

A decorative horizontal banner with a repeating geometric pattern. Inside the banner, on the left, is an illustration of a telescope on a tripod. In the center, the text "THE REALM OF SCIENCE" is written in a bold, serif font. On the right, there is an illustration of a microscope and a balance scale.

THE REALM OF SCIENCE

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SHORT time ago when the writer of these lines was called to the telephone, a female voice inquired: "What are the signs of the zodiac going to be tomorrow?" "What are the signs of the zodiac going to be tomorrow?" I repeated in astonishment and in doubt as to what sense the questioner intended to give to the words, since to me they conveyed none as they were. "Yes," came the iterated query, "What are the signs of the zodiac going to be tomorrow?" I realized now that the voice did not know much about the zodiac. So I proceeded to condense their explanation into the fewest possible words. "The signs of the zodiac are twelve divisions in a belt around the heavens, which the sun runs once a year and the moon once a month, and which are carried round once a day by the turning of the heavens, so that we have all twelve of them in turn above us every day some time or other during the day or night. I do not therefore understand what you mean by your question." "Yes, you know what I mean," came the reply. "A lady friend of mine is to be operated on tomorrow—" "And you want to know if it will be a lucky day?" I tried to convince her in a few words of the foolishness of such notions. "Yes," she said, "I know, but I thought I would ask you for her sake."

This is unfortunately not a rare case, because quite a number of people go to fortune tellers and astrologers to inquire about a future event they are interested in. The writer does not believe that any of his readers are so foolish and so unreasonable, but he knows that they must now and then come in contact with such foolish people, and will be glad to have simple and strong arguments at hand to disabuse them.

The belief that the stars determine our destinies has come

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down to us from the very beginnings of the race. It was easy to see that change was the watchword of events. On earth there were day and night, the seasons, extremes of heat and cold, storms, floods, earthquakes, wars, and pestilence chasing one another across the stage of life, while in the sky there were eclipses, outbursts of brilliant stars, meteoric displays and comets of threatening appearance. Was there any connection between the changes on earth and those in the heavens? Were the signs in the sky premonitory of events on earth? Did not the comets, those hairy stars with their sudden appearance and their terrifying shape, presage some dreadful calamities, like war and pestilence and the death of princes?

The conviction that the stars foretold human events seems to have been held universally throughout the world for untold centuries, and at present it is still lingering in all uncivilized nations, and even in some minds in those that call themselves civilized and emancipated from all unscientific and unreasonable prepossessions. Those that hold this belief and teach it are called astrologers, while those who study the stars independently of any influence over human affairs are named astronomers, who unanimously repudiate all connection with the pseudo-science of astrology.

Astrology is a pseudo-science—that is, a false science, which parades under the garb of a true one. It has certain rules the application of which requires much study. It attributes certain qualities or temperaments to certain stars, such as a martial spirit to the planet Mars, love to Venus, wisdom to Saturn, government to Jupiter, and the like, and then by the aspect of the heavens at the birth of any person and the position of the planets and stars at the time, according to the rules laid down, casts his horoscope and attempts to predict his character and the chief events of his life. It is like any game in which with certain given conditions at the start and during its course, one may hazard a guess as to its probable outcome.

In this respect, astrology is a science, but as its principle is false, it is a false or pseudo-science. Its principle is false

because it both admits and denies the liberty of the human will.

It first admits the liberty of the human will by setting up an arbitrary set of rules and ascribing certain qualities to certain stars and to their positions. It then denies it, by making man the willingless executor of the fortune meted out to him by unintelligent and inanimate stars.

In fact, the principle on which astrology is founded is absurd. The stars, as just explained, are unintelligent and inanimate, devoid, therefore, of all freedom of any kind. They obey certain laws in their motions, and they must obey these laws. And so convinced are we that these laws will be obeyed with scrupulous fidelity at all times, that as soon as we are in possession of the necessary data, we can predict the motions and positions of the stars for any given time. The whole world knows what accuracy astronomers have already attained in their predictions. And the underlying principle of every science is the same, the constancy of the laws of nature and the utter want of liberty in the action of bodies and consequently the certainty and invariability upon which our knowledge rests.

Now, human beings are endowed with intelligence and free will, and as such are essentially different from creatures not so endowed. This will is so free that we can never foretell, with certainty, what any man will do in any given possible act. If we know his character, we may venture a very probable guess. We may succeed in our prediction every time we try it on certain individuals and certain actions, but as we ourselves must admit, we can never have true certainty in our predictions, for the simple reason that while our friend will do the act, he has the power and the liberty not to do it, and he may surprise or deceive us by not actually doing it at a given time. Who can foretell the results of a coming election that is carried on by legitimate means? And even if any person could do so, how can he convince us that he has the knowledge?

No, it requires Infinite Wisdom to foresee the doings of free beings. And this knowledge, absolutely sure as it is, in no wise diminishes the liberty of men, as we can prove by our next.

act. God foreknows all our free acts, which we ourselves do not foreknow. He knows what we will freely do at any time in the future, and what we would do under all possible circumstances. He no more forces our free will than we force that of other men or shackle our own. For while we will never do certain free acts, such as gross crimes against morality or law, we can do them, other people have done them under less provocation, and we ourselves may do them under greater provocation, for which reason our Savior teaches us to pray, "Lead us not into temptation." God knows that as a fact we will freely do certain acts, and after having foreseen our free acts, He knows what our future will be in the next world.

We can hardly emphasize too strongly the absolute liberty of our will. It is precisely that liberty which is to work out our future happiness or woe, a liberty which God so patiently tolerates in this world, and in the exercise of which neither heaven nor earth nor hell can hinder us.

To come back to our subject—it is herein precisely that the absurdity of astrology consists. It makes unintelligent and lifeless stars determine the actions of intelligent and free beings. And worse than that, it does so through the interpretation of arbitrary rules, which might as well have been written in any other way.

The greater part of this paper I had written for a local daily, in which it appeared about a year ago. I would gladly give it the advertisement by mentioning its name, had it not at the beginning of this year republished an equally long article of astrological predictions without a word of adverse criticism. This is even more reprehensible in principle than giving the name of the poison a suicide has used. A certain class of readers ravenously seize that name, they know that substance will do it, they do not notice that the suffering is frightful and they do not—may they never—know that there are quicker, surer and painless methods within their reach.

The article in question was occasioned by a long one on astrology in a prominent New York paper, to which a member

of the local editorial staff wished me to reply, and in which a certain astrologer, whose name I have never seen before or after, ventured to predict calamities for the past year. I give neither his name nor that of the paper. And even if I did, who would go to the trouble to hunt up that article and see if its predictions had been verified? If the principle is false, why bother about statements?

In order to show how arbitrary all his statements were, I will mention a few. He tries to give a scientific aspect to his predictions by saying that he studied the heavens as they appeared in Washington, the capital of the country, at the very moment the year began. But every one of these facts is arbitrary and has been determined by the choice of free men. Washington was located by our first president and given his name. The beginning of the year has been fixed by the agreement of nations. Several centuries ago the year began in March. The French revolutionists began it in September. Russia begins it now thirteen days later. How can these arbitrary facts determine the happenings of the present year? Why should not every year have the same happenings since the stars have the same positions, and only a few planets have changed their places? And why should only calamities be foretold? Has astrology nothing good to offer, has it no consolation for the widows and orphans and all the sufferers of the great war?

It is true that astrology does sometimes succeed in its predictions. Like any other science or method which obeys rules, whether they be arbitrary or not, provided the rules are consistent and are obeyed, astrology must succeed in about ten per cent of its guesses, according to the mathematical theory of probabilities. Let the doubting reader formulate any rules he likes about the weather, no matter how arbitrary and then predict. He will have ten per cent success. For example, let him predict that it will rain at noon every day of the year. This prediction will be laughed down at once as absurd. But did it not rain at noon on thirty-six days—that is, ten per cent of the time, during the last year? Even if it rained only once at noon, will not such a

prophet claim the prediction to have been a success, a success like Hicks' prediction of the Omaha tornado? Can any general prediction, however improbable, provided it be barely possible, fail of coming true some time? Whenever it does happen, it is a feather in the cap of the prophet; he will tell everybody about it; he will publish it in the newspapers and show how wise a man he is. A second success, a third, similarly advertised, will constitute him infallible in his predictions in the estimation of the gullible public.

This pseudo-science of astrology is by no means dead. It is fighting hard for its life in our very midst, in our own city of Omaha. It was immediately after writing the above that I read in a second prominent daily that the first of a series of lectures on astrology had been given the day before. The lecturer said that "all things in the physical world bear a certain relation to the stars, the sun and the moon, and then when the planets are in certain positions in the heavens, there are always happenings of a certain character in the places in the world where the angles fall." This is, of course, the usual method, to make up the deficiency of facts by the vehemence of the assertion. Note for example, "*all* things in the physical world," and "there are *always* certain happenings."

To prove the truth of this claim a thousand facts and a thousand successes would not suffice, unless he could show that the positions of the planets were the causes and these happenings their effects, and that there was an essential bond uniting the two. A little common sense proves the very opposite, as I said before, since the planets are inanimate and unintelligent, and men are free beings.

The lecturer is also reported to have said "that the scientific astrologer, when he had the date, place and hour of the birth of an individual, could give the history of that individual from the cradle to the grave, show all the events of his life and know his inner nature better than the man himself." The boundless extent claimed for his power of predicting all the events of a

man's life, is of itself sufficient to make any reasonable being throw such stuff into the waste basket. Why does not this very learned man tell us when and how the present European war will end? Why did he not tell us two years ago when it would begin? If astrologers can do anything at all, they ought surely be able and kind enough to tell us what we are all so much interested in, the peace and the prosperity of the world. Will no astrologer predict? Will no astrologer convince us that he can predict?

