

MISCELLANEOUS.

GOTTFRIED WILHELM LEIBNITZ.

(1646—1716.)

The appearance of Leibnitz's most important metaphysical writings in a new volume of the Philosophical Classics¹ issued by The Open Court Pub. Co. affords us a favorable opportunity for recalling the attention of our readers to this great and commanding figure in the history of thought. The portrait of Leibnitz forming the frontispiece to the present *Open Court* is taken from the large photogravure picture of our Philosophical Portrait Series, and the photograph, reproduced in this note, of the Leibnitz monument near the Thomas-Kirche, which was the scene of the great composer Bach's famous triumphs, has been specially procured for our purpose from Leipsic.

The present volume of Leibnitz's writings, which now takes its place in the Philosophical Classics alongside the works of Descartes, Berkeley and Hume, (Kant is to follow,) is made up of three separate treatises: (1) *The Discourse on Metaphysics*, (2) *Leibnitz's Correspondence with Arnauld*, and (3) *The Monadology*. Together they form a composite and logical whole, and afford an excellent survey of Leibnitz's thought. The first two, the *Metaphysics* and the *Correspondence with Arnauld*, have never before been translated into English, while the translation of the *Monadology* is new. The translator, Dr. George R. Montgomery, has done his work well, and a clear and admirable *résumé* of the history of philosophy in Leibnitz's time and of his own system has been added from the pen of the late Paul Janet, Member of the French Institute. In fine, all the necessary material has been furnished in this volume for a comprehension of the thought of one of the most versatile geniuses the world has produced.

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It would be difficult to overestimate the importance or magnitude of the labors of Leibnitz. His attainments were universal. He distinguished himself alike in history, jurisprudence, logic, metaphysics, mechanics, and mathematics, being joint-founder, in the latter department, of the infinitesimal calculus. Success seemed to crown his every effort. Not until the closing years of his life was the brilliant picture darkened. How unlike Spinoza! "The illustrious Jew of Amsterdam," says Prof. Weber, "was poor, neglected, and persecuted even to his dying day, while Leibnitz knew only the bright side of life. Most liberally endowed with all the gifts of nature and of fortune, and as eager for titles and honors as for

¹ *Discourse on Metaphysics, Correspondence with Arnauld, and Monadology*. With an Introduction by Paul Janet, Member of the French Institute. Translated from the Originals by Dr. George Montgomery. Chicago. 1902. Pages, xxi, 272. Price, paper, 35 cents.

knowledge and truth, he had a brilliant career as a jurist, diplomat, and universal *savant*. His remarkable success is reflected in the motto of his *Theodicy*, which reads: "*Everything is for the best in the best of possible Worlds.*"

Let us see briefly the position which Leibnitz occupies in the history of metaphysics. The exaggerated nonsense of the theory of "substantial" or "accidental" forms, as elaborated by the Schoolmen, was exploded by Descartes. The explana-



THE LEIBNIZ MONUMENT NEAR THE THOMAS-KIRCHE IN LEIPSIG.

tion which this theory gave of the fact that some bodies fell to the earth while others rose in the air, was that heaviness was the "substantial form" of the former and lightness of the latter. Water rose in an empty tube because of the "abhorrence" which nature had for a vacuum. Fire, with heat for its instrument, produced fire, according to Toletus, because of the activity of the "substantial form" of fire. It was to abolish the abuse of substantial forms that Gassendi and Des-

cartes founded a new physics which became the modern mechanicalism, viz., that all the phenomena of bodies are modifications of the extension of bodies (extension being all that there is contained in the conception of bodies), and that all phenomena should consequently be explained by the properties inherent in extension, viz., form, position, and motion. This theory of Descartes has been partially confirmed by modern physics, which explains sound, light, heat, and electricity as movements either of the air or of the ether.

"It has often been said," says Paul Janet (and the following quotation clearly characterises not only Leibnitz's position in philosophy, but also one of the fundamental problems of metaphysics), "that the march of modern science has been in the opposite direction from the Cartesian philosophy, in that the latter conceives of matter as a dead and inert substance, while the former represents it as animated by forces, activities, and energies of every kind. This it seems to me is to confuse two wholly different points of view, that is the physical and the metaphysical points of view. The fact seems to be that from the physical point of view, science has rather followed the line of Descartes, reducing the number of occult qualities and as far as possible explaining all the phenomena in terms of motion. In this way all the problems tend to become problems of mechanics; change of position, change of form, change of motion,—these are the principles to which our physicists and our chemists have recourse whenever they can.

"It is therefore wrong to say that the Cartesian line of thought has completely failed and that modern science has been moving away from it more and more. On the contrary, we are witnessing the daily extension of mechanicalism in the science of our time. The question takes on a different phase when it is asked whether mechanicalism is the final word of nature, whether it is self-sufficient, in fact, whether the principles of mechanicalism are themselves mechanical. This is a wholly metaphysical question and does not at all affect positive science; for the phenomena will be explained in the same way whether matter is thought of as inert, composed of little particles which are moved and combined by invisible hands, or whether an anterior activity and a sort of spontaneity is attributed to them. For the physicist and for the chemist, forces are only words representing unknown causes. For the metaphysician they are real activities. It is metaphysics, therefore, and not physics which is rising above mechanicalism. It is in metaphysics that mechanicalism has found, not its contradiction, but its completion through the doctrine of dynamism. It is this latter direction that philosophy has mainly taken since Descartes and in this the prime mover was Leibnitz.

"In order to understand Leibnitz's system we must not forget a point to which sufficient attention has not been paid, namely, that Leibnitz never gave up or rejected the mechanicalism of Descartes. He always affirmed that everything in nature could be explained mechanically; that, in the explanation of phenomena, recourse must never be had to occult causes; so far, indeed, did he press this position that he refused to admit Newton's attraction of gravitation, suspecting it of being an occult quality: while, however, Leibnitz admitted with Descartes the application of mechanicalism, he differed from him in regard to the basis of it, and he is continually repeating that if everything in nature is mechanical, geometrical, and mathematical the source of mechanicalism is in metaphysics.

"Descartes explained everything geometrically and mechanically, that is, by extension, form, and motion, just as Democritus had done before; but he did not go further, finding in extension the very essence of corporeal substance. Leibnitz's genius showed itself when he pointed out that extension does not suffice to explain

phenomena and that it has need itself of an explanation. Brought up in the scholastic and peripatetic philosophy, he was naturally predisposed to accord more of reality to the corporeal substance, and his own reflections soon carried him much farther along the same line."

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The following, briefly stated, are the facts of Leibnitz's life.

Gottfried Wilhelm Leibnitz was born at Leipsic in 1646 and lost his father at the age of six years. He was very precocious, and from his infancy gave evidence of remarkable ability. At fifteen, he was admitted to the higher branches of study, philosophy and mathematics, which he pursued first at Leipsic and then at Jena. An intrigue not very well understood prevented his obtaining his doctor's degree at Leipsic, and he obtained it from the small university of Altdorf near Nuremberg, where he made the acquaintance of Baron von Boineburg, who became one of his most intimate friends and who took him to Frankfort. Here he was named as a councillor of the supreme court in the electorate of Mainz, and wrote his first two works on jurisprudence, *The Study of Law* and *The Reform of the Corpus Juris*. At Frankfort also were written his first literary and philosophical works and notably his two treatises on motion: *Abstract Motion*, addressed to the Academy of Sciences at Paris, and *Concrete Motion*, addressed to the Royal Society at London. He remained with the Elector till the year 1672, when he began his journeys. He first went to Paris and then to London, where he was made a member of the Royal Society. Returning to Paris, he remained till 1677, when he made a trip through Holland, and finally took up his residence at Hanover, where he was appointed director of the library. At Hanover he lived for ten years, leading a very busy life. He contributed to the founding of the *Acta Eruditorum*, a famous journal of learning, which served the purpose of the later Academies. From 1687 to 1691, at the request of his patron, Duke Ernst-Augustus, he was engaged in searching various archives in Germany and Italy for the writing of the history of the house of Brunswick. To him the Academy of Berlin, of which he was the first president, owes its foundation. The last fifteen years of his life were given up principally to philosophy. In this period must be placed the *New Essays*, the *Theodicy*, the *Monadology*, and also his correspondence with Clarke, which was interrupted by his death,—November 14, 1716. During the life-time of Leibnitz, aside from the articles in journals, only some five of his writings were published, including his doctor's thesis, *De Principio Individui* (1663), and the *Théodicée* (1710). After his death (1716) all his papers were deposited in the library at Hanover, where they are to-day, a great part of them (15,000 letters) still unpublished.

SIR JOHN MAUNDEVILLE ON THE CIRCUMNAVIGATION OF THE GLOBE.

Now that the causes of Columbus' memorable voyage which resulted in the discovery of America are under discussion, the sources of our information will doubtless be exhaustively scrutinised, but there is an item of evidence which, though well known by scholars, has received little attention from the public and is not without significance.

Whether the map and the two letters of Toscanelli to Columbus are forgeries, as Mr. Henry Vignaud seeks to prove, or not, are we wrong in believing that the