

with his eye at such a distance from him that he could just see one-third of the circumference ; how far from his eye was the hoop, supposing it to be two feet in diameter !

D. HICKS, Rose Hall.

122. What is the greatest possible number of hills of corn that can be planted on a square acre of land, a hill to occupy a mathematical point, and the hills to be at least $3\frac{1}{2}$ ft. apart ?

M. A. JAMES, Baltimore, Ont.

123. Through what distance will a point in the circumference of a carriage wheel move while the carriage is travelling one mile ?

T. H.

124. If h_1, h_2, h_3 , be the heights of the sights of a rifle wheel adapted for shooting at the distance of 100, 200, and 400 yards respectively, prove that $4h_1(h_2^2 - h_3^2) + 2h_2(h_3^2 - h_1^2) + h_3(h_1^2 - h_2^2) = 0$.

CHAS. BARNES, Ottawa.

125. Parse the words in italics in

"More is thy due than *more* than all can pay."

—Macbeth, I., iv., 21.

"Your face my thave is *as* a book."

—do., I., v., 60.

DIRTO.

126. "Natural Philosophy teaches us that 'action is equal to reaction,' i.e., that the force of the bullet is equal to the kick of the gun." From *Reflex Action of School Teaching* by J. D. Steele, in the National Teachers' Monthly. Point out the double error in the latter assertion of the above quotation.

EDITOR.

127. The visible energy of a moving hammer can be converted into the invisible energy of heat. How would you prove this, and what metal would theory recommend as the *heat-collector*.

EDITOR.

EDITOR'S DRAWER.

TO SUBSCRIBERS.

Subscribers are respectfully requested to remember and observe the following rules :

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TO CORRESPONDENTS.—"A Teacher's" questions in regard to the Superannuation Fund, will receive attention in our next issue.

HOME SCIENTIST.—We have received a copy of this new monthly, published by John A. Clark, Wadsworth, Ohio, U.S. The following extract from the prospectus explains its object. "We hope to meet a public want, which so far as we know has

not been met ; to occupy a field as yet unoccupied ; to bring before the the people in cheap form, and as far as may be in language unincumbered with technical terms, or words or phrases understood only by scholars, such scientific facts and useful knowledge as shall be attractive, instructive, and elevating ; that the farmer, the mechanic, the workmen in our numerous manufactories, journeymen, apprentices, and day-laborers, in their hours of relaxation, may at a trifling cost have at hand something from which they may derive such useful and permanent information as shall invigorate the mind and strengthen moral principle. To meet such a want is our object, and such a periodical we think is called for."

CORRECTIONS.—We regret that some misprints crept into Mr. T. J. Godfrey's article on Phonetic Spelling, in the January number of the "Teacher." We note the following corrections :

Page 7. "The sound should have more than one sign," should read, "No sound, &c."

Page 8, second column. For "not *wiser* in other respects" read, "not *worse*."

Page 9. For "words which *profess*," read "words which *possess*," &c.

Page 9, near bottom for "*design* to retain," read "*desire*."