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SCIENCE AND CULTURE¹

By Professor JOHN R. MURLIN

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"On the truth of nature," declared Sir Francis Bacon over 300 years ago, "we shall build a system for the general amelioration of mankind." Bacon was voicing the first significant dissent from the old authoritarianism which had come down from Aristotle. "Let us look at the facts and then draw our conclusions," said Bacon, and while he was writing on the inductive method Harvey was putting it into practice in his demonstration of the circulation of the blood, "on the truth of nature." Descartes, having set analytical geometry on its conquering way 50 years later, exclaimed: "When we know the force and action of fire, water, air, the stars, the heavens and all other

objects as we now know the various trades, we shall make ourselves masters and possessors of life. . . . This will not be solely for the pleasure of enjoying with ease . . . the good things of the world [he continues], but principally for the preservation and improvement of human health which is both the foundation of all other goods and the means of strengthening the human spirit." By a slight paraphrase we may find in Descartes' words an outline of the great services of science during these 300 years: (1) Contributing to the ease and comfort and convenience of life; (2) the improvement of human health; and (3) strengthening the human spirit. Does any one doubt the first of these great services? Let him look back only a generation to kerosene lamps, wood stoves, horse and buggy transportation. Or the second? Let

¹ A dedicatory address delivered on the occasion of opening the new science building at Ursinus College, Collegeville, Pa., June 5, 1933.