

from having been their hater, and writes this book that others may see the cat in all its possibilities as a useful, attractive, and affectionate domestic animal.

At the present time, when the power cats possess of finding their way home over supposed to be unknown roads is receiving some discussion, it is interesting to note that at a race of this kind held near Liege, Belgium, in 1860, the winner was a blind cat.

But it is not alone of cats as cats that our author tells us: he gives us also a glossary of terms of which the word "cat" forms a part. In fact, "Our Cats and all about Them" is a title well borne out by the contents, so far as such information as the ordinary reader is likely to seek is concerned.

*A Treatise on Ordinary and Partial Differential Equations.*  
By WILLIAM WOOLSEY JOHNSON. New York, Wiley. 8°. \$3.50.

THIS treatise on differential equations is in continuation of the series of mathematical text-books, by the same author, of which have already appeared the differential and integral calculus. Professor Johnson is professor of mathematics at the United States Naval Academy at Annapolis, and it may be that some will trace in the book methods which are said to be characteristic of the United States Army and Navy mathematics; but it must be said that the plan pursued is likely to lead to a clearer understanding by the student. The object is to give a knowledge of the subject, so far as it is likely to have practical application; and in this it is safe to say that Professor Johnson has succeeded.

*A Graduated Course of Natural Science, Experimental and Theoretical, for Schools and Colleges.* Part I. By BENJAMIN LOEWY. London and New York, Macmillan. 12°. 60 cents.

THOSE who are trying to introduce sane methods of science-teaching into our schools, will find in Mr. Loewy's little book much that is suggestive and of value. Mr. Loewy was at one time the science master in the recently discontinued International College

just out of London, and has had twenty years of experience in teaching physics and chemistry to large classes, both in the lecture-room and in the laboratory. In this first part of his series he confines himself to the physical phenomena which arise on account of the mutual attraction of particles of matter, but he has limited himself to those interactions of matter that his experience shows him to be really intelligible to young beginners. This sketch of the author's purpose may be misleading, as the following summation of some of the chapter-heads will show: "Pressure in Liquids," "Filtration," "Cause of Winds," "Hard and Soft Water," "Action of Animals and Plants on Air," etc.

#### AMONG THE PUBLISHERS.

THE Longmans will publish shortly two volumes of American short stories, — "Gerald French's Friends," tales of California Irishmen, by George H. Jessop; and "A Family Tree and Other Stories," by Brander Matthews.

— The October number (No. 43) of the Riverside Literature Series (published quarterly during the school year 1889-90 at 15 cents a number, by Houghton, Mifflin, & Co., Boston) contains the "Story of Ulysses among the Phæacians," from William Cullen Bryant's "Translation of Homer's Odyssey." This selection, which has been described by one of our most famous Greek scholars as the finest and at the same time simplest bit of imaginative writing in all Greek literature, is a complete story in itself. It tells of Ulysses' discovery by Nausicaä, the daughter of King Alcinoüs, his reception by the king, the festivals given in his honor, his song of the Trojan Horse and the Fall of Troy, and his departure for his home in Ithaca, and gives a most excellent picture of the life, manners, and customs of the ancient Greeks. This number of the Riverside Literature Series will be found of especial value for use in schools. It is rarely possible to make a selection from a great poem like the "Odyssey" at once so complete in itself, so fascinating, and so instructive, as is this "Story of the Adventures of Ulysses among the Phæacians."

## WATTS' DICTIONARY OF CHEMISTRY

Revised and entirely rewritten by

M. M. PATTISON MUIR, M.A., F.R.S.E.,

Fellow, and Prælector in Chemistry, of Gonville and Caius College, Cambridge, and

H. FORSTER MORLEY, M.A., D.Sc.,

Fellow of University College, London, and Professor of Queen's College, London, Assisted by eminent contributors.

IN FOUR VOLUMES, HALF BOUND. VOLUMES I. AND II. NOW READY.

VOL. I. (Abies—Chemical Change). Octavo, pp. xx-752. \$14.50.

VOL. II. (Chenocholic Acid—Indigo). Octavo, pp. xii-760. \$14.50.

#### PARTIAL LIST OF CONTRIBUTORS.

LOTHAR MEYER, Ph.D., Professor of Chemistry in the University of Tübingen.

C. O'SULLIVAN, F.R.S., Burton-on-Trent.

T. E. THORPE, Ph.D., F.R.S., Professor of Chemistry at the Royal School of Mines.

RAPHAEL MELDOLA, F.R.S., Professor of Chemistry in the Finsbury Technical College.

E. RAY LANKESTER, M.A., F.R.S., Professor of Zoology at University College, London.

W. D. HALLIBURTON, M.D., B.Sc., Assistant Professor of Physiology at University College, London.

THOMAS STEVENSON, M.D., Lecturer on Forensic Medicine at Guy's Hospital.

ARTHUR G. GREEN, Esq., F.I.C., Research Chemist to the Atlas Works, Hackney Wick.

R. THRELFALL, M.A., Professor of Physics in the University of Sydney, N. S. W.

FRANK W. CLARKE, Esq., B.S.c., Chief Chemist, United States Geological Survey.

IRA REMSEN, Ph.D., Professor of Chemistry in Johns Hopkins University, Baltimore.

F. W. RUDLER, F.G.S., Curator of the Museum of Practical Geology, London.

"Judging the work by the volumes which have appeared, we can fairly assign to it a high rank and predict for it a cordial reception and a very wide field of usefulness."—*The Nation*.

Messrs. Longmans, Green & Co., will be happy to send their Catalogues of Standard and Scientific Works on application.

LONGMANS, GREEN & CO., 15 East Sixteenth Street, New York.

A Necessary Work of Reference  
For Your Library.

## CHAMBERS'S ENCYCLOPÆDIA.

A Dictionary of Universal Knowledge,  
Revised and Rewritten. New  
Type, New Illustrations,  
New Subjects, New Maps.

Edited and published under the auspices of W. and R. Chambers, Edinburgh, and J. B. Lippincott Company Philadelphia.

Volumes I., II. and III. Now Ready.  
VOL. IV. READY OCT. 15th.

To be completed in ten volumes, issued at intervals.  
Price per volume: Cloth, \$3.00; Sheep, \$4.00;  
Half Morocco, \$4.50.

#### TESTIMONIALS:

From the *New York Independent*:

"In learning, accuracy and scholarly character, the work stands on the highest plane and in the first rank."

From the *New York Examiner*:

"It must be pronounced without a peer among the cheaper encyclopædias."

From the *Boston Herald*:

"The whole work is kept closely to its claim to be a dictionary of universal knowledge. If one can afford but one of these large reference books, Chambers's is the one that can least easily be dispensed with."

From the *Washington Tribune*:

"It is a fact well known that the Chambers's Encyclopædia is one of the best authorities in the world."

From the *Boston Congregationalist*:

"Indispensable in almost every library, while its wonderful cheapness is a large point in its favor."

SPECIMEN PAGES MAILED ON APPLICATION.

For sale by all booksellers, or will be sent by the publishers, carriage free, on receipt of price.

J. B. LIPPINCOTT COMPANY,  
715 and 717 Market St., Philadelphia.