

Astronomy Vs Christianity.

For the Torch of Reason.

The star known as 61 Cygni, is of the sixth magnitude. Its parallax was determined in 1838 and is one third of a second. Its distance is, therefore, 55,000 miles further from us than the sun. With its companions it makes a revolution around its center of gravity once every 520 years. If you wish a more correct value of distance, take an imaginary standpoint on the sun, and suspend a spider's web twenty feet from your eye. This would obscure our earth by several hundred times the size of its surface, as seen from the sun.

The spectroscope shows that stars differ greatly in chemical and physical constituents. This instrument reveals to us the life and duration of a star, through the change and refrangibility of the emitted light. This is the first step. There are other rays of light which have taken thousands and perhaps millions of years to reach this earth. This teaches us that space is infinite. Of this infinity it may be said that the center is everywhere—its boundary nowhere.

But what must one think of the giant star Sirius, the brightest in the heavens,—which is six times further from us than Alpha Centaurs,—and whose diameter is 12,000,000 (that of our own earth, remember, is only 25,000 miles) and which is 1,375,000 further from us than our sun.

Sirius, commonly called the dog star, is 200 times larger than our sun, gives off 200 times as much light and heat, yet has no measurable diameter. It travels at the rate of 840 miles per minute, carrying with it its retinue of worlds. And yet, in all our lives we could not discover that it had moved an inch, so to speak, in the sky. What must one think, in contemplating this magnitude of distance? I feel lost in the infinitude of space.

But it is only by the aid of these computations that we begin to appreciably sense the fallacy of the almost universal doctrine of human destiny, that all things were made for man, or that man was made to have dominion over all things.

Suppose for one moment that you stood upon one of these fixed stars, say Centaura, and could look down upon this earth; you would see it, not as it is now, but as it was five thousand years ago: Moses unborn; the shepherds of Judea lying upon the hill-sides, watching their flocks; perchance, you would see Joseph, trading corn to his brethren in Egypt; and the great trees of Calaveras county, California, would be mere saplings.

Have these gigantic bodies—myriads of which are placed at so vast a distance from us that we cannot perceive with the naked eye—have they no purpose other than that assigned by theologians, "to give light to man?" Does not their enormous size demonstrate, that, as they are the center of force, they must be the center of motion, and that they are, therefore, suns of other systems of worlds?

When I think of our earth—a mere mote in the sunbeam—of what consequence can such a comparatively insignificant aggregation of particles be? One might think it could be removed, or even annihilated, and yet not even be missed from the universe. More than a thousand million human monads swarm the face of this insignificant speck,—scarcely one of whom out of every million will leave any trace of his existence; hence, I ask, of what consequence is man, his ambition, his pleasure, or his pain?

Giordano Bruno, born seven years after Copernicus published his work on the infinity of the universe and of worlds, collected for the use of astronomers all the observations he could find respecting a new star that suddenly appeared in Cassiopea, A. D. 1572, which increased in brilliancy until it surpassed all other stars, and was plainly seen in the daytime. Suddenly, November 11th, it was as bright as Venus at her brightest. The following March it was of the first magnitude. It exhibited various hues of color for a few months, then disappeared in March 15, 1574. But from whence it came, or whither it went, no one could tell. Its appearance, its coming and going, will perhaps ever remain a mystery. Several other brilliant stars have come and gone in like manner, without leaving a trace behind them. These stars to the astronomer are as atoms are to the chemist—only relating to opposite extremes of matter.

A few years ago all these things were imperfectly known; few dare utter them, even though they believed them; the church was the supreme law, but occasionally there were noble spirits born that stood erect and preached the truth, in spite of the church, in contempt and defiance of death. Such a one was Bruno. He was intended for the priesthood, but was led into doubt by the doctrine of substantiation and the immaculate conception. He did not conceal his opinions; he fell under the censure of the church authorities, finding it necessary to seek refuge in foreign lands, he sojourned successively in Switzerland, France, England and Germany; but the cold, keen-scented sleuth hounds of the Inquisition followed remorselessly in his wake, and, by a trick, promising him a position in the college at Venice, he was induced to return there, where he was arrested and confined in prison for six years, without either books, papers or friends. On demand of the spiritual authorities he was removed to Rome and confined in prison by orders of the Inquisition, accused of not only being a heretic but a heresiarch, who had written unseemly things concerning religion. The special charge against him was that he had taught the plurality of worlds. My God! What a crime! Reader, are you not glad that you did not live in those days? We would all have been burned at the stake. I would not like to trust my neck to the

church now had they the same power today they had then. The Inquisition would soon be re-established and our soil would be dyed crimson by the best blood of our land, the result of ignorance and superstition.

Poor Bruno! After an imprisonment of two years in Rome, he was brought before his judges. Upon his nobly and steadfastly refusing to recant he was delivered over to the authorities, to be punished without the shedding of blood, which was then the formula for burning at the stake. Knowing full well that though his tormentors might destroy his body, his thoughts would still live among men, he said to his judges:

"Perhaps it is with greater fear that you pass sentence upon me than I receive it."

His sentence was carried into effect, and he was burned at Rome, February 16, A. D. 1600,—less than three hundred years ago. Think of it. Parents, read this to your children and tell them the story; it will do them good.

Any one reading Fox's *Martyrs* here in Christian America, less than two hundred years ago, can recall with sentiments of pity the sufferings of these countless martyrs, who have been brought to the stake for their religious opinions. Many of them have had a powerful support in their gross, fanatical belief that they were escaping from the cruelty of earth to the charity of heaven, even though their way was through the dark valley and fiery flames. Many martyrs believed that there was an invisible hand which would lead them, a friend who would gently guide them through the terrors of their martyrdom. Bruno had no such support or consolation. He must tread the winepress alone.

Is there not something noble and grandly inspiring in his attitude, when, standing before his judges in the gloomy hall, with no advocate, no accuser, no adviser, no witnesses, but accused by all; those holy officers, clad in their black robes, moving about; the rack and tormentors in the vaults below; he is told that he has brought upon himself incontrovertible suspicions of heresy, because he had said that there were other worlds than ours! He will not and does not recant; he will not deny what he knows to be true.

What a contrast between this exhibition of manly honor and that other scene which took place more than fifteen hundred years before, by the fireside in the halls of Caiaphas, the high priest, "when the cock crew and the Lord turned and looked upon Peter!" And yet it is upon Peter that the church has founded her right to treat Bruno as she did. "Will mankind ever become civilized?" as Pope asked in his Universal Prayer.

"Teach me to feel another's woe,
And hide the faults I see,
That mercy I to others show,
That mercy show to me."

J. H. FISK.

Worship.

The very idea of worship implies abasement of the worshipper, and is therefore, incompatible with the true dignity of manhood. Worship is a relic of the past; a survival of savagery. Away in the dim recesses of antiquity, Isis and Osiris sat on the thrones of Egypt, and stamped their worship on the granite monuments of the Nile. Brahma, Vishnu and Siva arose in India and swayed the destinies of the human race. Majestic Jove and lovely Juno, from the summit of Mt. Olympus, flung the silver fetters that bound the intellect of polished Greece and martial Rome. For untold ages, the gods have squatted like toads upon the world and dwarfed the minds of men. But each, in turn, have joined "that innumerable caravan that marches to the pale realms of shade, where each shall take his chamber in the silent halls of death." To-day the Christian Gods, Jehovah, Jesus, Mary, Satan and the Bible are on trial. Shall they be found an exception to all that have gone before? They are weighed and found wanting, and they too must "fold their tents like Arabs and as silently steal away." And when the gods have all gone; have flitted away like birds of the night before the dawn, been banished to the Siberia of Oblivion, what then? Man will still be here. Slowly struggling up from the mephitic atmosphere of ignorance, the slimy pool of superstition, and the bloody morass of religion, he will stand erect and cease to worship—even himself.

In that good time coming, man will no longer kneel in the dust before heavenly tyrants of his own creation; but, emancipated, redeemed and disenthralled, will stand firmly upon the apex of the world; woman, the queen of his heart, his equal, by his side; himself king of kings, lord of lords and god of gods.

HARRY HOOVER.

The Fathers laid down as a distinct proposition that pious frauds were justifiable and even laudable; and if they had not laid this down, they would nevertheless have practised it as a necessary consequence of their doctrine of exclusive salvation. Immediately all ecclesiastical literature became tainted with a spirit of the most unblushing mendacity. Heathenism was to be combated, and therefore prophecies of Christ by Orpheus and the Sibyls were forged, lying wonders were multiplied, and ceaseless calumnies were poured upon those who, like Julian, opposed the faith. Heretics were to be convinced, and therefore, interpolations of old writings or complete forgeries were habitually opposed to the forged gospels.

Lecky's Hist. of Rationalism.