THE SCIENCE OF LABOUR AND ITS ORGANIZATION

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649238088

The science of labour and its organization by Józefa Joteyko

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JÓZEFA JOTEYKO

THE SCIENCE OF LABOUR AND ITS ORGANIZATION

Trieste

The Science of Labour

AND

Its Organization

BY

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Formerly head of the Laboratory of Psycho-Physiology at Brussels University, Laureate of the Institute and of the Academy of Medicine

In charge of the course on "Fatigue" at the Collège de France in 1916

The human motor and the measurement of industrial fatigue— Scientific management—Measurement of aptitudes—Anthropological comparison of the sexes from the point of view of strength and endurance—Alimentation and work— Re-education of the left hand for the mutilated—Belgian methods of technical education and the University of Labour

London: GEORGE ROUTLEDGE & SONS, LIMITED New York: E. P. DUTTON & CO.

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PREFACE

IN this little volume we have collected together a series of articles published in 1916 and 1917 in the *Revue Philosophique*, the *Revue Scientifique*, and the *Revue Générale des Sciences*. We have revised them to ensure that continuity of thought which has always run through them all, but which does not shew quite so distinctly in scattered publications; to these we have added the substance of some of our lectures on *Fatigue* delivered at the *Collège de France*.

The leading idea running through this collection has been the necessity for throwing light on certain points in industrial psycho-physiology, which is universally recognised as important at the decisive hour through which we are now passing. Close collaboration between science and industry will be necessary in the near future ; the importance of this alliance will be greater than ever when the actual crisis is passed and the need for making a fresh start and for increased activity has made itself felt. Now, events have caused a scarcity of labour; it is, therefore, necessary to partly supply its place by as perfect and scientific an organisation of labour as is possible. A great part of life will have to be re-constructed. It is important that this reconstruction should be well devised from the first start, and that it should be based upon scientific rules, so that the unhappy errors of the past may be avoided.

This necessity has been so clearly seen that the attention of the Paris Academy of the Sciences has recently been drawn to the importance of the problem, and various measures have been proposed.

In the present volume we shall examine certain aspects of the question, and add some personal contributions

PREFACE

collected in the course of investigations of many years' duration on the problem of Fatigue in the motor function.

Four problems are examined :---

The first concerns the Human Motor, and here the question of apprenticeship, the manner of the economic working of the body, and the limits of industrial fatigue form the chief part.

The second is devoted to *Taylor's System*, which is so much discussed at the present time.

The third relates to the relative Aptitude for Work of the Right Hand and of the Left Hand, a question the importance of which has become very real, on account of the large numbers of men maimed in the war. We shall examine in succession: the estimate of the strength, and of the power of endurance of each hand, in the case of man and of woman, comparatively; we shall advance a new theory of our own regarding right-handedness; we shall give some rules for the re-education of the motor power of the wounded, and closely examine the process of writing with the left hand.

Finally, the fourth problem deals with the Belgian Methods of Technical Education. We have thought that it would not be uninteresting to make these known, since Belgium now occupies the foremost place in productivity in proportion to her population. She owes this productivity to her methods of industrial and technical education.

We trust that the importance of the problems discussed justify the publication of this volume and that it will emphasize the interest already felt in the subject.

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