schools. It is estimated that 8.5 per cent of the class of 1928 have remained at home, and no record is given for 8.9 per cent of those graduating. The remainder are engaged in commercial pursuits, agriculture, factory work, trade, or other occupations. The number of graduates of public high schools in Pennsylvania has more than doubled during the past eight years, increasing from 18,796 in 1920 to approximately 40,000 in 1928.

THE READING TABLE

Practical Mathematics for Home Study. By Claude Irwin Palmer. New York: McGraw-Hill Book Company.

Indeed an old book, but ever new to new needs—Mathematics as a tool is placed foremost in this most commendable volume. Its very beginning is devoted to simple arithmetic, a regular grade subject, but who has a comprehensive knowledge of the real sharp-cutting tool of arithmetic? Well, read and study Palmer.

This fine pocket edition of practical mathematics delves deep, yet not confoundingly into mathematics, geometry, algebra, trigonometry, and logarithms, and last but not least in importance, tables.

To laymen, business men, tradesmen, students, expert crafsmen, teachers, and mathematicians, this handbook should be readily accessible, and it could be made a source of ready information in several mathematical fields. Teachers of branches of mathematics and allied subjects will appreciate this book in their private library.

H. G. Pickett

Eminent Chemists of Our Time (Second Edition). By Benjamin Harrow. New York City: Van Nostrand Company. 1927.

This interesting and instructive work first appeared in two volumes, but now, in a much enlarged edition, it contains both the "life" and "works" of eleven foremost and illustrous chemists of our generation.

The book opens with Perkins, who at the tender age of 17 planted the corner stone of our coal-dye industry, not only as a theoretical possibility, but as a practical and industrial probability.

In the past year the reviewer has not read *any* book that required more resolution to lay aside at 2 a. m. than Harrow's more-interesting-than-modern-fiction volume.

To read the first part, the biographies, is to be entertained and inspired; to pursue the second part is to plunge into a study and an appreciation of the marvels of advancement in modern chemistry.

H. G. Pickett

A First Course in Physics for Colleges. By Millikan, Gale, and Edwards. New York: Ginn and Company.

In this comprehensive text we have the combined efforts of three teachers of physics from three widely varying sections of the United States. Pasadena, California; Chicago; and Durham, N. C., are the cities from which the co-authors hail. It is a good text and an excellent reference book, and the reviewer is happy to have such a valuable book at his arm's length in the preparation of lectures to present to girl students in a high class pedagogical institution. These girls, by requirement or election, take the first college course in physics. A copy for ready reference will be of great value to teachers of high school physics. That is a sincere recommendation.

H. G. Pickett

The Key to Culture. By Joseph McCabe. Girard, Kansas: Haldeman-Julius Publications.

These little booklets of Joseph McCabe's are of real value to those who find themselves possessed of a degree from a reputable institution of learning, without one single tittle of directed thought in science, and also to those who believe themselves to have an insight into all true thought and rational philosophy. This criticism does not purpose to place McCabe upon a pinnacle erected to scientific knowledge, but its aim is to place before the reader a brief review of some books of this series that McCabe has written. To be mild, the author is a most well-read man. He has been numbered (and should still be) among the advancing educators and progressive thinkers of our time. To date he is accredited with forty short volumes in this scientific series under the title of *The Key to Culture,* and these little booklets cost the reader but five cents a volume. They are written primarily for the layman in science, but to one who appreciates the well-instilled scientific attitude of the author, these little sketches of science are well worth the price and many fold the time spent in reading and digesting the numerous suggestions of original thought contained therein.

In some cases, even the liberal reviewer is astonished at the heterodox views disclosed. But is not the grain worth its salvaging from the husk?

H. G. Pickett

Physics for College Students. By A. A. Knowlton. New York: McGraw Hill Company, Inc.

There are textbooks in physics available today that would place the average teacher of physics, whatever environment or status of teaching he may be in, at a loss. But it is not so much the textbook that fills the course with real and up-to-date vitality as the background the instructor has of the subject. Prof. Knowlton frankly states in the preface that he has found himself in quite a radical change of environment; that is, having taught in a technical, or engineering school, for twelve years, he finds himself in a typical liberal arts school. He attempts to present the subject of physics in this new text from a cultural, and as he says a "humanistic," standpoint rather than from a purely technical point of view. However, if one carefully reads and concentrates on this new text, the conclusion will be that the technical and scientific value is not lost, but is really presented in a manner most artistic and thereby enhancing the delight in the teaching of physics with a well-defined background.

H. G. Pickett

Orleans Algebra Prognosis Test. By Joseph B. Orleans and Jacob S. Orleans. Yonkers-on-Hudson, New York: The World Book Co. Packages of 25 with Manual, Key, and Class record, $1.40.

Orleans Geometry Prognosis Test. By Joseph B. and Jacob S. Orleans. Yonkers-on-Hudson, New York: The World Book Co. Packages of 25, with Manual, Key, and Class Record, $1.70.

The *Orleans Algebra Prognosis Test* and the *Orleans Geometry Prognosis Test* are so alike in principle and in intention that they may very well be considered together. According to the authors, the scores on the test, when properly checked may be used:

1st. To advise students whether to undertake the study of algebra (geometry).

2nd. To advise students who have failed once whether they should repeat the study another year.

3rd. To divide students into ability groups for the purpose of instruction.

4th. To determine, in connection with achievement test scores, whether students are doing their best work and whether instruction is effective.

To one who is old-fashioned enough to believe that no student should be allowed to finish two years of high school without one year of algebra and one year of geometry, the first is valueless. To one who believes that a task once undertaken should be carried to completion, the second is valueless. As to the third use, pupils may be divided into ability groups by other means.

Be that as it may, these tests appear to have a real use which will be described later.

The algebra test consists of a test on arithmetic, eleven lessons on algebra, each followed by a test on that lesson, and finally a review test. Each lesson gives a few simple algebraic facts, followed by a test to show whether the pupil has learned these facts. Each lesson increases in difficulty, as do the corresponding tests.

Each lesson and each test is timed and the total is supposed to be accomplished in an hour's time, or may be given in two half-hour periods.

To the writer's mind these tests used as introductory lessons in algebra would be most valuable as giving a good foundation in the fundamental ideas of algebra.

The geometry test is similar in every way to the algebra test, and might be used for the same purposes.

Henry A. Converse

ALUMNÆ NOTES

Matilda Roane is studying music supervision at the Washington College of Music this year.

Mary A. Hartman is teaching at Chadbourn, N. C.

Virginia Shore is living in Columbus, N. C.

Dorothy Hearring was a recent visitor on the campus.

Emily Hogge, Ruth Fitchett, Charlotte Wilson and Virginia Curtis were back for the annual dance given on February 23. All of these girls are teaching in Hampton, except Ruth, who is teaching in Newport News, Va.

Clotilde Rodes and Ida Huckstep were welcome visitors at the college recently.

We were all glad to see Mary Fray, ex-president of student government, back at school for a short visit. Florence Fray, teaching in Main Street School, Harrisonburg, this year, expects to come back to the college for her degree in the near future.

We are delighted to see Edna Dechert and Delucia Fletcher attending so many school functions. We are always glad to have our old girls back—even if they are town girls.

About the middle of February, the alumnæ secretary, Mrs. Garber, left for a tour to visit the large high schools of the state. She addressed the senior girls of Petersburg, Portsmouth, Norfolk, and Newport News High Schools, and presented the teacher-training work to them. She was most cordially received by the principals and students of the high schools. The Alumnæ of Harrisonburg met on the nights in which Mrs. Garber was in their city, and the meetings were thoroughly enjoyed by all those present. On February 11 the alumnæ of Petersburg met in the Parrish House of St. Paul's church, at four-thirty in the afternoon. Those present were Helen Bowman, Blanche Ridenour, Mildred Jones, Annie Lee Jones, Mrs. James Scott, and Annie Tomko. The Petersburg Chapter has been very active this year, under the able direction of Helen Bowman. They recently cleared over fifty dollars at a benefit bridge party.

On February 14 the Portsmouth alumnæ met at the Y. W. C. A. about 7:30 p. m. The secretary was delighted to see Nancy Roane, Carrie Bishop, Mary Woodard, Audrey Chewning, Rowena Lacy, Elizabeth Thomas, and Emily Nicols Spong. My, we had a good time! Emily had prepared (all