

that country. Many intelligent people, and the number of such is increasing, earnestly contend that it is quite possible to have a system of public education non-sectarian, non-denominational, but unmistakably Christian. There is a great mistake constantly made by most men on this subject. They allow their minds to dwell too much on the differences which exist among the several denominations and thus pay more attention to the differences than to the agreements in the matter of Christian belief. In regard to this, what is wanted is the considerate forbearance which intelligent, sensible men have to exercise towards their brethren in the church. If this were done we would have fewer denominations very shortly. Let our readers think of the extent of the truths of Christianity common to all honest, earnest people, in comparison with the shadows of miserable

differences between them, and they will be surprised that we should be so suspicious of one another.

In order, therefore, that the great work of evangelizing the world may be accomplished and kept on the high plane of power and purity, necessity is laid upon all Christians to firmly set aside all minutiae in matters of belief and cordially to welcome all workers whose main object is the same. The Public School is one of the most influential agencies, if not the most influential, in the country, to secure this end.

It gives us, therefore, much pleasure this month to publish part of Dr. King's address, lately delivered in Manitoba at the opening of the College in Winnipeg. This question will not "down," and should not, till the right solution is reached, and this desirable result we have not yet obtained in the Ontario Public Schools.

SCHOOL WORK.

MATHEMATICS.

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JUNIOR MATRICULATION, 1889.

ALGEBRA—PASS.

Examiners: A. R. Bain, M.A.; W. H. Ballard, M.A.; J. McGowan, B.A.

NOTE.—Candidates for University Scholarships will take only those questions marked with an asterisk. All other candidates (whether for Pass or Honours, Second Class or First Class Certificates) must take the first three questions and any five of the remainder.

1. Prove (1) $(-a) \times (-b) = +ab$;

$$(2) \frac{a}{b} \div \frac{c}{d} = \frac{ad}{bc};$$

$$(3) a^m \times a^n = a^{m+n}.$$

2. Solve (1) $13x - 8y + 21z + 19 = 0$,
 $19x + 6y + 14z + 7 = 0$,
 $x + 24y + 35z + 13 = 0$;

$$(2) \frac{a}{x} + \frac{b}{y} = 5,$$

$$\frac{b}{2x} - \frac{a}{3y} = \frac{b^2 - a^2}{ab}.$$

*3. Solve (1) $2x^2 - 3xy + 11y^2 = 1$,

$$3x^2 - 5xy + 5y^2 = 3;$$

$$(2) \frac{x+3}{x} + \frac{1}{\sqrt{x+3}} = \frac{6}{x}.$$

*4. Factor

$$(1) (a+b+c)^4 + a^4 - (b+c)^4 + b^4 - (c+a)^4 + c^4 - (a+b)^4;$$

$$(2) (x+yz)(y+zx)(z+xy) + (x^2-1)(y^2-1)(z^2-1).$$

5. If $\frac{a}{b} = \frac{c}{d} = \frac{e}{f}$ shew that $\frac{a}{b}$

$$= \frac{a+c+e}{b+d+f}.$$

State and prove the more general theorem of which this is a particular case.

If $\frac{x}{a} = \frac{y}{b} = \frac{z}{c}$ shew that