth
Aquarius ♒	January 20 to Feburary 19	♅	governs the legs	Air
Pisces ♓	Feburary 19 to March 21	♃ and ♆	governs the feet	Water

APPENDIX C.

MOON SIGNS FOR SUN IN ARIES.*

☽ in ♈

When the Moon is in Aries the native will be mentally independent of all other persons, well balanced, self-satisfied, and very active.

☽ in ♉

When the Moon is in Taurus the native will be fond of elegant and harmonious surroundings and animal beauty, and the five senses will be particularly keen.

☽ in ♊

When the Moon is in Gemini the native will have artistic and mechanical genius and a good command of language. He will be fretful and changeable, and in danger of overdoing, and should cultivate regular habits.

☽ in ♋

When the Moon is in Cancer the native will be possessed of a clear, logical brain, will worry if money matters go wrong, and be liable to an excessive inclination toward the opposite sex.

☽ in ♌

When the Moon is in Leo the native will have a warm, sympathetic, affectionate, sensitive, deeply thoughtful and imaginative disposition.

☽ in ♍

When the Moon is in Virgo the native will be inclined to religious scepticism, but will make a good teacher. He will not be fond of

*The epitome of the effect of the moon when placed in the various signs in conjunction with the position of the sun is in accordance with the observations of Mr. Hiram Butler as given in his "Solar Biology."

manual labor or domesticity, but will be well adapted to literary pursuits and especially fond of music.

☽ in ♎ When the Moon is in Libra the native will be intuitive but slow to follow the reasoning of others; he will be a good counsellor, careful in what he says, honorable and domestic.

☽ in ♏ When the Moon is in Scorpio the native will be positive in temper, excitable, with strong passions, but conservative in ideas and methods.

☽ in ♐ When the Moon is in Sagittarius the native will have marked activity of mind, but be liable to extremes, restlessness, and impetuosity in judgment.

☽ in ♑ When the Moon is in Capricorn the native will be positive, active, determined, exacting, popular, fond of society, and adapted to music as a profession.

☽ in ♒ When the Moon is in Aquarius the native will be easy to get acquainted with, affable, winning, and generally successful in dealing with the public.

☽ in ♓ When the Moon is in Pisces the native will be studious, restless, dissatisfied, and hence liable to an unhappy married life.

MOON SIGNS FOR SUN IN TAURUS.

☽ in ♈ When the Moon is in Aries the native will be positive, conscientious, but exacting and headstrong, and persistent to obstinacy. He

will be adapted to law, engineering, mathematies, or mechanics.

☽ in ♉ When the Moon is in Taurus the native will be bold, animated, active, often brilliant, a very strong character in every way, and not liable to disease.

☽ in ♊ When the moon is in Gemini the native will have an inclination for public speaking, will have poetic ability, and prove useful in all departments of life. He will be fond of order and beauty, inclined to the city, and will probably be obstinate and self-conceited, desiring to be at the head of things, and possessed of great physical endurance.

☽ in ♋ When the Moon is in Cancer the native will have marked love of home, family, and children, will be persistent in business and economical, but in danger of sexual indulgence.

☽ in ♌ When the Moon is in Leo the native will be domestic, possessed of strong likes and dislikes, will be easily influenced by associates, and hence frequently deceived. This position of the Moon gives full play to the sensational and emotional nature of Taurus.

☽ in ♍ When the Moon is in Virgo the native will be intuitive, discriminating, possessed of a first-class business mind, but will be inclined to be critical. This position should make first-rate medical men.

When the Moon is in Libra the native

☽ in ♎ will be quick in deciding, positive, and selfish. He will have speculative ability and intuition.

☽ in ♏ When the Moon is in Scorpio the native will be hard, positive, conventional. This position of the Moon gives activity to the lower nature of Taurus.

☽ in ♐ When the Moon is in Sagittarius the native will be given to extremes, hasty, always hard at work, and will need to exercise control over his sex-nature and his temper.

☽ in ♑ When the Moon is in Capricorn the native will love wealth and grandeur, aspire to position and public honors, and be conventional in his ideas. He will be adapted to the legal or military profession. He will show great self-control, but be disinclined to a domestic life. This position of the Moon is good for men but bad for women.

☽ in ♒ When the Moon is in Aquarius the native will have a clear use of language, will be easy of acquaintance, tactful, and adapted to a literary calling. He would also make a good practical business agent.

☽ in ♓ When the Moon is in Pisces the native will have a practical, mechanical, ingenious mind, will be active, frequently irritable and dissatisfied, inclined to study, and economical.

MOON SIGNS FOR SUN IN GEMINI.

☽ in ♈ When the Moon is in Aries the native will have a strong will and an aspiring mind,

will be a reader of books and positive about having his own way. He will be adapted to law and politics, though in constant danger of extremes.

☽ in ♉

When the Moon is in Taurus the native will be determined and persistent, and inclined to a pushing, energetic business life. He will desire to control, and have adaptation for the medical profession.

☽ in ♊

When the Moon is in Gemini the native will be clear in thought, well balanced in calculation, but determined to carry out his ideas regardless of others. This position of the Moon gives a good business mind.

☽ in ♋

When the Moon is in Cancer the native will always be anxious about business success and money matters and family relations. He will be restless and have a great desire for sympathy from others.

☽ in ♌

When the Moon is in Leo the native will desire love and sympathy, will be lacking in determination, be inclined to despondency, and have faith in a controlling destiny. He will be adapted to the church, poetry, or music.

☽ in ♍

When the Moon is in Virgo the native will be studious, with a mathematical mind, and a tendency to criticise and examine. He will be fond of chemistry and medicine, and will have an eye for beauty of architecture and

the artistic in general. He will be particular and often irritable and critical.

☽ in ♎ When the Moon is in Libra the native will be endowed with spiritual tendencies and display love of the unseen, with an intuitive and presaging mind. He will be quick to decide, and adapted to the study of nature and philosophy.

☽ in ♏ When the Moon is in Scorpio the native will be positive, determined, imitative, conservative, and be inclined to keep out of sight. He will be more controlled by passion than conjugality in married life.

☽ in ♐ When the Moon is in Sagittarius the native will be over-active and over-expressive, and too quick in every way; he will be inclined to be mentally, not physically, combative. He will be adapted to the ministry or public speaking. Few children under this combination of signs come to maturity.

☽ in ♑ When the Moon is in Capricorn the native will be watchful and careful in business, suspicious of losses, distrustful of friends, and be inclined to view everything from a business standpoint. He will have love of beauty, elegance, and grandeur, and be disposed to labor hard for a position of eminence. There is danger of intemperance.

☽ in ♒ When the Moon is in Aquarius the native will have natural qualification for dealing with the public, and make a tactful business agent.

When the Moon is in Pisces the native
☽ in ♓ will have a reckless, anxious, studious mind; he will be frequently dissatisfied and feel that he is opposed in everything; but when self-mastery is attained great attainments in life may be looked for.

MOON SIGNS FOR SUN IN CANCER.

When the Moon is in Aries the native
☽ in ♈ will possess indomitable persistency, will be difficult of change, but liable to go to extremes. He will have an innate hatred of being controlled by another mind.

When the Moon is in Taurus the native
☽ in ♉ will be inclined to follow his sensations and in danger from persons of bad influence as he is abnormally sensitive. He will love the wonderful and sublime. There is danger of insanity.

When the Moon is in Gemini the native
☽ in ♊ will be inclined toward art, business, writing, speaking, etc.

When the Moon is in Cancer the native
☽ in ♋ will have clear, keen intellectual vision, will be free from vague imaginings, and possessed of a good business mind, and will be independent and self-sufficient.

When the Moon is in Leo the native will
☽ in ♌ have a restless love of nature, be somewhat unreliable, and sensitive to other minds.

When the Moon is in Virgo the native

☽ in ♍ will have a desire for pleasurable emotions, will be keen, critical, and discriminating in emotional matters, and passionate in his love nature.

☽ in ♎ When the Moon is in Libra the native will have fine intuitions and keen perceptions relating to social life. This position of the Moon often produces idealistic writers.

☽ in ♏ When the Moon is in Scorpio the native will have much self-control over passion. He will be adapted to usefulness in public life and money-getting; withal conventional and often severe toward opponents.

☽ in ♐ When the Moon is in Sagittarius the native will have good mechanical ability, industry and energy; indeed, he will be inclined to over-activity and to work himself to death.

☽ in ♑ When the Moon is in Capricorn the native will have high ideals of beauty and grandeur, and possibly religious zeal. He may be fond of society, but will display a curious self-opposition and uncertainty, and be liable to some eccentricity.

☽ in ♒ When the Moon is in Aquarius the native will love city life, be possessed of good business qualifications, will be careful in what he says and does, shrewd in bargains, seldom positive in assertion, and therefore truthful.

☽ in ♓ When the Moon is in Pisces the native will have a bright, active mind, will be studi-

ous, eager for knowledge, but liable to hysteria. He should keep active.

MOON SIGNS FOR SUN IN LEO.

in ♈ When the Moon is in Aries the native will have a kind and non-combative disposition, but will be persistent and inclined to extremes in whatever he undertakes, and liable to insanity on religious or scientific subjects.

in ♉ When the Moon is in Taurus the native will have a passion for the study of nature, especially human nature. He will appear anxious concerning his success in life, but will have good business intuitions, and an adaptation to the medical profession. He will not be liable to disease.

in ♊ When the Moon is in Gemini the native will have strong educational abilities. He will be restless and inclined to overdo.

in ♋ When the Moon is in Cancer the native will be liable to ups and downs of temperament, will be easily wounded, but very sympathetic with the thoughts of those he loves. He will have much practical energy, and there will be liability to a mistake in marriage.

in ♍ When the Moon is in Virgo the native will love purity of surroundings and have a tendency to criticise what is not harmonious, and will be anxious and dissatisfied, liable to eccentricities and idiosyncrasies.

When the Moon is in Libra the native

☽ in ♎ will be adapted to literary and educational pursuits, and will be possessed of mental and physical vigor and natural prophetic power.

☽ in ♏ When the Moon is in Scorpio the native will be fond of show and external appearance, and often proud and arrogant.

☽ in ♐ When the Moon is in Sagittarius the native will be restless and unsatisfied, wanting an unknown something, will have an inclination for religion, and a tendency to law, order, and rule, and intolerance of deviation therefrom.

☽ in ♑ When the Moon is in Capricorn the native will be active in business and adapted to trade. This position of the Moon counteracts the sympathetic nature of Leo and makes the native rather hard and exacting, with acute sensibilities of cleanliness and uncleanliness, sounds, actions, etc., almost to morbidness.

☽ in ♒ When the Moon is in Aquarius the native will be popular, fond of travel, liable to become an adventurer—certainly adapted to public life.

☽ in ♓ When the Moon is in Pisces the native will be restless and uneasy, dissatisfied with family restraints, fond of travel, eager for knowledge, sometimes meddlesome and impertinent. As a mechanic he will be diligent, accurate and practical.

MOON SIGNS FOR SUN IN VIRGO.

☽ in ♈ When the Moon is in Aries the native will have weak digestion because of too great activity of brain. This position of the Moon intensifies the power of sight, the strongest sense of Virgo, and eyes are liable to become weak from over-use. The native is frequently too stubborn for his own good, but likely to succeed in intellectual pursuits, and he has a lively sense of the ridiculous.

☽ in ♉ When the Moon is in Taurus the native will have keen perceptions of the unspoken thoughts and intentions of others, will seldom be deceived in business transactions and remarkably successful therein, but will be in danger of over-activity.

☽ in ♊ When the Moon is in Gemini the native will be talkative and so quick of speech as to be liable to stop or stammer; he will be artistic, fond of public life, and fastidious.

☽ in ♋ When the Moon is in Cancer the native will be easily unnerved by unpleasant surroundings, fond of an elegant home, economical, industrious, and exclusive to selfishness.

☽ in ♌ When the Moon is in Leo the native will have a strong and insatiable love passion, pure but restless, and will be liable to nervous affections.

☽ in ♍ When the Moon is in Virgo the native will have powerful love and sex endowments with great purity and self-control and faith-

fulness. He will be independent and self-reliant, with keen insight amounting to a gift of foreknowledge, and will be polite and refined.

☽ in ♎ When the Moon is in Libra the native will be free from sensationalism, philosophical in reasoning, independent in thought, rapid of speech, quick to learn, but liable to bad eyesight.

☽ in ♏ When the Moon is in Scorpio the native will be fond of the society of his own sex, lacking in sympathy, often high-tempered, but very likely to succeed in life as this position of the Moon hardens the sensitive points of Virgo.

☽ in ♐ When the Moon is in Sagittarius the native will be exceedingly active in body and mind, will concentrate his powers, and be liable to domineer and speak more harshly than he means. In thought he will be impulsive, with a tendency to the religious and spiritual.

☽ in ♑ When the Moon is in Capricorn the native will possess musical talents and business qualifications, will be fond of society, music, and public entertainments, and gratification of the senses. He will be independent in character, opposed to restraint or control, by no means domestic, but fond of an elegant home.

☽ in ♒ When the Moon is in Aquarius the native will display mental and physical harmony of

nature, will have superior tact and ability to please, and will be well fitted for mechanical or musical pursuits. He will have much control over others, and be inclined to politics and city life.

☽ in ♓ When the Moon is in Pisces the native will have a practical business mind, good mechanical ability, will be industrious, and adapted to literary pursuits. He will be restless and fond of variety, sensitive to blame, and be inclined to love of power.

MOON SIGNS FOR SUN IN LIBRA.

☽ in ♈ When the Moon is in Aries the native will have a strong will and power of self-control, superior ability to conceal thoughts, feelings, and emotions, and the power to control others by a word, with great intensity of speech. This position of the Moon enlarges and intensifies the powers of Libra.

☽ in ♉ When the Moon is in Taurus the native will be quiet, harmonious in nature and persistent in business. The continuity of Libra is intensified, with the addition of carefulness and patience, and Libra's sensitiveness is increased.

☽ in ♊ When the Moon is in Gemini the native will have a restless, active mind adapted to intellectual and educational spheres of usefulness, high aspirations, ability in the arts and mathematics, and good command of lan-

guage. Such a person is likely to be "an encyclopedia of knowledge."

☽ in ♋

When the Moon is in Cancer the native will be fond of home and family, faithful to employers, and inclined to trade. This position adds to the sensitiveness of Libra and inclines to sexual indulgence.

☽ in ♌

When the Moon is in Leo the native will be governed by intuitions and feelings, reason being subordinate. He will have a strong love nature and be deeply devoted to children, with an inclination toward spiritualism and a tendency to live in an ideal world.

☽ in ♍

When the Moon is in Virgo the native will be fond of music, inclined to follow his feelings, will be intuitive, and qualified for speculation and trade.

☽ in ♎

When the Moon is in Libra the native will have the peculiarities and eccentricities of the Libra nature balanced and harmonized. He will have a bright intellect and business qualifications, will not be much inclined to seek the society of others, but will be satisfied with his own home and business, and will be usually successful therein.

☽ in ♏

When the Moon is in Scorpio the native will be ambitious, proud of his abilities, desirons of pleasing others, inclined to materialistic sciences, and will have some adaptation to periodical literature. He will be selfish,

combative, rather hard-hearted and high-tempered.

☽ in ♐ When the Moon is in Sagittarius the native will belong to one of two classes. The first is the incarnation of activity and excitability, natural speculators, but in danger from gambling, inordinately fond of excitement, and hence liable to premature death. The other class has reasoning powers, is quick to learn, strongly inclined to public speaking, but largely dependent on the kind of education received.

☽ in ♑ When the Moon is in Capricorn the native will have strong business tendencies and adaptations, good, clear, general ideas, will be governed by intuition, possess musical talent, and exhibit great sympathy and kindness.

☽ in ♒ When the Moon is in Aquarius the native will make a good teacher or college professor, possess fine mechanical talent, with power to read character at first sight, and will hence be adapted to public service in general.

☽ in ♓ When the Moon is in Pisces the native will be fond of study, but restless, industrious in all directions, but Libra's morbid feelings of despondency will be increased.

MOON SIGNS FOR SUN IN SCORPIO.

☽ in ♈ When the moon is in Aries the native will be hard, positive, and liable to extremes of anger and hate. The imaginative nature

of Scorpio is intensified. Those born under this combination make good superintendents and managers. As husbands and wives they are bound to rule. There is liability of diseases of the brain.

☽ in ♉

When the Moon is in Taurus the native will be more kind, sympathetic, and sensitive than the normal Scorpio nature, less hard and positive, with love of music, order and harmony, and an adaptation to the medical profession.

☽ in ♊

When the Moon is in Gemini the native will have an active mind, love of art and science and an admiration for people in high position. This position of the Moon increases the pride of the Scorpio nature, makes vigilant students who love to teach, but are indisposed to follow an unpopular cult, and hate poverty and physical labor.

☽ in ♋

When the Moon is in Cancer the native will show domestic tendencies and energy and activity in financial matters. He will crave the sympathy and love of the opposite sex, and be liable to be led or misled by others.

☽ in ♌

When the Moon is in Leo the native will display an intense love of the opposite sex, often to morbidity, and will be liable to ideal and dreamy habits. He will have talent for the ministry or medical profession.

☽ in ♍

When the Moon is in Virgo the native will be active, positive, and critical, with a dis-

position to self-sufficiency and fault-finding. He will love newspaper reading and have a tendency to literary pursuits, he will desire to be in a position of control, possess mechanical ability, and be indisposed to the use of his hands.

☽ in ♎

When the Moon is in Libra the native will be inclined to doubt, will be intuitive with business perception and likely to succeed in business. He will have nobility of feeling, literary talent, be fond of the sciences, and in general possess a good judgment.

☽ in ♏

When the Moon is in Scorpio the native will be materialistic in thought and feeling, disposed to independence and self-reliance, not inclined to close friendship, and will be less liable to be led by others.

☽ in ♑

When the Moon is in Capricorn the native will be well suited to government employments, possess much pride, buy only the richest and best, will be careful of his words, will study hard to be thoroughly proficient in whatever he engages in, following out rigidly rules and customs. He will be domestic.

☽ in ♒

When the Moon is in Aquarius the native will have great adaptation for public or political life, sound judgment of human nature, conservatism, fondness for the theater, will have an active, practical mind, and be faithful in service. He will also be adapted to commercial life and be liable to marry for money.

☽ in ♐

When the Moon is in Pisces the native will be restless, studious, anxious about success in life, and have admiration for people of literary attainments and adaptation for such pursuits. This position of the Moon intensifies the excitability of Scorpio and gives rein to its vicious tendencies.

MOON SIGNS FOR SUN IN SAGITTARIUS.

☽ in ♈

When the Moon is in Aries the native will show unparalleled mental activity and will-power, will be always in a hurry, and when not engaged in business will become morbid and discontented. He will be subject to nervous difficulties and headaches, with some liability to insanity.

☽ in ♉

When the Moon is in Taurus the native will possess kindness, sympathy, a desire to help, with adaptation to the medical profession. The ladies born under this position make good cooks and natural housewives. In general the native is very sensitive, indisposed to meeting others in public or to form new acquaintances, and will possess a tendency to science in all departments.

☽ in ♊

When the Moon is in Gemini the native will possess love of order and beauty, educational and artistic abilities, and musical talent. This position increases the restlessness of Sagittarius.

When the Moon is in Cancer the native

☽ in ♋ will be economical and industrious, with great love of home and family, will be susceptible to the opposite sex, and in danger of an unworthy marriage alliance.

☽ in ♌ When the Moon is in Leo the native will be given to visions and dreams, will be interested in religious and reformatory movements, will foresee public events, and will be likely to act wholly from interior feelings, from the heart. Those born under this position of the Moon are likely to be peculiarly isolated characters.

☽ in ♍ When the Moon is in Virgo the native will be an intuitive musician, possess fine discrimination in mathematics and the fine arts, and sometimes possess linguistic abilities. This position refines the taste and gives love of harmony. If forced out of their normal course of life these people are liable to be morbid and restless.

☽ in ♎ When the Moon is in Libra the native will have fine intuitions, quick perceptions, with a fine business mind. This position of the moon balances the Sagittarius nature, makes the native cool and quiet, yet prompt and active in mind and body.

☽ in ♏ When the Moon is in Scorpio the native will be positive, determined, possessed of great pride, considerable conventionality, and have a disposition to use hard and sarcastic

language. He will lack judgment and reliability, but have great power to resist disease.

☽ in ♐

When the Moon is in Sagittarius the native will be well-balanced, free, independent, liberal, rather careless, yet prompt and industrious, with a clear and decisive mind, and will be faithful in domestic life.

☽ in ♑

When the Moon is in Capricorn the native will have an excellent business mind, abounding in plans and schemes, will be more adapted to general plans than minutiae, will have high business aspirations, and unusual love of music. Women are likely to follow music as a profession, though men are not.

☽ in ♒

When the Moon is in Aquarius the native will quickly form pleasant and profitable acquaintances, he will be good as a salesman or business agent, and usually successful in money-making, but liable to come to grief by over-confidence and unwise investment. There is danger of overwork.

☽ in ♓

When the Moon is in Pisces the native will be faithful and industrious, but liable to worry and restlessness; he will be faithful to the marriage vow and not inclined to changes.

MOON SIGNS FOR SUN IN CAPRICORN.

☽ in ♈

When the moon is in Aries the native will have an active brain full of speculative ideas and plans and the tenacity to carry them

out. He will be incapable of working out the minutiae of things, but will have an unbending will, musical talent, and ideality.

☽ in ♉ When the Moon is in Taurus the native will have a persistent mind, conservative ideas, ardent and sanguine feelings, and will be adapted to medical study.

☽ in ♊ When the Moon is in Gemini the native will possess a studious and active mind, a fondness for science, literature, and oratory, will be a builder of air-castles, have good command of language and musical abilities, and show dissatisfaction in the domestic circle.

☽ in ♋ When the Moon is in Cancer the native will have high aspirations for beauty and elegance. This position adds to Capricorn's economical tendencies and mechanical abilities.

☽ in ♌ When the Moon is in Leo the native will be inclined to be led by his feelings, appetites, and passions, will be restless under control or self-restraint, spontaneous, ardent, zealous, likely to be over-liberal, and will possess adaptation for the church.

☽ in ♍ When the Moon is in Virgo the native will love beauty and elegance, and be in danger of unhappiness in marriage from failing to realize his ideal of love. He will be a fine judge of the qualities of things.

When the Moon is in Libra the native

☽ in ♎ will be quick and bright in intuition, see that his plans and arrangements are carefully balaneed, will be thorough in business, kind and gentle in domestic life, adapted to literary pursuits, public speaking or office-holding under government.

☽ in ♏ When the Moon is in Scorpio the native will have great power to hide his feelings, will possess dignity of character, more inclination to write than to speak, will exhibit commanding positiveness and hardness. This position increases anger and aversion to manual labor.

☽ in ♐ When the Moon is in Sagittarius the native will have mental activity and be inclined to act on first thought, hence will be liable to business failure and mistake and extravagance. He will possess love of music, will be kind, but restless in domestic relations.

☽ in ♑ When the Moon is in Capricorn the native will have a clear, active brain, will not be adapted to physical labor, will love order and elegance, will be independent and indisposed to confidential relations. Women should marry wealth unless they have it.

☽ in ♒ When the Moon is in Aquarius the native will be adapted to dealing with the many, dislike country life, and will succeed best in mercantile pursuits or organizing government or corporative interests. Women will be dissatisfied in the domestic sphere.

☽ in ♓

When the Moon is in Pisces the native will be persevering and industrious, studious, economical, over-anxious about success in life, but will make good general superintendents for any business, or will be adapted to professional life. Women will be dissatisfied in marital relations.

MOON SIGNS FOR SUN IN AQUARIUS.

☽ in ♈

When the Moon is in Aries the native will possess a stubborn, quiet nature, will be indisposed to communicate plans to others, and will be inclined to control in whatever sphere placed, with great self-control.

☽ in ♉

When the Moon is in Taurus the native will be fond of farming interests, animals, etc., adapted to medicine, active and practical in business, industrious in all the minutiae of life. Those born under this position make loving and harmonious companions.

☽ in ♊

When the Moon is in Gemini the native will have good command of language, take an interest in politics, show mechanical skill, and a desire to excel in whatever he undertakes. He is likely to adopt the literary profession. Ladies will take up dressmaking and the like.

☽ in ♋

When the Moon is in Cancer the native will be nervous and sensitive, very susceptible to the diseases and conditions of others, industrious, and economical.

When the Moon is in Leo the native will

☽ in ♌ show devotion amounting to worship in love relations, will be zealous in religion, and best adapted to a country life. He will be liable to be deceived and misled in love affairs.

☽ in ♍ When the Moon is in Virgo the native will have a clear, logical mind, faithfulness in service, pride of personal appearance, mechanical abilities and an adaptation for trade. He will be economical, sometimes penurious, a faithful husband or wife, and possess a clear, plain handwriting.

☽ in ♎ When the Moon is in Libra the native will be keen, accurate, discriminative as a judge of weights, measures, qualities, and conditions; will be governed by intuitions, possess foresight, and natural occult powers.

☽ in ♏ When the Moon is in Scorpio the native will be adapted to trade, will drive bargains without feeling, have a tendency to remember injuries, be liable to over-reaching and dishonesty. This position counteracts the sensitiveness of Aquarius, and aids literary, educational or public life.

☽ in ♐ When the Mocn is in Sagittarius the native will be impulsive and premature in judgment, liable to overdo, will be possessed of an active religious nature, be adapted to public speaking and the church, will be industrious, more executive than studious, fond of home, and desirous of being loved.

When the Moon is in Capricorn the native

☽ in ♍ will be active, nervous, excitable, adapted to public life or mercantile pursuits. He will be restless unless in a position requiring great activity.

☽ in ♒ When the Moon is in Aquarius the native will be independent, frank, expressive, with great discretion and wisdom, and in general possessed of an harmonious character. He will be likely to confine himself to one pursuit, especially if it brings him into intimate relations with people.

☽ in ♓ When the Moon is in Pisces the native will be persevering, active, careful, adapted to mental rather than physical labor, will be fond of books and inclined to literary pursuits, will have a high sense of honor, a fondness for detail, a sense of economy, and an inclination to manufacturing business.

MOON SIGNS FOR SUN IN PISCES.

☽ in ♈ When the Moon is in Aries the native will be willful, headstrong, positive, more easily coaxed than driven. This position increases love of knowledge, strength, self-reliance and gives danger of overwork.

☽ in ♉ When the Moon is in Taurus the native will be externally quiet and easy, inwardly active, with strong desires and feelings, and an interior love nature. There will be adaptation for the medical profession and natural sciences. The native will be considerate of

others, subject to melancholy, unlikely to marry, yet possessed of great love of the opposite sex.

☽ in ♊ When the Moon is in Gemini the native will have love of knowledge, mechanical ability, and an inclination to public speaking. This position inspires the activity of the Pisces nature, which if restrained causes melancholy.

☽ in ♋ When the Moon is in Cancer the native will have a sensitive nature, be liable to excessive industry and overwork, with a tendency to penuriousness. This position tends to generalization rather than minutiae, causes a disinclination to work under others, sensitiveness to the influence of the opposite sex, and an adaptation to professional life.

☽ in ♌ When the Moon is in Leo the native will have great vitality, a high ideal of love, studiousness, and an inclination to the occult. He will be liable to mistakes in the bestowal of love and friendship, being kind-hearted and confiding, and hence liable to disappointments in this direction and in financial matters, which may make him morbid or penurious. He will be inclined to isolation and extremes.

☽ in ♍ When the Moon is in Virgo the native will love mathematics and abstruse subjects, be inclined to be positive and exacting, difficult to please, and fond of agriculture.

☽ in ♎ When the Moon is in Libra the native will have a deep, quiet thoughtfulness, with fore-

sight and carefulness, an inclination to poetic and literary pursuits, and if a woman will be better adapted to business than a domestic life.

☽ in ♏ When the Moon is in Scorpio the native will be quiet, perhaps sullen in temperament, subject to conventionality and selfishness, love great attainments in education, and have an adaptation to journalism. He will tend to be hard and jealous in domestic life, and be inclined to political and public occupations.

☽ in ♐ When the Moon is in Sagittarius the native will be active, restless, with a tendency to extremes in every direction, yet have considerable power of self-control, mechanical abilities, art tendencies, and an inclination to religious thought and life. He will be industrious and liable to overwork.

☽ in ♑ When the Moon is in Capricorn the native will have decided business talent, an inclination to plan and speculate, frequently a love of music and the fine arts, and an adaptation to be a general superintendent or manager.

☽ in ♒ When the Moon is in Aquarius the native will find the studious tendencies of Pisces somewhat counteracted; he will be bright, of a cheery habit of mind, somewhat lacking in fidelity to friends, adapted to mercantile pursuits or public life, and if a woman would not take kindly to domestic life.

When the Moon is in Pisces the native will

☽ in ♓ be disinclined to launch into new ventures, but will be active and persevering, though lacking confidence in his powers and abilities, and be subject to morbid sex inclinations and melancholy.

APPENDIX D.

DESCRIPTION OF PERSONS PRODUCED BY EACH OF THE SIGNS WHEN ASCENDING ALONE AT BIRTH, ACCORDING TO MESSRS. WILDE AND DODSON.*

♈. Middle stature, brown or swarthy complexion, quick, piercing sight; disposition active, determined, ambitious, and impulsive.

♉. Short stature, thick-set, broad shoulders, complexion not very clear; animal nature dominant, not at all sensative, but usually most unfeeling, fond of good and abundant fare, full of self-confidence and self-esteem.

♊. Generally above the medium height, complexion indifferent; active, agile, inclined to art and science, generally discreet and judicious, very receptive in mind.

♋. Moderate stature, oval face; mild, gentle, timid, inactive, lacking energy, anything but antagonistic.

♌. Stature generally large, broad-set, complexion sanguine, sometimes rather fierce in aspect; firm; bold, free, courteous, active, and quick in judgment.

♍. Slender in form as a rule; ruddy or rather dark complexion; ingenious, eloquent and agile.

♎. Generally rather tall and slender, inclines to baldness, complexion fair; inclined and quick to imbibe

*NOTE.—These men are among the most accurate of modern writers. Their descriptions may be depended on in most cases.

intellectual culture; amiable, conversible, and fond of art and science.

♏. Short stature, thick-set, broad head and face; ambitious and reserved, and has decided objection to undue familiarity; finesse and diplomacy dominant; rarely possessing elegant, graceful, or refined tastes; unemotional, cautious, reflective, very shrewd, close in nature, inclined to be rude, abrupt, unfeeling, unkind, and rather violent.

♐. Handsome and well formed, sometimes bald, generally tall, commanding carriage, free and open countenance; excellent moral basis of character; honor and rectitude exceptionally good; vanity and self-esteem strong; candid and fond of sport.

♑. Middle stature, thinly built, peculiar in motion, not commanding in carriage; rather subtle and selfish, very unstable in opinion and action, not dogmatic, but often capricious, quick in observation, rather sensative to impressions; finesse is marked.

♒. Rather above middle stature, moderately well built, features generally long, complexion fair; firm, unemotional, kind, sociable, constant in attachment, steadfast, and possessing many excellent qualities.

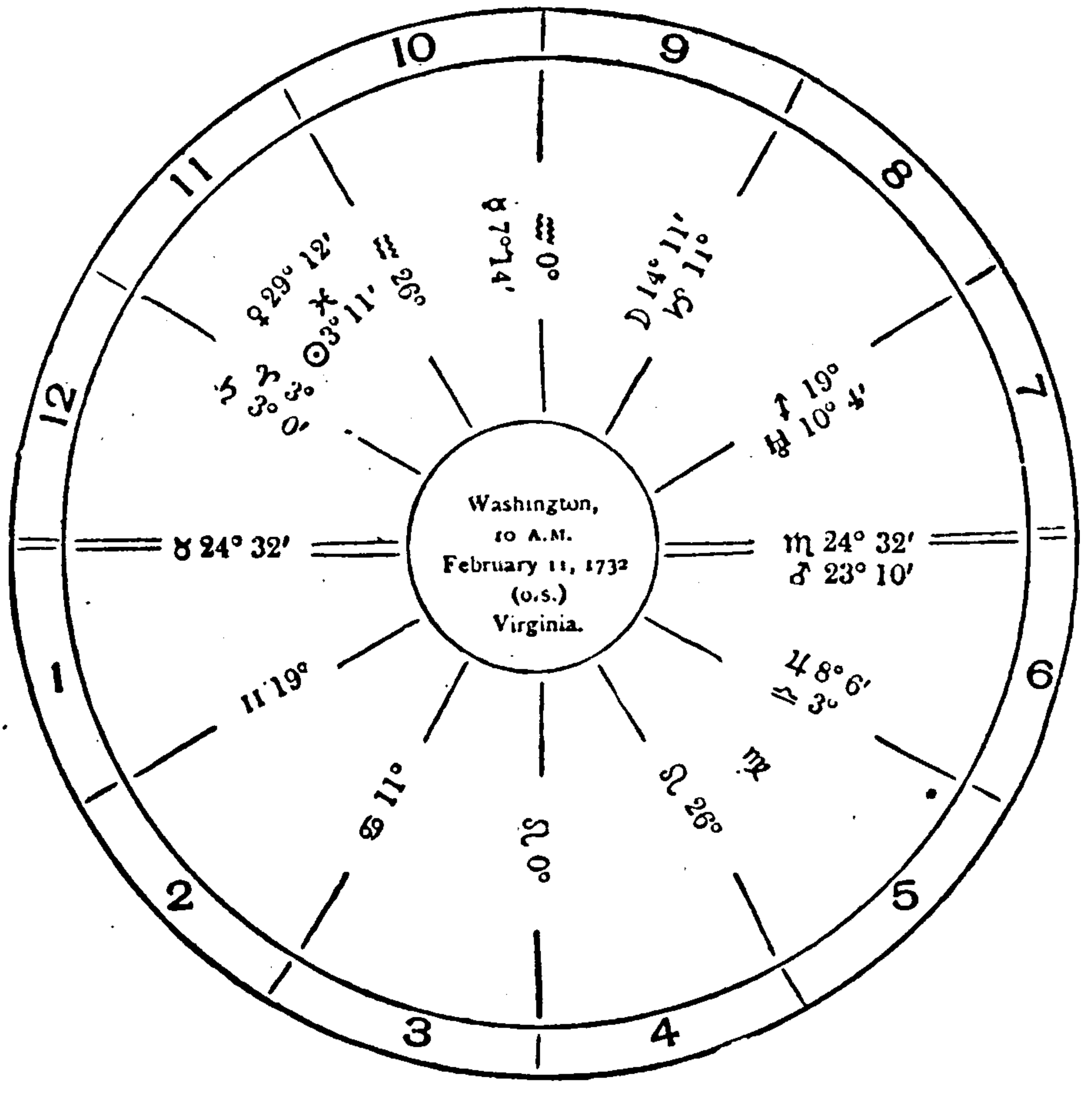
♓. Low stature, short limbs, inclined to be stout; indolent, slow in motion, dull in comprehension, little executive and aggressive power, unfit for prominent or responsible positions.

Note.—Planets in the ascendant vary above descriptions considerably. Planets rising, but not in the asc. make a slight difference. Aspects received by planets in the asc. have also a strong influence on the character.

The Tropical signs generally incline the mind much to political matters, distinction, and the study of theology. Such are ingenious, acute, inquisitive, inventive, and speculative.

Bicorporeal signs make the mind variable, versatile, and volatile. Fixed signs make it just, uncompromising, constant, firm, prudent, patient, strict, persevering and contentious.

In describing the personal appearance the student must not only take into consideration the asc. and planets therein, but also the sign occupied by the lord of the asc. For instance, should ♏ ascend unoccupied by planets, ♂ being found in ♍, the native will have the form of a scorpio person, but a lighter complexion. On the other hand, should ♊ ascend unoccupied and ☿ be found in ♏, the native will be a ♊ person with some resemblance to the ♏ man. A great deal also depends on the aspects of the lord of the asc. Should ♑ ascend and the ☽ be found in ♐ or ♌ in ♉ with the ☉, the native would have a full share of the solar nature; being noble-hearted, benevolent, firm and active. It is the same with the other planets, thereby explaining the endless variety of mankind. Take a ♑ person, whose ☽ is in ♓, and another, whose ☽ is in ♐. The former would be less active physically than the latter; also more cold and insipid in nature.


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Washington,
10 A.M.
February 11, 1732
(o.s.)
Virginia.
♀ 29° 12'
☉ 3° 11'
♂ 3° 3°
0°
♃ 7° 14'
☊ 0°
☽ 14° 11'
♄ 11°
♅ 19°
10°
♂ 24° 32'
♏ 24° 32'
♂ 23° 10'
♅ 19°
♃ 8° 6'
♎ 3° 6'
♄ 11°
♀ 11°
☽ 26°
☊ 0°

APPENDIX E.

HOROSCOPES OF GREAT MEN AS READ BY MESSRS. WILDE AND DODSON.

GEORGE WASHINGTON.

☿ is most dominant in this figure, ☿ △ ♃, and is in ✶ to ♀, ♄, and ♅. Linguistic, literary, and oratorical abilities would emanate from these positions. ☿ ✶ ♄ would give precision, caution, and wariness. ☿ ✶ ♅ added originality of thought and impressions, and an ingenious mind; while musical and artistic tastes and talents would be produced by ♀ ✶ ☿, and the same aspect would make him courteous, witty, and amiable. The ♂ of ♀ with ♄ gave imagination and sensuousness, other products of this conjunction being finesse and diplomacy:

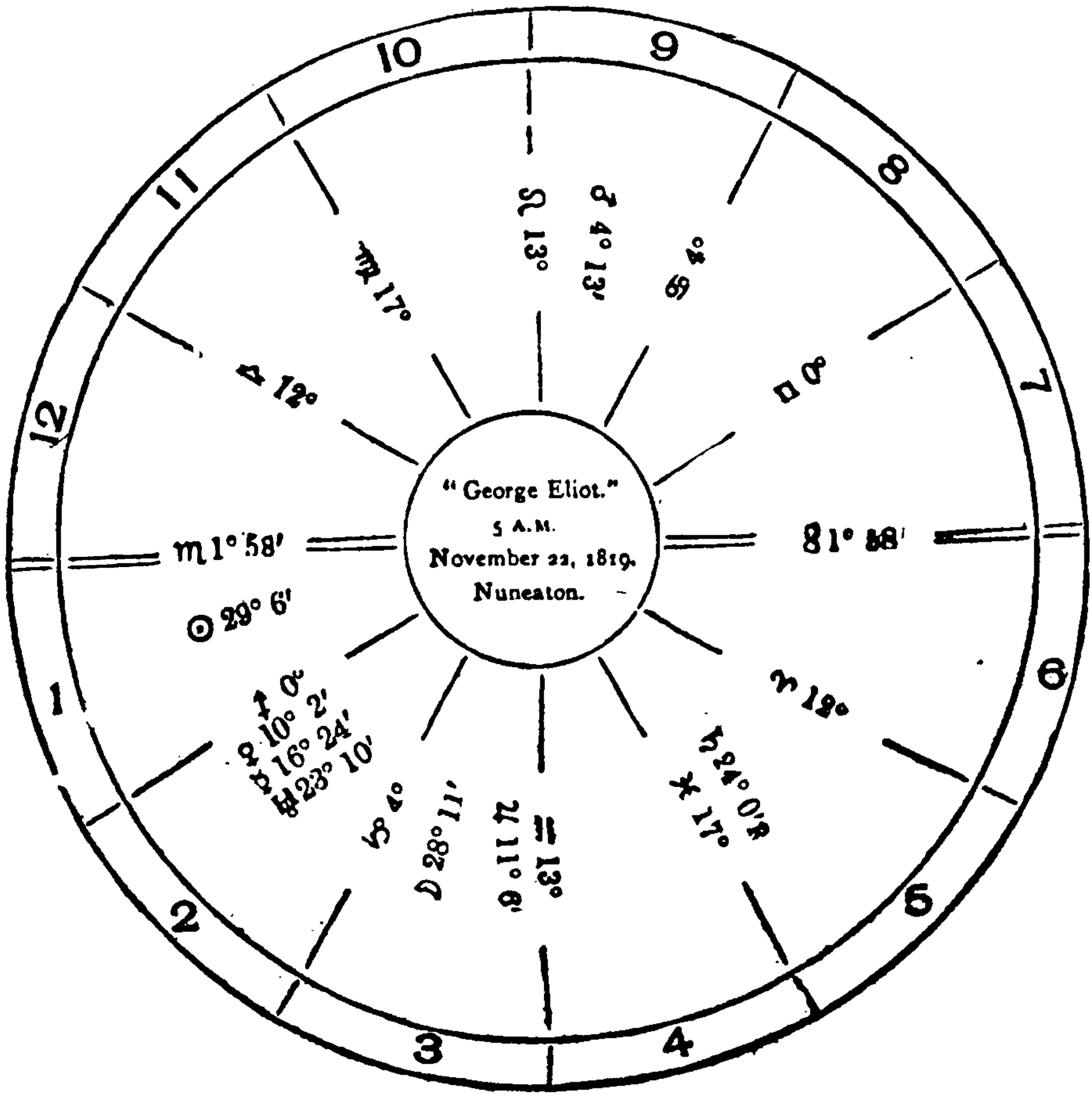
Vanity, ambition, and love of public approbation would rise from ♀ △ ♂.

♀ and ☉, posited in the 11th house, protrayed many powerful friends and much assistance from them. Much good fortune and many fine qualities would emanate from ☿ and ♃. ♂ and ♅ in the 7th indicated many open antagonists and much opposition and trouble in the conjugal state. He would not be particularly successful in his dealings with the other sex, judging from ♀ ♂ ♄. This configuration points to secret foes and disagreeable rumors. It should be observed that ☉, though within orb of a quartile aspect with ♂ in the zodiac, is in mundane trine to that planet, ♂ is very strongly posited in the house of war, being in ♏, his own sign.

Lord Byron.

"Ye stars, which are the poetry of heaven,
If in your bright leaves we would read the fate
Of men and empires,—'tis to be forgiven,
That in our aspirations to be great,
Our destinies o'erleap their mortal state,
And claim a kindred with you; for ye are
A beauty, and a mystery, and create
In us such love and reverence from afar,
That fortune, fame, power, life, have named
themselves a star."—*Childe Harold's Pilgrimage.*

Byron was a man of variable moods, and often a slave to sensuous passions, as deduced from ♂ in ♌, ☽ ☌ ♅ and ♀ ☌ ♄. He was keenly susceptible to all that was grand and beautiful, judging from ♀ ☌ ♄ in the M.C., and this position of ♄ would also produce shyness. ☽ ☌ ♅ would make his mind hopelessly entangled with the material world, and with voluptuousness, hence his mental conceptions were not always healthy. A captious temper and a morbid sensitiveness would be produced by ☿ ☍ ♂, making him quick to take offence. The last-named aspect operates in both the 7th and 8th houses; and ♄ being lord of the 7th, and the ☽ being afflicted by ♅, unhappiness in love-affairs and marriage would thus result. Warmth of affection would emanate from ♀ ☌ ♄. Byron was stern, impulsive, and if provoked, revengeful, as deduced from the affliction of ☿ by ♂, the latter being in the ascendant. He was very eecentric, erratic, uncertain, and disposed to travel, judging from ☽ ☌ ♅. The par. of ☽ with ☉, and ☿ with ♃, would add many fine and attractive qualities, but the ignoble ones preponderated. He died April 19th, 1824, at age 46 years and 3 months, when the following directions were operated:— ☽ □ ♄, ☽ □ ♀, ♂ ☍ ☿ R; the ☉ was but 6° removed from the ☌ of ♄ on the


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"George Eliot."
5 A.M.
November 22, 1819.
Nuneaton.

"GEORGE ELIOT."

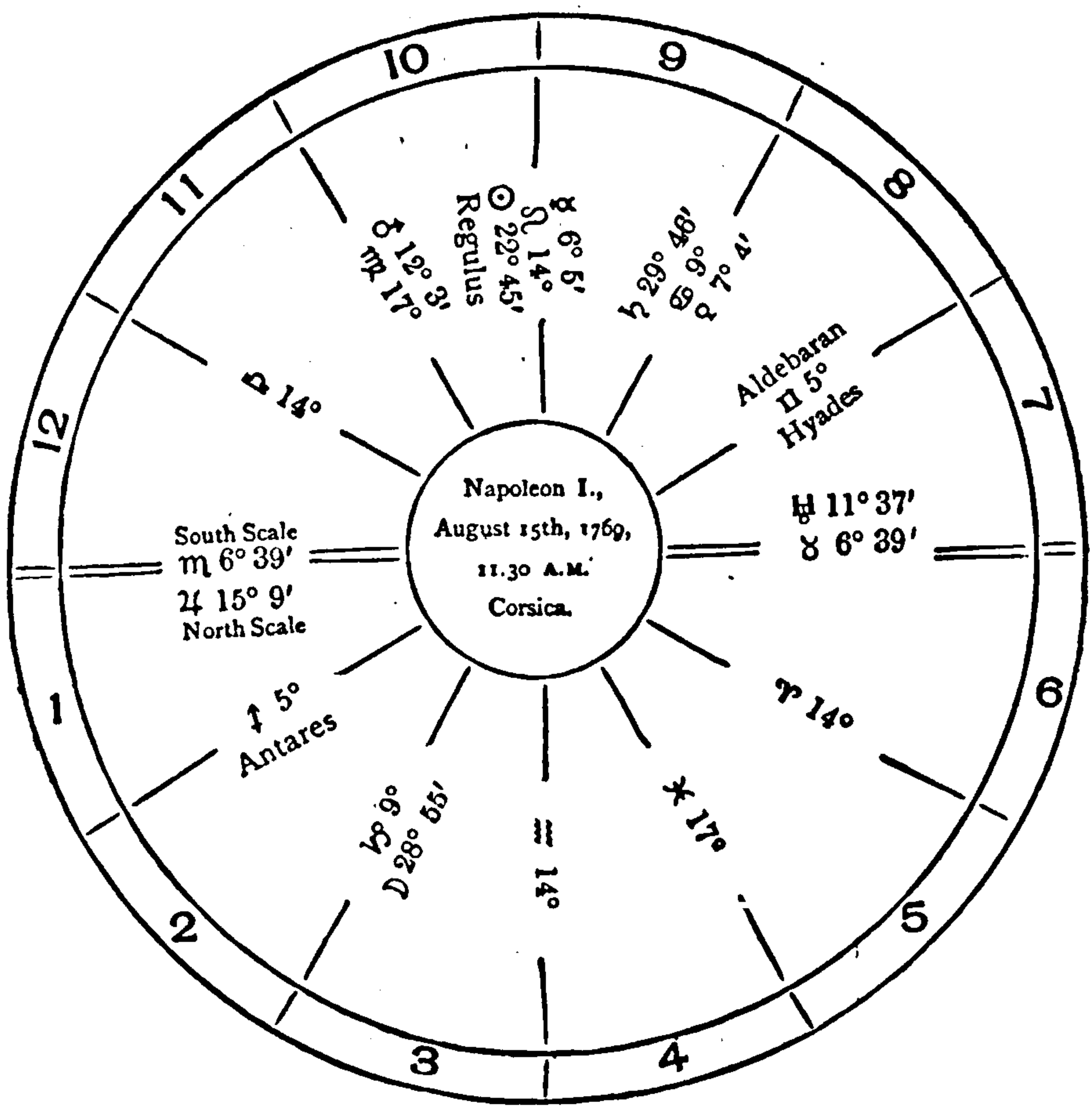
"Babies can't choose their own horoscopes, and indeed if they could, there might be an inconvenient rush of babies at particular epochs!"—*Romola*, chap. 4.

☉ in the fixed sign ♏ in ascendant, protrays a self-confident person, fond of wordy combat, bold, wilful, and courageous, indicating also considerable firmness, almost obstinacy, and a decidedly masculine mind. She was inclined to be scornful, and would often display rashness and precipitancy, as deduced from the opposition of ♂ to ♃ and the presence of ☿ in ♐. She possessed sound judgment and excellent reasoning powers, judging from ☿ ✶ ♃. ☽ posited in 3rd house in a movable sign would give considerable mental activity, and also sequence of ideas. The ☌ of ♀ and ☿ gives the power of acquiring languages, and also musical and literary abilities. As deduced from ♂ ☍ ♃ from 9th and 3rd houses, she was independent of opinions and creeds, possessing a mind of her own in all matters, and had very large perceptive powers, which made her able to detect instantly the motives of others, and particularly any inconsistencies. She would see a great deal more of the world than most people, and was a close student of human nature. The native was highly critical, penetrating, and wide-awake. ☉ had P ♃, which indicated honor and success chiefly at the latter part of life, ♃ being on the cusp of the 4th house. ♂ ☍ ♃ indicated impediments and annoyances, friction with and oppo-

sition from her father; and ♂'s position would cause trouble with her publishers. The ✶ of ☿ and ♃, the former being in the house of wealth, would give much gain from literature. Vanity would emanate from ♂ ☌ ♃, and this characteristic would be to the fore. She had a candour which was refreshing to the open-handed, but obnoxious to the insincere. The connection of ☿ with ♅ would add originality of thought, and a mind free from bias and the influence of others. The following directions coincide with her death, December 22nd, 1880:—☉ ☌ ♂ rad., ☽ □ ♂ rad., ☉ ☌ ♂ prog., ♂ ☌ ☽ R. As these aspects were from ☊ and ♒, the heart, side, and back would be seriously affected for some months before death.

The Emperor Napoleon I.

The time of Napoleon's birth is given by a historian of his life at 11:30 a. m. He does not quote the act of birth, but he could have no motive to misrepresent the matter. The horoscopes published by Worsdale, Oxley, and others, are computed for 9:45 a. m., and have the middle of the sign ♎ on the asc. Students that are familiar with Napoleon's appearance must know that he could not possibly be a ♎ man. There is besides no historical authority for such a birth-time. At 11:30 a. m. ♏ was on the asc., with ♃ therein, ♃ in ♏ is much more characteristic of the man than ♎; moreover, this time brings ♂ and the ☉ on the meridian, and the former is in close ✶ to ♃, signifying success in battle. The position of


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☌ 12° 3'
♏ 17°
Regulus
☉ 22° 45'
♌ 14°
☍ 6° 5'
♄ 29° 48'
♓ 9°
☿ 7° 4'
Aldebaran
♉ 5°
Hyades
☽ 14°
Napoleon I.,
August 15th, 1769,
11.30 A.M.
Corsica.
South Scale
♏ 6° 39'
☌ 15° 9'
North Scale
♐ 5°
Antares
♑ 9°
☍ 28° 65'
♒ 14°
♂ 17°
♈ 14°
♉ 11° 37'
☌ 6° 39'

♂ near the 11th house indicates a powerful ally in battle, but being in his detriment would cause indiscretion and rashness in contention, and could not stay his descent from power.

The portraits of Napoleon show that he was a good type of the ♏ person, the nose being slightly curved and rather long, and the eyes having a fixed, sharp, and penetrating look.

Another strong confimation of the correctness of this figure is, that Napoleon's M. C. is here the nadir of the younger Napoleon, a feature which so often happens in the nativities of parent and child. The position of ☿ in the 7th house in ♌ to ♃ alone accounts for Napoleon divorcing his Empress, and is strong signification of the opposition he met with in life; and the 7th house, representing the general public, his credit there would fluctuate. His supporters were, however, more numerous than his opponents, as signified by ♂ ✶ ♃, these planets being elevated. ♂ in the M. C. in △ to ☿ in the house of war, and ✶ to ♃ in the asc., gave him military support, and indicated the success in warfare which gave him his throne. It is noteworthy that Regulus, a star said to be of the nature of ♂, is conjoined with the ☉ on the M. C., which, old authors aver, brings military preferment, but ultimate disgrace and ruin. The North Scale, said by the ancients to bring good fortune and eminence, ascends with ♃. ♄ in the 9th house in ♌ to the ☽, brought him disaster in distant lands, as he would there meet with deceit, treachery and starvation. ♒ the sign of ♄ is said to rule Russia, and the opposition just named, and ♂ being

in his detriment, were the causes of the Moscow catastrophe. The man's exaggerated ambition, self-confidence, pugnacity and vanity, were inspired by ♃ □ ☉, ♃ ✶ ♂ in elevation, and ♃ in ♏ ✶ to ♂, giving him force of character and determination, and making him steadfast of purpose, inflexible and unflinching; bold and ambitious of honor.

Men with ♂ so much to the fore at birth rarely scruple to sacrifice others to gain their ends. ♃ rising in ♏ would make him eagerly avaricious and egotistical. ☽ ☌ ♄ and ☿ ☍ ♄ would add wariness, finesse, fear of the unknown, and a leaning to occult science. ☽ ☌ ☿ gave him marked intuition and good mental qualities. The evil houses here are the 7th and 9th, being occupied by ♅ and ♄, and these houses and planets would in some way assist to bring about his fall.

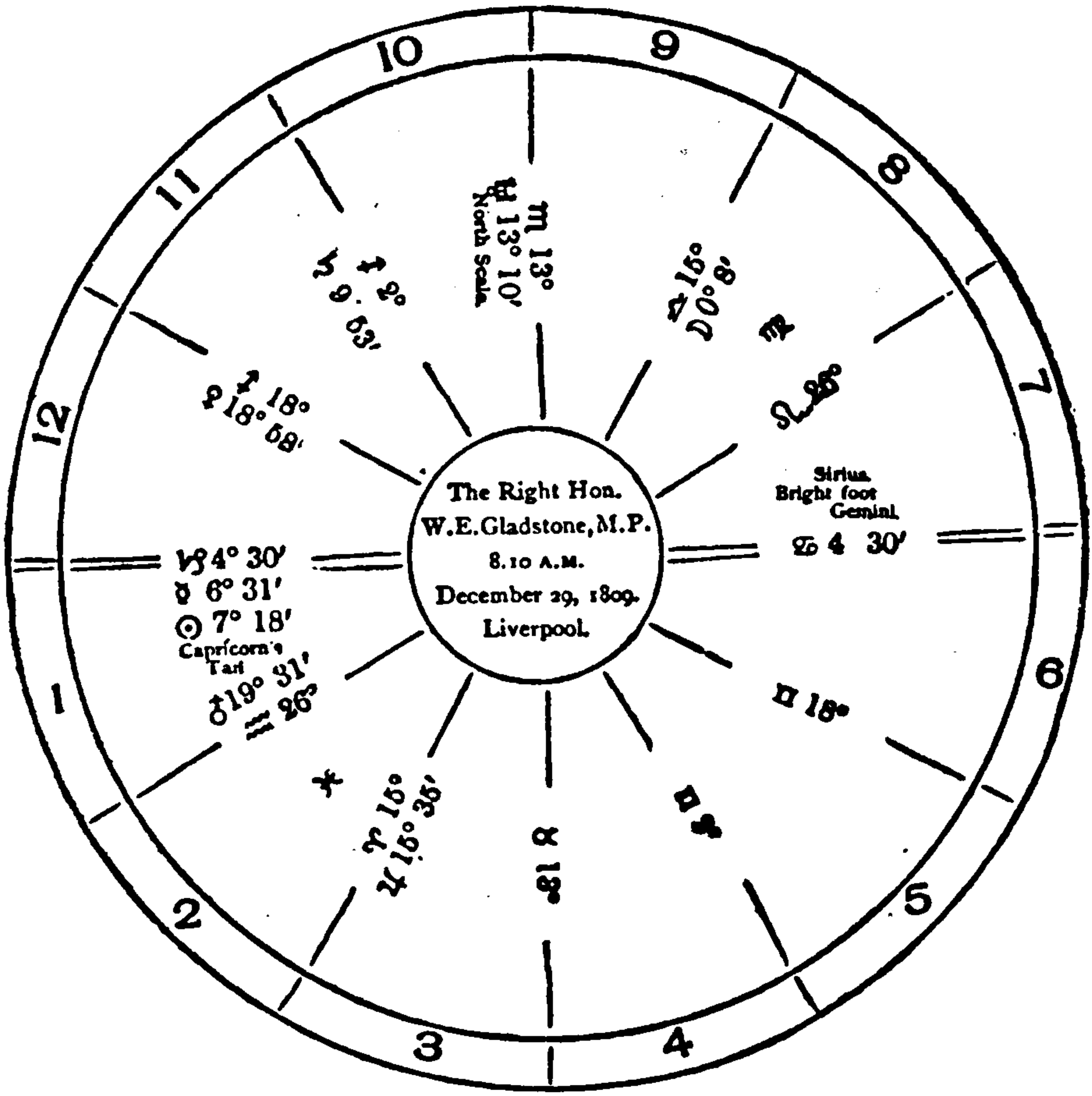
The ☉ on the M. C., unafflicted by the malefics, is a sure sign of a lift to power and position of trust. Besides being in the house of long journeys and foreign lands, ♄ is in a watery sign and on the threshold of a fiery sign, which signifies disaster abroad both by fire and water, sea and land. ♄ is in ♋, which rules the breast and stomach, and being in close opposition with the moon, points to organic weakness of the stomach and active system, which disease would be lingering and chronic as signified by Saturn. It is remarkable that Napoleon is said to have died of cancer of the stomach. ☉ □ ♃ would produce a derangement of the liver, and system.

The Right Hon. W. E. Gladstone, M. P.

Mr. Gladstone has stated that he was born "about breakfast-time," and a map for about 8 o'clock is certainly characteristic of him. The horoscope is computed for 8:10 a. m., which brings ♅ to the cusp of the M. C. ♅ in this position is sure to cause a fluctuating credit. The figure displays a subtle and capricious man. People with ☿ in ♍ on the asc. are noted for finesse, diplomacy, craft, instability, and a fickle judgment. ♍ on asc. indicates that he is ever feeling his way along, fearful of committing himself; yet, as ♂ also ascends, he possesses great determination and physical and moral power, but perhaps not sufficient to make him at all times scrupulously and conscientiously exact. ☉ □ ♃, ♀ ✶ ♂, ☽ □ ☉ and ☽ □ ☿ (the latter being in a subtle sign) show that he is secretly vain; catering unobserved for the applause of the multitude; preferring universal distinction and approval to an empty title. ☉ □ ♃, ☽ □ ☿ and ☉ □ ☽ give him excessive aspirations; and ♂ rising in ♒ lends an aggressive, vehement and contentious spirit.

The esteem in which he is held by so many people is brought about by ♀ in the 12th. People with ♃ or ♀ here at birth have an attractive and fascinating power over others. ♃, too, in the 3rd (one of the mental houses), endows the native with some fine qualities, and makes him kind and considerate.

☉ and ♂ being in the asc. give self-confidence, independence, and force of character, making him


10
9
11
8
12
7
1
6
2
5
3
4
☽ 13° 10′
North Scale
☽ 2°
♀ 9° 63′
♀ 18°
☿ 18° 68′
♄ 15°
☽ 0° 8′
☊ 26°
Sirius
Bright foot
Gemini
♋ 4° 30′
♈ 4° 30′
☿ 6° 31′
☉ 7° 18′
Capricorn's
Tail
♂ 19° 31′
♎ 26°
The Right Hon.
W.E.Gladstone, M.P.
8.10 A.M.
December 29, 1809.
Liverpool.
☌ 18°
☿ 15°
♃ 15° 36′
☊ R
☌ ♃
☌ ♄

haughty and self-assertive; but ☿ being in a movable and capricious sign and in □ to ☽, decision and fixedness of purpose are wanting; and beneath all his actions there is a subtle egotism to be found from the aspects previously referred to. He is courteous, but strategic, and never gives himself away; in fact, he is diplomatic in every move, hence it is very difficult to detect his motives and inconsistencies. There is a daring arrogance about him, deduced from ☽ □ ☿ and ☉ □ ♃, propelled by ♂ in asc. ☉ and ♂ give him much earnestness, although the restraining faculties produced by ☽ ✶ ♄ and ☿ in a fearful, timid sign, are here marked. ☿ in ♍ robs him of all honest bluntness, and that planet being conjoined with ☉ gives him a keen preception, making him far-seeing, highly intuitive, worldly-wise, and of ready comprehension. There is indication, however, that he would use the knowledge acquired by an observative mind for his own aggrandizement; and, to gain his ends, would not stop at mutilating any impediment, judging from the position of ♂ in quartile with ♅. The latter in ✶ to ☿ in asc. makes his mind extremely active, analytical and ingenious. ♂ ascending in □ to ♅ makes him courageous, and able controvertist, and every inch a disputant; in fact, polemics have a fascination for him.

From the numerous and varied aspects in this figure, and the fact that so many planets are in the asc. and otherwise powerfully placed, it is plain that the illustrious native is a most remarkable blend of character.

Victor Hugo.

It will be observed that ♀ is again connected with ♄, this time by an ☌ and P, hence he possessed imagination, inspiration, and a keen sense of the beautiful. ☿ in P ♅ and ✶ ♂. ♀ is also P ♃.

The latter in the M.C. △ ☽ in the 2nd house shows honours and exceptional pecuniary success. ☉ ☌ ♄ on the other hand indicates misfortune, low vitality, and indifferent health.

☽ □ ☿ from the 5th and 2nd houses signifies death of one or more of the offspring. Judging from ☿ ✶ ♂ in the 3rd house, he possessed a very active, ingenous mind, together with much self-confidence; and this position of ♂ gave firmness, and some degree of obstinancy when opposed. His mind was sharp, acute, and penetrating, and he was naturally vigilant. He would see more than most men, as deduced from ☿ P ♅ and ✶ ♂, ☽ □ ☿, and these were the aspects which gave him his literary ability.

☉ ☌ ♃ would give a certain amount of vanity, though this was an obscure ingredient, and the same aspect coupled with ☉ ☌ ♃, would tend to lessen the stability and force of his character.

The following adverse influences coincide with his death in May, 1885. ☽ leaving the □ of ♂ and ♅ (complete June, 1884, when his heath would begin to fail), ☉ □ ♃, ☉ □ ♄, ☿ □ ♄, and ☿ ⊏ ♃.

TABLE No. 1.

LONGITUDE, DECLINATION AND SIDEREAL TIME OF

SUN

For Mean Noon at Greenwich, for One Year (1887).

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
Jan. 1	1	280 49	S—23 1	18 43 17
2	2	281 51	22 55	18 47 14
3	3	282 52	22 50	18 51 10
4	4	283 53	22 44	18 55 7
5	5	284 54	22 37	18 59 3
6	6	285 55	22 30	19 3 0
7	7	286 56	22 23	19 6 56
8	8	287 57	22 15	19 10 53
9	9	288 59	22 7	19 14 49
10	10	290 0	21 58	19 18 46
11	11	291 1	21 49	19 22 43
12	12	292 2	21 39	19 26 39
13	13	293 3	21 29	19 30 36
14	14	294 4	21 19	19 34 32
15	15	295 5	21 8	19 38 29
16	16	296 6	20 56	19 42 25
17	17	297 7	20 45	19 46 22
18	18	298 8	20 33	19 50 18
19	19	299 9	20 20	19 54 15
		♒		
20	20	300 11	20 7	19 58 12
21	21	301 12	19 54	20 2 8
22	22	302 13	19 41	20 6 5
23	23	303 14	19 27	20 10 1
24	24	304 15	19 13	20 13 58
25	25	305 16	18 58	20 17 54
26	26	306 17	18 43	20 21 51
27	27	307 18	18 28	20 25 47
28	28	308 19	18 12	20 29 44
29	29	309 20	17 56	20 33 41
30	30	310 20	17 40	20 37 37
31	31	311 21	—17 23	20 41 34

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
Feb. 1	32	312 22	S—17 6	20 45 30
2	33	313 23	16 49	20 49 27
3	34	314 24	16 31	20 53 23
4	35	315 25	16 14	20 57 20
5	36	316 26	15 55	21 1 16
6	37	317 26	15 37	21 5 13
7	38	318 27	15 18	21 9 10
8	39	319 28	15 0	21 13 6
9	40	320 28	14 40	21 17 3
10	41	321 29	14 21	21 20 59
11	42	322 30	14 1	21 24 56
12	43	323 30	13 42	21 28 52
13	44	324 31	13 22	21 32 49
14	45	325 32	13 1	21 36 45
15	46	326 32	12 41	21 40 42
16	47	327 33	12 20	21 44 39
17	48	328 33	11 59	21 48 35
18	49	329 34	11 38	21 52 32
		♓		
19	50	330 34	11 17	21 56 28
20	51	331 35	10 55	22 0 25
21	52	332 35	10 34	22 4 21
22	53	333 35	10 12	22 8 18
23	54	334 36	9 50	22 12 14
24	55	335 36	9 28	22 16 11
25	56	336 37	9 6	22 20 8
26	57	337 37	8 43	22 24 4
27	58	338 37	8 21	22 28 1
28	59	339 37	—7 58	22 31 57
Mar. 1	60	340 37	S—7 35	22 35 54
2	61	341 38	7 13	22 30 51
3	62	342 38	6 50	22 43 47
4	63	343 38	6 27	22 47 44
5	64	344 38	6 3	22 51 40
6	65	345 38	5 40	22 55 37
7	66	346 38	—5 17	23 0 0

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
Mar. 8	67	347 38	S—4 54	23 3 30
9	68	348 38	4 30	23 7 26
10	69	349 38	4 7	23 11 23
11	70	350 37	3 43	23 15 19
12	71	351 37	3 20	23 19 16
13	72	352 37	2 56	23 23 13
14	73	353 37	2 32	23 27 9
15	74	354 37	2 9	23 31 6
16	75	355 36	1 45	23 35 2
17	76	356 36	1 21	23 38 59
18	77	357 36	0 58	23 42 55
19	78	358 35	0 34	23 46 52
20	79	359 35	S—0 10	23 50 48
		♈		
21	80	0 34	N+0 13	23 54 45
22	81	1 34	0 37	23 58 42
23	82	2 33	1 1	0 2 38
24	83	3 33	1 24	0 6 35
25	84	4 32	1 48	0 10 31
26	85	5 32	2 12	0 14 28
27	86	6 31	2 35	0 18 24
28	87	7 30	2 59	0 22 21
29	88	8 30	3 22	0 26 17
30	89	9 29	3 45	0 30 14
31	90	10 28	4 9	0 34 11
Apr. 1	91	11 27	+4 32	0 38 7
2	92	12 26	4 55	0 42 4
3	93	13 25	5 18	0 46 0
4	94	14 24	5 41	0 49 57
5	95	15 23	6 4	0 53 53
6	96	16 22	6 26	0 57 50
7	97	17 21	6 49	1 1 46
8	98	18 20	7 11	1 5 43
9	99	19 19	7 34	1 9 39
10	100	20 18	7 56	1 13 36
11	101	21 17	+8 18	1 17 33

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
Apr. 12	102	22 16	8 40	1 21 29
13	103	23 14	9 2	1 25 26
14	104	24 13	9 24	1 29 22
15	105	25 12	9 45	1 33 19
16	106	26 10	10 6	1 37 15
17	107	27 9	10 28	1 41 12
18	108	28 8	10 49	1 45 8
19	109	29 6	11 10	1 49 5
		♉		
20	110	30 5	11 30	1 53 2
21	111	31 3	11 51	1 56 58
22	112	32 2	12 11	2 0 55
23	113	33 0	12 31	2 4 51
24	114	33 59	12 51	2 8 48
25	115	34 57	13 11	2 12 44
26	116	35 55	13 30	2 16 41
27	117	36 54	13 49	2 20 37
28	118	37 52	14 8	2 24 34
29	119	38 50	14 27	2 28 30
30	120	39 49	14 46	2 32 27
May 1	121	40 47	N--15 4	2 36 24
2	122	41 45	15 22	2 40 20
3	123	42 43	15 40	2 44 17
4	124	43 41	15 57	2 48 13
5	125	44 39	16 14	2 52 10
5	126	45 37	16 31	2 56 6
7	127	46 35	16 38	3 0 3
8	128	47 33	17 5	3 4 0
9	129	48 31	17 21	3 7 56
10	130	49 29	17 37	3 11 53
11	131	50 27	17 52	3 15 49
12	132	51 25	18 7	3 19 46
13	133	52 23	18 22	3 23 42
14	134	53 21	18 37	3 27 39
15	135	54 18	18 51	3 31 35
16	136	55 16	19 5	3 35 32

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
May 17	137	56 14	N+19 19	3 39 29
18	138	57 12	19 32	3 43 25
19	139	58 10	19 46	3 47 21
20	140	59 7	19 58	3 51 18
		II		
21	141	60 5	20 11	3 55 15
22	142	61 3	20 23	3 59 11
23	143	62 0	20 34	4 3 8
24	144	62 58	20 46	4 7 4
25	145	63 56	20 57	4 11 1
26	146	64 53	21 7	4 15 57
27	147	65 51	21 17	4 18 54
28	148	66 48	21 27	4 22 50
29	149	67 46	21 37	4 27 47
30	150	68 43	21 46	4 30 44
31	151	69 41	21 55	4 34 40
June 1	152	70 38	+22 3	4 39 37
2	153	71 36	22 11	4 43 33
3	154	72 33	22 19	4 46 30
4	155	73 31	22 26	4 50 27
5	156	74 28	22 33	4 54 23
6	157	75 25	22 39	4 58 20
7	158	76 23	22 45	5 2 16
8	159	77 20	22 51	5 6 13
9	160	78 17	22 56	5 10 9
10	161	79 15	23 1	5 14 6
11	162	80 12	23 5	5 18 2
12	163	81 9	23 9	5 21 59
13	164	82 7	23 13	5 25 55
14	165	83 4	23 16	5 29 52
15	166	84 1	23 19	5 33 49
16	167	84 59	23 21	5 37 45
17	168	85 56	23 23	5 41 42
18	169	86 53	23 25	5 45 38
19	170	87 50	23 26	5 49 35
20	171	88 48	+23 27	5 53 31

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
June 21	172	89 45	N+23 27	5 57 28
		☋		
22	173	90 42	23 27	6 1 25
23	174	91 39	23 26	6 5 21
24	175	92 37	23 26	6 9 18
25	176	93 34	23 24	6 13 14
26	177	94 31	23 22	6 17 11
27	178	95 28	23 20	6 21 7
28	179	96 26	23 18	6 25 4
29	180	97 23	23 15	6 29 0
30	181	98 20	23 11	6 32 57
July 1	182	99 17	+23 8	6 36 53
2	183	100 14	23 3	6 40 50
3	184	101 12	22 59	6 44 47
4	185	102 9	22 54	6 48 43
5	186	103 6	22 48	6 52 40
6	187	104 3	22 43	6 56 36
7	188	105 0	22 36	7 0 33
8	189	105 57	22 30	7 4 29
9	190	106 55	22 23	7 8 26
10	191	107 52	22 16	7 12 23
11	192	108 49	22 8	7 16 19
12	193	109 46	21 60	7 20 16
13	194	110 43	21 51	7 24 12
14	195	111 41	21 42	7 28 9
15	196	112 38	21 33	7 32 5
16	197	113 35	21 24	7 36 2
17	198	114 32	21 14	7 40 58
18	199	115 30	21 3	7 43 55
19	200	116 27	20 53	7 47 51
20	201	117 24	20 41	7 51 48
21	202	118 22	20 30	7 55 45
22	203	119 19	20 18	7 59 41
		♌		
23	204	120 16	20 6	8 3 38
24	205	121 14	+19 54	8 7 34

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
July 25	206	122 11	N+19 41	8 11 31
26	207	123 8	19 28	8 15 27
27	208	124 6	19 15	8 19 24
28	209	125 3	19 1	8 23 20
29	210	126 0	18 47	8 27 17
30	211	126 58	18 33	8 31 14
31	212	127 55	18 18	8 35 10
Aug. 1	213	128 52	+18 3	8 39 7
2	214	129 50	17 48	8 43 3
		♌		
3	215	130 47	17 32	8 46 60
4	216	131 45	17 17	8 50 56
5	217	132 42	17 0	8 54 53
6	218	133 40	16 44	8 58 49
7	219	134 37	16 27	9 2 46
8	220	135 35	16 11	9 6 43
9	221	136 32	15 53	9 10 39
10	222	137 30	15 36	9 14 36
11	223	138 27	15 18	9 18 32
12	224	139 25	15 0	9 22 29
13	225	140 23	14 42	9 26 25
14	226	141 20	14 24	9 30 22
15	227	142 18	14 5	9 34 18
16	228	143 16	13 46	9 38 15
17	229	144 13	13 27	9 42 12
18	230	145 11	13 8	9 46 8
19	231	146 9	12 49	9 50 5
20	232	147 7	12 29	9 54 1
21	233	148 5	12 9	9 57 58
22	234	149 2	11 49	10 1 54
23	235	150 0	11 29	10 5 51
24	236	150 58	11 8	10 9 47
		♍		
25	237	151 56	10 48	10 13 44
26	238	152 54	+10 27	10 17 40

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
Aug. 27	239	153 52	N+10 6	10 21 37
28	240	154 50	9 45	10 25 34
29	241	155 48	9 23	10 29 30
30	242	156 46	9 2	10 33 27
31	243	157 44	8 41	10 37 23
Sept. 1	244	158 42	+ 8 19	10 41 20
2	245	159 40	7 57	10 45 16
3	246	160 38	7 35	10 49 13
4	247	161 37	7 13	10 53 9
5	248	162 35	6 51	10 57 6
6	249	163 33	6 28	11 1 3
7	250	164 31	6 6	11 4 59
8	251	165 30	5 43	11 8 56
9	252	166 28	5 21	11 12 52
10	253	167 26	4 58	11 16 49
11	254	168 25	4 35	11 20 45
12	255	169 23	4 12	11 24 42
13	256	170 21	3 49	11 28 38
14	257	171 20	3 26	11 32 35
15	258	172 18	3 3	11 36 32
16	259	173 17	2 40	11 40 28
17	260	174 16	2 17	11 44 24
18	261	175 14	1 54	11 48 21
19	262	176 13	1 30	11 52 18
20	263	177 12	1 7	11 56 14
21	264	178 10	0 44	12 0 11
22	265	179 9	N+0 20	12 4 7
		♎		
23	266	180 8	S— 0 3	12 8 4
24	267	181 7	0 26	12 12 1
25	268	182 6	0 50	12 15 57
26	269	183 4	1 13	12 19 54
27	270	184 3	1 37	12 23 50
28	271	185 2	2 0	12 27 47
29	272	186 1	2 23	12 31 43
30	273	187 0	— 2 47	12 35 40

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
Oct. 1	274	187 59	S—3 10	12 39 36
2	275	188 58	3 33	12 43 33
3	276	189 57	3 57	12 47 29
4	277	190 57	4 20	12 51 26
5	278	191 56	4 43	12 55 23
6	279	192 55	5 6	12 59 19
7	280	193 54	5 29	13 3 16
8	281	194 53	5 52	13 7 12
9	282	195 53	6 15	13 11 9
10	283	196 52	6 38	13 15 5
11	284	197 51	7 0	13 19 2
12	285	198 51	7 23	13 22 58
13	286	199 50	7 46	13 26 55
14	287	200 50	8 8	13 30 52
15	288	201 49	8 30	13 34 48
16	289	202 49	8 53	13 38 45
17	290	203 49	9 15	13 42 41
18	291	204 48	9 37	13 46 38
19	292	205 48	9 58	13 50 34
20	293	206 48	10 20	13 54 31
21	294	207 47	10 41	13 58 27
22	295	208 47	11 3	14 2 24
23	296	209 47	11 24	14 6 21
		♏		
24	297	210 47	11 45	14 10 17
25	298	211 47	12 6	14 14 14
26	299	212 46	12 26	14 18 10
27	300	213 46	12 47	14 22 7
28	301	214 46	13 7	14 26 3
29	302	215 46	13 27	14 30 0
30	303	216 46	13 47	14 33 56
31	304	217 46	14 6	14 37 53
Nov. 1	305	218 46	—14 26	14 41 50
2	306	219 46	14 45	14 45 46
3	307	220 47	15 4	14 49 43
4	308	221 47	—15 22	14 53 39

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
Nov. 5	309	222 47	S—15 41	14 57 36
6	310	223 47	15 59	15 1 32
7	311	224 47	16 17	15 5 29
8	312	225 48	16 34	15 9 25
9	313	226 48	16 52	15 13 22
10	314	227 48	17 9	15 17 19
11	315	228 49	17 26	15 21 15
12	316	229 49	17 42	15 25 12
13	317	230 50	17 58	15 29 8
14	318	231 50	18 14	15 33 5
15	319	232 51	18 29	15 37 1
16	320	233 51	18 45	15 40 58
17	321	234 52	18 59	15 44 54
18	322	235 52	18 14	15 48 51
19	323	236 53	19 28	15 52 48
20	324	237 53	19 42	15 56 44
21	325	238 54	19 55	16 0 41
22	326	239 55	20 8	16 4 37
		↑		
23	327	240 55	20 21	16 8 34
24	328	241 56	20 34	16 12 30
25	329	242 57	20 45	16 16 27
26	330	243 58	20 57	16 20 23
27	331	244 58	21 8	16 24 20
28	332	245 59	21 19	16 28 17
29	333	247 0	21 29	16 32 13
30	334	248 1	21 39	16 36 10
Dec. 1	335	249 2	—21 49	16 40 6
2	336	250 2	21 58	16 44 3
3	337	251 3	22 7	16 47 59
4	338	252 4	22 15	16 51 56
5	339	253 5	22 23	16 55 52
6	340	254 6	22 30	16 59 49
7	341	255 7	22 37	17 3 46
8	342	256 8	22 44	17 7 42
9	343	257 9	—22 50	17 11 39

TABLE No. 1.—*Continued.*

Day of Month.	Day of Year.	Sun's Longitude.	Sun's Declination.	Sidereal Time.
		° ′	° ′	h m s
Dec. 10	344	258 10	S—22 55	17 15 32
11	346	259 11	23 1	17 19 31
12	345	260 12	23 5	17 23 28
13	347	261 13	23 10	17 27 25
14	348	262 14	23 13	17 31 22
15	349	263 15	23 17	17 35 18
16	350	264 16	23 20	17 39 15
17	351	265 17	23 22	17 43 11
18	352	266 19	23 24	17 47 8
19	353	267 20	23 25	17 51 4
20	354	268 21	23 26	17 55 1
21	355	269 22	23 27	17 58 57
		♑		
22	356	270 23	23 27	18 2 54
23	357	271 24	23 27	18 6 50
24	358	272 25	23 26	18 10 47
25	359	273 26	23 24	18 14 44
26	360	274 28	23 23	18 18 40
27	361	275 29	23 20	18 22 37
28	362	276 30	23 18	18 26 33
29	363	277 31	23 14	18 30 30
30	364	278 32	23 11	18 34 26
31	365	279 33	—23 6	18 38 23

NOTE—The sun's longitude for a given day will vary a little from year to year; but it will always correspond exactly to the sidereal time. When a correction is made in the sidereal time, make a proportionate correction in the sun's longitude.

TABLE No. 2.

LATITUDE AND LONGITUDE OF ONE CYCLE OF THE MOON

For Noon and Midnight.

Day of Month.	True Longitude.		Latitude.		Day of Month.	True Longitude.		Latitude.	
	°	′	°	′		°	′	°	′
.5	5	44	—3	5	14.0	190	14	3	29
1.0	11	41	3	30	14.5	197	17	3	56
1.5	17	41	3	52					
2.0	23	44	4	13	15.0	204	17	+4	19
					15.5	211	14	4	39
2.5	29	50	—4	30	16.0	218	6	4	54
3.0	36	2	4	45	16.5	224	55	5	5
3.5	42	18	4	57	17.0	231	41	5	11
4.0	48	39	5	5					
4.5	55	7	5	9	17.5	238	23	+5	13
					18.0	245	1	5	11
5.0	61	40	—5	9	18.5	251	36	5	5
5.5	68	20	5	5	19 0	258	8	4	55
6.0	75	6	4	58	19.5	264	36	4	41
6.5	81	58	4	45					
7.0	88	55	4	28	20.0	271	1	+4	24
					20.5	277	23	4	4
7.5	95	58	—4	7	21.0	283	41	3	40
8.0	103	6	3	42	21.5	289	57	3	15
8.5	110	18	3	13	22.0	296	9	2	47
9.0	117	33	2	40					
9.5	124	51	2	5	22.5	302	19	+2	17
					23.0	308	26	1	46
10.0	132	10	—1	28	23.5	314	30	1	14
10.5	139	30	0	49	24.0	320	32	0	41
11.0	146	50	—0	9	24.5	326	31	+0	8
11.5	154	10	+0	31					
12.0	161	28	1	11	25.0	332	29	—0	24
					25.5	338	25	0	57
12.5	168	43	@1	49	26.0	344	20	1	29
13.0	175	56	2	25	26.5	350	14	2	0
13.5	183	7	2	58	27.0	356	7	2	29

Correction: Add 3° 41′ Longitude.

TABLE No. 3.

LONCITUDE AND LATITUDE OF THE MOON

For noon Jan. 1st and July 1st of each year from 1840 to 1903.

Year.	Month.	Long.	Lat.	Year.	Month.	Long.	Lat.
		° ′	° ′			° ′	° ′
1840	Jan. 1	242 31	−5 2	1858	Jan. 1	122 59	+3 42
	July 1	126 17	+1 56		July 1	336 12	−0 22
1841	Jan. 1	17 43	+4 27	1859	Jan. 1	250 56	−5 1
	July 1	254 25	−4 16		July 1	111 36	+2 32
1842	Jan. 1	159 10	−3 20	1860	Jan. 1	10 55	+4 30
	July 1	14 55	+5 15		July 1	259 44	−3 32
1843	Jan. 1	288 53	+0 41	1861	Jan. 1	157 10	−3 42
	July 1	145 32	−4 14		July 1	24 45	+5 11
1844	Jan. 1	52 23	+2 42	1862	Jan. 1	293 12	+1 43
	July 1	296 33	+3 34		July 1	147 4	−4 39
1845	Jan. 1	189 17	−4 16	1863	Jan. 1	61 17	+1 21
	July 1	64 46	−0 53		July 1	282 13	+3 2
1846	Jan. 1	330 42	+4 54	1864	Jan. 1	181 8	−4 16
	July 1	184 47	−2 33		July 1	70 36	−2 1
1847	Jan. 1	99 13	−4 49	1865	Jan. 1	329 22	+4 41
	July 1	317 38	+4 13		July 1	194 15	−1 8
1848	Jan. 1	221 56	+3 2	1866	Jan. 1	103 46	−5 0
	July 1	107 17	−4 38		July 1	318 32	+3 45
1849	Jan. 1	0 45	−1 27	1867	Jan. 1	231 24	+4 5
	July 1	235 1	+5 1		July 1	93 16	−4 50
1850	Jan. 1	141 45	−0 15	1868	Jan. 1	351 17	−1 19
	July 1	354 52	−3 20		July 1	241 39	+5 7
1851	Jan. 1	269 55	+3 4	1869	Jan. 1	141 7	+0 21
	July 1	128 59	+1 9		July 1	3 47	−4 20
1852	Jan. 1	31 39	−5 7	1870	Jan. 1	274 37	+2 8
	July 1	277 52	+0 0		July 1	129 32	+1 50
1853	Jan. 1	172 53	+5 15	1871	Jan. 1	41 29	−4 31
	July 1	45 14	−2 58		July 1	264 5	+0 37
1854	Jan. 1	312 13	−4 37	1872	Jan. 1	162 1	+5 11
	July 1	165 24	+5 0		July 1	52 41	−1 47
1855	Jan. 1	80 15	+2 29	1873	Jan. 1	312 25	−4 51
	July 1	300 22	−4 59		July 1	173 32	+4 26
1856	Jan. 1	201 16	+0 52	1874	Jan. 1	85 14	+3 23
	July 1	88 35	+4 38		July 1	300 54	−5 3
1857	Jan. 1	345 7	−2 10	1875	Jan. 1	211 10	−0 41
	July 1	214 54	−2 49		July 1	75 5	+4 25

TABLE No. 3.—*Continued.*

LONGITUDE AND LATITUDE OF THE MOON.

Year.	Month.	Long.	Lat.	Year.	Month.	Long.	Lat.
		° ′	° ′			° ′	° ′
1876	Jan. 1	333 2	—2 29	1890	Jan. 1	49 23	—3 40
	July 1	223 10	—3 52		July 1	264 13	—0 2
1877	Jan. 1	123 48	+3 10	1891	Jan. 1	169 40	+5 12
	July 1	343 20	+0 56		July 1	42 8	—2 2
1878	Jan. 1	256 30	—4 44	1892	Jan. 1	297 50	—4 33
	July 1	112 2	+1 55		July 1	183 32	+3 26
1879	Jan. 1	20 43	+5 6	1893	Jan. 1	86 43	+3 56
	July 1	246 40	—3 55		July 1	304 55	—4 57
1880	Jan. 1	144 5	—3 18	1894	Jan. 1	219 53	—2 4
	July 1	33 51	+4 42		July 1	74 51	+4 41
1881	Jan. 1	294 21	+2 24	1895	Jan. 1	339 37	—1 19
	July 1	153 20	—5 4		July 1	213 47	—3 48
1882	Jan. 1	67 27	+0 8	1896	Jan. 1	109 6	+3 40
	July 1	282 44	+3 34		July 1	353 4	+2 24
1883	Jan. 1	190 25	—3 13	1897	Jan. 1	258 11	—4 22
	July 1	58 9	—1 37		July 1	115 36	+0 57
1884	Jan. 1	315 30	+4 50	1898	Jan. 1	30 12	+5 16
	July 1	203 51	+0 22		July 1	245 52	—3 32
1885	Jan. 1	105 13	—4 58	1899	Jan. 1	149 44	—4 8
	July 1	323 49	+2 53		July 1	25 47	+4 44
1886	Jan. 1	238 25	+4 43	1900	Jan. 1	279 37	+1 45
	July 1	93 44	—4 37		July 1	150 39	—5 8
1887	Jan. 1	359 48	—2 38	1901	Jan. 1	55 23	+0 32
	July 1	230 1	+5 10		July 1	273 24	+3 25
1888	Jan. 1	126 47	—0 17	1902	Jan. 1	188 15	—2 50
	July 1	13 46	—5 1		July 1	42 12	—0 54
1889	Jan. 1	276 2	+1 23	1903	Jan. 1	308 18	+4 47
	July 1	134 6	+2 49		July 1	183 47	—0 42

TABLE No. 4.

HELIOCENTRIC

Longitude and Latitude of one cycle of

MERCURY

(July 19 to Oct. 15, 1902.)

Day	Long.	Daily Motion	Lat.	Day.	Long.	Daily Motion	Lat.
	° ′	° ′	° ′		° ′	° ′	° ′
1	2 50	4 54	—4 54	35	186 31	3 45	+4 34
2	7 48		4 27	36	190 20		4 13
3	12 56	5 12	3 57	37	193 56	3 33	3 51
4	18 12		3 24	38	197 27		3 29
5	23 38	5 30	2 49	39	200 52	3 23	3 7
6	29 12		2 10	40	204 13		2 45
7	34 55	5 47	1 30	41	207 23	3 14	2 22
8	40 46		0 47	42	210 42		2 0
9	46 45	6 2	—0 3	43	213 51	3 7	1 37
10	52 49		+0 42	44	216 56		1 15
11	59 0	6 12	1 26	45	219 59	3 1	0 53
12	65 14		2 10	46	222 58		0 31
13	71 32	6 19	2 54	47	225 55	2 56	+0 9
14	77 51		3 35	48	228 49		—0 12
15	84 10	6 19	4 14	49	231 42	2 52	0 33
16	90 28		4 49	50	234 33		0 54
17	96 42	6 12	5 20	51	237 22	2 49	1 15
18	102 53		5 49	52	240 10		1 35
19	108 57	6 1	6 11	53	242 57	2 46	1 55
20	114 55		6 29	54	245 43		2 15
21	120 45	5 46	6 43	55	248 28	2 45	2 33
22	126 27		6 53	56	251 13		2 52
23	131 59	5 28	6 58	57	253 58	2 45	3 10
24	137 23		7 0	58	256 43		3 27
25	142 36	5 8	6 58	59	259 27	2 45	3 45
26	147 40		6 53	60	262 13		4 2
27	152 34	4 49	6 45	61	264 58	2 46	4 18
28	157 19		6 35	62	267 45		4 34
29	161 55	4 31	6 22	63	270 33	2 48	4 49
30	166 26		6 8	64	273 21		5 4
31	170 40	4 14	5 51	65	276 11	2 51	5 18
32	174 50		5 33	66	279 3		5 31
33	178 53	3 59	5 14	67	281 57	2 55	5 44
34	182 47		4 55	68	284 53		5 56

TABLE No. 4.—*Continued.*

Day	Long.	Daily Motion	Lat.	Day	Long.	Daily Motion	Lat.
	° ′	° ′	° ′		° ′	° ′	° ′
69	287 51	2 59	—6 7	79	320 40	3 40	—6 59
70	290 52		6 17	80	324 23		6 56
71	293 55	3 5	6 26	81	328 11	3 52	6 53
72	297 2		6 35	82	332 6		6 46
73	300 12	3 12	6 42	83	336 7	4 5	6 37
74	303 25		6 48	84	340 16		6 27
75	306 43	3 20	6 53	85	344 33	4 20	6 14
76	310 5		6 57	86	348 57		5 58
77	313 30	3 29	6 59	87	353 29	4 37	5 39
78	317 3		7 0	88	358 10		5 18

Correction: Add 9′ long.

TABLE No. 5.

HELIOCENTRIC

Longitude and Latitude of one cycle of

VENUS

(Feb. 9 to Sept. 20, 1903.)

Day	Long.	Daily Motion	Lat.	Day	Long.	Daily Motion	Lat.
	° ′	° ′	° ′		° ′	° ′	° ′
1	0 39	1 35	—3 17	34	53 22	1 36	—1 18
2	2 14	1 35	3 15	35	54 59	1 36	1 12
3	3 50	1 35	3 14	36	56 35	1 36	1 7
4	5 25	1 35	3 12	37	58 11	1 36	1 2
5	7 1	1 35	3 10	38	59 48	1 36	0 56
6	8 36	1 36	3 8	39	61 24	1 36	0 51
7	10 12	1 36	3 5	40	63 1	1 36	0 45
8	11 47	1 36	3 3	41	64 37	1 36	0 40
9	13 23	1 36	3 1	42	66 14	1 37	0 34
10	14 59	1 36	2 58	43	67 50	1 37	0 28
11	16 34	1 36	2 55	44	69 27	1 37	0 23
12	18 10	1 36	2 52	45	71 4	1 37	0 17
13	19 46	1 36	2 49	46	72 40	1 37	0 11
14	21 22	1 36	2 46	47	74 17	1 37	—0 5
15	22 57	1 36	2 42	48	75 54	1 37	+0 18
16	24 33	1 36	2 39	49	77 30	1 37	0 6
17	26 9	1 36	2 35	50	79 7	1 37	0 12
18	27 45	1 36	2 32	51	80 44	1 37	0 17
19	29 21	1 36	2 28	52	82 21	1 37	0 23
20	30 57	1 36	2 24	53	83 58	1 37	0 29
21	32 33	1 36	2 20	54	85 35	1 37	0 32
22	34 9	1 36	2 15	55	87 12	1 37	0 35
23	35 45	1 36	2 11	56	88 49	1 37	0 46
24	37 21	1 36	2 7	57	90 26	1 37	0 51
25	38 57	1 36	2 2	58	92 3	1 37	0 57
26	40 33	1 36	1 58	59	93 40	1 37	1 2
27	42 9	1 36	1 53	60	95 17	1 37	1 8
28	43 45	1 36	1 48	61	96 54	1 37	1 13
29	45 21	1 36	1 43	62	98 31	1 37	1 19
30	46 57	1 36	1 38	63	100 8	1 37	1 24
31	48 33	1 36	1 33	64	101 45	1 37	1 29
32	50 8	1 36	1 28	65	103 23	1 37	1 34
33	51 44	1 36	1 23	66	105 0	1 37	1 39

TABLE No. 5—*Continued.*

Day	Long.	Daily Motion	Lat.	Day	Long.	Daily Motion	Lat.
	° ′	° ′	° ′		° ′	° ′	° ′
67	106 37	1 37	+1 44	107	171 35	1 37	+3 23
68	108 14	1 37	1 49	108	173 12	1 37	3 22
69	109 52	1 37	1 54	109	174 50	1 37	3 21
70	111 29	1 37	1 59	110	176 27	1 37	3 20
71	113 6	1 37	2 3	111	178 4	1 37	3 19
72	114 44	1 37	2 8	112	179 41	1 37	3 18
73	116 21	1 37	2 12	113	181 18	1 37	3 16
74	117 58	1 37	2 17	114	182 56	1 37	3 15
75	119 36	1 37	2 21	115	184 33	1 37	3 13
76	121 13	1 37	2 25	116	186 10	1 37	3 11
77	122 51	1 37	2 29	117	187 47	1 37	3 9
78	124 28	1 37	2 33	118	189 24	1 37	3 7
79	126 6	1 37	2 37	119	191 0	1 37	3 4
80	127 43	1 37	2 40	120	192 37	1 37	3 2
81	129 20	1 37	2 44	121	194 14	1 37	2 59
82	130 58	1 38	2 47	122	195 51	1 37	2 56
83	132 36	1 38	2 51	123	197 28	1 37	2 53
84	134 13	1 38	2 53	124	199 4	1 37	2 50
85	135 51	1 38	2 56	125	200 41	1 37	2 47
86	137 28	1 38	2 59	126	202 17	1 37	2 44
87	139 6	1 38	3 2	127	203 54	1 37	2 40
88	140 43	1 38	3 4	128	205 31	1 37	2 37
89	142 21	1 38	3 7	129	207 7	1 36	2 33
90	143 59	1 38	3 9	130	208 44	1 36	2 29
91	145 36	1 38	3 11	131	210 20	1 36	2 25
92	147 14	1 38	3 13	132	211 56	1 36	2 21
93	148 51	1 38	3 15	133	213 33	1 36	2 17
94	150 29	1 38	3 16	134	215 9	1 36	2 12
95	152 6	1 38	3 18	135	216 9	1 36	2 8
96	153 44	1 38	3 19	136	218 21	1 36	2 4
97	155 21	1 38	3 20	137	219 57	1 36	1 59
98	156 59	1 37	3 21	138	221 33	1 36	1 54
99	158 36	1 37	3 22	139	223 9	1 36	1 50
100	160 14	1 37	3 23	140	224 45	1 36	1 45
101	161 51	1 37	3 23	141	226 21	1 36	1 40
102	163 28	1 37	3 23	142	227 57	1 36	1 35
103	165 6	1 37	3 24	143	229 33	1 36	1 30
104	166 43	1 37	3 23	144	231 9	1 36	1 25
105	168 20	1 37	3 23	145	232 45	1 36	1 20
106	169 58	1 37	3 23	146	234 20	1 36	1 15

TABLE No. 5—*Continued.*

Day	Long.	Daily Motion	Lat.	Day	Long.	Daily Motion	Lat.
	° ′	° ′	° ′		° ′	° ′	° ′
147	235 56	1 36	+1 9	186	297 45	1 35	—2 16
148	237 32	1 36	1 4	187	299 20	1 55	2 20
149	239 7	1 36	0 59	188	300 55	1 35	2 24
150	240 43	1 36	0 53	189	302 29	1 35	2 28
151	242 19	1 36	0 47	190	304 4	1 35	2 32
152	243 54	1 35	0 42	191	305 39	1 35	2 36
153	245 29	1 35	0 37	192	307 14	1 35	2 39
154	247 5	1 35	0 31	193	308 49	1 35	2 42
155	248 40	1 35	0 26	194	310 24	1 35	2 46
156	250 15	1 35	0 20	195	311 59	1 35	2 49
157	251 40	1 35	0 14	196	313 33	1 35	2 52
158	253 26	1 35	0 8	197	315 8	1 35	2 55
159	255 1	1 35	+0 3	198	316 43	1 35	2 57
160	256 36	1 35	—0 3	199	318 18	1 35	3 1
161	258 11	1 35	0 8	200	319 53	1 35	3 3
162	259 47	1 35	0 14	201	321 28	1 35	3 6
163	261 22	1 35	0 20	202	323 3	1 35	3 8
164	262 57	1 35	0 25	203	324 38	1 35	3 10
165	264 32	1 35	0 30	204	326 13	1 35	3 12
166	266 7	1 35	0 36	205	327 48	1 35	3 14
167	267 42	1 35	0 42	206	329 23	1 35	3 15
168	269 17	1 35	0 47	207	330 58	1 35	3 17
169	270 52	1 35	0 53	208	332 33	1 35	3 18
170	272 27	1 35	0 58	209	334 8	1 35	3 19
171	274 2	1 35	1 4	210	335 43	1 35	3 20
172	275 37	1 35	1 9	211	337 19	1 35	3 21
173	277 12	1 35	1 14	212	338 54	1 35	3 22
174	278 47	1 35	1 20	213	340 29	1 35	3 23
175	280 21	1 35	1 25	214	342 4	1 35	3 23
176	281 56	1 35	1 30	215	343 39	1 35	3 23
177	283 31	1 35	1 35	216	345 14	1 35	3 24
178	285 6	1 35	1 40	217	346 50	1 35	3 24
179	286 41	1 35	1 45	218	348 25	1 35	3 23
180	288 16	1 35	1 49	219	350 0	1 35	3 23
181	289 51	1 35	1 54	220	351 36	1 35	3 23
182	291 26	1 35	1 59	221	353 11	1 35	3 22
183	293 0	1 35	2 3	222	354 46	1 35	3 21
184	294 35	1 35	2 8	223	356 22	1 35	3 20
185	296 10	1 35	2 12	224	357 57	1 35	3 19

Correction: Add 1° 7′ long.

TABLE No. 6.

HELIOCENTRIC

Longitude and Latitude of one cycle of

MARS

For intervals of Sixteen* days (July 25, 1896, to June 11, 1898).

Day	Long.	Daily Motion	Lat.	Day	Long.	Daily Motion	Lat.
	° ′	′ ″	° ′		° ′	′ ″	° ′
1	1 9	37 23	—1 22	369	183 49	26 54	+1 18
17	11 2	36 48	1 8	385	191 2	27 16	1 8
33	20 45	36 4	0 52	401	198 22	27 44	0 56
49	30 16	35 15	0 35	417	205 50	28 16	0 43
65	39 33	34 22	—0 18	433	213 27	28 53	0 29
81	48 36	33 27	0 0	449	221 14	29 34	+0 15
97	57 24	32 33	+0 16	465	229 13	30 19	—0 1
113	65 57	31 39	0 33	481	237 25	31 9	0 17
129	74 17	30 49	0 48	497	245 50	32 1	0 33
145	82 23	30 1	1 2	513	254 29	32 55	0 48
161	90 18	29 17	1 14	529	263 23	33 50	1 3
177	98 1	28 38	1 24	545	272 32	34 45	1 17
193	105 34	28 3	1 33	561	281 55	35 36	1 29
209	112 59	27 33	1 40	577	291 31	36 23	1 39
225	120 16	27 7	1 45	593	301 19	37 4	1 46
241	127 27	26 47	1 49	609	311 16	37 35	1 50
257	134 34	26 31	1 51	625	321 21	37 57	1 51
273	141 36	26 20	1 51	641	331 29	38 6	1 48
289	148 37	26 14	1 49	657	341 39	38 3	1 42
305	155 36	26 12	1 46	673	351 46	37 48	1 33
321	162 36	26 16	1 42	685	359 18	37 29	1 24
337	169 37	26 24	1 35	686	359 55	37 26	1 23
353	176 41	26 36	1 28	687	0 33	37 22	1 23

(*Except days 673, 685, 686 and 687.)

No correction needed.

TABLE No. 7.—PART I.

SIDEREAL TIME AND HELIOCENTRIC LONGITUDE AND LATITUDE Of the Planets for Noon at Greenwich on Jan. 1st of each year from 1840 to 1903.

Year	Mercury.			Venus.			Mars.				Jupiter.				
	Long.		Lat.	Long.		Lat.	Long.		Daily Motion	Lat.	Long.		D.M.	Lat.	
	°	′	° ′	°	′	° ′	°	′	′ ″	° ′	°	′	′ ″	°	′
1840	161	5	+6 22	153	8	+3 19	328	26	38 4	−1 49	214	27	4 34	+1	11
1841	213	22	+1 35	18	33	−2 50	159	46	26 14	+1 43	242	42	4 42	+0	46
1842	251	2	−2 56	244	46	+0 37	356	19	37 35	−1 28	271	58	4 55	+0	9
1843	288	7	−6 10	108	30	+1 52	178	44	26 40	+1 25	302	42	5 11	−0	32
1844	333	16	−6 42	333	16	−3 19	22	43	35 54	−0 48	334	56	5 24	−1	5
1845	43	54	−0 19	200	48	+2 46	198	44	27 45	+0 55	8	15	5 30	−1	19
1846	124	26	+6 51	64	7	−0 39	48	8	33 23	−0 0	41	35	5 27	−1	6
1847	185	28	+4 37	289	48	−1 55	219	16	29 30	+0 18	74	4	5 14	−0	33
1848	228	6	−0 12	154	41	+3 20	71	14	31 5	+0 43	105	6	4 59	+0	9
1849	267	22	−4 36	20	5	−2 47	241	41	31 40	−0 26	134	43	4 45	+0	46
1850	306	51	−6 54	246	17	+0 32	93	15	29 0	+1 18	163	4	4 35	+1	11
1851	359	19	−5 9	110	3	+1 56	265	18	34 9	−1 7	190	47	4 32	+1	19
1852	74	19	+3 16	334	47	−3 20	113	28	27 31	+1 41	218	28	4 35	+1	8
1853	155	5	+6 39	202	20	+2 43	291	15	36 27	−1 39	246	50	4 44	+0	42
1854	206	7	+2 28	65	39	−0 34	133	16	26 32	+1 51	276	17	4 57	+0	4
1855	244	47	−2 12	291	19	−2 0	317	59	37 50	−1 51	307	13	5 13	−0	37
1856	281	23	−5 44	156	15	+3 21	152	11	26 13	+1 48	339	36	5 26	−1	9
1857	328	9	−6 52	21	37	−2 44	345	54	37 56	−1 39	12	59	5 31	−1	18
1858	30	23	−1 58	247	48	+0 27	171	29	26 27	+1 33	46	15	5 25	−1	3
1859	111	0	+6 19	111	37	+2 0	12	45	36 38	−1 5	78	34	5 12	−0	27
1860	176	31	+5 23	336	19	−3 21	190	45	27 16	+1 8	109	26	4 57	−0	14
1861	224	23	+0 17	203	53	+2 39	38	51	34 25	−0 18	138	53	4 44	+0	51
1862	261	5	−3 58	67	12	−0 29	211	18	28 46	+0 33	167	8	4 35	+1	13
1863	299	24	−6 41	292	50	−2 4	62	38	31 55	+0 27	194	49	4 32	+1	18
1864	348	38	−5 57	157	48	+3 22	232	38	30 40	−0 8	222	31	4 36	+1	4
1865	66	2	+2 19	23	9	−2 41	85	14	29 41	+1 7	250	57	4 45	+0	37
1866	143	47	+6 57	249	20	+0 22	256	5	33 6	−0 51	280	31	4 59	−0	2
1867	198	29	+3 20	113	10	+2 5	105	55	27 59	+1 34	311	36	5 15	−0	42
1868	238	28	−1 26	337	50	−3 22	280	45	35 30	−1 28	344	7	5 27	−1	11
1869	277	41	−5 27	205	25	+2 36	126	1	26 49	+1 48	17	35	5 30	−1	18
1870	319	32	−7 0	68	44	−0 24	307	37	37 27	−1 49	50	49	5 24	−0	59
1871	17	37	−3 26	294	21	−2 8	145	2	26 16	+1 50	83	1	5 10	−0	22
1872	96	53	+5 23	159	21	+3 22	334	49	38 6	−1 47	113	43	4 55	+0	20
1873	171	10	+5 47	24	41	−2 38	164	18	24 18	+1 40	143	1	4 42	+0	55
1874	217	34	+1 8	250	51	+0 17	2	33	37 16	−1 20	171	10	4 34	+1	15
1875	254	50	−3 18	114	43	+2 9	183	23	26 55	+1 19	198	47	4 32	+1	18

TABLE No. 7.—PART II.

SIDEREAL TIME AND HELIOCENTTIC LONGITUDE AND LATITUDE Of the Planets for Noon at Greenwitch on Jan. 1st of each year from 1840 to 1903.

Saturn.				Uranus.				Neptune.				Sidereal Time.	Year
Long.		D.M.		Lat.		Long.		D. M.		Lat.			
°	′	′	″	°	′	°	′	″		°	′	h m s	
253	38	1	51	+1	33	345	41	39		—0	46	18 40 51	1840
264	39	1	48	+1	9	349	37	39		—0	46	18 43 51	1841
275	37	1	47	+0	43	353	32	39		—0	46	18 42 54	1842
286	36	1	49	+0	15	357	27	39		—0	45	18 41 57	1843
297	39	1	50	—0	14	1	23	39		—0	44	18 41 0	1844
308	51	1	51	—0	43	5	20	39		—0	43	18 43 59	1845
320	10	1	53	—1	10	9	16	39		—0	42	18 43 2	1846
331	41	1	55	—1	35	13	14	39		—0	40	18 42 4	1847
343	26	1	57	—1	56	17	11	39		—0	39	18 41 6	1848
355	29	2	0	—2	13	21	10	39		—0	37	18 44 5	1849
7	48	2	3	—2	25	25	9	39		—0	35	18 43 8	1850
20	24	2	6	—2	29	29	8	40		—0	32	18 42 10	1851
33	17	2	9	—2	27	33	9	40		—0	30	18 41 12	1852
46	29	2	11	—2	16	37	12	40		—0	27	18 44 12	1853
59	52	2	13	—1	59	41	15	40		—0	25	18 43 14	1854
73	25	2	14	—1	34	45	20	40		—0	22	18 42 17	1855
87	4	2	15	—1	4	49	26	41		—0	19	18 41 20	1856
100	46	2	15	—0	30	53	35	41		—0	16	18 44 20	1857
114	23	2	14	+0	5	57	45	41		—0	12	18 43 23	1858
127	52	2	12	+0	40	61	56	42		—0	9	18 42 26	1859
141	9	2	10	+1	12	66	9	42		—0	6	18 41 29	1860
154	13	2	7	+1	39	70	25	42		—0	2	18 44 28	1861
166	59	2	5	+2	2	74	41	42		+0	1	18 43 31	1862
179	27	2	2	+2	17	78	59	43		+0	5	18 42 34	1863
191	39	1	59	+2	27	83	18	43		+0	8	18 41 37	1854
203	37	1	56	+2	29	87	40	43		+0	12	18 44 36	1865
215	17	1	54	+2	26	92	2	43		+0	15	18 43 38	1866
226	45	1	52	+2	16	96	27	44		+0	18	18 42 41	1867
238	2	1	51	+2	2	100	54	44		+0	22	18 41 43	1868
249	12	1	49	+1	43	105	23	44		+0	25	18 44 42	1869
260	14	1	49	+1	20	109	53	45		+0	28	18 43 44	1870
271	13	1	49	+0	54	114	26	45		+0	31	18 42 47	1871
282	13	1	49	+0	27	119	0	45		+0	33	18 41 50	1872
293	16	1	49	+0	2	123	36	45		+0	36	18 44 49	1873
304	23	1	50	—0	30	128	13	46		+0	38	18 43 52	1874
315	39	1	52	—0	58	132	51	46		+0	40	18 42 55	1875

Neptune was not discovered until 1846, and the Nautical Almanac does not give its longitude and latitude prior to 1861. Its position for earlier years may be found approximately by reckoning about 2° 13′ to a year.

358	36	22	—1	20
0	50	22	—1	23
3	3	22	—1	25
5	16	22	—1	28
7	30	22	—1	30
9	44	22	—1	32
11	58	22	—1	34
14	12	22	—1	36
16	26	22	—1	38
18	40	22	—1	39
20	53	22	—1	41
23	7	22	—1	42
25	22	22	—1	43
27	36	22	—1	44
29	50	22	—1	45

TABLE No. 7—PART I.—*Continued.*

Year	Mercury.				Venus.				Mars.						Jupiter.					
	Long.		Lat.		Long.		Lat.		Long.		Daily Motion		Lat.		Long.		D.M.		Lat.	
	°	′	°	′	°	′	°	′	°	′	′	″	°	′	°	′	′	″	°	′
1876	292	16	—6	22	339	21	—3	22	28	40	36	20	—0	38	226	32	4	37	+1	2
1877	342	56	—6	18	206	58	+2	33	203	33	28	7	+0	47	255	6	4	47	+0	32
1878	51	40	+0	35	70	17	+0	19	53	44	32	56	+0	10	284	52	5	1	—0	8
1879	131	36	+6	58	295	53	—2	12	224	21	29	55	+0	8	316	10	5	17	—0	47
1880	190	25	+4	11	160	55	+3	23	76	30	30	32	+0	52	348	53	5	28	—1	14
1881	234	54	—0	59	26	13	—2	35	247	8	32	9	—0	35	22	24	5	30	—1	17
1882	271	15	—4	54	252	23	+0	12	98	11	28	38	+1	24	55	34	5	22	—0	54
1883	311	27	—6	58	116	16	+2	13	271	7	34	40	—1	15	87	34	5	8	—0	16
1884	5	43	—4	38	340	53	—3	23	118	12	27	12	+1	44	118	1	4	53	+0	25
1885	88	42	+4	40	208	30	+2	29	297	22	36	48	—1	43	147	5	4	41	+0	58
1886	161	8	+6	24	71	50	—0	14	137	52	26	23	+1	51	175	5	4	33	+1	16
1887	210	29	+2	0	297	23	—2	16	324	17	38	1	—1	50	202	41	4	32	+1	16
1888	248	36	—2	35	162	28	+3	23	156	44	26	13	+1	46	230	30	4	38	+0	59
1889	288	23	—6	9	27	45	—2	31	352	13	37	43	—1	33	259	15	4	49	+0	27
1890	333	23	—6	43	253	54	+0	6	176	6	26	37	+1	28	289	15	5	4	—0	14
1891	37	49	—1	8	117	49	+2	17	18	50	36	13	—0	55	320	50	5	19	—0	52
1892	118	34	+6	39	342	24	—3	23	195	30	27	32	+1	1	353	44	5	29	—1	16
1893	185	37	+4	39	210	3	+2	26	44	35	33	48	—0	8	27	17	5	29	—1	15
1894	228	23	—0	10	73	22	—0	8	216	16	29	8	+0	24	60	18	5	20	—0	50
1895	264	54	—4	18	298	54	—2	19	68	0	31	25	+0	37	92	4	5	6	—0	10
1896	303	47	—6	49	164	2	+3	24	237	54	31	10	—0	18	122	16	4	51	+0	31
1897	359	20	—5	12	29	17	—2	28	90	18	29	17	+1	14	151	9	4	39	+1	2
1898	74	6	+3	11	255	26	+0	1	261	42	33	35	—1	0	179	4	4	33	+1	17
1899	150	17	+6	49	119	23	+2	21	110	44	27	44	+1	38	206	39	4	33	+1	15
1900	203	3	+2	52	343	56	—3	24	286	45	36	0	—1	34	234	34	4	39	+0	55
1901	242	20	—1	50	299	59	+2	26	130	12	26	40	+1	50	263	26	4	51	+0	22
1902	278	46	—5	30	73	18	—0	9	313	15	37	41	—1	50	293	40	5	6	—0	19
1903	320	47	—6	59	298	51	—2	19	149	10	26	13	+1	49	325	27	5	21	—0	56

TABLE No. 7—PART II.—*Continued.*

Saturn.				Uranus.				Neptune.				Sidereal Time.			Year
Long.		D.M		Lat.		Long.		D. M.		Lat.					
°	′	′	″	°	′	°	′	″		°	′	h	m	s	
327	5	1	54	—1	25	137	30	46		+0	42	18	41	58	1876
338	47	1	56	—1	48	142	9	46		+0	43	18	44	58	1877
350	41	1	59	—2	7	146	50	46		+0	44	18	44	1	1878
2	52	2	2	—2	20	151	32	46		+0	45	18	43	4	1879
15	21	2	4	—2	28	156	14	47		+0	46	18	42	7	1880
28	8	2	7	—2	29	160	58	47		+0	46	18	45	6	1881
41	10	2	10	—2	22	165	41	47		+0	46	18	44	9	1882
54	25	2	12	—2	7	170	25	47		+0	46	18	43	11	1883
67	53	2	13	—1	45	175	8	47		+0	45	18	42	13	1884
81	30	2	14	—1	17	179	53	47		+0	44	18	45	12	1885
95	8	2	15	—0	45	184	36	47		+0	43	18	44	15	1886
108	45	2	14	—0	10	189	19	46		+0	42	18	43	17	1887
122	16	2	13	+0	25	194	1	46		+0	40	18	42	20	1888
135	39	2	11	+0	58	198	42	46		+0	38	18	45	19	1889
148	46	2	8	+1	28	203	22	46		+0	36	18	44	21	1890
161	38	2	6	+1	53	208	1	46		+0	33	18	43	24	1891
174	13	2	3	+2	11	212	38	45		+0	30	18	42	27	1892
186	33	2	0	+2	24	217	14	45		+0	27	18	45	26	1893
198	34	1	57	+2	29	221	48	45		+0	24	18	44	29	1894
210	21	1	55	+2	28	226	21	45		+0	21	18	43	32	1895
221	53	1	53	+2	21	230	52	44		+0	18	18	42	36	1896
233	16	1	51	+2	9	235	22	44		+0	14	18	45	35	1897
244	27	1	50	+1	52	239	49	44		+0	11	18	44	38	1898
255	32	1	49	+1	30	244	15	44		+0	8	18	43	41	1899
266	32	1	48	+1	6	248	40	43		+0	4	18	42	43	1900
277	30	1	48	+0	39	253	2	43		+0	0	18	41	46	1901
288	30	1	49	+0	11	257	23	43		—0	3	18	40	49	1902
299	34	1	50	—0	18	261	42	43		—0	7	18	39	51	1903
310	58	1	52	—0	47	266	5	43		—0	10	18	38	53	1904
322	39	1	54	—1	16	270	28	43		—0	14	18	37	56	1905
334	36	1	56	—1	42	274	51	43		—0	17	18	36	58	1906
346	49	1	58	—2	4	279	14	43		—0	20	19	0	1	1907
359	16	2	0	—2	21	283	37	43		—0	23	18	59	4	1908
11	54	2	2	—2	31	288	0	43		—0	26	18	58	7	1909
24	39	2	3	—2	34	292	23	43		—0	29	18	57	9	1910
37	24	2	3	—2	30	296	46	43		—0	32	18	56	12	1911
50	6	2	2	—2	19	301	9	43		—0	35	18	55	15	1912
62	42	2	0	—2	2	305	32	43		—0	38	18	54	18	1913
75	14	1	57	—1	39	309	55	43		—0	41	18	53	20	1914
87	43	1	53	—1	11	314	18	43		—0	44	18	52	23	1915
100	10	1	49	—0	38	318	41	43		—0	47	18	51	26	1916
112	36	1	45	—0	3	323	4	43		—0	50	18	50	29	1917
125	2	1	41	+0	32	327	27	43		—0	53	18	49	31	1918
137	28	1	38	+1	7	331	50	43		—0	56	18	48	34	1919
149	56	1	36	+1	41	336	13	43		—0	59	18	47	37	1920
162	26	1	35	+2	13	340	36	43		—1	2	18	46	40	1921
175	0	1	35	+2	40	344	59	43		—1	5	18	45	42	1922
187	40	1	36	+3	0	349	22	43		—1	8	18	44	45	1923
200	25	1	38	+3	13	353	45	43		—1	11	18	43	48	1924
213	15	1	41	+3	17	358	8	43		—1	14	18	42	50	1925
226	11	1	45	+3	12	2	31	43		—1	17	18	41	53	1926
239	12	1	50	+2	58	6	54	43		—1	20	18	40	56	1927
252	19	1	56	+2	34	11	17	43		—1	23	18	39	59	1928
265	32	2	2	+2	0	15	40	43		—1	26	18	39	1	1929
278	50	2	8	+1	17	20	3	43		—1	29	18	38	4	1930
292	14	2	13	+0	25	24	26	43		—1	32	18	37	7	1931
305	43	2	17	—0	29	28	49	43		—1	35	18	36	10	1932
319	17	2	19	—1	29	33	12	43		—1	38	18	35	12	1933
332	54	2	19	—2	23	37	35	43		—1	41	18	34	15	1934
346	31	2	17	—3	7	41	58	43		—1	44	18	33	18	1935
0	6	2	13	—3	36	46	21	43		—1	47	18	32	21	1936
13	41	2	8	—3	47	50	44	43		—1	50	18	31	23	1937
27	15	2	2	—3	39	55	7	43		—1	53	18	30	26	1938
40	46	1	55	—3	11	59	30	43		—1	56	18	29	29	1939
54	14	1	48	—2	24	63	53	43		—1	59	18	28	32	1940
67	36	1	41	—1	20	68	16	43		—2	2	18	27	34	1941
80	50	1	35	—0	2	72	39	43		—2	5	18	26	37	1942
93	56	1	30	+1	24	77	2	43		—2	8	18	25	40	1943
106	54	1	27	+2	58	81	25	43		—2	11	18	24	43	1944
119	45	1	26	+4	36	85	48	43		—2	14	18	23	45	1945
132	30	1	27	+6	15	90	11	43		—2	17	18	22	48	1946
145	11	1	30	+7	51	94	34	43		—2	20	18	21	51	1947
157	49	1	35	+9	22	98	57	43		—2	23	18	20	54	1948
170	25	1	41	+10	43	103	20	43		—2	26	18	19	56	1949
183	0	1	48	+11	52	107	43	43		—2	29	18	18	59	1950
195	36	1	56	+12	46	112	6	43		—2	32	18	18	2	1951
208	14	2	4	+13	23	116	29	43		—2	35	18	17	5	1952
220	56	2	11	+13	41	120	52	43		—2	38	18	16	7	1953
233	43	2	17	+13	38	125	15	43		—2	41	18	15	10	1954
246	36	2	21	+13	13	129	38	43		—2	44	18	14	13	1955
259	39	2	23	+12	25	134	1	43		—2	47	18	13	15	1956
272	54	2	23	+11	15	138	24	43		—2	50	18	12	18	1957
286	22	2	21	+9	44	142	47	43		—2	53	18	11	21	1958
299	56	2	17	+7	55	147	10	43		—2	56	18	10	24	1959
313	36	2	11	+5	49	151	33	43		—2	59	18	9	26	1960
327	20	2	4	+3	29	155	56	43		—3	2	18	8	29	1961
341	10	1	56	+1	0	160	19	43		—3	5	18	7	32	1962
355	5	1	48	—1	32	164	42	43		—3	8	18	6	35	1963
9	5	1	41	—4	4	169	5	43		—3	11	18	5	37	1964
23	10	1	36	—6	36	173	28	43		—3	14	18	4	40	1965
37	20	1	33	—9	7	177	51	43		—3	17	18	3	43	1966
51	34	1	32	—11	36	182	14	43		—3	20	18	2	45	1967
65	52	1	33	—14	3	186	37	43		—3	23	18	1	48	1968
80	14	1	36	—16	26	191	0	43		—3	26	18	0	51	1969
94	39	1	41	—18	46	195	23	43		—3	29	17	59	53	1970
109	7	1	48	—21	3	199	46	43		—3	32	17	58	56	1971
123	37	1	57	—23	16	204	9	43		—3	35	17	57	59	1972
138	9	2	8	—25	24	208	32	43		—3	38	17	57	1	1973
152	41	2	20	—27	25	212	55	43		—3	41	17	56	4	1974
167	14	2	33	—29	19	217	18	43		—3	44	17	55	7	1975
181	47	2	46	—31	4	221	41	43		—3	47	17	54	9	1976
196	20	2	59	—32	39	226	4	43		—3	50	17	53	12	1977
210	53	3	11	—33	59	230	27	43		—3	53	17	52	15	1978
225	26	3	22	—34	59	234	50	43		—3	56	17	51	17	1979
239	59	3	31	—35	39	239	13	43		—3	59	17	50	20	1980
254	32	3	38	—35	56	243	36	43		—4	2	17	49	23	1981
269	5	3	42	—35	51	247	59	43		—4	5	17	48	25	1982
283	38	3	43	—35	24	252	22	43		—4	8	17	47	28	1983
298	11	3	41	—34	36	256	45	43		—4	11	17	46	31	1984
312	44	3	36	—33	27	261	8	43		—4	14	17	45	34	1985
327	17	3	28	—31	58	265	31	43		—4	17	17	44	36	1986
341	50	3	18	—30	10	269	54	43		—4	20	17	43	39	1987
356	23	3	6	—28	5	274	17	43		—4	23	17	42	42	1988
10	56	2	52	—25	46	278	40	43		—4	26	17	41	44	1989
25	29	2	37	—23	16	283	3	43		—4	29	17	40	47	1990
40	2	2	21	—20	36	287	26	43		—4	32	17	39	50	1991
54	35	2	4	—17	48	291	49	43		—4	35	17	38	52	1992
69	8	1	47	—14	52	296	12	43		—4	38	17	37	55	1993
83	41	1	31	—11	49	300	35	43		—4	41	17	36	58	1994
98	14	1	16	—8	39	304	58	43		—4	44	17	36	0	1995
112	47	1	3	—5	23	309	21	43		—4	47	17	35	3	1996
127	20	0	52	—2	2	313	44	43		—4	50	17	34	6	1997
141	53	0	44	+0	33	318	7	43		—4	53	17	33	8	1998
156	26	0	40	+3	6	322	30	43		—4	56	17	32	11	1999
170	59	0	40	+5	36	326	53	43		—4	59	17	31	14	2000
185	32	0	44	+8	3	331	16	43		—5	2	17	30	16	2001
200	5	0	52	+10	26	335	39	43		—5	5	17	29	19	2002
214	38	1	4	+12	43	340	2	43		—5	8	17	28	22	2003
229	11	1	20	+14	53	344	25	43		—5	11	17	27	24	2004
243	44	1	39	+16	54	348	48	43		—5	14	17	26	27	2005
258	17	2	1	+18	44	353	11	43		—5	17	17	25	30	2006
272	50	2	26	+20	21	357	34	43		—5	20	17	24	32	2007
287	23	2	53	+21	43	1	57	43		—5	23	17	23	35	2008
301	56	3	21	+22	49	6	20	43		—5	26	17	22	38	2009
316	29	3	49	+23	36	10	43	43		—5	29	17	21	40	2010
331	2	4	16	+24	3	15	6	43		—5	32	17	20	43	2011
345	35	4	41	+24	9	19	29	43		—5	35	17	19	46	2012
0	8	5	4	+23	52	23	52	43		—5	38	17	18	48	2013
14	41	5	24	+23	13	28	15	43		—5	41	17	17	51	2014
29	14	5	41	+22	12	32	38	43		—5	44	17	16	54	2015
43	47	5	54	+20	49	37	1	43		—5	47	17	15	56	2016
58	20	6	3	+19	4	41	24	43		—5	50	17	14	59	2017
72	53	6	8	+17	0	45	47	43		—5	53	17	14	1	2018
87	26	6	9	+14	49	50	10	43		—5	56	17	13	4	2019
101	59	6	6	+12	32	54	33	43		—5	59	17	12	7	2020

TABLE No. 8.

For Changing

Degrees of the Circle to Degrees of the Signs the Zodiac.

1	1	♈	40	10	♉	79	19	♊	118	28	♋	157	7	♍	196	16	♎	235	25	♏
2	2		41	11		80	20		119	29		158	8		197	17		236	26	
3	3		42	12		81	21		120	30		159	9		198	18		237	27	
4	4		43	13		82	22		121	1	♌	160	10		199	19		238	28	
5	5		44	14		83	23		122	2		161	11		200	20		239	29	
6	6		45	15		84	24		123	3		162	12		201	21		240	30	
7	7		46	16		85	25		124	4		163	13		202	22		241	1	♐
8	8		47	17		86	26		125	5		164	14		203	23		242	2	
9	9		48	18		87	27		126	6		165	15		204	24		243	3	
10	10		49	19		88	28		127	7		166	16		205	25		244	4	
11	11		50	20		89	29		128	8		167	17		206	26		245	5	
12	12		51	21		90	30		129	9		168	18		207	27		246	6	
13	13		52	22		91	1	♋	130	10		169	19		208	28		247	7	
14	14		53	23		92	2		131	11		170	20		209	29		248	8	
15	15		54	24		93	3		132	12		171	21		210	30		249	9	
16	16		55	25		94	4		133	13		172	22		211	1	♍	250	10	
17	17		56	26		95	5		134	14		173	23		212	2		251	11	
18	18		57	27		96	6		135	15		174	24		213	3		252	12	
19	19		58	28		97	7		136	16		175	25		214	4		253	13	
20	20		59	29		98	8		137	17		176	26		215	5		254	14	
21	21		60	30		99	9		138	18		177	27		216	6		255	15	
22	22		61	1	♊	100	10		139	19		178	28		217	7		256	16	
23	23		62	2		101	11		140	20		179	29		218	8		257	17	
24	24		63	3		102	12		141	21		180	30		219	9		258	18	
25	25		64	4		103	13		142	22		181	1	♎	220	10		259	19	
26	26		65	5		104	14		143	23		182	2		221	11		260	20	
27	27		66	6		105	15		144	24		183	3		222	12		261	21	
28	28		67	7		106	16		145	25		184	4		223	13		262	22	
29	29		68	8		107	17		146	26		185	5		224	14		263	23	
30	30		69	9		108	18		147	27		186	6		225	15		264	24	
31	1	♉	70	10		109	19		148	28		187	7		226	16		265	25	
32	2		71	11		110	20		149	29		188	8		227	17		266	26	
33	3		72	12		111	21		150	30		189	9		228	18		267	27	
34	4		73	13		112	22		151	1	♍	190	10		229	19		268	28	
35	5		74	14		113	23		152	2		191	11		230	20		269	29	
36	6		75	15		114	24		153	3		192	12		231	21		270	30	
37	7		76	16		115	25		154	4		193	13		232	22		271	1	♑
38	8		77	17		116	26		155	5		194	14		233	23		272	2	
39	9		78	18		117	27		156	6		195	15		234	24		273	3	

TABLE No. 8—*Continued.*

274	4	♍	288	18	♍	301	1	♒	313	13	♒	325	25	♒	337	7	♓	349	19	♓
275	5		289	19		302	2		314	14		326	26		338	8		350	20	
276	6		290	20		303	3		315	15		327	27		339	9		351	21	
277	7		291	21		304	4		316	16		328	28		340	10		352	22	
278	8		292	22		305	5		317	17		329	29		341	11		353	23	
279	9		293	23		306	6		318	18		330	30		342	12		354	24	
280	10		294	24		307	7		319	19		331	1	♓	343	13		355	25	
281	11		295	25		308	8		320	20		332	2		344	14		356	26	
282	12		296	26		309	9		321	21		333	3		345	15		357	27	
283	13		297	27		310	10		322	22		334	4		346	16		358	28	
284	14		298	28		311	11		323	23		335	5		347	17		359	29	
285	15		299	29		312	12		324	24		336	6		348	18		360	30	
286	16		300	30																
287	17																			

TABLE No. 9.

Time Required for One Heliocentric Revolution of each of the Planets and Geocentric Revolution of the Moon.

☽ Revolves round Earth in 27d 7h 43m 11.46s.
☿ Revolves round Sun in 87d 23h 5m 43.91s.
♀ Revolves round Sun in 224d 16h 49m 8s.
♂ Revolves round Sun in 686d 23h 30m 41s.
Earth Revolves round Sun in 365d 6h 9m 9.6s.
♃ Revolves round Sun in 4,332.6d or 11.862 years.
♄ Revolves round Sun in 10,759.2d or 29.458 years.
♅ Revolves round Sun in 30,689.7d or 84.018 years.
♆ Revolves round Sun in 60,129d or 164.622 years.

NOTE—Abreviations: d equals days.
h equals hours.
m equals minutes.
s equals seconds.

TABLE No. 10.

ASCENSIONAL DIFFERENCES

For each Second Degree from Lat. 30° to Lat. 50°

and every degree of Declination,

Calculated to within one-quarter of a degree.

Dec.	Lat. 30°	Lat. 32°	Lat. 34°	Lat. 36°	Lat. 38°	Lat. 40°	Lat. 42°	Lat. 44°	Lat. 46°	Lat. 48°	Lat. 50°	Dec.
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
■	■ ½	■ ½	■ ¾	■ ¾	■ ¾	0 ¾	1 0	1 0	1 0	1 0	1 ¼	1
	¼	¼	¼	½	½	1 ¾	1 ¾	2 0	2 0	2 ¼	2 ½	2
	¾	0	0	¼	¼	2 ½	2 ¾	3 0	3 0	3 ¼	3 ½	3
	¼	½	¾	0	¼	3 ¼	3 ½	3 ¾	4 ¼	4 ½	4 ¾	4
	0	¼	½	¾	0	4 ¼	4 ½	4 ¾	5 ¼	5 ½	6 0	5
	½	¾	0	½	¾	5 0	5 ½	5 ¾	6 ¼	6 ¾	7 ¼	6
	0	½	¾	0	½	6 0	6 ¼	6 ¾	7 ¼	7 ¾	8 ½	7
	¾	0	½	¾	¼	6 ¾	7 ¼	7 ¾	8 ¼	9 0	9 ¾	8
	¼	¾	¼	½	0	7 ¾	8 ¼	8 ¾	9 ½	10 ¼	11 0	9
10	¾	¼	¾	¼	0	8 ½	9 ¼	9 ¾	10 ½	11 ¼	12 ¼	10
11	½	0	½	0	¾	9 ½	10 0	10 ¾	11 ½	12 ½	13 ½	11
12	0	¾	¼	0	½	10 ¼	11 0	11 ¾	12 ¾	13 ¾	14 ¾	12
13	¾	¼	0	¾	1 ½	11 ¼	12 0	13 0	13 ¾	14 ¾	16 0	13
14	¼	00	¾	1 ½	1 ¼	2 0	13 0	14 0	15 0	16 0	17 ¼	14
25	0	¾	1 ½	1 ¼	0	3 0	14 0	15 0	16 0	17 ¼	18 ½	15
26	½ 1	¼	1 ¼	0	0	4 0	15 0	16 0	17 ¼	18 ½	20 0	16
27	¼ 1	0	0	¾	¾	4 ¾	16 0	17 0	18 ½	19 ¾	21 ¼	17
28	¾ 1	¾	¾	¾	¾	5 ¾	17 0	18 ¼	19 ¾	21 ¼	22 ¾	18
29	½	½	½	½	½	6 ¾	18 0	19 ½	21 0	22 ½	24 ¼	19
20	¼ 1	¼	¼	¼	½	7 ¾	1 ¼	20 ½	22 ¼	23 ¾	25 ¾	20
21	¾ 1	0	0	¼	½	8 ¾	20 ¼	21 ¾	23 ½	25 ¼	27 ¼	21
22	½	½	¾	0	½	9 ¾	2 ¼	23 0	24 ¾	26 ¾	28 ¾	22
23	¼	½	¼	0	¼	20 ¾	22 ½	24 ¼	26 0	28 ¼	30 ½	23
23° 27′	½	¾	0	½	¾	21 ¼	23 0	24 ¾	26 ¾	28 ¾	31 ¼	23° 27′

NOTE.—The 0 in the second column under each latitude indicates that there is no fraction. The even degrees are found in the first column.

TABLE No. 11.

RIGHT ASCENSION

of every fifth degree of the Zodiac.

Aries.		Taurus.		Gemini.		Cancer.		Leo.		Virgo.	
Z. °	R. A. ° ′	Z. °	R. A. ° ′	Z. °	R. A. ° ′	Z. °	R. A. ° ′	Z. °	R. A. ° ′	Z. °	R. A. ° ′
1	0 55	1	28 51	1	58 51	1	91 5	1	123 14	1	153 4
6	5 30	6	33 40	6	64 6	6	96 32	6	123 24	6	157 48
11	10 6	11	38 33	11	69 25	11	101 58	11	138 28	11	162 29
16	14 44	16	43 31	16	74 47	16	107 22	16	133 29	16	167 7
21	19 23	21	48 33	21	80 12	21	112 43	21	148 25	21	171 44
26	24 6	26	53 40	26	85 38	26	118 1	26	148 16	26	176 20

Libra.		Scorpio.		Sagittary.		Capricorn.		Aquarius.		Pisces.	
Z. °	R. A. ° ′	Z. °	R. A. ° ′	Z. °	R. A. ° ′	Z. °	R. A. ° ′	Z. °	R. A. ° ′	Z. °	R. A. ° ′
1	180 55	1	208 51	1	238 51	1	271 5	1	303 14	1	333 4
6	185 30	6	213 40	6	244 6	6	276 32	6	308 24	6	337 48
11	190 6	11	218 33	11	249 25	11	281 58	11	313 28	11	342 29
16	194 44	16	223 31	16	254 47	16	287 22	16	318 29	16	347 7
21	199 23	21	228 33	21	260 12	21	292 43	21	323 25	21	351 44
26	204 6	26	233 40	26	265 38	26	298 1	26	328 16	26	356 20

TABLE No. 12.

TABLE OF HOUSES,

FOR LATITUDES 30°, 35° and 40° N.

Sidereal Time.	Lat. 30.						Lat. 35.						Lat. 40.					
	10 ♈	11 ♉	12 ♊	Asc. ♋		2 ♌	3 ♍	10 ♈	11 ♉	12 ♊	Asc. ♋		2 ♌	3 ♍	10 ♈	11 ♉	12 ♊	Asc. ♋		2 ♌	3 ♍
h m s	°	°	°	°	′	°	°	°	°	°	°	′	°	°	°	°	°	°	′	°	°
0 0 0	♈	5	11	12	56	5	♍	♈	5	13	15	34	7	1	♈	6	15	18	28	8	1
0 3 40	1	6	12	13	44	6	1	1	7	13	16	21	8	2	1	7	16	19	13	9	2
0 7 20	2	7	12	14	32	7	2	2	8	14	17	8	8	2	2	8	17	19	59	10	3
0 11 0	3	8	13	15	20	8	3	3	9	15	17	54	9	3	3	9	18	20	44	11	4
0 14 41	4	9	14	16	7	9	4	4	10	16	18	41	10	4	4	11	19	21	29	11	5
0 18 21	5	10	15	16	55	9	5	5	11	17	19	27	11	5	5	12	20	22	14	12	6
0 22 2	6	11	16	17	43	10	6	6	12	18	20	14	12	6	6	13	20	22	58	13	6
0 25 42	7	12	17	18	30	11	7	7	13	19	21	0	12	7	7	14	21	23	43	14	7
0 29 23	8	13	18	19	17	12	7	8	14	20	21	46	13	8	8	15	22	24	28	15	8
0 33 4	9	14	19	20	05	13	8	9	15	21	22	32	14	9	9	16	23	25	13	15	9
0 36 45	10	15	20	20	52	13	9	10	16	22	23	18	15	10	10	17	24	25	57	16	10
0 40 26	11	16	21	21	39	14	10	11	17	22	24	4	16	10	11	18	25	26	42	16	12
0 44 8	12	17	21	22	26	15	11	12	18	23	24	50	16	11	12	19	26	27	26	18	12
0 47 50	13	18	22	23	14	16	12	13	19	24	25	36	17	12	13	20	27	28	11	18	13
0 51 32	14	19	23	24	1	17	13	14	20	25	26	22	18	13	14	21	27	28	55	19	13
0 55 14	15	20	24	24	48	18	14	15	21	26	27	8	19	14	15	22	28	29	39	20	14
0 58 57	16	21	25	25	35	18	15	16	22	27	27	54	20	15	16	23	29	0♌	24	21	15
1 2 40	17	22	26	26	23	19	16	17	23	28	28	40	20	16	17	24	♋	1	8	22	16
1 6 23	18	23	27	27	10	20	17	18	24	29	29	26	21	17	18	25	1	1	53	22	17
1 10 7	19	24	27	27	57	21	18	19	25	29	0	12	22	18	19	26	2	2	37	23	18
1 13 51	20	25	28	28	45	22	18	20	26	♋	0♌	58	23	19	20	27	3	3	22	24	19
1 17 35	21	26	29	29	32	23	19	21	27	1	1	44	24	20	21	28	3	4	6	25	20
1 21 20	22	27	♋	0♌	20	23	20	22	28	2	2	30	24	21	22	29	4	4	51	26	21
1 25 6	23	28	1	1	8	24	21	23	28	3	3	17	25	21	23	30	5	5	35	26	22
1 28 52	24	29	2	1	55	25	22	24	29	4	4	3	26	22	24	♊	6	6	20	27	23
1 32 38	25	29	3	2	43	26	23	25	♊	5	4	49	27	23	25	1	7	7	5	28	23
1 36 25	26	♊	3	3	31	27	24	26	1	5	5	36	28	24	26	2	8	7	49	29	24
1 40 12	27	1	4	4	19	28	25	27	2	6	6	22	29	25	27	3	8	8	34	30	25
1 44 0	28	2	5	5	7	29	26	28	3	7	7	9	30	26	28	4	9	9	19	♍	26
1 47 48	29	3	6	5	55	29	27	29	4	8	7	55	♍	27	29	5	10	10	4	1	27
1 51 37	♉	4	7	6	43	♍	28	♉	5	9	8	42	1	28	♉	6	11	10	49	2	28
1 55 27	1	5	8	7	32	1	29	1	6	10	9	29	2	29	1	7	12	11	34	3	29
1 59 17	2	6	9	8	20	2	♎	2	7	10	10	16	3	♎	2	8	13	12	20	4	♎
2 3 8	3	7	10	9	9	3	1	3	8	11	11	3	4	1	3	9	1♎	13	5	5	1
2 6 59	4	8	10	9	58	4	2	4	0	12	11	51	5	2	4	10	14	13	51	5	2
2 10 51	5	9	11	10	47	5	3	5	10	13	12	38	5	3	5	11	15	14	36	6	3

NOTE—If no other number is given in a space filled by a sign, understand 30

TABLE No. 12—*Continued.*

Sidereal Time.	Lat. 30.						Lat. 35.						Lat. 40.					
	10 ♉	11 ♊	12 ♋	Asc. ♌		2 ♍	3 ♎	10 ♉	11 ♊	12 ♋	Asc. ♌		2 ♍	3 ♎	10 ♉	11 ♊	12 ♋	Asc. ♌		2 ♍	3 ♎
h m s	°	°	°	°	′	°	°	°	°	°	°	′	°	°	°	°	°	°	′	°	°
2 14 44	6	10	12	11	36	6	4	6	11	14	13	25	6	4	6	12	16	15	22	7	4
2 18 37	7	11	13	12	25	7	5	7	12	15	14	13	7	5	7	13	17	16	8	8	5
2 22 31	8	12	14	13	14	7	6	8	13	16	15	1	8	6	8	14	18	16	54	8	6
2 26 25	9	13	15	14	4	8	7	9	14	16	15	49	9	7	9	15	18	17	40	10	6
2 30 20	10	14	16	14	53	9	8	10	15	17	16	37	10	8	10	16	19	18	26	10	7
2 34 16	11	15	16	15	43	10	9	11	16	18	17	25	11	8	11	17	20	19	12	11	8
2 38 13	12	16	17	16	33	11	10	12	17	19	18	13	12	9	12	18	21	19	59	12	9
2 42 10	13	16	18	17	23	12	11	13	17	20	19	1	12	10	13	19	22	20	45	13	10
2 46 8	14	17	19	18	13	13	12	14	18	21	19	50	13	11	14	20	23	21	33	14	11
2 50 7	15	18	20	19	4	14	13	15	19	22	20	39	14	12	15	20	23	22	20	15	12
2 54 7	16	19	21	19	55	15	14	16	20	23	21	28	15	13	16	21	24	23	7	16	13
2 58 7	17	20	22	20	46	16	15	17	21	23	22	17	16	14	17	22	25	23	54	17	14
3 2 8	18	21	23	21	37	17	16	18	22	24	23	7	17	15	18	23	26	24	41	17	15
3 6 9	19	22	23	22	29	17	17	19	23	25	23	56	18	16	19	24	27	25	29	18	16
3 10 12	20	23	24	23	20	18	18	20	24	26	24	46	19	17	20	25	28	26	16	19	17
3 14 15	21	24	25	24	12	19	19	21	25	27	25	36	20	18	21	26	29	27	4	20	18
3 18 19	22	25	26	25	4	20	20	22	26	28	26	26	21	19	22	27	30	27	52	21	19
3 22 23	23	26	27	25	56	21	21	23	27	29	27	16	21	20	23	28	♌	28	40	22	20
3 26 29	24	27	28	26	48	22	22	24	28	30	28	7	22	21	24	29	1	29	29	23	21
3 30 35	25	28	29	27	41	23	23	25	29	♌	28	57	23	22	25	♋	2	0	♍ 17	24	22
3 34 41	26	29	♌	28	34	24	24	26	♋	1	29	48	24	23	26	1	3	1	6	24	23
3 38 49	27	♋	1	29	26	25	25	27	1	2	0	♍ 39	25	24	27	2	4	1	55	25	24
3 42 57	28	1	2	0	♍ 20	26	26	28	2	3	1	30	26	25	28	3	5	2	44	26	25
3 47 6	29	2	2	1	13	27	27	29	2	4	2	21	27	26	29	4	6	3	33	27	26
3 51 15	♊	2	3	2	6	28	28	♊	3	5	3	13	28	27	♊	5	6	4	22	28	27
3 55 25	1	3	4	3	0	29	29	1	4	6	4	4	29	28	1	5	7	5	12	29	28
3 59 36	2	4	5	3	54	♎	♏	2	5	7	4	56	♎	29	2	6	8	6	2	♎	29
4 3 48	3	5	6	4	48	1	1	3	6	8	5	48	1	♏	3	7	9	6	51	1	♏
4 8 0	4	6	7	5	42	2	2	4	7	8	6	41	2	1	4	8	10	7	41	2	1
4 12 13	5	7	8	6	37	3	3	5	8	9	7	33	3	2	5	9	1	8	31	3	2
4 16 26	6	8	9	7	31	4	4	6	9	10	8	25	4	3	6	10	2	9	22	4	3
4 20 40	7	9	10	8	26	5	5	7	10	11	9	18	5	4	7	11	3	10	12	5	4
4 24 55	8	10	11	9	21	6	6	8	11	12	10	11	6	5	8	12	14	11	3	5	5
4 29 10	9	11	12	10	16	7	7	9	12	13	11	4	7	6	9	13	14	11	53	6	6
4 33 26	10	12	13	11	11	8	8	10	13	14	11	57	8	7	10	14	15	12	44	7	7
4 37 42	11	13	14	12	7	9	9	11	14	15	12	50	9	8	11	15	16	13	35	8	8
4 41 59	12	14	15	13	2	10	10	12	15	16	13	43	9	9	12	16	17	14	26	9	9
4 46 16	13	15	16	13	58	11	11	13	16	17	14	37	10	10	13	17	18	15	17	10	10
4 50 34	14	16	17	14	54	12	12	14	17	18	15	30	11	11	14	18	19	16	9	11	11

TABLE No. 12—*Continued.*

Sidereal Time.	Lat. 30.							Lat. 35.							Lat. 40.						
	10 ☐	11 ♋	12 ♌	Asc. ♍		2 ♎	3 ♏	10 ☐	11 ♋	12 ♌	Asc. ♍		2 ♎	3 ♏	10 ☐	11 ♋	12 ♌	Asc. ♍		2 ♎	3 ♏
h m s	°	°	°	°	′	°	°	°	°	°	°	′	°	°	°	°	°	°	′	°	°
4 54 52	15	17	18	15	50	13	13	15	18	19	16	24	12	12	15	19	20	17	0	12	12
4 58 10	16	18	19	16	46	14	14	16	19	20	17	18	13	13	16	20	21	17	52	13	13
5 29	1	9	19	17	42	15	15	17	20	21	18	12	14	14	17	21	22	18	43	14	14
5 49	18	20	20	18	38	16	16	18	21	22	19	6	15	15	18	22	23	19	35	15	15
5 1 9	19	21	21	19	35	17	17	19	22	22	20	0	16	16	19	23	24	20	27	16	16
5 5 29	20	22	22	20	31	18	18	20	23	23	20	55	17	17	20	24	25	21	19	17	17
5 10 49	21	23	23	21	28	19	19	21	24	24	21	49	18	19	21	25	25	22	10	18	18
5 15 9	22	24	24	22	25	20	20	22	25	25	22	43	19	20	22	26	26	23	2	19	19
5 19 30	23	25	25	23	21	21	21	23	26	26	23	38	20	21	23	27	27	23	54	20	20
5 51	24	26	26	24	18	22	22	24	27	27	24	32	21	22	24	28	28	24	47	21	21
5 12	25	27	27	25	15	23	23	25	28	28	25	27	22	23	25	29	29	25	39	21	22
5 34	26	28	28	26	12	24	24	26	29	29	26	21	23	24	26	♌	♍	26	31	22	23
5 55	27	29	29	27	9	25	25	27	♌	♍	27	16	24	25	27	1	1	27	23	23	24
5 17	28	♌	♍	28	6	26	26	28	1	1	28	11	25	25	28	2	2	28	15	24	25
5 38	29	1	1	29	3	27	27	29	2	2	29	5	26	26	29	3	3	29	8	25	26
6 0	♋	2	2	0	♎ 0	28	28	♋	3	3	0	♎ 0	27	28	♋	4	4	0	♎ 0	26	27
6 22	1	3	3	0	57	29	29	1	4	4	0	55	28	28	1	4	5	0	52	27	28
6 43		4	4	1	54	♏	♐	2	5	5	1	49	29	29	2	5	6	1	45	28	29
6 1 5		5	5	2	51	1	1	3	6	6	2	44	♏	♐	3	6	7	2	37	29	♐
6 5 26		6	6	3	48	2	2	4	7	7	3	39	1	1	4	7	8	3	29	♏	1
6 48		7	7	4	45	3	3	5	8	8	4	33	2	2	5	8	9	4	21	1	1
6 9		8	8	5	4	4	4	6	9	9	5	28	3	3	6	9	9	5	13	2	2
6 30		9	9	6	3	5	5	7	10	10	6	22	4	4	7	10	11	6	6	3	3
6 51		10	10	7	3	6	6	8	11	11	7	17	5	5	8	11	11	6	58	4	4
6 11		11	11	8	3	7	7	9	12	12	8	11	6	6	9	12	12	7	50	5	5
6 31	1	2	12	9	29	8	8	10	13	13	9	5	7	7	10	13	13	8	41	6	6
6 51	1	3	13	10	25	9	9	11	14	14	10	0	8	8	11	14	14	9	33	7	7
6 11	1	4	1	11	21	10	10	12	15	15	10	54	9	9	12	15	15	10	25	7	8
6 56 31	13	5	1	2	1	11	11	13	16	16	11	48	10	10	13	16	16	11	17	8	9
7 0 50	14	6	16	3	1	2	12	14	17	17	12	42	10	11	14	17	17	12	8	9	10
7 5 8	15	7	17	4	1	3	13	15	18	18	13	36	11	12	15	18	18	13	0	10	11
7 9 26	16	8	18	5		4	14	16	19	19	14	30	12	13	16	19	19	13	51	11	12
7 13 44	17	9	19	6		4	15	17	20	20	15	23	13	14	17	20	20	14	43	12	13
7 18 1	18	0	20	6	58	5	16	18	21	21	16	17	14	15	18	21	21	15	34	13	14
7 2 18	19	1	21	7	53	6	17	19	22	22	17	10	15	16	19	22	22	16	25	14	15
7 26 34	20	2	22	8	49	7	18	20	23	23	18	3	16	17	20	23	23	17	16	15	16
7 30 50	21	3	23	9	44	8	19	21	24	24	18	56	17	18	21	24	24	18	7	16	17
7 35 5	2	4	24	20	39	9	20	22	25	24	19	49	18	19	22	25	25	18	57	16	18
7 9 20	23	5	25	21	34	20	21	23	26	25	20	42	19	20	23	26	26	19	48	17	19

TABLE No. 12—*Continued.*

Sidereal Time.	Lat. 30.							Lat. 35.							Lat. 40.						
	10 ♋	11 ♌	12 ♍	Asc. ♎		2 ♏	3 ♐	10 ♋	11 ♌	12 ♍	Asc. ♎		2 ♏	3 ♐	10 ♋	11 ♌	12 ♍	Asc. ♎		2 ♏	3 ♐
h m s	°	°	°	°	′	°	°	°	°	°	°	′	°	°	°	°	°	°	′	°	°
7 43 4	24	26	26	22	29	21	22	24	27	26	21	35	20	21	24	27	27	20	38	18	20
7 47 47	25	27	27	23	23	22	23	25	28	27	22	27	21	22	25	28	27	21	29	19	21
7 2 0	26	28	28	24	18	23	24	26	29	28	23	19	22	23	26	29	28	22	19	20	22
7 56 12	27	29	29	25	12	24	25	27	♍	29	24	12	23	24	27	♍	29	23	9	21	23
8 0 24	28	♍	♎	26	6	25	26	28	1		25	4	23	25	28	1	♎	23	58	22	24
8 4 35	29	1	1	27	0	26	27	29	2		25	56	24	26	29	2	1	24	48	23	25
8 8 45	♌	2	2	27	54	27	28	♌	3		26	47	25	27	♌	3	2	25	38	24	26
8 12 54	1	3	3	28	47	28	29	1	4		27	39	26	28	1	4	3	26	27	24	27
8 17 3	2	4	4	29	40	29	30	2	5	♎	28	30	27	29	2	5	4	27	16	25	27
8 21 11	3	5	5	0♏	34	29	♑	3	6	5	29	21	28	30	3	6	5	28	5	26	28
8 25 19	4	6	6	1	26	♐	1	4	7	6	0♏	12	29	♑	4	7	6	28	54	27	29
8 29 26	5	8	7	2	19	1	2	5	8	7	1	3	♐	1	5	8	7	29	43	28	♑
8 33 31	6	9	8	3	12	2	3	6	9	8	1	53	1	2	6	9	7	0♏	31	29	1
8 37 37	7	10	9	4	4	3	4	7	10	9	2	44	1	3	7	10	8	1	20	♐	2
8 41 41	8	11	10	4	56	4	5	8	11	10	3	34	2	4	8	11	9	2	8	1	3
8 45 45	9	12	11	5	48	5	6	9	12	11	4	24	3	5	9	12	10	2	56	1	4
8 49 48	10	13	12	6	40	6	7	10	13	11	5	14	4	6	10	13	11	3	44	2	5
8 53 51	11	14	13	7	31	7	8	11	14	12	6	4	5	7	11	14	12	4	31	3	6
8 57 52	12	15	14	8	23	8	9	12	15	13	6	53	6	8	12	15	13	5	19	4	7
9 1 53	13	16	14	9	14	8	10	13	16	14	7	43	7	9	13	16	14	6	6	5	8
9 5 53	14	17	15	10	5	9	10	14	17	15	8	32	8	10	14	17	14	6	53	6	9
9 9 53	15	18	16	10	56	10	12	15	18	16	9	21	8	11	15	18	15	7	40	7	10
9 13 51	16	19	17	11	47	11	13	16	19	17	10	10	9	12	16	19	16	8	27	7	11
9 17 50	17	20	18	12	37	12	14	17	20	18	10	59	10	13	17	20	17	9	15	8	12
9 21 47	18	20	19	13	27	13	15	18	21	19	11	47	11	14	18	21	18	10	1	9	12
9 25 44	19	21	20	14	17	14	15	19	22	19	12	35	12	15	19	22	19	10	48	10	13
9 29 40	20	22	21	15	7	15	16	20	23	20	13	23	13	15	20	23	20	11	34	11	14
9 33 35	21	23	22	15	56	15	17	21	24	21	14	11	14	16	21	24	20	12	20	12	15
9 37 29	22	24	23	16	46	16	18	22	24	22	14	59	14	17	22	25	21	13	6	12	16
9 41 23	23	25	24	17	35	17	19	23	25	23	15	47	15	18	23	26	22	13	52	13	17
9 45 16	24	26	24	18	24	18	20	24	26	24	16	35	16	19	24	26	23	14	38	14	18
9 49 9	25	27	25	19	13	19	21	25	27	25	17	22	17	20	25	27	24	15	24	15	19
9 53 1	26	28	26	20	2	20	22	26	28	25	18	9	18	21	26	28	25	16	9	16	20
9 56 52	27	29	27	20	51	21	23	27	29	26	18	57	19	22	27	29	26	16	55	17	21
10 0 43	28	♎	28	21	40	21	24	28	♎	27	19	44	20	23	28	♎	26	17	40	18	22
10 4 33	29	1	29	22	28	22	25	29	1	28	20	31	20	24	29	1	27	18	26	18	23
10 8 23	♍	2	♏	23	17	23	26	♍	2	29	21	18	21	25	♍	2	28	19	11	19	24
10 12 11	1	3	1	24	5	24	27	1	3	♏	22	5	22	26	1	3	29	19	56	20	25
10 16 0	2	4	1	24	53	25	28	2	4	1	22	51	23	27	2	4	30	20	41	21	26

TABLE No. 12.—*Continued.*

Sidereal Time.	Lat. 30.							Lat. 35.							Lat. 40.						
	10 ♍	11 ♎	12 ♏	Asc. ♐		2 ♑	3 ♒	10 ♍	11 ♎	12 ♏	Asc. ♐		2 ♑	3 ♒	10 ♍	11 ♎	12 ♏	Asc. ♐		2 ♑	3 ♒
h m s	°	°	°	°	′	°	°	°	°	°	°	°	°	°	°	°	°	°	′	°	°
10 19 48	3	5	2	25	41	26	29	3	5	1	23	48	24	28	3	5	♏	21	26	22	27
10 23 35	4	6	3	26	29	27	♒	4	6	2	24	24	25	29	4	6	1	22	11	23	28
10 27 22	5	7	4	27	17	27	1	5	7	3	25	11	26	♒	5	7	2	22	55	23	29
10 31 8	6	8	5	28	5	28	2	6	8	4	25	57	26	1	6	8	3	23	40	24	♒
10 34 54	7	9	6	28		29	3	7	9	5	26	43	27	2	7	8	4	24	25	25	1
10 38 40	8	10	7	29		♑	3	8	10	6	27	30	28	3	8	9	5	25	9	26	2
10 42 25	9	11	7	0	♐ 52	1	4	9	11	6	28	16	29	4	9	10	5	25	54	27	3
10 46 9	10	12	8	1	15	2	5	10	11	7	29	2	♑	5	10	11	6	26	38	28	4
10 49 53	11	13	9	2	3	3	6	11	12	8	29	48	1	6	11	12	7	27	23	28	4
10 53 37	12	13	10	2	50	3	7	12	13	9	0	♐ 34	2	6	12	13	8	28	7	29	5
10 57 20	13	14	11	3	37	4	8	13	14	10	1	20	2	7	13	14	9	28	52	♑	6
11 1 3	14	15	12	4	25	5	9	14	15	11	2	6	3	8	14	15	9	29	36	1	7
11 4 46	15	16	13	5	12	6	10	15	16	11	2	52	4	9	15	16	10	0	♐ 21	2	8
11 8 28	16	17	13	5	59	7	11	16	17	12	3	38	5	10	16	17	11	1	5	3	9
11 12 10	17	18	14	6	46	8	12	17	18	13	4	24	6	11	17	17	12	1	49	4	10
11 15 22	18	19	15	7	34	9	13	18	19	14	5	10	7	12	18	18	12	2	34	4	11
11 19 34	19	20	16	8	2	10	14	19	20	15	5	56	8	13	19	19	13	3	18	5	12
11 23 15	20	21	17	9		10	15	20	21	15	6	42	9	14	20	20	14	4	3	6	13
11 26 56	21	22	17	9	♑ 5	11	16	21	21	16	7	28	9	15	21	21	15	4	47	7	14
11 30 37	22	23	18	10	43	12	17	22	22	17	8	14	10	16	22	22	16	5	32	8	15
11 34 18	23	24	19	11	30	13	18	23	23	18	9	0	11	17	23	23	16	6	17	9	17
11 37 58	24	24	20	12	17	14	19	24	24	19	9	46	12	18	24	24	17	7	2	10	18
11 41 39	25	25	21	13	5	15	20	25	25	19	10	33	13	19	25	25	18	7	46	11	19
11 45 19	26	26	22	13	53	16	21	26	26	20	11	19	14	20	26	25	19	8	31	11	20
11 49 0	27	27	22	14	40	17	22	27	27	21	12	6	15	21	27	26	19	9	16	12	21
11 52 40	28	28	23	15	28	18	23	28	28	22	12	52	16	22	28	27	20	10	1	13	22
11 56 20	29	29	24	16	16	19	24	29	29	23	13	39	17	24	29	28	21	10	47	14	23
12 0 0	♎	♏	25	17	4	19	25	♎	29	23	14	26	18	25	♎	29	22	11	32	15	24
12 3 40	1	1	26	17	52	20	26	1	♏	24	15	13	18	26	1	♏	23	12	17	16	25
12 7 20	2	2	26	18	40	21	27	2	1	25	15	59	19	27	2	1	23	13	3	17	26
12 11 0	3	3	27	19	28	22	28	3	2	26	16	47	20	28	3	1	24	13	49	18	27
12 14 41	4	3	28	20	17	23	29	4	3	27	17	34	21	29	4	2	25	14	35	19	28
12 18 21	5	4	29	21	5	24	♓	5	4	27	18	22	22	♓	5	3	26	15	21	20	29
12 22 2	6	5	30	21	54	25	1	6	5	28	19	9	23	1	6	4	26	16	7	21	♓
12 25 42	7	6	♐	22	43	26	2	7	6	29	19	57	24	2	7	5	27	16	54	22	1
12 29 23	8	7	1	23	32	27	3	8	6	30	20	45	25	3	8	6	28	17	41	23	2
12 33 4	9	8	2	24	21	28	5	9	7	♐	21	34	26	4	9	7	29	18	28	24	3
12 36 45	10	9	3	25	11	29	6	10	8	1	22	22	27	5	10	8	30	19	15	25	5
12 40 27	11	10	4	26	0	30	7	11	9	2	23	11	28	6	11	8	30	20	2	26	6

TABLE No. 12—*Continued.*

Sidereal Time.	Lat. 30.							Lat. 35.							Lat. 40.						
	10 ♎	11 ♏	12 ♐	Asc. ♐		2 ♒	3 ♓	10 ♎	11 ♏	12 ♐	Asc. ♐		2 ♑	3 ♓	10 ♎	11 ♏	12 ♐	Asc. ♐		2 ♑	3 ♓
h m s	°	°	°	°	′	°	°	°	°	°	°	′	°	°	°	°	°	°	′	°	°
12 44 8	12	11	4	26	50	1	8	12	10	3	24	0	29	7	12	9	1	20	50	27	7
12 47 50	13	11	5	27	40	2	9	13	11	4	24	49	♒	8	13	10	2	21	58	28	8
12 51 32	14	12	6	28	31	3	10	14	12	4	25	39	1	9	14	11	3	22	26	29	9
12 55 14	15	13	7	29	22	4	11	15	13	5	26	28	2	11	15	12	3	23	15	♒	10
12 58 57	16	14	8	0	♑ 13	5	12	16	13	6	27	19	3	12	16	13	4	24	4	1	11
13 2 40	17	15	9	1	4	6	13	17	14	7	28	19	4	13	17	14	5	24	53	2	12
13 6 23	18	16	9	1	55	7	14	18	15	8	29	0	5	14	18	14	6	25	42	3	14
13 10 7	19	17	10	2	48	8	15	19	16	9	29	51	6	15	19	15	7	26	33	4	15
13 13 51	20	18	11	3	40	9	16	20	17	9	0	♑ 43	7	16	20	16	7	27	23	5	16
13 17 35	21	18	12	4	33	10	17	21	18	10	1	35	8	17	21	17	8	28	13	6	17
13 21 20	22	19	13	5	25	11	19	22	19	11	2	27	9	18	22	18	9	29	4	7	18
13 25 6	23	20	14	6	19	12	20	23	19	12	3	20	10	19	23	19	10	29	56	8	19
13 28 52	24	21	14	7	12	13	21	24	20	13	4	13	11	21	24	20	11	0	♑ 48	9	20
13 32 38	25	22	15	8	7	14	22	25	21	13	5	6	12	22	25	21	11	1	40	10	22
13 36 25	26	23	16	9	1	15	23	26	22	14	6	0	14	23	26	21	12	2	33	12	23
13 40 12	27	24	17	9	56	16	24	27	23	15	6	55	15	24	27	22	13	3	27	13	24
13 44 0	28	25	18	10	51	17	25	28	24	16	7	49	16	25	28	23	14	4	20	14	25
13 47 49	29	25	19	11	47	18	26	29	25	17	8	45	17	26	29	24	15	5	1	15	26
13 51 37	♏	26	19	12	44	20	28	♏	26	18	9	41	18	28	♏	25	16	6	16	16	27
13 55 27	1	27	20	13	40	21	29	1	26	18	10	37	19	29	1	26	16	7	5	17	29
13 59 17	2	28	21	14	38	22	♈	2	27	19	11	34	20	♈	2	26	17	8	1	19	♈
14 3 8	3	29	22	15	35	23	1	3	28	20	12	32	22	1	3	27	18	8	58	20	1
14 6 59	4	♐	23	16	34	24	2	4	29	21	13	30	23	2	4	28	19	9	55	21	2
14 10 52	5	1	24	17	33	25	3	5	♐	22	14	28	24	3	5	29	20	10	53	22	3
14 14 44	6	2	25	18	32	26	4	6	1	23	15	28	25	5	6	♐	21	11	52	23	5
14 18 37	7	3	25	19	32	28	6	7	2	24	16	27	26	6	7	1	21	12	51	25	6
14 22 31	8	3	26	20	33	29	7	8	3	24	17	28	28	7	8	2	22	13	51	26	7
14 26 25	9	4	27	21	34	♓	8	9	4	25	18	29	29	8	9	3	23	14	52	27	8
14 30 20	10	5	28	22	36	1	9	10	4	26	19	31	♓	9	10	3	24	15	53	29	9
14 34 16	11	6	29	23	38	2	10	11	5	27	20	34	1	10	11	4	25	16	56	♓	11
14 38 13	12	7	♑	24	41	4	11	12	6	28	21	37	3	12	12	5	26	17	59	1	12
14 42 10	13	8	1	25	45	5	13	13	7	29	22	41	4	13	13	6	27	19	3	3	13
14 46 8	14	9	2	26	49	6	14	14	8	♑	23	46	5	14	14	7	28	20	8	4	14
14 50 7	15	10	3	27	55	7	15	15	9	1	24	52	6	15	15	8	28	21	13	5	16
14 54 7	16	11	4	29	0	9	16	16	10	2	25	58	8	16	16	9	29	22	20	7	17
14 58 7	17	12	5	0	♒ 7	10	17	17	11	3	27	5	9	18	17	10	♑	23	28	8	18
15 2 8	18	12	5	1	14	11	18	18	12	4	28	14	10	19	18	11	1	24	36	9	19
15 6 9	19	13	6	2	23	13	20	19	12	4	29	23	12	20	19	11	2	25	46	11	20
15 10 12	20	14	7	3	31	14	21	20	13	5	0	♒ 33	13	21	20	12	3	26	56	12	22

TABLE No. 12—*Continued.*

Sidereal Time.	Lat. 30.						Lat. 35.						Lat. 40.					
	10 ♏	11 ♐	12 ♑	Asc. ♒		2 ♓	3 ♈	10 ♏	11 ♐	12 ♑	Asc. ♒		2 ♓	3 ♈	10 ♏	11 ♐	12 ♑	Asc. ♑		2 ♓	3 ♈
h m s	°	°	°	°	′	°	°	°	°	°	°	′	°	°	°	°	°	°	′	°	°
15 14 15	21	15	8	4	41	15	22	21	14	6	1	43	15	22	21	13	4	28	8	14	23
15 18 19	22	16	9	5	51	16	23	22	15	7	2	55	16	24	22	14	5	29	20	15	24
15 22 23	23	17	10	7	3	18	24	23	16	8	4	8	17	25	23	15	6	0♒	34	17	25
15 26 29	24	18	11	8	15	19	25	24	17	9	5	21	19	26	24	16	7	1	49	18	27
15 30 35	25	19	12	9	28	20	27	25	18	10	6	36	20	27	25	17	8	3	5	19	28
15 34 41	26	20	13	10	41	22	28	26	19	11	7	52	21	28	26	18	9	4	22	21	29
15 38 49	27	21	14	11	56	23	29	27	20	12	9	8	23	♉	27	19	10	5	41	22	♉
15 42 57	28	22	15	13	11	24	♉	28	21	13	10	26	24	1	28	20	11	7	0	24	1
15 47 6	29	23	16	14	28	26	1	29	22	14	11	44	26	2	29	21	12	8	21	25	3
15 51 15	♐	24	17	15	45	27	2	♐	23	15	13	4	27	3	♐	22	13	9	43	27	4
15 55 25	1	25	18	17	3	29	4	1	24	16	14	24	28	4	1	23	14	11	6	28	5
15 59 36	2	26	19	18	21	♈	5	2	25	17	15	46	♈	5	2	23	15	12	31	♈	6
16 3 48	3	26	20	19	41	1	6	3	26	18	17	9	1	7	3	24	16	13	57	1	7
16 8 0	4	27	21	21	2	3	7	4	26	19	18	32	3	8	4	25	17	15	24	3	9
16 12 13	5	28	22	22	23	4	8	5	27	21	19	57	4	9	5	26	18	16	53	4	10
16 16 26	6	29	24	23	45	5	9	6	28	22	21	23	6	10	6	27	19	18	22	6	11
16 20 40	7	♑	25	25	8	7	11	7	29	23	22	50	7	11	7	28	20	19	54	7	12
16 24 55	8	1	26	26	32	8	12	8	♑	24	24	18	9	13	8	29	21	21	26	9	13
16 29 10	9	2	27	27	57	10	13	9	1	25	25	47	10	14	9	♑	23	23	0	10	14
16 33 26	10	3	28	29	22	11	14	10	2	26	27	17	11	15	10	1	24	24	35	12	16
16 37 42	11	4	29	0♓	49	12	15	11	3	27	28	48	13	16	11	2	25	26	12	14	17
16 41 59	12	5	♒	2	16	14	16	12	4	28	0♓	20	14	17	12	3	26	27	50	15	18
16 46 16	13	6	1	3	44	15	18	13	5	29	1	53	16	18	13	4	27	29	29	17	19
16 50 34	14	7	2	5	12	16	19	14	6	♒	3	27	17	19	14	5	28	1♓	9	18	20
16 54 52	15	8	4	6	42	18	20	15	7	2	5	2	19	21	15	6	♒	2	51	20	22
16 59 10	16	9	5	8	11	19	21	16	8	3	6	37	20	22	16	8	1	4	34	21	23
17 3 29	17	10	6	9	42	21	22	17	9	4	8	13	22	23	17	8	2	6	18	23	24
17 7 49	18	11	7	11	13	22	23	18	10	5	9	51	23	24	18	9	3	8	3	24	25
17 12 9	19	12	8	12	45	23	24	19	11	7	11	29	24	25	19	10	4	9	48	26	26
17 16 29	20	13	10	14	17	25	25	20	12	8	13	7	26	26	20	11	6	11	35	27	27
17 20 49	21	14	11	15	50	26	26	21	13	9	14	47	27	27	21	12	7	13	23	29	28
17 25 9	22	15	12	17	24	27	27	22	14	10	16	27	29	28	22	13	8	15	11	♉	♊
17 29 30	23	16	13	18	57	29	29	23	15	11	18	7	♉	♊	23	14	9	17	1	1	1
17 33 51	24	17	14	20	31	♉	♊	24	17	13	19	48	1	1	24	15	11	18	51	3	2
17 38 12	25	19	16	22	6	1	1	25	18	14	21	30	3	2	25	16	12	20	41	4	3
17 42 34	26	20	17	23	40	3	2	26	19	15	23	11	4	3	26	17	13	22	33	6	4
17 46 55	27	21	18	25	15	4	3	27	20	17	24	53	5	4	27	19	15	24	24	7	5
17 51 17	28	22	19	26	50	5	4	28	21	18	26	35	7	5	28	20	16	26	16	9	6
17 55 38	29	23	21	28	25	7	5	29	22	19	28	18	8	6	29	21	17	28	8	10	7

TABLE No. 12.—*Continued.*

Sidereal Time.	Lat. 30.						Lat. 35.						Lat. 40.					
	10 ♑	11 ♒	12 ♓	Asc. ♈	2 ♉	3 ♊	10 ♑	11 ♒	12 ♓	Asc. ♈	2 ♊	3 ♊	10 ♑	11 ♒	12 ♓	Asc. ♉	2 ♊	3 ♊
h m s	°	°	°	° ′	°	°	°	°	°	° ′	°	°	°	°	°	° ′	°	°
18 0 0	♑ 24	22	0♈ 0	8	6	♑ 23	21	0♈ 0	9	7	30	22	19	0	0	11	8
18 4 22	1 25	23	1 35	9	7	1 24	22	1 42	11	8	1	23	20	1	52	13	9
18 8 43	2 26	25	3 10	11	8	2 25	23	3 25	12	9	2	24	22	3	44	14	10
18 13 5	3 27	26	4 45	12	9	3 26	25	5 7	13	10	3	25	23	5	36	15	12
18 17 26	4 28	27	6 20	13	11	4 27	26	6 49	15	11	4	26	24	7	27	17	13
18 21 48	5 29	29	7 54	14	12	5 28	27	8 30	16	13	5	27	26	9	19	18	14
18 26 9	6 ♒	♓	9 29	16	13	6 29	29	10 12	17	14	6	28	27	11	9	19	15
18 30 30	7 1	1	11 3	17	14	7 ♒	♓	11 53	19	15	7	29	29	12	59	21	16
18 34 51	8 3	3	12 36	18	15	8 2	2	13 33	20	16	8	♒	♓	14	49	22	17
18 39 11	9 4	4	14 10	19	16	9 3	3	15 13	21	17	9	2	2	16	37	23	18
18 43 31	10 5	5	15 43	21	17	10 4	4	16 53	22	18	10	3	3	18	25	24	19
18 47 51	11 6	7	17 15	22	18	11 5	6	18 31	24	19	11	4	5	20	12	26	20
18 52 11	12 7	8	18 47	23	19	12 6	7	20 9	25	20	12	5	6	21	57	27	21
18 56 31	13 8	9	20 18	24	20	13 7	9	21 47	26	21	13	6	8	23	42	28	22
19 0 50	14 9	11	21 49	25	21	14 8	10	23 23	27	22	14	7	9	25	26	29	23
19 5 8	15 10	12	23 18	26	22	15 10	11	24 58	28	23	15	9	11	27	9	♊	24
19 9 26	16 11	14	24 48	28	23	16 11	13	26 33	29	24	16	10	12	28	51	2	25
19 13 44	17 13	15	26 16	29	24	17 12	14	28 7	♊	25	17	11	14	0♉	31	3	26
19 18 1	18 14	16	27 44	♊	25	18 13	16	29 40	2	26	18	12	15	2	10	4	27
19 22 18	19 15	18	29 11	1	26	19 14	17	1♉ 12	3	27	19	13	17	3	48	5	28
19 26 34	20 16	19	0♉ 38	2	27	20 15	19	2 43	4	28	20	14	18	5	25	6	29
19 30 50	21 17	21	2 3	3	28	21 16	20	4 13	5	29	21	16	20	7	0	8	♋
19 35 5	22 18	22	3 28	4	29	22 18	22	5 42	6	♋	22	17	22	8	34	9	1
19 39 20	23 19	23	4 52	5	♋	23 19	23	7 10	7	1	23	18	23	10	6	10	2
19 43 34	24 21	25	6 15	7	1	24 20	24	8 37	8	2	24	19	24	11	38	11	3
19 47 47	25 22	26	7 37	8	2	25 21	26	10 3	10	3	25	20	26	13	7	12	4
19 52 0	26 23	27	8 58	9	3	26 22	27	11 28	11	4	26	22	27	14	36	13	5
19 56 12	27 24	29	10 19	10	4	27 23	29	12 51	12	5	27	23	29	16	3	4	6
20 0 24	28 25	♈	11 39	11	5	28 25	♈	14 14	13	6	28	24	♈	17	29	5	7
20 4 35	29 26	2	12 57	12	6	29 26	2	15 36	14	6	29	25	2	18	54	6	8
20 8 45	♒ 28	3	14 15	13	6	♒ 27	3	16 56	15	7	♒	26	3	20	17	7	9
20 12 54	1 29	4	15 32	14	7	1 28	4	18 16	16	8	1	28	5	21	39	8	9
20 17 3	2 ♓	6	16 49	15	8	2 29	6	19 34	17	9	2	29	6	23	0	9	10
20 21 11	3 1	7	18 4	16	9	3 1	7	20 52	18	10	3	♓	8	24	19	20	11
20 25 19	4 2	8	19 19	17	10	4 2	9	22 8	19	11	4	1	9	25	38	21	12
20 29 26	5 3	10	20 32	18	11	5 3	10	23 24	20	12	5	2	11	26	55	22	13
20 33 31	6 5	11	21 45	19	12	6 4	11	24 39	21	13	6	4	12	28	11	23	14
20 37 37	7 6	12	22 57	20	13	7 5	13	25 52	22	14	7	5	14	29	26	24	15
20 41 41	8 7	13	24 9	21	14	8 7	14	26 5	23	15	8	6	15	20♊	40	25	16

TABLE No. 12—*Continued.*

Sidereal Time.	Lat. 30.							Lat. 35.							Lat. 40.						
	10 ♒	11 ♓	12 ♈	Asc. ♉		2 ♊	3 ♋	10 ♒	11 ♓	12 ♈	Asc. ♉		2 ♊	3 ♋	10 ♒	11 ♓	12 ♈	Asc. ♊		2 ♊	3 ♋
h m s	°	°	°	°	′	°	°	°	°	°	°	′	°	°	°	°	°	°	′	°	°
20 45 45	9	8	15	25	19	22	15	9	8	16	28	17	24	16	9	7	16	1	52	26	17
20 49 48	10	9	16	26	29	23	16	10	9	17	29	27	25	17	10	8	18	3	4	27	18
20 53 51	11	11	18	27	37	24	17	11	10	18	0♊	37	26	18	11	10	19	4	14	28	19
20 57 52	12	12	19	28	46	25	18	12	11	20	1	46	27	19	12	11	21	5	24	29	20
21 1 53	13	13	20	29	53	26	19	13	13	21	2	55	27	19	13	12	22	6	32	♋	20
21 5 53	14	14	21	1♊	0	26	19	14	14	22	4	2	28	20	14	13	23	7	40	1	21
21 9 53	15	15	23	2	5	27	20	15	15	24	5	8	29	21	15	15	25	8	47	2	22
21 13 52	16	16	24	3	11	28	21	16	16	25	6	14	♋	22	16	16	26	9	52	2	23
21 17 50	17	18	25	4	15	29	22	17	17	26	7	19	1	23	17	17	28	10	57	3	24
21 21 47	18	19	26	5	19	♋	23	18	18	28	8	23	2	24	18	18	29	12	1	4	25
21 25 44	19	20	28	6	22	1	24	19	20	29	9	26	3	25	19	19	♉	13	4	5	26
21 29 40	20	21	29	7	24	2	25	20	21	♉	10	29	4	26	20	21	1	14	7	6	27
21 33 35	21	22	♉	8	26	3	26	21	22	2	11	31	5	27	21	22	3	15	8	7	28
21 37 29	22	23	1	9	27	4	27	22	23	3	12	32	6	27	22	23	4	16	9	8	28
21 41 23	23	25	2	10	28	5	28	23	24	4	13	33	7	28	23	24	5	17	9	9	29
21 45 16	24	26	4	11	28	5	28	24	26	5	14	32	7	29	24	25	7	18	8	10	♌
21 49 9	25	27	5	12	27	6	29	25	27	6	15	32	8	♌	25	27	8	19	7	10	1
21 53 1	26	28	6	13	26	7	♌	26	28	7	16	30	9	1	26	28	9	20	5	11	2
21 56 52	27	29	7	14	25	8	1	27	29	9	17	28	10	2	27	29	10	21	2	12	3
22 0 43	28	♈	8	15	22	9	2	28	♈	10	18	26	11	3	28	♈	22	21	59	13	4
22 4 33	29	1	9	16	20	10	3	29	1	11	19	23	12	4	29	1	13		55	14	5
22 8 23	♓	3	10	17	16	11	4	♓	3	12	20	19	13	5	♓	3	14		50	15	5
22 12 12	1	4	12	18	13	12	5	1	4	13	21	15	13	5	1	4	15		45	15	6
22 16 0	2	5	13	19	9	12	6	2	5	14	22	11	14	6	2	5	16		40	16	7
22 19 48	3	6	14	20	4	13	6	3	6	15	23	5	15	7	3	6	17		33	17	8
22 23 35	4	7	15	20	59	14	7	4	7	17	24	0	16	8	4	7	19	22	27	18	9
22 27 22	5	8	16	21	53	15	8	5	8	18	24	54	17	9	5	9		28	20	19	10
22 31 8	6	9	17	22	48	16	9	6	9	19	25	47	17	10	6	10		29	12	19	11
22 34 54	7	10	18	23	41	17	10	7	11	20	26	40	18	11	7	11		0♋	4	20	11
22 38 40	8	12	19	24	35	17	11	8	12	21	27	33	19	11	8	12	20	0	56	21	12
22 42 25	9	13	20	25	27	18	12	9	13	22	28	25	20	12	9	13	24	1	47	22	13
22 46 9	10	14	21	26	20	19	13	10	14	23	29	17	21	13	10	14	25	2	37	23	14
22 49 53	11	15	22	27	12	20	13	11	15	24	0♋	9	22	14	11	15	26	3	27	23	15
22 53 37	12	16	23	28	5	21	14	12	16	25	1	0	22	15	12	17	27	4	18	24	16
22 57 20	13	17	24	28	56	22	15	13	17	26	1	51	23	16	13	18	28	5		25	17
23 1 3	14	18	25	29	47	22	16	14	18	27	2	41	24	17	14	19	29	5	57	26	17
23 4 46	15	19	26	0♋	38	23	17	15	20	28	3	32	25	18	15	20	□	6	45	27	18
23 8 28	16	20	27	1	29	24	18	16	21	29	4	21	26	18	16	21	1	7	34	27	19
23 12 10	17	21	28	2	20	25	19	17	22	30	5	11	26	19	17	22	2	8	22	28	20

TABLE No. 12—*Continued.*

Sidereal Time.			Lat. 30.							Lat. 35.							Lat. 40.						
			10 ♓	11 ♈	12 ♉	Asc. ♌		2 ♌	3 ♑	10 ♓	11 ♈	12 ♊	Asc. ♌		2 ♌	3 ♑	10 ♓	11 ♈	12 ♊	Asc. ♌		2 ♌	3 ♑
h	m	s	°	°	°	°	′	°	°	°	°	°	°	′	°	°	°	°	°	°	′	°	°
23	15	52	18	22	29	3	20	26	20	18	23	1	6	0	27	20	18	23	3	9	10	29	21
23	19	34	19	23	♊	4	0	26	20	19	24	2	6	49	28	21	19	24	4	9	58	♑	22
23	23	15	20	25	1	4	49	27	21	20	25	3	7	38	29	22	20	26	5	10	45	1	23
23	26	56	21	26	2	5	39	29	22	21	26	4	8	26	30	23	21	27	6	11	32	1	23
23	30	37	22	27	3	6	28	18	23	22	27	5	9	15	♑	24	22	28	7	12	19	2	24
23	34	18	23	28	4	7	17	30	24	23	28	6	10	3	1	25	23	29	8	13	6	3	25
23	37	58	24	28	5	8	6	♑	25	24	29	7	10	51	2	25	24	♉	9	13	53	4	26
23	41	39	25	♉	6	8	55	1	26	25	♉	8	11	38	3	26	25	1	10	14	39	4	27
23	45	19	26	1	7	9	43	2	27	26	1	9	12	26	4	27	26	2	11	15	25	5	28
23	49	0	27	2	8	10	32	3	28	27	2	10	13	13	4	28	27	3	12	16	11	6	29
23	52	40	28	3	9	11	20	4	28	28	4	11	14	1	5	29	28	4	13	16	57	7	29
23	56	20	29	4	10	12	8	5	29	29	5	12	14	47	6	♍	29	5	14	17	43	8	♍
24	0	2	30	5	11	12	56	5	30	30	5	13	15	34	7	1	30	6	15	18	28	8	1