here be suggested, that if, in the exercise of his duty, the inspector feels bound to note errors in management or immaturity of judgment, it were well to mention these things to the master himself at least more than once. We unhesitatingly affirm that it is neither in the interest of the schools nor favourable to the existence or continuance of good-fellowship to have periodical visits from men who appear to be only too ready to report unfavourably, and who are not in a position always to judge with fairness respecting the diligence or efficiency of the masters. Holding this opinion, we therefore venture to ask the following questions:—Should there be any inspection of High Schools? Does the present system of inspection exert a healthful influence upon the school or strengthen the position of the masters and teachers? Should any grant of money be made by the Government? Are secondary schools treated in the same manner in any other country?

Surely in these days of examinations, conducted by the Education Department, the College and the University, there is no lack of trying tests; no lack of opportunity, recognized diligence and efficiency. But the infallible proof is furnished by the class of men and women our High Schools turn out. Do they show application, power, and truthfulness? Do they walk according to the principles of honesty and common sense? Are they fit for life's work? If so, then, no official's report can shake the confidence of a discerning public in the schools, or weaken the influence of the masters.

SCHOOL WORK.

MATHEMATICS.

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SOLUTIONS TO QUESTIONS IN APRIL NUMBER.

By Geo. Ross, Math. Master Galt Coll. Inst.

17. Draw $BD = AC$ and DF at right angles to AD to meet the bisector AF in F as indicated. Produce CA to E and make $AE = AB$, join EB. Then angle $AEB = \frac{1}{2}$ angle $BAC =$ angle DAF; also $EC = AD$. $\therefore$ triangles EBC and DAF are equal in all respects, $\therefore$ etc.

18. If we join the centre with each of the angular points, it can be readily shown that one pair of opposite angles is equal to the other pair. Since the four angles of every quadrangle equal four right angles, the proposition follows.

19. If BAC and BDC are angles in the same segment, then join B and C to a point F in the remaining segment of the circle. BAC and $BFC = 2$ right angles, also BDC and $BFC = 2$ right angles, etc.

20. The converse of first part of 18 can be deduced indirectly by describing a circle through three of the points of a quadrangle, and supposing it to cut the fourth side in a point other than D.

21. Let P be point of intersection of circles about ACQ and BCR. Draw AF and BF at right angles to AC and CB, then F is centre of a circle passing through A and B and cutting $QABC$ at right angles. If P lies on this circle then must angle $AFB = 2$(2 right angles $- APB$); but since angle $AFB = 2$ right angles $-$ angle ACB, we must have 2 angle $APB = 2$ right angles $+$ angle ACB. Now angle $APB = 4$ right angles $-$ angles $APC -$ angle $CPB = 4$ right angles $-$ (2 right angles $-$ angle CQA) $-$ (2 right angles $-$ angle CRB) $= CQA + CRB = CAQ + CBR$

$= $ right angle $- \frac{1}{2}$ angle $BCR +$ right angle $- \frac{1}{2}$ angle QCA

$= 2$ right angles $- \frac{1}{2}$ (2 right angles $-$ angle ACB)

$= $ right angle $+ \frac{1}{2} ACB$, $\therefore$ etc.

22. Let AD and BE intersect in R, CF