

W. E. B.—Please solve the following questions from the Academic Arithmetic :

1.—Page 111, Ex. 53, No. 8.—An empty glass bottle, weighing 6.66 ounces, is filled with olive oil weighing 7.32 ounces. What is the specific gravity of the bottle of oil?

2.—Page 112, Ex. 53, No. 13. A solid soluble in water, but not in alcohol, weighs 346 grains in air and 210 grains in alcohol. Find specific of the solid, that of alcohol being .85.

3.—Page 112, Ex. 53, No. 14. Find the specific gravity of a piece of wood from the following data : Weight of wood in air 25.35 lbs., weight of metal sinker 11 lbs., weight of wood and sinker in water 5.1 lbs., specific gravity of metal sinker 8.95.

4.—Ex. paper 39, page 123. Calculate the specific gravity of alcohol from the following data : Weight of flask empty 14.326 grains, weight of flask filled with water 29.654 grains, weight of flask filled with alcohol 26.741 grams.

1.  $6.66 \text{ oz.} \div 3 \text{ 33 s. g. of flint glass} = 2$ , weight in water.

$7.32 \div .915 \text{ s. g. of olive oil} = 8$ , weight in water.

$(6.66 + 7.32) \div (8 + 2) = 13.98 \div 10 = 1.398 \text{ oz.}$

2. 346 grs. in air. 210 grs. in alcohol.

$346 \text{ grs.} - 210 \text{ grs.} = 136 \text{ grs.} \div .85 = 160 \text{ grs.}$

$346 \div 160 = 2.1625$ .

3. Weight of wood, 25.35 lbs.

" metal, 11 36.35 weight of both.

5.1

Water displaced =  $\frac{31.25}{1.229}$

$11 \text{ lbs.} \div 695 = \frac{30.021}{.844}$

$25.35 \div 30.021 = .844$

4. Flask filled with water, 29.654 grs.  
Weight of flask, 14.326

Weight of water = 15.328 grs.

Flask filled with alcohol, 26.741 grs.

Weight of flask, 14.326

Weight of alcohol = 12.415 grs.

$12.415 \div 15.328 = .8099$

G. M.—Kindly analyze the following and parse words in italics : "Don't let *it be a matter between you and me.*"

A simple sentence : Simple subject, (Thou) ; simple predicate, "do let ;" object, "it (to) be a matter between you and me ;" extension, "not."

"It" a pronoun, standing for "this affair," or some idea like it ; (to) "be" a verb in the infinitive depending upon "it." (This follows the Latin construction where a verb in the infinitive agrees with its subject in the accusative. The relation may be seen by making the sentence complex : "Don't permit that it shall be," etc.) "Matter" is nominative after the verb "to be."

"Between" is a preposition.

When I entered my schoolroom one morning in June, 1899, I found a little robin there, which had flown in through a broken window. When it saw me, it appeared to be very frightened, and kept flying round the room as high as it could fly ; I opened the doors and windows thinking it would fly out, but it did not appear to notice them.

It was nine o'clock. I picked up the bell, and before walking to the door I rang it once quite loudly ; the bird flew a little lower. I rang it again ; it flew still lower. Again, and it dropped to the floor. I picked it up, went to the open window by which it entered, and let it go, when it flew away seemingly quite unhurt, and joined its mate in a field on the opposite side of the road.

I do not know whether or not the ringing of the bell saved the bird's life, but it looked like it.

A. K. M.

Here (Chatham, N. B.,) during January and February we have frequently seen crows, partridges, moose birds, blue jays, wood peckers, black birds, sparrows, snow birds and chickadees. And the weather has, for a week past, been much like what we usually have during the first half of April.

J. B.

### RECENT BOOKS.

JEAN MITCHELL'S SCHOOL, a story by Angelina W. Wray. Illustrated. Cloth. Pages 244. Price \$1.25. Public School Publishing Co., Bloomington, Illinois.

It is seldom that an author is able to put the very heart of life into the straightforward narrative of ordinarily humdrum duties. To do this is the mark of genius. The public school is dear to the heart of all and many popular stories have been written in which the interest centres around the characters of teacher and pupil, but, from the Hoosier Schoolmaster down, all draw their dramatic movement from the relations outside of school life. In "Jean Mitchell's School," however, just the reverse is true. What of dramatic element there is in the every-day life in her school district appears only as drawn out by the most tenderly developed flow of human spirit in the school room. It was said to be the worst kind of a "hard school" before Jean Mitchell took it, but there is scarcely a break in her control of it from the first. How was it done? What was the power she used? No wizard charm, but a more wonderful sympathetic insight and patient careful watching for opportunity. What a deep yet simple drama it all is as the author has worked it out, individual by individual, and step by step.

COURS COMPLET DE LANGUE FRANÇAISE. Par Maxime Ingres de L'Université de Chicago. Cloth. Pages 314. Price, postpaid, \$1.62. The University of Chicago Press, Chicago.

The University of Chicago Press announces the publication of a new text book for the study of the French language. The author of the volume is Professor Maxime Ingres of the Department of Romance Languages and Literatures in the University of Chicago. Professor Ingres is an advocate of the theory that one must read and talk French in order to learn the language, and his book, therefore, is written entirely in French. As an instructor he has won a wide reputation, not only at Chicago, but at McGill College, and in the Atlantic provinces where he is well and favorably known. The book is designed for the use of individual students as well as a text book for classes and academies, colleges and universities, and in private clubs. The fine paper, large type and other excellent features of the book should win for it a deserved popularity.