## RICHARD A. PROCTOR

# MYTHS AND MARVELS OF ASTRONOMY

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### Myths and Marvels of Astronomy

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#### PREFACE.

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THE chief charm of Astronomy, with many, does not reside in the wonders revealed to us by the science, but in the lore and legends connected with its history, the strange fancies with which in old times it has been associated, the half-forgotten myths to which it has given birth. In our own times also, Astronomy has had its myths and fancies, its wild inventions, and startling paradoxes. My object in the present series of papers has been to collect together the most interesting of these old and new Astronomical myths, associating with them, in due proportion, some of the chief marvels which recent Astronomy has revealed to us. To the former class belong the subjects of the first four and the last five essays of the present series, while the remaining essays belong to the latter category.

Throughout I have endeavoured to avoid technical expressions on the one hand, and ambiguous phraseology (sometimes resulting from the attempt to avoid technicality) on the other. I have, in fact, sought to present my subjects as I should wish to have matters outside the range of my special branch of study presented for my own reading.

RICHARD A. PROCTOR.

#### MYTHS AND MARVELS OF ASTRONOMY

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I. *ASTROLOGY.* 

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Signs and planets, in aspects sextile, quartile, trine, conjoined, or opposite; houses of heaven, with their cusps, hours, and minutes; Almuten, Almochoden, Anahibazon, Catahibazon; a thousand terms of equal sound and significance.—*Guy Mannering.* 

... Come and see! trust thine own eyes. A fearful sign stands in the house of life, An enemy: a fiend lurks close behind The radiance of thy planet—oh! be warned!— COLERIDGE.

Astrology possesses a real interest even in these days. It is true that no importance attaches now even to the discussion of the considerations which led to the rejection of judicial astrology. None but the most ignorant, and therefore superstitious, believe at present in divination of any sort or kind whatsoever. Divination by the stars holds no higher position than palmistry, fortune-telling by cards, or the indications of the future which foolish persons find in dreams, tea-dregs, salt-spilling, and other absurdities. But there are two reasons which render the history of astrology interesting. In the first place, faith in stellar influences was once so widespread that astrological terminology came to form a part of ordinary language, insomuch that it is impossible rightly to understand many passages of ancient and mediæval literature, or rightly to apprehend the force of many allusions and expressions, unless the significance of astrological teachings to the men of those times be recognised. In the second place, it is interesting to examine how the erroneous teachings of astrology were gradually abandoned, to note the way in which various orders of mind rejected these false doctrines or struggled to retain them, and to perceive how, with a large proportion of even the most civilised races, the superstitions of judicial astrology were long retained, or are retained even to this very day. The world has still to see some superstitions destroyed which are as widely received as astrology ever was, and which will probably retain their influence over many minds long after the reasoning portion of the community have rejected them.

Even so far back as the time of Eudoxus the pretensions of astrologers were rejected, as Cicero informs us ('De Div.' ii. 42). And though the Romans were strangely superstitious in such matters, Cicero reasons with excellent judgment against the belief in astrology. Gassendi quotes the argument drawn by Cicero against astrology, from the predictions of the Chaldæans that Cæsar, Crassus, and Pompey would die 'in a full old age, in their own houses, in peace and honour,' whose deaths, nevertheless, were 'violent, immature, and tragical.' Cicero also used an argument whose full force has only been recognised in modern times. 'What contagion,' he asked, 'can reach us from the planets, whose distance is almost infinite?' It is singular that Seneca, who was well acquainted with the uniform character of the planetary motions, seems to have entertained no doubt respecting their influence. Tacitus expresses some doubts, but was on the whole inclined to believe in astrology. 'Certainly,' he says, 'the majority of mankind cannot be weaned from the opinion that at the birth of each man his future destiny is fixed; though some things may fall out differently from the predictions, by the ignorance of those who profess the art; and thus the art is unjustly blamed, confirmed as it is by noted examples in all ages.'[1]

Probably, the doubt suggested by the different fortunes and characters of men born at the same time must have occurred to many before Cicero dwelt upon it. Pliny, who followed Cicero in this, does not employ the argument quite correctly, for he says that, 'in every hour, in every part of the world, are born lords and slaves, kings and beggars.' But of course, according to astrological principles, it would be necessary that two persons, whose fortunes were to be alike, should be born, not only in the same hour, but in the same place. The fortunes and character of Jacob and Esau, however, should manifestly have been similar, which was certainly not the case, if their history has been correctly handed down to us. An astrologer of the time of Julius Cæsar, named Publius Nigidius Figulus, used a singular argument against such reasoning. When an opponent urged the different fortunes of men born nearly at the same instant, Nigidius asked him to make two contiguous marks on a potter's wheel which was revolving rapidly. When the wheel was stopped, the two marks were found to be far

apart. Nigidius is said to have received the name of Figulus (the potter), in remembrance of the story; but more probably he was a potter by trade, and an astrologer only during those leisure hours which he could devote to charlatanry. St. Augustine, who relates the story (which I borrow from Whewell's 'History of the Inductive Sciences'), says, justly, that the argument of Nigidius was as fragile as the ware made on the potter's wheel.

The belief must have been all but universal in those days that at the birth of any person who was to hold an important place in the world's history the stars would either be ominously conjoined, or else some blazing comet or new star would make its appearance. For we know that some such object having appeared, or some unusual conjunction of planets having occurred, near enough to the time of Christ's birth to be associated in men's minds with that event, it came eventually to be regarded as belonging to his horoscope, and as actually indicating to the Wise Men of the East (Chaldæan astrologers, doubtless) the future greatness of the child then born. It is certain that that is what the story of the Star in the East means as it stands. Theologians differ as to its interpretation in points of detail. Some think the phenomenon was meteoric, others that a comet then made its appearance, others that a new star shone out, and others that the account referred to a conjunction of Jupiter, Saturn, and Mars, which occurred at about that time. As a matter of detail it may be mentioned, that none of these explanations in the slightest degree corresponds with the account, for neither meteor, nor comet, nor new star, nor conjoined planets, would go before travellers from the east, to show

them their way to any place. Yet the ancients sometimes regarded comets as guides. Whichever view we accept, it is abundantly clear that an astrological significance was attached by the narrator to the event. And not so very long ago, when astrologers first began to see that their occupation was passing from them, the Wise Men of the East were appealed to against the enemies of astrology,[2] —very much as Moses was appealed to against Copernicus and Galileo, and more recently to protect us against certain relationships which Darwin, Wallace, and Huxley unkindly indicate for the human race divine.

now reject altogether Although astronomers the doctrines of judicial astrology, it is impossible for the true lover of that science to regard astrology altogether with contempt. Astronomy, indeed, owes much more to the notions of believers in astrology than is commonly supposed. Astrology bears the same relation to modern astronomy that alchemy bears to modern chemistry. As it is probable that nothing but the hope of gain, literally in this case *auri sacra fames*, would have led to those laborious researches of the alchemists which first taught men how to its elementary constituents, and analyse matter into afterwards to combine these constituents afresh into new forms, so the belief that, by carefully studying the stars, men might acquire the power of predicting future events, first directed attention to the movements of the celestial bodies. Kepler's saying, that astrology, though a fool, was the daughter of a wise mother, [3] does not by any means present truly the relationship between astrology and astronomy. Rather we may say that astrology and alchemy,

though foolish mothers, gave birth to those wise daughters, astronomy and chemistry. Even this way of speaking scarcely does justice to the astrologers and alchemists of old times. Their views appear foolish in the light of modern scientific knowledge, but they were not foolish in relation to what was known when they were entertained. Modern analysis goes far to demonstrate the immutability, and, consequently, the non-transmutability of the metals, though it is by no means so certain as many suppose that the present position of the metals in the list of *elements* is really correct. Certainly a chemist of our day would be thought very unwise who should undertake a series of researches with the object of discovering a mineral having such qualities as the alchemists attributed to the philosopher's stone. But when as yet the facts on which the science of chemistry is based were unknown, there was nothing unreasonable in supposing that such a mineral might exist, or the means of compounding it be discovered. Nay, many arguments from analogy might be urged to show that the supposition was altogether probable. In like manner, though the known facts of astronomy oppose themselves irresistibly to any belief in planetary influences upon the fates of men and nations, yet before those facts were discovered it was not only not unreasonable, but was in fact, highly reasonable to believe in such influences, or at least that the sun, and moon, and stars moved in the heavens in such sort as to indicate what would happen. If the wise men of old times rejected the belief that 'the stars in their courses fought' for or against men, they yet could not very readily

abandon the belief that the stars were for signs in the heavens of what was to befall mankind.

If we consider the reasoning now commonly thought valid in favour of the doctrine that other orbs besides our earth are inhabited, and compare it with the reasoning on which judicial astrology was based, we shall not find much to choose between the two, so far as logical weight is concerned. Because the only member of the solar system which we can examine closely is inhabited, astronomers infer a certain degree of probability for the belief that the other planets of the system are also inhabited. And because the only sun we know much about is the centre of a system of planets, astronomers infer that probably the stars, those other suns which people space, are also the centres of systems; although no telescope which man can make would show the members of a system like ours, attending on even the nearest of all the stars. The astrologer had a similar argument for his belief. The moon, as she circles around the earth, exerts a manifest influence upon terrestrial matterthe tidal wave rising and sinking synchronously with the and other consequences movements of the moon. depending directly or indirectly upon her revolution around the earth. The sun's influence is still more manifest: and. though it may have required the genius of a Herschel or of a Stephenson to perceive that almost every form of terrestrial energy is derived from the sun, yet it must have been manifest from the very earliest times that the greater light which rules the day rules the seasons also, and, in ruling them, provides the annual supplies of vegetable food, on which the very existence of men and animals depends. If these two bodies, the sun and moon, are thus potent, must it not be supposed, reasoned the astronomers of old, that the other celestial bodies exert corresponding influences? *We* know, but they did not know, that the moon rules the tides effectually because she is near to us, and that the sun is second only to the moon in tidal influence because of his enormous mass and attractive energy. We know also that his position as fire, light, and life of the earth and its inhabitants, is due directly to the tremendous heat with which the whole of his mighty frame is instinct. Not knowing this, the astronomers of old times had no sufficient reason for distinguishing the sun and moon from the other celestial bodies, so far at least as the general question of celestial influences was concerned.

So far as particulars were concerned, it was not altogether so clear to them as it is to us, that the influence of the sun must be paramount in all respects save tidal action, and that of the moon second only to the sun's in other respects, and superior to his in tidal sway alone. Many writers on the subject of life in other worlds are prepared to show (as Brewster attempts to do, for example) that Jupiter and Saturn are far nobler worlds than the earth, because superior in this or that circumstance. So the ancient astronomers, in their ignorance of the actual conditions on which celestial influences depend, found abundant reasons for regarding the feeble influences exerted by Saturn, Jupiter, and Mars, as really more potent than those exerted by the sun himself upon the earth. They reasoned, as Milton afterwards made Raphaël reason, that 'great or bright infers' not excellence,' that Saturn or Jupiter, though 'in comparison so small, nor glist'ring' to like degree, may yet 'of solid good contain more plenty than the sun.' Supposing the influence of a celestial body to depend on the magnitude of its sphere, in the sense of the old astronomy (according to which each planet had its proper sphere, around the earth as centre), then the influence of the sun would be judged to be inferior to that of either Saturn, Jupiter, or Mars; while the influences of Venus and Mercury, though inferior to the influence of the sun, would still be held superior to that of the moon. For the ancients measured the spheres of the seven planets of their system by the periods of the apparent revolution of those bodies around the celestial dome, and so set the sphere of the moon innermost, enclosed by the sphere of Mercury, around which in turn was the sphere of Venus, next the sun's, then, in order, those of Mars, Jupiter, and Saturn. We can readily understand how they might come to regard the slow motions of the sphere of Saturn and Jupiter, taking respectively some thirty and twelve years to complete a revolution, as indicating power superior to the sun's, whose sphere seemed to revolve once in a single year. Many other might urged, before the considerations have been Copernican theory was established, to show that, possibly, some of the planets exert influences more effective than those of the sun and moon.

It is, indeed, clear that the first real shock sustained by astrology came from the arguments of Copernicus. So long as the earth was regarded as the centre round which all the celestial bodies move, it was hopeless to attempt to shake men's faith in the influences of the stars. So far as I know, there is not a single instance of a believer in the old Ptolemaic system who rejected astrology absolutely. The views of Bacon—the last of any note who opposed the system of Copernicus[4]—indicate the extreme limits to which a Ptolemaist could go in opposition to astrology. It may be worth while to quote Bacon's opinion in this place, because it indicates at once very accurately the position held by believers in astrology in his day, and the influence which the belief in a central fixed earth could not fail to exert on the minds of even the most philosophical reasoners.

'Astrology,' he begins, 'is so full of superstition that scarce anything sound can be discovered in it; though we judge it should rather be purged than absolutely rejected. Yet if any one shall pretend that this science is founded not in reason and physical contemplations, but in the direct experience and observation of past ages, and therefore not to be examined by physical reasons, as the Chaldæans boasted, he may at the same time bring back divination, auguries, soothsaying, and give in to all kinds of fables; for these also were said to descend from long experience. But we receive astrology as a part of physics, without attributing more to it than reason and the evidence of things allow, and strip it of its superstition and conceits. Thus we banish that empty notion about the horary reign of the planets, as if each resumed the throne thrice in twenty-four hours, so as to leave three hours supernumerary; and yet this fiction produced the division of the week, [5] a thing so ancient and so universally received. Thus likewise we reject as an idle figment the doctrine of horoscopes, and the distribution of the houses, though these are the darling inventions of astrology, which have kept revel, as it were, in the heavens. And lastly, for the calculation of nativities, fortunes, good or bad hours of business, and the like fatalities, they are mere levities, that have little in them of certainty and solidity, and may be plainly confuted by physical reasons. But here we judge it proper to lay down some rules for the examination of astrological matters, in order to retain what is useful therein, and reject what is insignificant. Thus, 1. Let the greater revolutions be retained. but the lesser. of horoscopes and houses, be rejected—the former being like ordnance which shoot to a great distance, whilst the other are but like small bows, that do no execution. 2. The celestial operations affect not all kinds of bodies, but only the more sensible, as humours, air, and spirits. 3. All the celestial operations rather extend to masses of things than to individuals, though they may obliquely reach some individuals also which are more sensible than the rest, as a pestilent constitution of the air affects those bodies which are least able to resist it. 4. All the celestial operations produce not their effects instantaneously, and in a narrow compass, but exert them in large portions of time and space. Thus predictions as to the temperature of a year may hold good, but not with regard to single days. 5. There is no fatal necessity in the stars; and this the more prudent astrologers have constantly allowed. 6. We will add one thing more, which, if amended and improved, might make for astrology—viz. that we are certain the celestial bodies have other influences besides heat and light, but these influences act not otherwise than by the foregoing rules, though they lie so deep in physics as to require a fuller explanation. So that, upon the whole, we must register as needed,[6] an astrology written in conformity with these principles, under the name of *Astrologia Sana*.'

He then proceeds to show what this just astrology should comprehend—as, 1, the doctrine of the commixture of rays; 2, the effect of nearest approaches and farthest removes of planets to and from the point overhead (the planets, like the sun, having their summer and winter); 3, the effects of distance, 'with a proper enquiry into what the vigour of the planets may perform of itself, and what through their nearness to us; for,' he adds, but unfortunately without assigning any reason for the statement, 'a planet is more brisk when most remote, but more communicative when nearest;' 4, the other accidents of the planet's motions as they pursue

Their wand'ring course, now high, now low, then hid, Progressive, retrograde, or standing still;

5, all that can be discovered of the general nature of the planets and fixed stars, considered in their own essence and activity; 6, lastly, let this just astrology, he says, 'contain, from tradition, the particular natures and alterations of the planets and fixed stars; for' (here is a reason indeed) 'as these are delivered with general consent, they are not lightly to be rejected, unless they directly contradict physical considerations. Of such observations let a just astrology be formed; and according to these alone should schemes of the heavens be made and interpreted.'

The astrology thus regarded by Bacon as sane and just did not differ, as to its primary object, from the false systems which now seem to us so absurd. 'Let this astrology be used with greater confidence in prediction,' says Bacon, 'but more cautiously in election, and in both cases with due moderation. Thus predictions may be made of comets, and all kinds of meteors, inundations, droughts, heats, frosts, earthquakes, fiery eruptions, winds, great rains, the seasons of the year, plagues, epidemic diseases, plenty, famine, wars, seditions, sects, transmigrations of people, and all commotions, or great innovations of things, natural and civil. Predictions may possibly be made more particular, though with less certainty, if, when the general tendencies of the times are found, a good philosophical or political judgment applies them to such things as are most liable to accidents of this kind. For example, from a foreknowledge of the seasons of any year, they might be apprehended more destructive to olives than grapes, more hurtful in distempers of the lungs than the liver, more pernicious to the inhabitants of hills than valleys, and, for want of provisions, to monks than courtiers, etc. Or if any one, from a knowledge of the influence which the celestial bodies have upon the spirits of mankind, should find it would affect the people more than their rulers, learned and inquisitive men more than the military, etc. For there are innumerable things of this kind that require not only a general knowledge gained from the stars which are the agents, but also a particular one of the passive subjects. Nor are elections to be wholly rejected, though not so much to be trusted as predictions; for we find in planting, sowing, and grafting,

observations of the moon are not absolutely trifling, and there are many particulars of this kind. But elections are more to be curbed by our rules than predictions; and this must always be remembered, that election only holds in such cases where the virtue of the heavenly bodies, and the action of the inferior bodies also, is not transient, as in the examples just mentioned; for the increases of the moon and planets are not sudden things. But punctuality of time should here be absolutely rejected. And perhaps there are more of these instances to be found in civil matters than some would imagine.'

The method of inquiry suggested by Bacon as proper for determining the just rules of the astrology he advocated, was, as might be expected, chiefly inductive. There are, said he, 'but four ways of arriving at this science, viz.—1, by future experiments; 2, past experiments; 3, traditions; 4, physical reasons.' But he was not very hopeful as to the progress of the suggested researches. It is vain, he said, to think at present of future experiments, because many ages are required to procure a competent stock of them. As for the past, it is true that past experiments are within our reach, 'but it is a work of labour and much time to procure them. Thus astrologers may, if they please, draw from real history all greater accidents, as inundations, plagues, wars, seditions, deaths of kings, etc., as also the positions of the celestial bodies, not according to fictitious horoscopes, but the above-mentioned rules of their revolutions, or such as they really were at the time, and, when the event conspires, erect a probable rule of prediction.' Traditions would require to be carefully sifted, and those thrown out which manifestly clashed with physical considerations, leaving those in full force which complied with such considerations. Lastly, the physical reasons worthiest of being enquired into are those, said Bacon, 'which search into the universal appetites and passions of matter, and the simple genuine motions of the heavenly bodies.'

It is evident there was much which, in our time at least, would be regarded as wild and fanciful in the 'sound and just astrology' advocated by Bacon. Yet, in passing, it may be noticed that even in our own time we have seen similar ideas promulgated, not by common astrologers and fortunetellers (who, indeed, know nothing about such matters), but by persons supposed to be well-informed in matters scientific. In a roundabout way, a new astrology has been suggested, which is not at all unlike Bacon's 'astrologia sana,' though not based, as he proposed that astrology should be, on experiment, or tradition, or physical reasons. It has been suggested, first, that the seasons of our earth are affected by the condition of the sun in the matter of spots, and very striking evidence has been collected to show that this must be the case. For instance, it has been found that years when the sun has been free from spots have been warmer than the average; and it has also been found that such years have been cooler than the average: a double-shotted argument wholly irresistible, especially when it is also found that when the sun has many spots the weather has sometimes been exceptionally warm and sometimes exceptionally cold. If this be not considered sufficient, then note that in one country or continent or hemisphere the weather, when the sun is most spotted (or least, as the case may be), may be singularly hot, while in another country, continent, or hemisphere, the weather may be as singularly cold. So with wind and calm, rain and drought, and so forth. Always, whether the sun is very much spotted or quite free from spots, something unusual in the going of weather must be on somewhere, wav demonstrating in the most significant way the influence of sun-spots or the want of sun-spots on the weather. It is true that captious minds might say that this method of reasoning proved too much in many ways, as, for example, thusalways, whether the sun is very much spotted or quite free from spots, some remarkable event, as a battle, massacre, domestic tragedy on a large scale, or the like, may be going on, demonstrating in the most significant way the influence of sun-spots or the want of sun-spots on the passions of men—which sounds absurd. But the answer is twofold. First. such reasoning is captious, and secondly, it is not certain that sun-spots, or the want of them, may not influence human passions; it may be worth while to enquire into this possible solar influence as well as the other, which can be done by crossing the hands of the new fortune-tellers with a sufficient amount of that precious metal which astrologers have in all ages dedicated to the sun.

That the new system of divination is not solely solar, but partly planetary also, is seen when we remember that the sun-spots wax and wane in periods of time which are manifestly referable to the planetary motions. Thus, the great solar spot-period lasts about eleven years, the successive spotless epochs being separated on the average by about that time; and so nearly does this period agree with the period of the planet Jupiter's revolution around the sun, that during eight consecutive spot-periods the spots were most numerous when Jupiter was farthest from the sun, and it is only by going back to the periods preceding these eight that we find a time when the reverse happened, the spots being most numerous when Jupiter was nearest to the sun. So with various other periods which the ingenuity of Messrs. De la Rue and Balfour Stewart has detected, and which, under the closest scrutiny, exhibit almost exact agreement for many successive periods, preceded and followed by almost exact disagreement. Here, again, the captious may argue that such alternate agreements and disagreements may be noted in every case where two periods are not very unequal, whether there be any connection between them or not; but much more frequently when there is no connection: and that the only evidence really proving a connection between planetary motions and the solar spots would be constant agreement between solar spot periods and particular planetary periods. But the progress of science, and especially the possible erection of a new observatory for finding out ('for a consideration') how sun-spots affect the weather, etc., ought not to be interfered with by captious reasoners in this objectionable manner. Nor need any other answer be given them. Seeing, then, that sun-spots manifestly affect the weather and the seasons, while the planets rule the sun-spots, it is clear that the planets really rule the seasons. And again, seeing that the planets rule the seasons, while the seasons largely affect the well-being of men and nations (to say nothing of animals), it follows that the planets influence the fates of men and nations (and animals). *Quod erat demonstrandum.* 

Let us return, however, to the more reasonable astrology of the ancients, and enquire into some of the traditions which Bacon considered worthy of attention in framing the precepts of a sound and just astrology.

It was natural that the astrologers of old should regard the planetary influences as depending in the main on the position of the celestial bodies on the sky above the person or place whose fortunes were in question. Thus two men at the same moment in Rome and in Persia would by no means have the same horoscope cast for their nativities, so that their fortunes, according to the principles of judicial astrology, would be quite different. In fact it might happen that two men, born at the same instant of time, would have all the principal circumstances of their lives contrasted planets riding high in the heavens of one being below the horizon of the other, and *vice versâ*.

The celestial sphere placed as at the moment of the native's birth was divided into twelve parts by great circles supposed to pass through the point overhead, and its opposite, the point vertically beneath the feet. These twelve divisions were called 'houses.'

Their position is illustrated in the following figure, taken from Raphaël's Astrology.



The first, called the Ascendant House, was the portion rising above the horizon at the east. It was regarded as the House of Life, the planets located therein at the moment of birth having most potent influence on the life and destiny of the native. Such planets were said to rule the ascendant, being in the ascending house; and it is from this usage that our familiar expression that such and such an influence is 'in the ascendant' is derived. The next house was the House of Riches, and was one-third of the way from the east below the horizon towards the place of the sun at midnight. The third was the House of Kindred, short journeys, letters, messages, etc. It was two-thirds of the way towards the place of the midnight sun. The fourth was the House of Parents, and was the house which the sun reached at midnight. The fifth was the House of Children and Women, also of all sorts of amusements, theatres, banquets, and merry-making. The sixth was the House of Sickness. The seventh was the House of Love and Marriage. These three houses (the fifth, sixth, and seventh) followed in order from the fourth, so as to correspond to the part of the sun's path below the horizon, between his place at midnight and his place when descending in the west. The seventh, opposite to the first, was the Descendant. The eighth house was the first house above the horizon, lying to the west, and was the House of Death. The ninth house, next to the mid-heaven on the west, was the House of Religion, science, learning, books, and long voyages. The tenth, which was in the midheaven, or region occupied by the sun at midday, was the House of Honour, denoting credit, renown, profession or calling, trade, preferment, etc. The eleventh house, next to the mid-heaven on the east, was the House of Friends. Lastly, the twelfth house was the House of Enemies.

The houses were not all of equal potency. The *angular* houses, which are the first, the fourth, the seventh, and the tenth—lying east, north, west, and south—were first in power, whether for good or evil. The second, fifth, eighth, and eleventh houses were called *succedents*, as following the angular houses, and next to them in power. The remaining four houses—viz. the third, sixth, ninth, and

twelfth houses—were called *cadents*, and were regarded as weakest in influence. The houses were regarded as alternately masculine and feminine: the first, third, fifth, etc., being masculine; while the second, fourth, sixth, etc., were feminine.

The more particular significations of the various houses are shown in the accompanying figure from the same book.



It will be easily understood how these houses were dealt with in erecting a scheme of nativity. The position of the planets at the moment of the native's birth, in the several houses, determined his fortunes with regard to the various matters associated with these houses. Thus planets of good influence in the native's ascendant, or first house, signified generally a prosperous life; but if at the same epoch a planet of malefic influence was in the seventh house, then the native, though on the whole prosperous, would be unfortunate in marriage. A good planet in the tenth house signified good fortune and honour in office or business, and generally a prosperous career as distinguished from a happy life; but evil planets in the ninth house would suggest to the native caution in undertaking long voyages, or entering upon religious or scientific controversies.

Similar considerations applied to questions relating to horary astronomy, in which the position of the planets in the various houses at some epoch guided the astrologer's opinion as to the fortune of that hour, either in the life of a man or the career of a State. In such inquiries, however, not only the position of the planets, etc., at the time had to be considered, but also the original horoscope of the person, or the special planets and signs associated with particular States. Thus if Jupiter, the most fortunate of all the planets, was in the ascendant, or in the House of Honour, at the time of the native's birth, and at some epoch this planet was illaspected or afflicted by other planets potent for evil in the native's horoscope, then that epoch would be a threatening one in the native's career.

The sign Gemini was regarded by astrologers as especially associated with the fortunes of London, and accordingly they tell us that the great fire of London, the plague, the building of London Bridge, and other events interesting to London, all occurred when this sign was in the ascendant, or when special planets were in this sign.[7]

The signs of the zodiac in the various houses were in the first place to be noted, because not only had these signs special powers in special houses, but the effects of the planets in particular houses varied according to the signs in which the planets were situated. If we were to follow the description given by the astrologers themselves, not much insight would be thrown upon the meaning of the zodiacal signs. For instance, astrologers say that Aries is a vernal, dry, fiery, masculine, cardinal, equinoctial, diurnal, movable, commanding, eastern, choleric, violent, and quadrupedalian sign. We may, however, infer generally from their accounts the influences which they assigned to the zodiacal signs.

Aries is the house and joy of Mars, signifies a dry constitution, long face and neck, thick shoulders, swarthy complexion, and a hasty, passionate temper. It governs the head and face, and all diseases relating thereto. It reigns over England, France, Switzerland, Germany, Denmark, Lesser Poland, Syria, Naples, Capua, Verona, etc. It is a masculine sign, and is regarded as fortunate.

Taurus gives to the native born under his auspices a stout athletic frame, broad bull-like forehead, dark curly hair, short neck, and so forth, and a dull apathetic temper, exceedingly cruel and malicious if once aroused. It governs the neck and throat, and reigns over Ireland, Great Poland, part of Russia, Holland, Persia, Asia Minor, the Archipelago, Mantua, Leipsic, etc. It is a feminine sign, and unfortunate. Gemini is the house of Mercury. The native of Gemini will have a sanguine complexion and tall, straight figure, dark eyes quick and piercing, brown hair, active ways, and will be of exceedingly ingenious intellect. It governs the arms and shoulders, and rules over the south-west parts of England, America, Flanders, Lombardy, Sardinia, Armenia, Lower Egypt, London, Versailles, Brabant, etc. It is a masculine sign, and fortunate.

Cancer is the house of the Moon and exaltation of Jupiter, and its native will be of fair but pale complexion, round face, grey or mild blue eyes, weak voice, the upper part of the body large, slender arms, small feet, and an effeminate constitution. It governs the breast and the stomach, and reigns over Scotland, Holland, Zealand, Burgundy, Africa, Algiers, Tunis, Tripoli, Constantinople, New York, etc. It is a feminine sign, and unfortunate.

The native born under Leo will be of large body, broad shoulders, austere countenance, with dark eyes and tawny hair, strong voice, and leonine character, resolute and ambitious, but generous, free, and courteous. Leo governs the heart and back, and reigns over Italy, Bohemia, France, Sicily, Rome, Bristol, Bath, Taunton, Philadelphia, etc. It is a masculine sign, and fortunate.

Virgo is the joy of Mercury. Its natives are of moderate stature, seldom handsome, slender but compact, thrifty and ingenious. It governs the abdomen, and reigns over Turkey both in Europe and Asia, Greece, and Mesopotamia, Crete, Jerusalem, Paris, Lyons, etc. It is a feminine sign, and generally unfortunate. Libra is the house of Venus. The natives of Libra are tall and well made, elegant in person, round-faced and ruddy, but plain-featured and 'inclined to eruptions that disfigure the face when old; they' (the natives) 'are of sweet disposition, just and upright in dealing.' It governs the lumbar regions, and reigns over Austria, Alsace, Savoy, Portugal, Livonia, India, Ethiopia, Lisbon, Vienna, Frankfort, Antwerp, Charleston, etc. It is a masculine sign, and fortunate.

Scorpio is, like Aries, the house of Mars, 'and also his joy.' Its natives are strong, corpulent, and robust, with large bones, 'dark curly hair and eyes' (presumably the eyes dark only, not curly), middle stature, dusky complexion, active bodies; they are usually reserved in speech. It governs the region of the groin, and reigns over Judæa, Mauritania, Catalonia, Norway, West Silesia, Upper Batavia, Barbary, Morocco, Valentia, Messina, etc. It is feminine, and unfortunate. (It would appear likely, by the way, that astrology was a purely masculine science.)

Sagittarius is the house and joy of Jupiter. Its natives are well formed and tall, ruddy, handsome, and jovial, with fine clear eyes, chestnut hair, and oval fleshy face. They are 'generally jolly fellows at either bin or board,' active, intrepid, generous, and obliging. It governs the legs and thighs,[8] and reigns over Arabia Felix, Spain, Hungary, Moravia, Liguria, Narbonne, Cologne, Avignon, etc. It is masculine, and of course fortunate.

Capricorn is the house of Saturn and exaltation of Mars. This sign gives to its natives a dry constitution and slender make, with a long thin visage, thin beard (a generally goaty aspect, in fact), dark hair, long neck, narrow chin, and weak knees. It governs, nevertheless, the knees and hams, and reigns over India, Macedonia, Thrace and Greece, Mexico, Saxony, Wilna, Mecklenburgh, Brandenburg, and Oxford. It is feminine, and unfortunate.

Aquarius also is the house of Saturn. Its natives are robust, steady, strong, healthy, and of middle stature; delicate complexion, clear but not pale, sandy hair, hazel eyes, and generally an honest disposition. It governs the legs and ankles, and reigns over Arabia, Petræa, Tartary, Russia, Denmark, Lower Sweden, Westphalia, Hamburg, and Bremen. It is masculine, and fortunate.

Pisces is the house of Jupiter and exaltation of Venus. Its natives are short, pale, thick-set, and round-shouldered (like fish), its character phlegmatic and effeminate. It governs the feet and toes, and reigns over Portugal, Spain, Egypt, Normandy, Galicia, Ratisbon, Calabria, etc. It is feminine, and therefore, naturally, unfortunate.

Let us next consider the influences assigned to the various planets and constellations.

Though we can understand that in old times the planets and stars were regarded as exercising very potent influences upon the fates of men and nations,[9] it is by no means easy to understand how astrologers came to assign to each planet its special influence. That is, it is not easy to understand how they could have been led to such a result by actual reasoning, still less by any process of observation. [10] There was a certain scientific basis for the belief in the possibility of determining the special influences of the stars; and we should have expected to find some scientific process