

# PRESS OPINIONS.—*"Intensity Coils: How Made and How Used."*

## ENGLISH MECHANIC.

"In the preface it warns us that it is not put forth as a scientific exposition of the matter; yet, for all that, many of the explanations are clear and good, and directions for experiments easily to be followed."

## ELECTRICAL ENGINEER.

"*'Intensity Coils: How Made and How Used.'* By Dyer. Sixteenth Edition. London: Perken, Son and Rayment. A book that has reached a sixteenth edition, and which has been before the world for many years, must contain information that is wanted. The Ruhmkorff coil has become one of the most interesting pieces of apparatus in electrical engineering in its comparatively recent development, known as the transformer. This book shows very clearly the historical views held about the coil, and from the amateur constructor's point of view is most valuable, in that it explains clearly how to make and how to use a coil. A great many lecture experiments are described."

## CHEMIST AND DRUGGIST.

"*'Intensity Coils.'* By 'Dyer.' London: Perken, Son and Rayment, 99, Hatton Garden. 1s. This is one of those valuable little popular manuals which convey a sound elementary knowledge of an important subject in a concise manner. It describes the principal batteries, deals fully with making coils, and illustrates their use by numerous experiments. There are in addition brief explanations of the electric light, the telegraph, telephone, phonograph, &c."

## ARCHITECT

"*'Intensity Coils.'* This is the title of one of the publications of Messrs. Perken, Son and Rayment, of Hatton Garden. It is a "beginner's guide to electricity," describing the way to make batteries, bells, coils, electric light, telegraphs, phonographs, telephones, &c. It is already passing through its sixteenth edition, or the 128th thousand. One of the merits of this brochure is that it does not require an expert to understand it."

## PHOTOGRAPHIC NEWS.

"Messrs. Perken, Son and Rayment, the sixteenth edition of '*Intensity Coils*, being a beginner's guide to electricity, describing the way to make batteries, bells, coils, electric light, telegraphs, phonographs, and so on."

## PHOTOGRAPHY.

"*'Intensity Coils.'* Perken, Son and Rayment, 99, Hatton Garden, E.C. This forms one of the firm's well-known publications, and is a sort of beginner's guide to electricity, describing the way to make batteries, coils, lights, bells, telegraphs, telephones, phonographs, &c."

## CHEMICAL NEWS.

"The induction coil has now come into such general favour, and is used for such varied purposes as a medical instrument, a means of scientific research, and an amusing toy for winter's evenings, that several treatises have lately appeared, describing the best methods of its manufacture and management. The object of the little work before us is explained in the following manner in the preface:—

"What is an intensity coil? How does it differ from other coils? How is it made? What will it do? These and similar questions are being continually asked, and to furnish intelligible replies to them the following pages have been written. It is not a scientific treatise that is here offered to the public, but simply the necessary instructions that those who want to make or use intensity coils desire to obtain."

## CITY PRESS.

"*'Intensity Coils.'* By 'Dyer' (Perken, Son and Rayment). When a handbook, as for instance the one now demanding attention, retains its position for nearly a quarter of a century, few will be inclined to dispute the contention that it is a work possessing considerably more backbone than the generality of such publications. The present book was first published in the year 1867, and it is now in its 16th edition. In its pages will be found, given in an eminently readable form, much that will serve to instruct the young idea concerning the electric light, the telephone, the microphone, and other wonders which, more or less, are associated with the great American inventor, Edison. With all the confidence we displayed when twenty years ago we noticed the first edition, we can heartily commend this handbook to the notice of our readers as a publication 'which will be of service to all persons' engaged in the interesting experiments about which 'Dyer' has so much to say."

## BRITISH JOURNAL OF PHOTOGRAPHY.

"Messrs. Perken, Son and Rayment have issued a small book—'*Intensity Coils; How Made and How Used.*' It forms an excellent beginner's guide to electricity, describing the way in which batteries, coils, &c., are made. The previous editions of this work have evidently found much favour, for the present is the sixteenth edition. It contains numerous illustrations."

# PRESS OPINIONS.—*"Intensity Coils: How Made and How Used."*

## SPORTING AND DRAMATIC.

"'Intensity Coils.' Messrs. Perken, Son and Rayment publish the sixteenth edition of a capital little handbook on this subject by 'Dyer.' Electric lighting, electric bells, the telegraph, the telephone, the microphone, the phonograph, &c., are pithily and comprehensively explained. The work, which has been revised to date, is published at one shilling, so that a practical knowledge of applied electricity up to date is within the reach of everybody."

## OVERLAND MAIL.

"Messrs. Perken, Son and Rayment's useful guide to electricity for Beginners, entitled 'Intensity Coils: How made and How Used,' is now passing through its sixteenth edition (128th thousand). It describes the construction and method of using galvanic batteries, while there are chapters on electric lighting, the telegraph, telephone, and Phonograph. The chapters are subdivided into paragraphs, which are headed in large type. To the amateur electrician this work is invaluable."

## PICTORIAL WORLD.

"'Intensity Coils: How Made and How Used.' This is the third of a series of scientific primers brought out by the well-known firm of Perken, Son and Rayment, 99, Hatton Garden, E.C. It should prove of great use to all those interested in electricity; it is carefully compiled and brought up to date, containing much useful information on electric lighting, bells, motors, the telephone, microphone, and phonograph. Directions are fully given for seventy or eighty instructive and amusing experiments; and we predict a large sale for this, the latest edition."

## BUILDERS' REPORTER AND ENGINEERING TIMES.

"'Intensity Coils.' The scientific information is of an advanced character; but the reader is introduced to it by a preliminary clear and simple explanation of all the rudimentary steps, technical terms, &c. The application of electricity to the various well-known purposes is explained, and the latest projects, and, among these, 'seeing by electricity' are noticed."

## MERCANTILE GUARDIAN

"'Intensity Coils.' Sixteenth edition. By 'Dyer.' London: Perken, Son and Rayment. 1s. Electricity, like photography, is no longer the exclusive pursuit of the professional expert; for the ubiquitous amateur has made it his own, as he has most other things, thus necessitating elaborate handbooks for his particular benefit. The induction coil is much in favour, as it can be applied in so many ways—as a medical instrument, for scientific research, and as part of a drawing-room entertainment. We can advisedly recommend this most useful little handbook, as it contains in a condensed form just the information required. Other branches of the science are treated upon, such as electric lighting, bells and telegraph; the telephone, microphone and phonograph."

## INVENTION.

"'Intensity Coils: How Made and How Used,' Perken, Son and Rayment, 99, Hatton Garden. This is a very useful beginner's guide to electricity, although its title hardly gives a fair idea of its contents. It deals with electric lighting, bells, telegraphs, motors, the telephone, and the microphone, while the phonograph is also noticed, on the ground that its invention was an outcome of the investigation of the phenomena connected with the telephone. This being the 16th edition (128th thousand), the fact that the work supplies a public want may be safely assumed."

## CIVILIAN.

"'Intensity Coils: How Made and How Used,' also electric light, telephone, phonograph, &c. By 'Dyer.' Messrs. Perken, Son and Rayment, 99, Hatton Garden. This is a little handbook which will be of great use to amateurs engaged in their interesting experiments. It is concisely written, the explanations are clear and good, and it is evidently the work of one who has himself done the work. Students will have to find out what is an intensity coil? How does it differ from other coils? How is it made? What will it do? Besides a mass of other information, including seventy or eighty amusing and instructive experiments. All who have a scientific bent will welcome this little book."

## HOME NEWS.

"'Intensity Coils: How Made and How Used.' By 'Dyer,' (Perken, Son and Rayment. 1s.) Describes the manufacture of batteries, bells, coils, electric light, telegraphs, telephones, phonographs, &c., in a crisp, clear, understandable style, which the amateur will value very highly. It is not a book of 'pretension,' but no better testimonial as to its merits as a popular handbook to the fascinating subject of which it treats could be mentioned than the fact that the little volume is now passing through its sixteenth edition, or 128th thousand,

# INTENSITY COILS: A

*How Made and How Used,*

BY

**"DYER."**

WITH A

DESCRIPTION OF THE ELECTRIC LIGHT—  
ELECTRIC BELLS—ELECTRIC MOTORS—THE TELEPHONE—  
THE MICROPHONE—AND THE PHONOGRAPH.

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**SEVENTEENTH EDITION.**

*[The Right of Translation is Reserved.]*

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*PUBLISHED BY THE PROPRIETORS,*

PERKEN, SON & RAYMENT, 99, HATTON GARDEN,

AND SOLD BY ALL BOOKSELLERS AND OPTICIANS.

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1891.

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## *Preface to the Seventeenth Edition.*

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A NEW EDITION of this work being required, the opportunity has been taken to make some additions to it, which, it is hoped, will render it even more worthy of the place it has attained. In addition to describing the construction and method of using Galvanic Batteries and Intensity Coils, other branches of the science receive attention—viz., Electric Lighting—Electric Bells—Electric Telegraph—Electric Motors—the Telephone—the Microphone—the Phonograph.

“DYER.”

June, 1891.