

the mind grasps them with an intensity of interest that holds them as permanent possessions, and they become the principle of future discoveries and acquisitions.

The function of the school is to lift the standard of national taste, and to beget in the people the power to discern between the true and the false, and to enjoy what is highest, truest and best. An unschooled people in a republic will be debased and grovelling. Flattered and plundered by turns, they will become the helpless but savage tools of demagogues, and will at length unbar the bloody gates of civil discord, to be rescued only by the iron hand of a military despot."

Mr. H. M. Welland, Principal of Vermont Academy, on the "Education Needed," concluded rightly that :—

"The teacher's moral responsibility is second to none, intrusted as he is with the priceless possessions of family and state. Morality must be the fundamental principle of a successful system of education. The teacher cannot neglect his pupil's moral training, nor can the pupil disconnect his present conduct from the future results. Intellectual activity does not necessarily include moral rectitude, and that training is worse than useless which separates mental powers from reverence for the fundamental principles of morality, the safeguards of church and state. A comparison of teacher's intellectual work alone leads to trife for intellectual honors, and a cessation of moral training. The possibilities of genius are dependent upon the essential principles of morality. Law and morality in society are largely traceable to order and morality in the school. Lack of moral training in the schools renders compulsory education farcical. The mechanical harmony of organs conceived by man is nothing compared to the divine harmony of delicately organized individuals. Acquaintance with each pupil and intensity of action will achieve success. The influence of the moral teacher is never lost."

We had noted other excellent passages for extraction, but have space in this issue only for the following, from "The Influence of Woman's Education on National Character," by Miss Freeman, President of Wellesley College. The *Journal of Education* says that Miss Freeman spoke for three quarters of an hour with eloquence, and with clearness, but without a note, and she seems to have awakened more interest than any other of the talented speakers who addressed the Convention during the week :—

"I have been asked, to-day, for the practical outcome of this new movement for the higher education of women. I was told this morning that even though all this was true, there is no place now for the work of all the "highly-educated women" we have. Hardly a week passes that fathers and mothers and teachers do not ask me whether it will pay to send some brilliant, ambitious girl to college. There is but one answer : If civilization pays, if education is not a mistake, if hearts and brains and souls are more than the dress they wear, then every interest dear to a Christian republic, by all the hope we have of building finer character than former generations have produced, give the girls the widest and the highest and the deepest education we have dreamed of, and then regret that it is not better, broader, and deeper. Never ask, as did a New England college president, "If this girl marries, then what becomes of her education?" A beautiful woman, a professor in a prominent college, resigned her position last May to be married to a business man in a little lumber town, in the woods of a Western state. He is not a college graduate, but he has made this town a centre of good influence, and will make it a city of importance. My friend said to me when she left her work in college, "I'm going to a broader work, as the wife of a business man, in a new town, where there is no church, no school, and

no library, and I want the congratulations of college presidents and professors." Never believe that there is no room for such women, while the Southern States show their record of illiteracy, while Utah's heathenism blots out civilization, while the Indians harass the West, when European pauperism flocks to the East. But let us have hope that we shall meet the demands of the foreign population, that we shall uplift the ignorance of the South, while the women and girls stand ready for the higher education, and more than ready to give as freely as they have received. France never needed educated mothers as America needs them to-day, and France nor Europe ever realized the glory of civilization which will crown our republic, when all the homes, school-rooms, and churches are filled with women as intelligent as they are loving, as broad-minded as they are large-hearted, as strong in body and mind as they have proved themselves generous in heart. The civilization of the Anglo-Saxon race in America, therefore, depends upon the education, —physical, mental, moral, and social,—of the women for the next fifty years."

Prize Competition.

ARITHMETICAL PROBLEMS.

FOR CANADA SCHOOL JOURNAL COMPETITION PRIZES—THIRD CLASS QUESTIONS.

1. Simplify $\frac{3}{4}$ of $(\frac{1}{2}$ of $2\frac{1}{2} + 6\frac{7}{8} + 2\frac{1}{4}) + \frac{1}{2}$ of $(5\frac{1}{2} + 2\frac{1}{2} + 3\frac{1}{4})$.
 Solution. $\frac{3}{4}(\frac{1}{2}(\frac{5}{2} + \frac{53}{8} + \frac{5}{4}) + \frac{1}{2}(\frac{11}{2} + \frac{5}{2} + \frac{13}{4}))$
 $\frac{3}{4}(\frac{1}{2}(\frac{52}{8} + \frac{53}{8} + \frac{10}{8}) + \frac{1}{2}(\frac{22}{4} + \frac{10}{4} + \frac{13}{4}))$
 $\frac{3}{4}(\frac{1}{2}(\frac{115}{2}) + \frac{1}{2}(\frac{45}{2})) = 6\frac{1}{4}$ Ans.

2. A grocer bought 54 gallons of molasses for \$32.40 ; a part being lost by leakage, he sold the remainder for $\frac{2}{3}$ of cost per gallon, gaining $\frac{1}{2}$ of original cost. How many gallons were lost ?
 Ans. $5\frac{1}{2}$

Solution. $\frac{1}{3}$ of \$32.40 = \$35.10 selling price.
 \$32.40 ÷ 54 = 60 cents cost per gallon.
 $\frac{2}{3}$ of 60 = 72 " selling price per gallon.
 \$35.10 ÷ 72 = 48 $\frac{1}{2}$ gallons sold.
 54 - 48 $\frac{1}{2}$ = 5 $\frac{1}{2}$ gallons lost.

3. A room 20 feet long, whose width is $\frac{2}{3}$ of its length, and capacity 2,720 cubic feet, is papered for \$5.40, with rolls of paper, containing 8 yds. each, the paper being 27 inches wide, costing 30 cents per roll. Find the number of rolls required, and what was charged for the work. Ans. 11 $\frac{1}{2}$ rolls, and \$2.00 for work.

Solution. $20 \times \frac{2}{3}(20) = 320$ area of floor.
 $2720 \div 320 = 8\frac{1}{2}$ ft. height of room.
 $2(20 + 16) \times 8\frac{1}{2} = 612$ sq. ft. area of walls.
 $8 \times 3 \times 2\frac{1}{2} = 54$ " " " roll.
 $612 \div 54 = 11\frac{1}{2}$ rolls.
 $11\frac{1}{2} \times 30 = \3.40 cost of paper.
 $\$5.40 - \$3.40 = \$2.00$ charge of workman.

4. If 30 men do as much work as 72 boys in a day ; in what time will sixty boys finish a work that requires 20 men for 15 days to do $\frac{1}{2}$ of it ? Ans. 36 days.

Solution. By problem 72 boys' work = 30 men's work.
 $\therefore 1$ " " = $\frac{3}{2}$ man's "
 $\therefore 60$ " " = 25 men's "
 If 20 men do $\frac{1}{2}$ of work in 15 days.
 $\therefore 20$ " " = 45 " "
 $\therefore 25$ " " = 36 " " Ans.

5. A boy finds that in going along the road he passes a telegraph pole every 30 seconds, making 88 steps. If poles are 66 yards apart, find his rate of walking per hour, and the length of his step.

Solution. By problem he walks in 30 sec. 66 yds.
 \therefore " " " 1 " "
 \therefore he walks in 1 hr. or 3,600 sec. 7,920 yds. or 4 $\frac{1}{2}$ miles.
 And $\frac{2}{3}$ of 1 yd. = 2 ft. 3 in. in length of step.

6. A merchant hired a car that would hold his whole stock of tea and sugar ; viz. 60 chests of tea and 40 bbls. of sugar ; but as other merchandise would occupy $\frac{1}{4}$ of the space he found he could only take 54 chests of tea and 24 bbls. of sugar. How many chests or barrels separately would the car hold ?