Godless Education.

How often, and in how extravagant terms, do we hear the educational advantages of this country praised. How often do we hear it mentioned that each State contains a number of flourishing colleges, and that there is no reason why any one having sufficient means may not obtain an education. Yet, what are the facts of the case? No doubt, there is but little or no hindrance to any one who wishes to complete a certain course of studies. But are there many opportunities for a young man to obtain a complete education? We think not, unless that training which is very deficient, which, in short, is destitute of one of the most necessary elements of an education, can be called one. Just as a substance, which though it has all the appearances of sugar, yet is not sweet, cannot be called sugar, so a training which wants morality cannot be denominated an education, and those who have received this deficient training cannot be said to be educated. Now the great fault of the majority of American institutions of learning is, that they do not pay sufficient attention to the moral training of their students. In fact, some of them pay no attention to it at all. Of what benefit is it to any young man to spend several years at college, if he steps forth from his Alma Mater not only ignorant of his moral duties, but even utterly indisposed to perform them. He may now be prepared to "make money," to accumulate material wealth, if that is his only object. But, is he really fit to undertake the responsibilities of life, either social or political? This question, in the premises, is not difficult to answer; because it is easily seen that the man who was not required to practice an observance of moral principles while his mind was being developed, but was left to his own discretion at that turning period of his life, is not likely to attempt an observance of them in maturer age. It is easily seen also that unless he does observe the principles of morality his life is, and deserves to be, a failure. And for this failure, that institution which gave him a deficient training is in a great measure responsible. An educational institution which does not carefully guard the moral character of those who attend it, and, as far as circumstances permit, require them to practice diligently their duties towards God, has certainly but little claim to be called more than a school of vice. Its influence must be either positive or negative. There is no middle ground. If its regulations do not enforce the observance of moral obligations, then its manner of controlling students tends to their moral degradation. Its managers have induced youth to place themselves under their care, for the purpose of obtaining instruction; they have withdrawn them from the fostering care of their parents for the avowed purpose of educating them. Hence, they are responsible for their moral and mental training, and also for the natural consequences that may follow from this training. No declarations to the contrary can absolve them from their obligations in this regard. In the great majority of colleges in this country, the students are subjected to a mere nominal discipline. Now it is well known that in those institutions the students, though they may not be utterly devoid of all the principles of morality, are, for the most part, indifferent as far as religion is concerned. The tendency of an attendance at such places is to confirm those already indifferent in their indifference, and to make those not indifferent vacillating in their faith, and negligent in its practice. In short, such places are seats of irreligion and infidelity. The habits acquired by a student during his college life, will, as a general thing, continue with him afterwards, and will exert their beneficial or baneful influence upon all with whom he may come in contact. And since this is the case, it is terrible to see such a great number of insti-
tutions imparting godless educations. They are thereby striking at the very foundations of society, and sooner or later the effects of their work will be painfully felt. It is natural for young persons to dislike restraint, and hence they prefer to attend those colleges in which they are watched over the least. In this "enlightened age of progress and refinement," discipline is considered "old-fogyish," and strict morality unfashionable. Hence, the restraint and direction of young minds is very limited; but the result of this, though it may not be apparent to us, will be ruinous to future generations. They will reap the bitter harvest springing from the seed we have sown. If we are willing that these consequences shall follow, then let the ruinous system of separating the moral from the mental training be continued. If we do not wish them to follow, then let students receive in our colleges a complete, not a deficient, training. Let them go forth into the world prepared to meet the duties of life. As long as the moral tone of the country remains as it is at present, this will of course be impossible, and we can only await the course of events, knowing in the mean time that those who are the only true directors of the moral education of youth, will not neglect their duty, and that through their efforts many will receive an education which can be of practical benefit, not only in regard to the things of this life but also those of the next.

J. T. W.

On the Indeterminate and Diophantine Analysis.

The principle which underlies what is called the Indeterminate Analysis in Algebra appears both in Arithmetic and Geometry. In Arithmetic it is found as the basis upon which those problems in Alligation Alternate are worked which are susceptible of an unlimited number of answers. This always happens when the proportion only of the simples is required, provided they be more than two [Illustration I]. In Geometry it also appears, in such problems as: Given the base of a triangle, and the sum of the squares of the other two sides, to construct the triangle. [Illustration II]. But, nevertheless, the whole subject of Indeterminate Analysis is properly joined to Algebra, because by the Algebraic notation the limits within which the indetermination exists are more easily defined in all problems relating to numbers.

A problem may be either indeterminate in general, or indeterminate within certain limits. Thus when we are asked what two numbers are those whose difference is twenty, there is no limit possible to the numbers; they may go on increasing indefinitely, provided only that the larger one is always 20 more than the smaller. But if we are asked what two numbers are they whose sum is twenty, they must both be included between the limits 10 and 0.

Now the limits may be so narrow that when the condition that both the required numbers shall be whole numbers is introduced, the problem becomes susceptible of only a very small number of solutions. It is the object of the Indeterminate Analysis, whether Geometrical, Arithmetical, or Algebraic, to find out the number and kind of those solutions.

Some problems which have but one solution cannot be worked by the ordinary methods of Algebra, because they have a less number of equations than of unknown quantities by the given conditions. Such problems, although worked by the Indeterminate method, are really determinate problems.

It must be understood that an Algebraic equation, useful as it is, cannot express every condition of a problem—even of a numerical problem. The methods of the Indeterminate Analysis, therefore, are often brought to bear on questions which could not be solved by the usual methods of eliminating from equations.

In the Indeterminate Analysis of Problems relating to whole numbers, the following axioms form the basis of operation:

If a whole number be added to a whole number, the sum is a whole number.

If a whole number be taken from a whole number, the difference is a whole number.

If a whole number be multiplied by a whole number, the product is a whole number.

I will now give one equation containing two unknown quantities, to find all the possible values of those quantities in positive whole numbers. 

$$2x + 3y = 12$$ (Illustration III).

It is evident that by the ordinary methods of Algebra, the values of $x$ and $y$ cannot be found, for we have but one equation containing two unknown quantities, and no means of elimination.

If negative and fractional values of the unknown quantities were allowed, the number of solutions would be unlimited, but we limit the equation to positive whole numbers, and we have reason to suppose that there are but few solutions.
To find how many and what solutions there are, however, we must have some method of trial.

Transposing $y$ and dividing by two, we have
\[ \frac{1}{2} - \frac{3y}{2} = \frac{1}{2} \]
which must be a whole number. This Algebraic fraction, which is really a whole number, is evidently divisible by 3 without a remainder, therefore $\frac{3y}{2}$ is a whole number. Put it $= n$.

Then $y = 4 - 2n$. Here $n$ may = 0 or 1 without making $y$ negative, hence $y = 4$ or 2.

Substitute these values in $x = \frac{10 - 3y}{2}$ and $y = 4$ will make $x = 0$; $y = 2$ makes $x = 3$. Hence $x = 3$ and $y = 2$ are the only positive whole numbers which will satisfy the equation $2x + 3y = 12$.

This is an example of a determinate problem worked by the indeterminate method. We will give one more—an example in Alligation Alternate, which by Arithmetic comes by mere guesswork, whereas the solution by the indeterminate method is extremely definite and concise.

A man going to market, found cows selling at $10$ each, sheep at $3$, and pigs at 50 cents. He purchased a hundred animals, buying cows, sheep, and pigs, and spent a hundred dollars. How many of each kind did he buy?

By Arithmetic: (Illustration IV.)

| 10 | 2 | 5 |
| 3 | 3 | 3 |
| 5 | 9 | 4 |
| 2 | 90 | 100 | $100$ | $100$ | $90$ | $94$ | $100$ | $94$ |

In this operation, as it stands, there can be no reason assigned for multiplying the first column by 5 and the second by 2. It is all mere guesswork. Any other multipliers would give the mean price of a dollar an animal the same, but no other multipliers would make out the hundred animals exactly, and these can be only found by trial. The Algebraic operation proceeds on definite principles at every step. The equations are
\[ x + y + z = 100 \]
and
\[ 10x + 3y + \frac{1}{2}z = 100 \]
two equations with three unknown quantities. But the condition implied that $x, y$ and $z$ are to be given in whole numbers makes these two sufficient.

There is another condition expressed, more important than it at first appears: this is, that the animals he buys be of all three kinds. Were it not for this we might make $x = 0$ in both equations, and the result $y + z = 100$ and $3y + \frac{1}{2}z = 100$ would give us $y = 20$ and $z = 80$, showing that 20 sheep at $3$ and 80 pigs at 50 cents would make 100, but this is inadmissible, since there are no cows in the purchase. Making $y = 0$ would give fractional results for both $x$ and $z$, and making $z = 0$ would make $x$ negative and both $x$ and $y$ fractional.

We will now give the full operation:

The value of $x$ from the 1st equation is $100 - x - y$.
From the second is $200 - 20x - 6y$.
Equating these values and transposing, $19x = 100 - 5y$.

Then $\frac{19}{5}x$ is a whole number, and since the numerator is divisible by 5 without a remainder, $\frac{19}{5}x$ is also a whole number. Put it equal to $n$.
Then $19n = 20 - y$.

Now if a positive whole number greater than 1 is taken from twenty, the result is less than 19 and would make $n$ a proper fraction. But there is no positive whole number less than 1. Hence $n$ and $y$ can only be both positive whole numbers when $y = 1$ and $n = 1$.

But $x = \frac{19}{5} - 5$ and $z = 100 - x - y = 94$.

The answer.

There is no guess-work in this operation—all is perfectly logical from beginning to end.

TO BE CONTINUED
THE SCHOLASTIC YEAR.

Yet happy, happy were the days
We spent beneath thine eye;
Within thy soul's benignant rays,
Each trouble passed us by.
Our life was like the gentle stream
That glides in silence on,
Reflecting back each smiling beam
That sheds the radiant sun.
'Twas like the morning young and fair
That springs from ocean's breast.
With dewdrops in her golden hair.
Beneath her spotless crest;
Till suddenly her virgin brow
Is cross'd by yon dark cloud,
That hangs upon her beauty now.
And tells it like a shroud.
Yes, we must part! 'tis doom'd on high!
Since such is heaven's will,
We'll only breath a parting sigh,
And bid our souls be still.
To-morrow's sun may meet your gaze
Upon the trackless sea,
But many a heart to heaven shall raise
An humble pray'r for thee.
That on thine own dear native shore.
Thou soon may'st proudly stand.
And see thine own blue sky once more,—
Thy happy fatherland.
How dearly shall each friendly glance
Becall the days gone by;—
The vine-clad hills of sunny France
Call forth a loving sigh I
And though the wide and endless deep
May then between us roll,
No space our minds from thee shall keep,
In distant land and clime.
Go, then! since virtue's humble lot
Is ever to obey;
He who commands ne'er forget
His servant on his way,
Go, then! though you must leave behind
The pill of many a year,
And though our souls may feel inclined
To shed a parting tear.
Go! leave the tree whose every root
Has been thy tender care,
Let others taste the ripening fruit
It now begins to bear;
Let others pluck the long-nur'd flow'r
That's bursting into bloom.
And which beneath thy magic pow'r
Now sheds its sweet perfume.
But ever shall St. Lawrence's walls
With pride repeat thy name,
And ever in its humble halls
Thy mem'ry be the same!
And oft, when you'll be far away,
Shall our young bosoms swell,
On thinking of this gloomy day—
And this our sad farewell!

STUDENT'S OF ST. LAWRENCE COLLEGE.

March 30th, 1869.

ACADEMIE DE NOTRE DAME DU SACRE COEUR,
St. Vincent P. O., Allen Co., Ind.

A few weeks ago we had the pleasure of visiting the above-named academy and of attending there an exhibition, or rather soiree, prepared in honor of the superioress, Mother Arsene, whose festival had been transferred by the pupils of the academy to suit the occasion. In company with our good friend, Rev. A. Adam, we were for nearly two hours treated to fine music and adresses, which we enjoyed no less than the good mother for whose special benefit the whole performance had been gotten up. We were really surprised to see so much proficiency and good taste manifested by the pupils who had a part in the festival—and we believe that all had something to say or to sing, even the smallest Minim, who, scarcely high enough to reach the keyboard of the piano, sang her little song with accompaniment, to the great merryment of all listeners. The little festival surprised us exceedingly. We must confess it, we were not prepared to expect anything so perfect in a new academy scarcely two years in operation. We give credit to the good Sisters of Holy Cross, who are in charge of it, for the real proficiency manifested by their pupils.

The Academie de Notre Dame du Sacre Cœur is situated some six miles from Fort Wayne, in a fine and healthy country. It has extensive and well laid out grounds, upon which a most complete building has been reared. No house can surpass in appointments and accommodation of all sorts the building occupied by the pupils of the Academy, the plan of which was made and carried out by Rev. A. Adam, an architect of no small merit. Visitors to the Academie de Notre Dame du Sacre Cœur are surprised to find such a beautiful monument of learning raised in a place where some few years ago the tall oaks towered so luxuriantly.

A railroad is now in contemplation, by which the Academie de Notre Dame du Sacre Cœur will be made of easy access and have a rail communication with all the lines running east and west between Indianapolis and Detroit.

ENTERPRISE B. B. CLUB.—At a regular meeting held on the 9th inst, the Director, Bro. Alban, presented the Club with a bat and ball, for which the members returned the generous donor a vote of thanks.
Arrival of Students at Notre Dame.

MAY 4th.
S. D. Morrison, Fort Madison, Iowa.

MAY 11th.
St. Mark C. Melancon, Donaldsonville, La.

MAY 12th.

Tables of Honor.

SENIOR DEPARTMENT.
M. Carney, J. McMurphy, J. Montgomery, W. P. Rhodes, H. Barlow, L. G. Dupler, F. Crapser, C. Ilgenfritz, A. Arrington, A. Menard.

JUNIOR DEPARTMENT.

MINOR DEPARTMENT.

Honorable Mention.

ASTRONOMY.
H. B. Keeler.

SURVEYING.

TRIGONOMETRY.

FIRST GEOMETRY.
H. Wrape, D. J. Wile, J. McClain.

SECOND GEOMETRY.
C. H. Ilgenfritz, J. Gearin.

THIRD GEOMETRY.

FIRST ALGEBRA.

SECOND ALGEBRA.

THIRD ALGEBRA.

FOURTH ALGEBRA.

BOOK-KEEPING, SR.

BOOK-KEEPING, JR.

FIRST ARITHMETIC, SR.

SECOND ARITHMETIC.

THIRD ARITHMETIC.

SECOND ARITHMETIC, JR.
C. Walter, C. Duffy, A. Lafferty, J. Ward, F. Bulger, H. Morgan, H. Hayes, De Witt Bland, J. Nash, J. Page. Masters P. Tiana, J. McGuire and J. Dooley, members of this Class, have distinguished themselves this session for excellent recitations, neat duties, and a thorough understanding of all the subjects they have gone through, and, were it not so late in the session, ought to be promoted to the First Arithmetic Senior, in which they would prove themselves equally competent with the most studious members of that Excelsior Class.

THIRD ARITHMETIC.

Fourth Arithmetic.


The Twenty-fifth Annual Commencement.

It has been decided at last by the officers of the University and the committee of the Alumni Association that the 25th Annual Commencement shall take place on Wednesday, the 23d of June, as petitioned by all the students of the University, instead of Wednesday the 30th.

On Tuesday, June 22d, will be celebrated the solemn Mass of the Alumni, which will be followed by a formal reception of all the Associates by the officers of the University. The welcome will be tendered in the large parlor of the University, previous to the dinner, which on account of the exercises of the day will be at 1 o'clock, p.m.

In the evening of Tuesday the exercises will open with the Cantata of the Jubilee; appropriate speeches by the students will then follow. The famous play of "Richelieu," remodelled to suit the occasion, will be presented by the members of the Thespian Society on the same evening.

Wednesday, 23d, the exercises will be resumed in the forenoon: speeches by the students, music, and the play of "The Prodigal Law-Student," by the members of the St. Cecilia Philomathean Society, will form the main feature of the morning performances. The afternoon will be occupied with the poem, oration of the day and the solemn awarding of diplomas to the new graduates, distribution of prizes and premiums to the students, etc. We cannot now do more than give a general outline of the programme, which shall be published in all its details early in June.

At a special meeting of a Faculty committee, held last Sunday evening, May 9th, the subjects of the speeches to be delivered at the Annual Commencement were chosen, and distributed to the students. They comprehend the following:

A Valedictory, a Greek Address, a Latin Address, a Speech from the Law Department, a Speech from the Scientific Department, and one from the Commercial Department; also Speeches from the Junior and Minim Departments. Speeches from the Literary Societies will also be delivered if time permits.


We expected that some eye-witness of the ceremony would send us a good report of the same, and regret to say so little on a subject which enlisted so many sympathies.

A Competition took place in the First Arithmetic Class, Jr., on Tuesday, 11th inst. We were invited to witness the very interesting contest, which lasted a whole hour.

We have had several such occasions of seeing the progress and lively spirit of the members of this Class, and have never failed to compliment them on their splendid training and efficiency.

All the members of the Class are deserving of praise, but among the rest were conspicuous at the competition—for quickness and exactness in working up the most intricate examples—F. Dwyer and G. McCartney. The following young gentlemen were inferior to the above-named only in the length of time which they required to work the same examples: J. Falley, A. Hemsteger, A. Wile, V. Hackmann, F. Curtis, H. Breckweg, A. Cable, K. Esly, D. Hogan, G. Buck, D. Eagan, P. Cochran. Bro. Philip, their teacher, may well feel proud of his smart boys.

The competitions for the prizes are now occupying the students' attention. More time has been given this year to prepare them, and by beginning this important work immediately, the extra labor which the competitions necessarily entail, being divided up throughout a whole month, will scarcely be felt. These competitions are specially intended to show the proficiency of each student. Like those of the preceding year, they will be bound in neat volumes and exhibited to the gaze of parents and visitors on the Commencement Day.

Very Rev. Father E. Sorin is now on his way home, and in all probability will reach Notre Dame about the 29th inst.
Eureka.

We are sorry to see another printer's error in our last, which makes a sort of sneezing impression, by the unnecessary repetition of the last two syllables of "vacation"—and to show that "Eureka" is not to be sneezed at, we venture on a few additional queries.

If, when you wreak a cruel vengeance, your conduct is justly reproached as atrocious and unchristian why should it not be equally so when you wreak a College Vidette?

If you should follow the vocation of a scavenger, live entirely on garlic, and keep a pet skunk as a playmate, you might reek occasionally with a very peculiar Vyuquet, but would your exhalations be more effective than when you reek a College Vidette?

The best of it is that we can give the Vidette eight pokes in the ribs to his one, for not all the aids and succors that his part of Illinois can furnish, will enable him—not all the switches that Miss Henelia Smalley can apply will stimulate him, to appear in less than two months, after his last apparition,—or the idle phantom of a disordered imagination which we suppose he considers equivalent to an apparition. But we really ought not to be too hard upon him, for although he called us a dog, yet he frankly acknowledged that he was a lyin' at the time. S.

The members of the St. Cecilia Philomathean Association are preparing an exhibition for the arrival of Very Rev. Father General. The play "The Prodigal Law-student" is to be produced then, with an appropriate selection of vocal and instrumental music.

Musical.

On last Sunday evening we attended, through the kindness of Bro. Albert, a musical soiree which was given in the Minims' study-hall by the St. Joseph Orchestra. This body of young musicians, all of whom belong to the Cornet Band, rendered several choice pieces of music in a superior style. Prof. O'Neill, their Director, also enlivened the audience with some of the solos for which he is celebrated. It is needless to say that the Minims enjoyed the treat, and greeted the performances with prolonged applause. Quite a number of visitors were present, and among them the Rev. Prefect of Discipline, who closed the evening's entertainment by a few happy remarks.

Visitor.

Whampoa, China.

BY G. F. B. COLLINS

This morning at 6 o'clock (Ap.6th,) the fires were started, and before 9 o'clock we were underweigh and steaming for Whampoa. We started from Hong Kong at daybreak and expect to reach the delectable town of Whampoa before dark. A disagreeable, hazy day. At 5 p. m. we came to anchor at the "Hong Kong and Whampao Dock Co.'s" buoy. This Whampoa is a town in the province of Qnang-tung, on an Island in the Chukiang or Canton River. Merchant vessels stop at this town and communicate with Canton by means of boats. It is forty-five miles north of Macao, and ten miles south of Canton. The population is difficult to estimate on account of the unsettled disposition and temperament of the people, but there is no doubt the majority of the Chinese of this viciage belong to the floating sampans and flower-boats which dot the surface of the Chu-Kiang river, while the shore population are as migratory and fluctuating as so many ants. The nearest approximate one could make as to the census would be to average the number of entrances, exits, and permanent subjects, and we would find Whampoa revels in the round figures of 1,600,000. We had no sooner made fast to the aforesaid buoy than the ship was swarmed with Chinese peddlers and washerwomen, the latter being a noisy set of unwashed creatures, while the former glory in the bare sight of a Mexican dollar and are very uneasy until they swindle an ignorant European or American and obtain by some means the much coveted piece of silver. Orders were given to prevent their coming aboard until next day, and we rested over night.

Whampoa, Apr. 7. This morning, permission being given to come aboard, we were literally mixed with visitors. As soon as they heard that no objection would be offered, the Foo-Hongs, Yu-chongs, Chon-kees, Hoong-shings, How-sangs, Kai-sacks, Nam-sings, Sam-kees, Tong-cheongs, Kuo-lys, Lee-shings, Yen-qua, Wing-cheongs, Wo-hings, Wys sings, and a host of other pigtail celebrities (?) and dignitaries (?) of the Celestial dominions, came aboard with their nasal and guttural twang, and made your correspondent heartily glad to leave the ship's sides and get rid of the "noise of Babylon." It being Sunday, one would think it a poor visiting day, but nevertheless when once ashore we find we are "bulls in
the wrong china shop,” and our Sunday is no more to them than their manner of idolatrous worship is to a devout Christian. Wheelwrights, millers, tinkers, tailors and gambling-shops were in full bloom and vigor, and Sunday as it was to us was anything else to them. These houses of Whampoa are the same in size and substance as those of the village of Bruni, Borneo excepting the latter are built in the river while the former are on terra firma.

No house here exceeds two stories in height and no one room contains less than twenty occupants. The streets are ten feet wide (in some passage-ways even less) and the houses and people are as solid and compact as ems in a printer’s stick. The Scriptural notoriety of the visitation of fire on the cities of Sodom and Gomorrah may be an example of Divine intervention and punishment for immorality. We read these things of bygone days of miracles, &c., but apprehend if ever a city, for violation of chastity and morality, should receive the strong hand of God in castigation it is Whampoa. Innocence and purity are here at a discount. “There is no virtue in Sodom,” and as apt a quotation would be “From 8 years to 80, there is no virtue in Whampoa” a place the least susceptible of honesty, laziness and debauchery to stalk abroad unpunished. On the 29th we will leave this place for Canton proper, a few miles to the northward and where on dit there will transpire something more interesting.

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**St. Mary’s Academy.**

St. Mary’s, May 11, 1869.

**Table of Honor, Sr.**


**Honorable Mention, Sr.**

Graduating Class.—Misses L. and L. Tong, K. Livingston, E. Crouch, K. Cunnea.

First Class.—Misses J. Hynds, A. Radin, E. Kirwin, L. McManman, M. Alexander, M. Chouteau, M. Mulhall, J. Dobson, M. Claffey, C. Daenport.


Second Preparatory.—Misses J. Davis, M. Clune, K. Zell, M. Vanhorn, M. Minor, J. Dennie, L. Blaizy.

Third Preparatory.—A. Matthews, M. Coffey, E. Whitfield, E. Spillard, R. Hoerber, M. Rollman, L. Sprochnle.

**French.**


**German.**

First Class.—Misses R. and F. Fox, E. Ruger.

Second Class.—Misses K. Zell, L. Byers, K. Moore.

**Music.**


Harp.—Misses B. Davenport, M. Sherland.

Organ.—Misses A. Walker, A. D’Arcy, N. Burridge. Guitar.—Miss L. English.