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JOSIAH WILLARD GIBBS¹

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ON the one hundredth anniversary of his birth, we are here to do honor to the memory of Josiah Willard Gibbs, the greatest physical scientist that America has produced and one of the greatest original thinkers of all time. The occurrence of genius is commonly believed to be a phenomenon of pure chance, and such it may well be so far as native talent is concerned; but talent has merely a potential value; it is fruitful only when it is properly cultivated, indeed, we may say when it is self-cultivated under favorable conditions. Genius may be assisted in this process of self-cultiva- tion but, in all cases, genius flourishes best in an envi- ronment of complete intellectual freedom. The history of American science bears this out.

Let us review, briefly, the careers of the American men of genius who contributed to the development of

physical science from Colonial times up to the last quarter of the nineteenth century. Up to 1880, Amer- ica had produced five great physical scientists: Benja- min Franklin, Benjamin Thompson (Count Rumford), Joseph Henry, Henry A. Rowland and Josiah Willard Gibbs.

Franklin and Rumford were products of pre-revolu- tionary America; they were self-taught, having re- ceived only very meager common school education. The two men, although their lives were, in certain re- spects, very diverse, had much in common. Both were exceptionally versatile; both were keen observers and ready experimenters; both were of a practical and in- ventive turn of mind; both were keenly conscious of their social environment and both did much to advance science and learning in other ways than through their scientific contributions. Franklin was active in pro- moting the establishment of libraries, colleges and

¹ An address delivered in Yale University on the occa- sion of exercises held in commemoration of the one hun- dredth anniversary of the birth of Josiah Willard Gibbs.

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