

**THE HUMAN MACHINE
& INDUSTRIAL
EFFICIENCY**

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The Human Machine & Industrial Efficiency by Frederic S. Lee

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THE HUMAN MACHINE AND INDUSTRIAL EFFICIENCY

BY

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PREFACE

MOST of the substance of this little book constituted the two Cutter Lectures on Preventive Medicine and Hygiene, which were given at the Harvard Medical School, April 25 and 26, 1918, under the title "Industrial Efficiency and the War." Many of the facts here presented relate to war industries, but they are none the less pertinent as illustrating the principles enunciated; and even if interest in the facts dies out, the principles, it is hoped, will survive and receive attention long after the war has ended. I believe fully that any activity in which the human body plays so large a part as it does in industry must be organized on a physiological basis before the highest degree of efficiency can be secured. In the field of human activity here discussed a science of industrial physiology must come into being, a science of the human machine in industry, and this must be developed largely within industrial establishments themselves. They constitute the laboratories in which much of the observation and experiment of the future must be made. If I can help to make this thought accepted by others than

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physiologists and especially by industrial leaders, I shall be gratified.

In preparing this summary of our present knowledge I am under many obligations to my colleagues in the U. S. Public Health Service and the Committees on Industrial Fatigue. Their names will be found at the beginning of the Bibliography printed at the end of the volume. The numbers in the text refer to the Bibliography.

FREDERIC S. LEE.

COLUMBIA UNIVERSITY,
June 1, 1918.

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