

INDUSTRIAL EDUCATION

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Industrial Education by Sir Philip Magnus

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SIR PHILIP MAGNUS

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EDUCATION**

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BY

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Pi. Kent

PREFACE.

THE following Chapters contain the subject-matter of Articles and Addresses which have been written and delivered on different occasions during the past six years. Some of them have already appeared in the pages of the 'Contemporary Review' and of other publications. All of them, excepting the 'Inaugural Address at the opening of the Finsbury Technical College,' have been carefully revised and in part rewritten. They are now offered as a contribution to the study of the important problem: How to train our industrial population, so as to best fit them to engage in technical and commercial pursuits.

P. M.

ATHENÆUM CLUB: *October 25, 1888.*

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INDUSTRIAL EDUCATION.



CHAPTER I.

EDUCATION IN RELATION TO THE NEEDS OF LIFE.

THE problem of industrial education is that of adapting education to the practical needs of life. These needs are various, and the term industrial education is employed with reference to the general and special training which is best adapted to that overwhelmingly large proportion of every community who are employed directly or indirectly in the production and distribution of saleable commodities. Such persons may be employed in agriculture, in engineering, in building, or in any other branch of constructive work, such as cabinet-making ; in designing ; in mercantile or banking business. The question, which of late years has been from different points of view very fully discussed, is, what relation, if any, should subsist between school teaching and the work of life ?

It is usual to distinguish between the education that is preliminary to what, for want of a better term,

may be called apprenticeship, and that which is carried on *pari passu* with the learning of a trade, or with specific reference to some industrial occupation. The former is the education given in our ordinary elementary and higher schools; the latter may be called 'professional instruction,' and is obtained in special schools and institutions. When people speak of 'technical education,' they generally mean specialised instruction; but the demand for technical education has made us carefully consider whether the instruction given in our ordinary schools is the best preparation for it. And the consideration of this question suggests a previous one, whether it is necessary or desirable that the concerns of practical life should cast their shadow behind them, and influence the education given in ordinary schools. There are many persons who doubt the necessity of establishing any relation between school education and the practical business of life. They tell us that 'education' is a word derived from *educō*, and means a 'drawing out' of the faculties. It is training and nothing more. In the gymnasium a man does not exercise his muscles with the view to their use in boating, cricket, shooting, boxing, or riding, but for the development of his physical strength, confident that by such exercise he will be able to apply his powers to any purposes for which they may be required. In the same way, it is contended that mental training should consist of the development of