

Solar System in it are much like those of our modern astronomy, except that the orbits of the planets are circular; the observations and facts were new and true, but many of the reasons given were fanciful. One noteworthy exception was a clear anticipation of the theory and law of gravity, which was left to Newton as a problem to solve. Of the religious and secular consequences of his new light he seems to have had only a fearful apprehension. That light was practically extinguished by the church for nearly fifty years, and might have so remained, had it not been for the reckless and heroic spirit of one who was born to be, as he describes himself, the Awakener of the Souls of those Asleep (*Dormitantium Animarum Excubitor*)—

GIORDANO BRUNO, THE MORNING STAR OF THE NEW ERA.

He was born about 1548, five years after the death of Copernicus, at Nola, in the Province of Naples, between that beautiful Bay and Vesuvius the volcano, pictures of the dawn of his early, and the tragedy of his later, life. We are told, probably from the statements made by him before the Inquisitors at Venice, that he was the son of a soldier, of good family; that his mother's name was Fraulisa Savolina; that he was of gentle and studious habits, was instructed in the rudiments of learning at the Convent of St. Dominico Maggiore, which he entered with a view of becoming a Priest, and continued his studies as a member of the Dominican order. It does not appear that he ever became active as a Priest. His life was rather that of a student and teacher, and as such he developed doubts which prevented his present and future success as a priest of any Order or "Faith" then existent. He did not know, that is, had doubts, about the Transubstantiation, The Trinity and Immaculate Conception; and the inquiries on these and similar dogmas were not satisfactorily solved by "Faith." This last discovery—that "Faith" was not sufficient to solve doubts, marks the birth of a scientific soul, then and there the rarest of products, and certainly neither at home nor safe in any convent of the Dominican order, which Order had control of the Inquisition. He was to be disciplined, and escaped.

About 1576 he fled from his Naples birthplace and home, which he never saw again, and took refuge in Rome. But the Eternal City could not remain a refuge long. The proceedings from which he had escaped followed and threatened him. Was there a place on earth where a human soul might study and think and speak with safety? If so, it might be Switzerland. Thitherward the hunted Bruno by circuitous routes worked his way as traveling monk or student, and in

1580 began at Geneva a new life as a free man. As teacher and press worker, he obtained livelihood and opportunity for study and writing, or for preparing to write. But those were days when "religion" was the principal thing to look after in one's neighbor's life. In 1553 Servetus had paid the most awful penalty for differing with Calvin upon the question of the Trinity. Was Bruno safe when that fire might be re-lighted at any time?

It seems that the Swiss tried to love Bruno "for the enemies he had made"—the Papists; but there is no liberty under Theology,—not even in Switzerland. Bruno did not attend "sacrament" nor church; he was guilty of human and simply "moral" sentiments. And so it was intimated to him that it would be healthier for him to move on before the "authorities" should resort to the Servetus precedent: He made a tour in France, and at Lyons and Toulouse took privileges of reading and lecturing on philosophy, which prepared him for a wider sphere. So we next find him at Paris (1579) occupying a far more noteworthy position than ever before. He seems by that time to have graduated from his studentship or journeyman years (wander-jahre, as the Germans call it) and was prepared for his main lifework. What was that? "The awakening of the sleeping world."

And why was it necessary for him at that time to become such Awakener? Because he not only saw that the Copernican Astronomy was true, but that it involved enormous changes in the views of mankind, as then entertained, as to individuals, societies, governments and churches. But the most peculiar thing is that this man, without home or country of his own, seems to have gathered from his new Cosmism a form of "the enthusiasm of humanity" that is difficult to account for in him, but which we, in these after years, see to be a logical and proper consequent of the New World. Col. Ingersoll said, in his last lecture on Thomas Paine, that the strangest thing about Paine (and which he, Ingersoll, could not understand) was that he never lost faith in man and humanity, notwithstanding all of the injustice, ingratitude and ill-treatment to which he had been subjected. Bruno had this same undying faith in human nature (what he calls "tranquilla, generalique philanthropia"); and that is the faith that always saves in the long run. This was the reason that the new truth seemed so good and so unspeakably sacred to him, and why it became the chief object of his life to make it known. In his "De la Causa, Principio et Uno," that is, The Unity of the Universe, he says: "Those other Philosophers have found nothing so great; they have not so much to

admire or to defend. Hence it is easy for them to care little for a Philosophy which avails naught or little, or which they really know not; but he who has found THE TRUTH, which is a hidden treasure, inflamed by the beauty of its divine countenance (*acceso de la belta, di quel volto divino*), is not less, but more, zealous to preserve it from untruth, injury or stain than if it might be a contest about filthy gold, rubies or diamonds, or the fair form of woman."

In this way "this strange mortal" consecrated himself to be the Knight Errant of the NEW TRUTH, in the interest of THE HUMAN, and his life was one continuous battle in that holiest of causes until it came to its glorious end by fire at the Stake in place of the torture of the Cross. This life as the Herald of Truth was not so "out of form" then as it might seem now. Then there were no newspapers or magazines and few books or readers. The way to get things known was to proclaim them, and to hold disputations at Universities, and wherever hearings could be obtained, upon Propositions (Theses), which were given out or often posted, as were Luther's on the church door at Wittenburg. Paris was then the intellectual center of the world. That was the place for this Knight Errant of THE NEW to begin his work by a challenge of THE OLD. With what ability and effect he did it, is well attested by opponents, friends and patrons, which soon were his. The first of his works, which were preserved, seem to have been written here. His challenges, disputations and lectures secured, not only great interest, but interest of the great, whether out of fear or favor is not so certain.

After two years of this work in Paris, he was ready to open a campaign in England. He had "noble" invitations, for Sir Phillip Sydney, the friend of Shakespeare, was his friend, and the literary circle of London was open to him. He is said to have had letters from the King of France (Henry III, the Bad) to the French Ambassador Castelnovo, who also became his friend and patron, and also letters to Queen Elizabeth, whose court he certainly attended, and with whom he conversed in Italian. These were the Halcyon Days of poor Bruno—the days of his Italian works, disputations and triumphs; all made necessary to reach his new, noble and larger audience. These compelled him to work industriously, but besides these he had visitations, conferences, and, above all, intellectual tournaments, especially at the great University of Oxford, which he found to be "a widow of learning," and sadly dominated by Aristotle, as Bacon also sadly complained shortly afterwards. He seemed in these happy days to fly so high that he may well

have thought that his new philosophy of "The Truth of the Copernican Astronomy" was going to be accepted. That, of course, was then impossible, when we come to think of it. As a speculation, it was interesting; but its consequences were a horror—far worse then than now. After about two years he had finished sowing the new seed in England, much of which has come up in unexpected places. By no means did he miss, as Prof. Thomas Davidson has shown, an acquaintance with Shakespeare, and his "Globe" Theatre, with the earth globe on a column in front of it, whence its name. The echo of this intercourse appears in more than one of The Plays and in the Italian coloring of the Comedies, which is so accurate that it has made many suspect that the greatest Dramatist must have at some time visited and even lived in Italy. But the University in England, that "widow of learning," rejected the heliocentric, and he could not wait for his sown seed to grow. Where next was the proper field for this Knight of the Intellect? Evidently Germany, the home of Luther, of the Reformation and of Protestantism. Having so determined, he took farewell of his friends in England and Paris by a few parting "disputations," and next appeared at the University of Marburg in 1586. The new Philosophy could obtain no hearing there, but shortly after, at the University of Wittenburg, he was heard, and there he remained two years engaged in lecturing, especially upon Aristotle, and preparing his later Latin works. Among these was his great Latin Poem, with comments, "De Immenso et Innumerabilibus, seu de Universo et Mundis"—Concerning Immensity and the Innumerable Worlds, or The Universe and Worlds. This was evidently to be his great "defence against time," designed to carry on his great work when he could no longer continue it by voice. It was an attempt to state the new heliocentric theory of the world and its manifest consequences in contrast with that of Aristotle and Ptolemy, and in continuation and completion of the splendid Latin Poem of Lucretius, "De Natura Rerum" (concerning the Nature of Things), who could only tell of the world as it was conceived when he wrote,—before Christ, 95. This work was dedicated to the Duke of Brunswick, from whom he received honors and some remuneration. To that, his great book, we must refer later.

Of course his comfortable life with the Lutherans, as with the Calvinists, could only continue until his views might become well known. There was even danger that the Calvinists would get control of the University of Wittenburg, and consequently from thence he re-