hey and some others would stand by him, and that hey could throw stones as well as the other party. The Captain however, declined this resort to carnal weapons, and took the occasion to enlighten his friends upon the nature of the pure gospel, for which they thanked him. and retired very much pleased with their visit. On reaching Genoa, the Captain found that a process had been commenced against him, and his passport was refused him to continue in Switzerland. It may be some time yet before the case is decided.

Correspondence.

FOR THE CHURCH TIMES.

KING'S COLLEGE, WINDSOR,
December 10, 1852.

REV. SIR,—I enclose a copy of the Questions proposed by me at the Terminal Examination just held. Since some remarks of a rather disparaging nature, as I think, relative to the Mathematical instruction given here, have appeared in the columns of the " Church Times," I must beg you, as an act of justice, to insert them, either the whole of them, or such as the type you have will allow, in the next number of the paper.

The manner in which the Examination is conducted is as follows. The young men attend in the Hall, where the questions are proposed to them, each one having a copy, and they give in their answers to them in writing. The whole is carried on under the eye of the Professors, and the time allotted is from ten to two.

I am, Rev. Sir, very faithfully, yours,
J. BAINBRIDGE SMITH, M. A.
Prof. Math. & Nat. Phil.

REV. J. C. COCHRAN,
Editor of " Church Times," &c.

TERMINAL EXAMINATION, DEC. 1852.

1st. Year. Euclid, I. II., Arithmetic, Algebra.

1. The st. lines which join the extremities of equal and parallel st. lines, are themselves equal and parallel.
2. The complements of the parallelograms which are about the diameter of any parallelogram are equal to one another.
3. If a st. line be divided into any two parts, the rectangle of the whole, and one of the parts, equals the rectangle of the two parts together with the square of the aforesaid part.
4. In every triangle the square of the side subtending an acute angle is less than the square of the sides containing it by twice the rectangle contained by either of those sides, and the st. line intercepted between the acute angle and the perpendicular from the opposite angle.
5. If 144 men dig a trench 40 yrds. long, 1¼ ft. broad and 4 ft. deep, in 3 days of 10 hrs. each; how many would dig a trench of 60 yrds. long, 5 ft. deep and 2 ft. 3in. broad, in 15 days of 9 hrs. each ?
6. In England gunpowder is made of 75 parts nitre, 10 sulphur, and 15 charcoal. In France, of 77 nitre, 9 sulphur, and 14 charcoal. What weight of each ingredient would there be in the compound where half a ton of each kind are mixed?
7. [Omitted by the Printer, for want of Algebraic characters.]
8. [Omitted by the Printer, for want of Algebraic characters.]
9. A cistern is filled in 20 minutes by three pipes, one of which conveys 10 gals. more, and the other 5 gals. less than the 3rd., per minute. The cistern holds 320 gals. How much flows thro' each pipe, per minute?
10 A man rows with the tide, 18 miles in 1½ hours, and back against it in 2½ hrs. What rate per hour does the tide run?
11. [Omitted by the Printer, for want of Algebraic characters.]
12. The Arithmetic mean between two numbers exceeds the geometric by 13, and the geometric mean exceeds the harmonic by 12. Find the numbers.

2nd Year, Euclid VI., Plane Trigonometry, Statics.

1. The sides about the equal angles of equiangular triangles are proportional.
2 Similar triangles are to one another in the duplicate ratio of their homologous sides.
3. In right-angled triangles the rectilineal figure on the side opposite the right angle, equals the similar and similarly situated rectilineal figures on the sides containing the right angle.
4. Find the perimeter and area of a regular polygon described about a circle. Thence find the circumference and area of a circle shewing that $\frac{\tan \theta}{\theta} = 1$.
5. When $\text{Pi} = 3.1416$ is used as the measure of two right angles, what is a like measure of 25° 30' ?
6. Find the true weight on a false balance. Ex.—One pound is placed in the pans of a false balance and the sum of the apparent weights is 2¼ lbs., what proportion do the arms of the balance bear to one another?
7. Shew how [1st] the Roman Steel Yard [2nd] the Danish one are graduated.
8. When two forces act on the same side of the fulcrum they will balance each other if their momenta are equal, prove this [1st] when the forces are parallel, [2nd] when they are not so.
9. Find the ratio of the power (P) to the weight (w) on a single moveable pulley, when the strings are not

parallel. Then from this that a heavy material string cannot be held in a perfectly horizontal position by any assignable force.
10. In the first system of pulleys, prove that there will be equilibrium when the power, the weight and each pulley are all equally heavy.
11. Find the ratio of P. to w. on a smooth inclined plane.
Ex. Two planes have a common altitude and are inclined at 60°, 45° to the horizon respectively; two weights attached by a string passing over the common vertex keep each other in equilibrium; find the ratio of the weights.
12. Find the centre of gravity of a triangle, and thence find the point in a vertical section of a lock-gate above and below which the water pressures are equal.

3rd Year, Astronomy and Spherical Trigonometry.

1. Prove that the arc between the zenith and pole, equals that between the equator and the horizon, and that the elevation of the pole at any place equals the latitude.
Explain by a figure how the change of seasons is effected on any place of the earth's surface, mentioning the greatest and least inclinations of the sun's rays to the earth's axis.
2. Describe Hadley's sextant fully. If the limb be divided so as to read to 10' how will the Vernier be graduated so as to read to 10" ? and explain why.
3. What is the common method used at sea for finding the latitude ?
4. It being given that twilight continues while the sun is not more than 18° below the horizon, shew that there will be twilight all night when the latitude of a place and the sun's declination are together not less than 72°.
5. V. and v. being the velocities of light and of the earth respectively, at what angle must the axis of a telescope be inclined to the line of light from a star so as to render it visible to the observer? What is the error in observation arising from this termed? and show how the real place of the star may be found.
6. Explain by a figure the circumstances attending a lunar eclipse, also shew how the duration of an eclipse can be calculated.
7. Prove the properties of the polar triangle and find the values of cos A. and cos a. in terms of the cosines of the sides and angles respectively in a spherical triangle.
8. [Omitted by the Printer for want of Algebraic characters.]
9. Prove and show how when the latitude of a place is given, [1st] a horizontal dial [2nd] an erect direct dial facing south may be constructed.
10. In a latitude of 51° 30' what will be the angle between the 4 and 5 hour lines on a horizontal dial ?
11. Find how the latitude of a place may be obtained by two observations on the same day of a heavenly body of given declination. How may this be rendered useful at sea where the ship has changed her position between the observations ?
12. Find the real distance between the moon's centre and a known star, and prove Borda's theorem. How will this be instrumental in finding the longitude of the place of observation ?
Ex. The apparent distance of the moon's centre and the star's was 2°20' the apparent altitude of the star's centre was 11° 14' of the moon's 9° 39'; the moon's correction was 51' 30", the star's 4' 40', required the true distance of their centres.

TO THE EDITOR OF THE CHURCH TIMES.

KING'S COLLEGE.
No. IV.

SIR,—It was never my intention to ask for the insertion of more than four letters in your much improved paper, and to this original design I believe it will be, for many reasons, wise to adhere. Allow me then to conclude the unadorned remarks which have been already made, by offering a few simple propositions to those who profess a friendship to the College.

If we are all contented with that Institution as it now is, and believe it to be perfect in its organization and its practical working, it would be foolish to attempt a change. But we are far from being satisfied; we are exceedingly dissatisfied; we see glaring faults which not only weaken our respect and affection, but are fast destroying them altogether. Some few there are. we know, who think otherwise, and from an excess of admiration are blind to the errors which the Church publicly clearly behold. While, however, a very small minority of Churchmen can sit content, and look with pleasure upon the feeble attempt of an infant Colony to imitate the venerable University of the greatest nation of the world, there are hundreds who see how inappropriate, how inapplicable, the whole system is to the wants of the country. Ask any respectable farmer in Nova Scotia to send a promising son to Windsor, he answers you with so long a catalogue of reasonable objections that you feel it would be rude to press the matter further; and if through your arguments he is induced to educate his child, at your next visit you find the absent boy has gone to some better school, or perhaps some other College, but rarely scarcely one in a hundred, to Windsor. The Church University, the title with which its royal Charter honors it, is kept up at an expense of some twelve hundred pounds per annum, and what for ? to educate ten or fifteen lads the sons of gentlemen, chiefly residents in towns, and occupiers of public offices. Why call it a University ? Either drop the name or so improve the Institution as not to provoke a smile at the title. Believe this, my fellow Church-

men, that the countrymen of our Province, members of our Communion, have at this moment a strong feeling of opposition to King's College, and that it will never be a University where their sons will gather from every county, until some decided reformation be effected. It is said that means are wanted, that no improvement can be made without additional money. This we know, and in addition to this we also know, that if a subscription list was opened to-day for funds to support the College as it now is, not five hundred pounds could be raised in the country, whatever might be done in the town. The fact is established, the College does not live in the hearts of the people. But the case would be different if a solemn promise of remodelling the Institution, or at least of adding some advantages to it, were made; if the modern sciences were taught, and the sons of poor parents might be initiated into their future callings; if a Professor of Pastoral Theology were there, to counsel and to guide the erring, if pious mothers needed not to tremble when their children left their fireside, knowing that all human means were used for their preservation from sin; if every effort was made, under God, to instruct the head and keep the heart, we might reasonably hope for a helping hand, and sure I am, that if you gave the country what it wants and asks for, it would be willing to pay liberally in return.

We are not, however, so badly off as it is. The funds of King's College, Windsor, we believe to be as follows:—

Building fund	£5157	6 11 sterling.
Library	1679	10 7½ "
Visitors	1415	16 2 cur'cy.
General	1000	9 0 "
	£9,253	2 8½

There is over £10,000 currency, safely lodged in the hands of the Institution, which, invested at 6 per cent., would bring annually £600. Perhaps this money or the larger part of it, may be so tied up, as not to be capable of being removed from its present place of investment; but an effort, at least, might be made to render it more useful. Then again there is £400 per annum, provincial grant, and some £200 from the treasury of the Alumni. Supposing the present Professors to receive their salaries as now, if this money was put out to better advantage, there would be a surplus of some £150 Here is at once, an income for another Professor, or a good share of it. And suppose further, if at the extravagant salary given to the Steward of £60 were withdrawn, here is the nucleus of another salary. At the lowest we might have for the really useful purposes of the College £200 more, a year, than we have at present.

This, however, is not all that might be done. Let the College hold forth some superior advantages. Let its Governors be all members of our own Communion. Let there be a watch always on the part of the officers over the spiritual interests of the Students, and then let the country be asked during the next Summer, to raise £5000 in much the same way as has been done by the friends of Acadia College. Many a man would be found quite ready to subscribe £100 if he were allowed to send one Student free of fees, and when his own children were educated, to transfer his privilege to his neighbour.

So confident am I, Sir, that if the authorities were to do two simple things, promise to the country that if means were given, then they would establish a chair for Modern Science and a chair for Pastoral Theology, and secondly, that they would open the lectures on Science and Modern Language, to all, upon the payment of a public fee, that the country would immediately respond, and that two agents would in three months collect the sum proposed, and even more.

I must not, however, enter into detail; the hundred difficulties that may arise upon reading a bold scheme could not be answered in letters of this kind, and I must reserve further communication to a future day. Let me, in conclusion, beg every friend of the College not to wish draw his interest or support from it, until one more effort is made to place it in such a position as to gain the confidence of the great majority of Churchmen. Let us put the College in such a position as to demand the respect of every member of our Communion, and morally compel them to send their sons to Windsor, instead of seeking for them an education beyond the seas; this it is in our power to do, and if some change be not effected, believe it, that many a voice will be heard echoing the words of old " Meiobainnmen enteuthen."

A BACHELOR OF ARTS

FOR THE CHURCH TIMES.

SIR,—I beg to offer the subjoined, in reply to " Oppidanus" communication in Church Times, of Oct. 23. Absence from home and a little more business than usual, has prevented me from before answering it.— " Oppidanus" tells us what has been the invariable rule of pronunciation and accent, in certain words, of his Clergyman, and gives us as an instance of it, the first o in Prochorus long; this is wrong, all the o's in Prochorus are short ones. " Oppidanus" has fallen into the mistake of confounding accent with quantity, two things which are quite distinct from each other.— I desire to state, that I did not say a word in my communication about accent. I merely spoke as to the improper sound given to certain well known letters of the Greek language. " Oppidanus" then refers to the words Rabboni, and tells us that his clerical friend, after listening to all he had to say, &c. quietly directed him (some people are in the habit of taking things too quietly) to turn &c. to John. 20. 16. where he would find the word altered to, " which is not in Hebrew, but formed from a Chaldaic word, spelt with a