

VENTILATION OF SCHOOL HOUSES.

It is really astonishing how much ignorance or thoughtlessness there is among teachers even at this late day, about properly ventilating their school-rooms. It would seem that enough had been written and said about this subject, yet if the readers of this magazine will officiate as visiting committee and visit our schools in the winter season, they will learn the rule, and not the exception, is, bad air in the school-room. The construction of the room is faulty, in a majority of instances, but the fact is apparent that teachers do not *practically believe* in ventilation, and do not do the best they can to have good air in the room. To show the bad effects of want of ventilation, I quote from *Mayhew's Universal Education* a short article :

"Both irritability of the nervous system and dulness of the intellect are unquestionably *the direct and necessary result of a want of pure air*. The vital energies of the pupils are thus prostrated, and they become not only restless and *indisposed to study*, but absolutely *incapable of studying*. Their minds hence wander, and they unavoidably seek relief in mischievous and disorderly conduct. This doubly provokes the already exasperated teacher, who, from a like cause, is in the same irritable condition of both body and mind. And what is more natural under such circumstances, than to resort to the use of the rod."

Now, brother teacher, when your school gets very noisy some afternoon, when you have had a good fire and warm room all day, try this experiment : Set every scholar marching round the room, or turn them out of doors for five minutes, then open every window, and when you call them back and you close the windows again, they will be quiet and go to work. Why? Because they have taken a new lease of life. City teachers are familiar with this, but many of our common country schools suffer more than can be calculated from the want of pure air, of which such an abundance is all about them out of doors.—E. S. M., in *Maine Journal of Education*.

I. Papers of the recent Examinations.

To the Editor of the Journal of Education.

SIR,—In the June number of the *Journal*, I gave solutions of the questions proposed, in Algebra and Natural Philosophy, to candidates for First Class certificates at the recent Examination of Public School Teachers. Owing to my absence from town, I had no opportunity of correcting the press; and I find that the discussion of one of the questions in the Natural Philosophy paper appears in a somewhat unintelligible form, in consequence of a confusion in the letters employed. I refer to the 3d question, of which I gave two solutions. In the *first solution*, in the expressions, "the forces represented by P A and P B," and "of which A P and B P are adjacent sides," P should be changed into D. The confusion in the *second solution* is such, that perhaps the simplest course is to give the whole de novo.—Draw C F perpendicular to A D, and C E to B D. Then, since the lever is at rest, the force at A, multiplied by C F, is equal to the force at B, multiplied by C E. That is

$$D A \times C F = D B \times C E.$$

Therefore, triangle A C D = triangle B C D. ∴ A C = B C.

In the solution of question 4, a misprint occurs, which I should also like to correct. Instead of "uniting in the direction B A, and uniting in the direction A B," read "one acting in the direction B A, and one acting in the direction A B."

In question 7, it is put for 1; but this can create no difficulty.

I am Sir,

Yours truly,

GEORGE PAXTON YOUNG.

TORONTO, 12th September, 1872.

SELECTIONS FROM RECENT MISCELLANEOUS EXAMINATION PAPERS.

ETYMOLOGY AND SPELLING.

FOR 2ND AND 3RD CLASS TEACHERS.

1. Correct, where necessary, the spelling of the following words :—paroxysm, miniature, mischievous, delapidate, alkemy, abscess, harpsicord, acheive, yoeman, beverage, obliquy, catiff.
2. Attach roots to the following prefixes, exhibiting, when possible, change made in prefix for the sake of euphony :—ad, re, inter, trans, con, in, syn, amphi, hyper, sub.
3. Mention prefixes, each in combination with some word, which denote *negation* and *destitution* in place or time.

4. Give words in which the following affixes appear, and state the force of each affix :—"ster," "mony," "ric," "ion," "ency," "tude."

ADDITIONAL FOR SECOND CLASS CANDIDATES.

5. Give the adjectives of Latin derivation corresponding to the following nouns :—Dog, head, house, friend, step, light, law, rest.
6. Trace the following to their Greek roots :—Rhetoric, crypt, nautical, cosmogony, ephemeral, asteroid, polity, telegraph.
7. Give words—two in each case—derived from these Latin roots :—Faber, fruur, integer, licet, plico, salio, voveo.

ENGLISH GRAMMAR.

2ND AND 3RD CLASSES.

[Second Class will omit 1, 4, 6, 7, and 11]

1. Name the four great divisions of Grammar, and state the province of each.
2. Define CASE, PERSON, VOICE, MOOD, and TENSE.
3. Form abstract nouns from the following adjectives : pure, brief, slow, dear, intricate,
4. Name and distinguish the plurals of nouns which have two forms of the plural with different signification.
5. Write the plurals of the following : staff, potato, canto, grotto, attorney, seraph, cousin-german, medium, stamen, appendix, thesis, chrysalis.
6. Of the following adjectives compare such as are capable of comparison : cool, late, happy, perpendicular, many, triangular.
7. Name the distributive and the indefinite pronouns.
8. How is the verb inflected? Name the moods, and state the force of each.
9. Quote the rules of syntax which the following sentences are severally intended to exemplify :
(a) Give us this *day* our daily bread.
(b) The youth of this country *are* well educated.
(c) The horse and the man *that* we met.
10. Parse the following sentence, and change the active into the passive construction.
"His love of change drove him a pilgrim to the Holy Land."
11. Analyze the following : "Stimulated in turn by their approbation, and by that of better judges, he turned to their literature with redoubled energy."

ADDITIONAL FOR 2ND CLASS.

12. Give rules for the proper use of "shall" and "will."
13. Form or quote sentences to illustrate :
(1) The restrictive and the connective force of the relative pronoun.
(2) The twofold form of the cognate object.
14. Examine the correctness of the following, giving, in each case, your reason for retaining or altering the construction :
"The nations not so blessed as thee
Must in their turn to tyrants fall."—*Thomson*.
"In reality more than one principle has been contended for at one time."—*Arnold*.
"Every street and square in Dresden was by this time crowded with troops."—*Alison*.
"At an hour
When all slept sound, save she who bore them both."—*Rogers*.
15. Analyze the following :
"Fancy had cast a spell upon the place
And made it holy ; and the vilagers
Would say that never evil thing approached
Unpunish'd there. The strange and fearful pleasure
That filled me by that solitary spring
Ceased not in riper years ; and now it woke
Deeper delight and more mysterious awe."—*Southey*.

ENGLISH GRAMMAR AND ETYMOLOGY.

FIRST CLASS.

1. Give reasons for regarding the Article as an Adjective.
2. Give, as fully as you can, the Syntax of the possessive Case.
3. Parse the italicised words in the following sentences.
(a) No amount of experience will teach *them wisdom*.
(b) *Lepidus flatters both,*
Of both is flattered ; but he never loves,
Nor *either* cares for him.
(c) Villain, knock *me* at his gate,
And rap *me* well.
(d) *Whom* he would he slew.