THE

JAFFNA COLLEGE

MISCELLANY.

"He most lives who thinks most, feels the noblest, acts the best."

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The fourth volume of the *Miscellany* closed with the March number, and with this issue it enters upon its fifth year. During the past year we have received and inserted but one contribution from the Alumni. One of our former students, not a graduate, also sent in a communication which was duly published. The foreign professors and missionaries have contributed five articles on subjects which we think must have interested our readers. Of the students' articles, five or six have been inserted each time; and one or two of the papers of each Certificate examination. Miscellaneous items and College and Alumni news have appeared in each number.

A word or two to our subscribers. We seldom receive any items of news or contributions from any of our Alumni. We hope that this does not indicate a lack of interest on their part. If there is any dissatisfaction with the manner in which the paper has been conducted, at least write and tell the Principal what your criticisms are, and thus help to make this little paper better.

Again, subscribers are not as careful about paying their dues as they ought to be. During the last year—to July 1st—only about

Rs. 40 have been received in subscriptions, leaving a debt of over Rs. 50 for the year. This with the previous debt makes a total indebtedness of about Rupees 80. More than this amount of subscriptions are due. About 180 copies are taken and if all dues were paid there would be no debt. If the *Miscellany* is to be self-supporting, all subscriptions should be paid promptly. We trust that the year upon which we are entering will be one in which all our friends will give their assistance in making this periodical as interesting and successful as possible.

SELECTIONS FROM 'THE STUDENT' & 'THE BANNER.'

PLEASURES OF HOPE.

Hope, as it is defined by an eminent author, is the desire of some good attended with a belief in the possibility, at least, of obtaining it, and enlivened with joy, greater or less, according to the greater or less probability of our possessing the object of our hope.

Now, that man derives a great deal of pleasure from hope is evident from the following considerations :—The student of history will not fail to remember the striking incident about Alexander. He, when preparing his Asiatic expedition, distributed his dominions among his friends, giving to some, villages, to others, large countries, and to others, cities, and when asked what he had reserved for himself, replied "My hopes." What does this mean? Was it not, as he himself expressed it, because he had great pleasure in his expectations, that he distributed his hereditary dominions to his friends? Again, man is never satisfied with what he possesses. However abundantly he may have accumulated treasures, his aims are yet reaching higher and higher. He is an ambitious being. He is a being who seeks fame, and space in the world's thought. Such being our nature, is it unnatural for us to derive a great deal of pleasure from the hope that we may attain a high position? Certainly it is not.

Again, look at the case of a general. He plans to make war with a mighty nation. It is not always true that he who undertakes to make war succeeds in his attempts. He remembers also several cases in which he was utterly defeated. Yet by the greater pleasure which he derives from his hope, he goes to the battle field.

Notice the student who prepares himself in a prize subject. He devotes a great part of his time to that subject. He neglects some of his other studies. Sometimes he forgets his bedroom. He makes no difference between day and night. Thus it sometimes causes him to lose his health. Now why does he suffer so much? Is it always true that he will succeed in his undertaking? Then is it not merely by the pleasure which he derives from his hope that he does so many things?

Finally, let those who do not admit this fact answer this question, what prompted our first parents to eat the fruit of the forbidden tree? Was it the pleasure which they derived from remembering that God had prohibited them from eating the fruit? Nay, it was the pleasure of hope. So we see that all or almost all people in the world are doing things just because of their hope, from the pleasure which they derive from their expectations.

E. S. T.

HOW TO USE MONEY.

The way to use money is a question which agitates states and political bodies. Some states are now beginning to set forth schemes for the proper use of money. Individuals begin to lay out plans for saving money. When the world is thus agitated, one sect comes forward to say that money should be used profusely and extravagantly. Their sole business is to enjoy pleasure. Both of these parties are equally inflicting injury upon the community. One brings avariciousness and the other devastation, into the world. Both of these characters are extremes and are probably set up by nature to be counteracting. The accumulated wealth of the father is generally squandered by the son, and in this manner the equilibrium

is preserved. The prodigal is happy until he reaches the bottom of his purse; after that he is thrown into the pool of poverty. It is then that he begins to think of the sad condition to which he is reduced. A spend-thrift violently thrusts himself into poverty. He sets a very bad example to the world. The happiness of a spend-thrift does not last very long.

Men should spend as circumstances would permit, and if, on the contrary, one goes to either extreme he has no real happiness. A king has to spend as his circumstances permit. If he does not, he not only ruins himself and his power, but the whole state. It will not look proper on the part of a king to live after the manner of a poor peasant, for he should keep up his dignity. Again suppose a common man spends after the manner of a king, such a one is called a spend-thrift. Every dignitary has to spend enough to keep up his dignity. If one is too economical he loses his honor. He ruins all connected with him. Again, he is led on to every kind of wickedness by which he may get money. The Bible says that the love of money is the root of all evil. The miser feels no real pleasure. The true way to use money is in such a way as to be profitable to all. Money may be given for the cause of religion. Other cases where we may spend money in a profitable manner, are: for educational purposes, for charity, for supporting paupers, and for the improvement of one's own country.

C. C.

READ AND YOU WILL KNOW.

This is a rule which every school-boy ought to remember. It is a rule given to Sir William Jones by his mother when he asked her for information. He very willingly followed the advice of his mother and, altho he died in his forty-eighth year, he was one of the most learned men of his age. It is said that he was acquainted with more than twenty languages. He was a judge of the Supreme Court of Calcutta. While there he performed his duties with much diligence. It was by following this advice that he became the author of many

volumes about the manners,customs, and languages of the people of India. This being the case, whenever we do not understand an exercise in geometry or a portion of any other mathematical or classical subject, we should say to ourselves the very same words which the noble mother of Sir William Jones said to him. Moreover it was by finding out the numerous uses derived from reading that Bacon said, "Reading maketh a full man." Let every scholar, then who wishes to please his teacher and to be respected by others, keep in mind what the mother of Sir William Jones said. The general practice of many students of soon running for help would of course be replaced by their repeated careful reading. S. K.

PHYSICAL EXERCISE.

Many do not understand the value of physical exercise. It is very important for a student. But often he does not care for it. He thinks that he may gain many things by studying in the time occupied in this exercise. It may seem to him to be so, but in reality the reverse is true. One may study for a whole day, but if he does it without proper exercise it is worth nothing. Exercise, like food, is requisite for the maintenance of the body, and still more for the maintenance of the intellect. If no exercise is taken the intellect is in a state of dulness and laziness. We may find in our experience that, if we study a lesson after a leisure time, we retain it in memory. Still better do we retain it when we have exercise and leisure. Thus we may see that, tho one studies through the whole day without exercise, he cannot retain his lesson in memory so well as one who studies with exercise and leisure. It is quite necessary for students such as are in this college to take exercise. Others have a variety by walking out and working, but these do not have any thing of that sort, but would sit down and study from 6 o'clock in the morning to 9 o'clock in the evening. Exercise not only assists the intellectual faculties but also brings the muscles to an active and vigorous state. The proper time to take exercise is very early in the morning. Tho it is a good time for study it is the best time for exercise. K. C. S.

THE USES OF TRAVELLING.

God has made man with various faculties and placed in nature things corresponding to these faculties. The organ of vision is excited by the presence of light, and the sense of smell by odors. Man derives his happiness from the exercise of his faculties upon the corresponding objects in the world outside of him. As happiness is the immediate result of the exercise of our faculties upon the corresponding objects, a man who visits several places derives more happiness than one who confines himself to his own land. If such be the case it is obvious that happiness is promoted by travelling. One of the objects for which man was created was the promotion of his own happiness. Because travelling is a source of promoting human happiness, we may safely conclude that by travelling he fulfils that object.

Again, travelling gives man a natural stimulus toward active obedience to the Great First Cause of every thing. Nature is one of our teachers respecting our duties. We know that in the world there are many things which call forth our admiration, and that when we see them our feelings are excited. This agitation of our feelings causes within us reverence for the Creator of those objects. It is too evident to need discussion that he who feeds his eyes upon the aspects of nature in various places will have his devotional spirit stirred up more than one who does not.

Travelling leads men to the discovery of new things. Had it not been for the adventurous travels of Colombus, America could not have attained that position which it now holds.

R. V. P.

RIVERS.

It is a great blessing to have rivers on the earth. If we wish to know the origin of rivers, it may be found that the sun is the cause; for it transforms the water into vapor. The vapor rises up higher and higher in the sky, and when it condenses it becomes clouds.

Those clouds generally descend on the top of mountains or high hills as rain. This rain-water flows down from the mountains as brooks and rivers, and finally enters the sea. As the blood vessels are to the body, so are the rivers to the earth.

To understand clearly the benefit of rivers we should notice the state of deserts. Suppose we go and see the desert of Sahara. What shall we see? We may see the arid plains of land covered only with thistles and thorns. Nothing would attract our eyes except a few cases in the vast extent of the desert land. Sometimes caravans and travellers pass through it riding on camels. How very difficult it is for mankind to live in such regions where there are no rivers!

If we direct our attention to the countries watered by rivers, how pleasant they will appear. These countries, such as India, France, Germany and the United States, yield how many products to man? What a pleasant appearance they present attractive to the human mind? Certainly we may say that the wealth of a country depends chiefly upon its rivers. When the rivers flow from the mountains they sweep down the soil which fertilizes the land. So the rivers not only supply water for the vegetables, but they add to the soil itself.

S. C. K.

SENIOR CERTIFICATE EXAMINATION.

PAPER IN CHEMISTRY (*Time* 3 *hours.*)

EXAMINER, REV. G. T. FLEMING.

1. In what respects do the metallic elements differ from the non-metallic? Pick out the elements in the following list, and divide them into metals and non-metals: Aluminium, Arsenic, Boron, Brass, Chalk, Common Salt, Graphite, Magnesium, Mercury, Soda, Sulphur.

2. Distinguish between a chemical compound and a mechanical mixture. What reasons are there for supposing that common air is a *mixture* of gases?

3. State with clear explanations the laws which govern the volume of a gas, when subjected to varying degrees of pressure and heat respectively.

4. State concisely the part that oxygen plays in nature. Describe any common method of preparing the gas.

5. Enumerate the qualities of hydrogen. What reasons are there for supposing it to be a metal?

6. Mention any experiment for determining synthetically the composition of water. Why will not water cook an egg on the top of a high mountain?

7. Describe the preparation of Nitric acid from Saltpetre. Show by an equation distinctly what changes take place in the composition of the chemicals employed.

8. What is an acid, an alkali, a base, and a salt? What relation do these bear to one another?

9. What are the qualities of Carbon di-oxide? State why it cannot strictly be called an acid, and how it was that old chemists came to call it such?

10. Describe Bunsen's Burner, and Davy's Safety Lamp, showing the principles of construction of each.

PAPER IN PALEY'S EVIDENCES OF CHRISTIANITY (*Time 3 hours*)

EXAMINER, REV. E. M. GRIFFITH, M. A.

1. What is meant by "Natural Religion," and quote from Scripture references to it? Also prove from the writings of deists themselves, that belief in Natural Religion alone is insufficient for man.

2. Upon what supposition does Paley conclude that a revelation was not improbable?

3. Show the falsity of Hume's view of miracles, and state the full consequence of his representation.

4. Write out correctly the two propositions which Paley endeavours to establish, and give direct evidence of the activity and sufferings of the first propagators of Christianity derived from profane testimony.

5 By what arguments (independently of the authority of the Christian histories) does Paley prove that the story which we have now, is, in the main, the story which the first Christians had ?

6. Show that the Scriptures are not of modern contrivance, and give the eleven propositions of Paley in favor of the genuineness and authenticity of the Scriptures.

7. In comparing the evidence for Christian miracles with what our adversaries may bring into competition with it, state what cases we may lay aside where the deficiency relates to the miracles themselves.

8. Give an account of the cures which Tacitus relates to have been performed by Vespasian, and Paley's remarks upon them. Also, what circumstances distinguish the miracles recorded in the New Testament from those adduced by Mr. Hume ?

9. Show that the prophecy respecting the destruction of Jerusalem was uttered *before* the event took place.

10. What four points are observable as regards the things which the Savior taught ? Further, prove that the character commended by Christ is the most worthy.

11. Show the fitness of Christianity for all forms of Government. What passage does Paley quote as offering the best and shortest rules of life ever delivered.

12. Give instances of the candor of the writers of the New Testament, and account for the difference between St. John's history and that of the other Evangelists.

13. Show that Jesus, from his coming under a character totally different from that expected, was neither an enthusiast, nor an impostor.

CONTRIBUTIONS.

THE SCHOLAR'S INFLUENCE.

By a scholar we mean one who has given himself more to mental than to physical labor. It is he who reads much and thinks much.

It is he who solves many a difficult problem for one and all. It is he who labors hard for the public good. It is by him the fountain of public opinion is either poisoned or made wholesome. Of the principles struggling for existence, a scholar is the most devoted and eloquent champion. Such being the case his influence is exceedingly great and is felt everywhere. We wish to examine some aspects of this influence. "And tho," in the words of Lord Macaulay, "in this vast field on which we are entering, innumerable reapers have already put their sickles, yet the harvest is so abundant that the negligent search of a straggling gleaner may be rewarded with a sheaf."

In the first place, thought is the source of all outward action. Whatsoever influences our thought influences our action also. It is an undeniable fact that our practical life depends much on what we believe to be true. Innumerable instances might be cited to support this statement. The public view is at the command of a scholar. Whatsoever a scholar expounds and pronounces to be an object of belief, the public at large accepts. If we want to make any change in public opinion we should first turn the course of literary men. It is said that when James II. wished to restore Catholicism into England his first attempt was to fill the chairs of the universities and private colleges with professors who believed in Romanism. He knew full well that if he should succeed in this respect his intention would be carried into effect. The influence which a scholar exerts upon the public introduces a new method of thinking. The public does not at all look upon education in the same light as it did some centuries ago. The usefulness and necessity of education is now more clearly seen and understood by the public than ever before.

There is a refinement in intellectual discipline. In proportion to the increase of scholars and their influence, there is a change in the public mind. This intellectual refinement is produced by reading the valuable and useful books published by eminent scholars from time to time; and by conversing with them on important topics. The mantle of ignorance is torn away by degrees. The mental darkness is dispelled gradually. The mind becomes enlighten-

ed and noble. The line of distinction between right and wrong becomes well marked and better understood. The spiritual nature of man becomes more active and controlling.

As knowledge increases civilization also increases. The manners and customs of nations change very greatly on this account. Especially is there refinement in different arts. A farmer does not use at the present day the same implements as were in use some 300 years ago. They are entirely different. They promote agriculture to a great extent. The chemist, by analyzing the various soils into their component parts, has shown to the farmer in what kind of soil he may expect a good crop. A sailor of this century can direct the course of his ship over the vast ocean in a better and safer way than ever before. He owes this knowledge to astronomers. Political economy has rendered no less help to merchants. It has taught them when to buy and when to sell. The same may be said of other arts also. In a word there is no art which has not been improved in one way or another. There is a change for the better in every department.

Further, we are not unaware that the influence of a scholar is a source of evil as well as good. No reasonable man can deny this. The history of the world proves it. The experience of all ages confirms it. Knowledge is a good and useful thing. It is the most precious thing we can ever obtain in this life. But it may lead us to God or to Satan; to heaven or to hell; to eternal bliss or to eternal misery. Our hands are good. They are of great use to us. No one can imagine the benefit we daily derive from their labor. Yet man uses them for bad purposes. Just in the same way our knowledge also may be used. It may be used for bad as well as for good purposes. Examples are not wanting to show this. A fine example is found in different schools of philosophy. We confidently affirm that the social, moral and religious condition of a nation depends for the most part upon the form of philosophy it accepts. Hence it is not a matter of indifference or sport what form of philosophy is taught. The prevalent forms of philosophy of the present

day are materialism and intuitionalism. There are other forms but they are of secondary importance. Materialism logically carried out, leads to conclusions most destructive and pernicious in their nature. It admits no First Cause, no Supreme Being. This system offers a most fatal shock to the fundamental belief of mankind. Wherever we go, whether to a civilized and enlightened nation or to the rudest tribe, there we find the notion of a Supreme Being universally present. If any form of philosophy counteracts this notion, what a pernicious and world-destroying system must it be? As a general rule, we may say that wherever materialism prevails, there scepticism also follows it.

But, on the other hand, intuitive philosophy is not so. Its results are diametrically opposed to those of materialism. It gives man his true worthiness. It says that there is a God, the Creator of the universe. Hence we positively affirm that the acceptance or the denial of a Supreme Being is a normal result of the form of philosophy we embrace. Therefore it is a matter of no small consequence what form of philosophy we accept.

This influence of a scholar has not failed to attract the attention of some of our Tamil authors. They have well expressed it. They say that if a king be compared with a scholar, the scholar has the greater influence. A king is honored and has influence in his own country alone; whereas a scholar is honored and respected everywhere.

P. L. C.

INTEMPERANCE.

As the above evil is gradually taking hold of many of our educated and promising men it is thought a few hints against it are desirable. We propose to give in the following series of articles the evils resulting from such a habit in the long run and wish our friends will take them in good part at a time when our dear young friends are treated far and wide beyond the reach of the influence

of their parents and friends. It is hoped that as there are instances when those who give themselves up to drink have lost all prospects, this will be instrumental in warning many who are likely to find themselves sooner or later irrecoverably lost. Never did we anticipate the downfall of a few whose talents, tact in business, family connection, surrounding influences, the moral training they had, the height to which they have risen in life by their own endeavours, would have reduced them to actual madness and poverty in such a short time. If such a course is not checked in time what else can they give to their dear and near ones who expect better things from them, but something similar to the last will of a drunkard which reads thus:—

"I leave to society a ruined character, wretched example, and memory that will soon rot.

I leave to my parents during the rest of their lives as much sorrow as humanity, in a feeble and decrepit state, can sustain.

I leave to my brothers and sisters as much mortification and injury as I could well bring on them.

I leave to my wife a broken heart, a life of wretchedness, a shame to weep over my premature death.

I give and bequeath to each of my children poverty, ignorance, a low character, and a remembrance that their father was a drunkard." L. S. S.

MISCELLANEA.

—The practice of mechanics is largely a series of experiments, some successive and cumulative and others isolated and independent. Some months ago a mechanic wished to cut some very narrow slots in a bar of steel that was hammer-hardened, and it was desirable that it should not be annealed and rehardened, because of the danger of disturbing the relative widths of the slots. The workman tried the ordinary saw, or thin rotary milling tool, but found it to be impossible to keep an edge. After many ineffective trials, he recollected having witnessed the sawing of stone with sand urged by sheet-iron blades. He substituted a soft iron disk for his steel

saw, and, procuring some moulding sand, he had the satisfaction of seeing progress made in the obdurate steel. By changing the moulding sand for fine quartz sand and using a disk of Muntz sheathing metal, feeding the sand with water, he performed the job in a most satisfactory manner.

—At the instance of the Board of Trade, some experiments were made recently at Aberdeen Harbor entrance, with a view of testing the practicability of using oil as a means of reducing the danger to vessels entering in a gale. The occasion was most favorable. A stiff southeaster was blowing, the sea was running high, the waves dashed over the piers, and it was next to impossible for any vessel to cross the bar in safety. Captain Price, representing the Board of Trade, and the leading harbor officials, were present. Some improvements had been made in the pumping apparatus since the last experiment, a larger hose being supplied, and seal oil being used instead of coarser oil. When the pumping commenced, the waves were dashing wildly against the piers. After twenty minutes the crests disappeared, the breakers assumed a rolling motion, and the entrance was rendered comparatively safe. Two hundred and eighty gallons of oil were used in the experiment.

—All attempts to explain satisfactorily the formation of coal have thus far proved unsuccessful, tho it is generally understood that it is the product of the decomposition of vegetable matter. Just how that decomposition has been brought about chemically is a matter which chemists have not as yet been able to solve. The principal difficulty has been that it has been impossible to obtain a clear insight into the chemical constitution of coal. It has been thought hitherto, and this is still the popular belief, that coal is in the main pure carbon, mixed with varying quantities of bituminous substances. It has been generally believed that, as the product of the distillation of coal is principally carbon, it would be safe to conclude that free carbon actually does exist in coal. The fact that sugar, starch, &c, under similar circumstances leaves a residuum consisting of carbon has never been considered a proof that that element existed in these bodies in a free state. It is well known that coals

which may have the same percentage of carbon, hydrogen, and oxygen, do not by any means, in coking, yield the same products of distillation, and we have a complete analogy for this in the behavior of cellulose and starch when subjected to distillation. Evidence points to the conclusion that coal is a mixture of many and complex compounds; and the difficulty, amounting almost to an impossibility, of separating these compounds, has much to do in rendering a chemical solution of the questions involved in the formation of coal a very arduous task. The production of coal by artificial means is met by great obstacles, among which the absence of all knowledge concerning the conditions under which that process actually took place is the principal one.

—Whatever success science may have or fail to have in predicting terrestrial weather, there can be no doubt astronomers have learned to predict with considerable correctness the occurrence of the mighty solar storms which produce what are called sun spots They cannot yet say that on such and such a day, or even in such and such a week or month, a great spot will appear: but they can tell what years will be characterized by many sun storms, and what years by few, for ten or twelve years in advance. Yet scarce half a century has passed since the periodicity of sun spots began to be recognized, and not a quarter of a century has passed since the theory was thoroughly established. We do not even yet know why these waves of sun spots pass in their long ten-yearly surge over the vast surface of the sun. The Kepler of the sun has done his work; the Newton has yet to come.

What a problem it is that lies before astronomers when we consider what sun spots really mean! The great atmosphere of the sun, whose breath is flame, is yet so cool compared with his intensely glowing surface that it absorbs a large proportion of his light as well as of his heat. It absorbs so much that it actually changes his color. There can be no manner of doubt, from what Professor Langley has shown about the absorptive qualities of that atmosphere, that were it suddenly stripped off the sun would shine not only with greatly

increased brightness, but with a bluish violet color In a very short time indeed that color would seem white again to our eyes, grown accustomed to the change: after which, the sudden restoration of the absorbing atmosphere would change the sun to an orange-red orb, which only after awhile would seem to our eyes a white globe as before. But while the general absorptive action of the sun is wonderful, the story is still more wonderful which the spectroscope has to tell about the specific absorptive effects due to its constitution. We find that, whereas in our air the vapor of water is present (to condense into water drops and form clouds at certain levels, and to change to ice-crystals and form *cirri* at higher levels), in the sun the atmosphere is laden with the vapors of iron, copper, zinc, sodium, magnesium, and like elements, to form clouds of metallic drops, great gatherings of metallic crystals, while the rains that pour down towards the concealed true globe of the sun are mighty showers of molten metal. When a hurricane occurs in the sun, the clouds which form the sun's surface are swept along, or whirled around, not at the rate at which we measure our storms, but with a velocity compared with which their swiftest motion is as rest. The solar tornadoes rage, not over a few hundred square miles, but over regions as large as the whole surface of the earth, over hundreds, even thousands of millions of square miles; and they travel at a rate not of so many miles per hour or per minute, but of many miles, sometimes more than a hundred miles, in every second of time. Such storms are in progress now, where we see the spots upon the sun. Such storms tell us of the activity of that great central engine whose throbs are the life-beats of the solar system.

It has been shown that the earth as a whole responds to the solar action displayed in sun spots. There can scarcely be any doubt that the connection long since indicated by Sabine between the phenomena of terrestrial magnetism and the condition of the sun's surface with respect to spots is a real one. Not magnetic relations simply, but others which have only been associated within recent times with magnetism, as the occurrence of auroral displays, &c, have been clearly associated with the general condition of the

sun's surface on the one hand, and with the outbreak of specific sunspots on the other. Again it seems clear that the temperature of the earth as a whole is affected by the absence or presence of many spots on the surface of the sun. This has been shown, apparently in an unmistakable way, by the underground thermometers at Edinburgh and at Greenwich. But the rain and wind cycles, the famine and financial crisis periods, the recurrence of disasters and shipwrecks, bad vine years, and so forth, in harmony with the sun spot waves, these have not yet been established.

—Mr. Edward Atkinson says that it takes 160,000 men, women, and children to make the cotton cloth, the use of which is now enjoyed by the people of the United States, who are the best clothed people in the world. If those who do this work were obliged to use machinery no more effective than the spinning wheel or hand loom, it would require, he computes, 16,000,000 persons continuously employed ten hours a day to do the necessary work.

According to the view of a certain class of self-called "labor reformers" of whom we hear less now than formerly, and less than we are likely to when hard times come again—modern labor-saving cotton machinery must be depriving 15,840,000 men, women, and children of steady work; the "reformers" would assume, remunerative work.

Where are they, and what are they doing? In every department of productive labor, machinery has been and is having a corresponding effect. The displaced millions of mythical hand workers cannot have starved to death, or have been otherwise exterminated, for there has been a rapid increase of population in all manufacturing countries, and the average length of human life is greater than it used to be.

The obvious truth—obvious, that is, to all who can see things as they are—is, that so far from displacing labor, or the demand for it, labor-saving machinery furnishes more and more varied opportunities for remunerative work, larger pay for the worker, and cheaper products for the worker to enjoy. Machinery increases the cot-

ton worker's capacity a hundredfold, cotton cloth is cheapened, and, as a natural result, a hundred times as many people can afford to use cotton and more of it. And a similar effect is produced in every other department of productive labor.

The anti-machinery argument holds good only on the assumption that savagery—which means nakedness, hunger, indifferent shelter, and general misery—is better than limited labor, made efficient by steam power and machinery, and surrounded by all the comforts that labor brings. If any workman, or class of workmen, remains as badly off as savages are, it is wholly because of their choice to lead the lives of savages or worse. Intemperance and improvidence, the great sources of misery in industrial communities, are not produced by machinery.

—Speaking numerically, it may be said that the Press of to-day is numbered by tens of thousands. Every continent hears the rustle of its falling leaves. Upon some it descends with whitening showers; upon others as yet with but big drops that presage the coming of a glorious season of awakening life, and grand activity. Europe, North America, and Australia are at present its most favored fields. But those that have long sat in darkness are beginning to see the great light. India is awakening. Nearly four hundred journals published upon its own soil, a large proportion of them in its native languages, are breaking the bread of life to its people. Japan, among the youngest of nations to be born into a new civilization, has more than two hundred and fifty newspapers in active operation.

South Africa, enriched by both British and Dutch blood, has had kindled within it a great fire of civilization, which is steadily penetrating northward. To the heathen is thus being given the pearl of great price while the givers for themselves extract diamonds of inestimable material value from the reclaimed soil. In North Africa, too, the skies are beginning to be radiant. Railways, the telegraph, and the press are found in Algeria and Egypt.

Mexico, Central and South America are unquestionably upon the eve of a great awakening, both commercial and intellectual.

Railways, electricity, and the press are nimble instruments in the hands of the Present in scaling off the binding incrustations of the Past, and in stimulating the development of the Future. China cannot long resist the influences of a Western civilization permeating her masses. It is already surmounting her walls and peering into her palaces. It requires but little of the gift of prophecy to foretell that the Flowery Kingdom must soon yield herself to those essential principles, omnipotent in power, which have made Europe and America the absolute rulers and arbiters of the destinies of the world.

In the entire world there are published 34,274 newspapers of all degrees. Europe leads the way in numbers, circulation, and influence, having 57 per cent of all in existence. North America follows with 36 per cent. How unequal is the distribution of newspaper literature throughout the world, is apparent when it is considered that Europe and North America together have an area less than one-fourth of the habitable globe and yet they contain more than nine-tenths of all publications in existence. Popular intelligence is indicated by the diffusion of the products of the press among the people. By this test North America is seen to take first rank. The nearest approach to it is found, not in Europe, as naturally would be expected, but in that continent or division younger in civilization even than America, we mean Australasia. After Australasia the next in rank of popular intelligence is Europe. It is a long stride downward from Europe to the next in rank, which is south America, and another long stride to reach the rank of Asia and Africa.

It is interesting to note the languages in which newspapers are printed. The variety is very great, including, perhaps, hundreds of different families, branches, and dialects. But it becomes speedily apparent that the vast bulk of newspaper work is done in four tongues, which outstrip all competitors.

The first of these is the English, which stands in the forefront, much more than a head and shoulders above and beyond its nearest fellow, in the number of journals which employ it. Sixteen thousand and five hundred newspapers are printed in English—that great

linguistic mosaic, that philological breccia, which, rolling through the ages, has drawn into itself from all ancient and modern tongues the vigor and the fire, the piquancy and the elasticity, the Latinian polish and the Celtic ruggedness, the height and breadth and depth, which fit it for cosmopolitan uses.

Next in importance to the English stands the German,—solid, sombre, rich in resonance and resources, and powerful in expression,—speaking to the world through 7,350 presses.

The third tongue most liberally used by the press is the French, versatile and elegant, making good in brilliant flashes and in keen thrusts what it may lack in ponderous, crushing power. In this are printed 3,850 newspapers, mostly earnestly devoted to advancing the civilization and promoting the welfare of mankind.

The Spanish tongue comes fourth in this order, making use of about 1,600 publications and bidding fair, in the future, to reach a still wider range of usefulness. With Mexico and the South American Republics speaking the Spanish language almost uniformly, it is easy to foresee that its journalistic scope and utility are sure to increase with the steady growth of the nations named, until it may become third, or even second, in the rank of newspaper use.

The four languages named may be called the imperial mediums for the conveyance to the world of man's purest, loftiest, most ingenious and most patriotic inspirations and designs; since through them nearly thirty thousand presses are continously giving to the world that mental stimulus, intellectual light, moral stamina, and religious enthusiasm which move, illuminate, and sustain all souls, both small and great, that underlie, and guide, and in their spheres achieve and illustrate the progress of mankind.

COLLEGE AND ALUMNI NOTES.

—Nineteen have been received into the Freshman class this term. The total number on the roll is 68; distributed in classes as follows: Senior 9, Senior Middle 11, Junior 13, Junior Middle 16, Freshman 19.

—Several of the students are intending to present themselves for the Clerical examination to be held August 29th. We presume there will be a large number of candidates from all over the Island but we doubt whether more than a tithe will be taken

—The Mathematical Prize examination was held July 17th—19 Only two presented themselves from Jaffna, both from our College.

—Three of the last graduating class have already obtained employment as teachers. H. Chellappah is assistant teacher in the Chavagacherri English school; K. Clough in Karadive; and A. C. Hemphil is assistant to R.O. D. Asbury, Esq.in his University Class.

—Mr. Arooloanantham Daniel who was formerly a writer at Tillipally is now the Treasury writer of the A. C. M.

—Mr. David Thambyah '79 has very kindly sent to the *Miscellany* a donation of Rs. 10. We are glad to know that he is prospering, and does not forget his Alma Mater, nor any of her interests. The gift was a most timely one, in the present financial embarrassment of this magazine.

—Mr. James P.Tilliampalam '80, we hear, has been promoted to the Batticaloa Kachcherri. He has been employed in Newera Ellia for the past two or three years.

—Mr. S. N. Strong of the class of '77 is now employed by the Misses Leitch at Manippay,

—We regret very much that the *Miscellany* is to lose the valuable services of Rev. R. C. Hastings, who has been connected with the editorial staff of the paper ever since it was started. His marriage to Miss M. B. Truax is announced for August 10, (too late for us to give an account of the ceremony in this number); after that he will engage in missionary work at Udupitty. The college, for whose welfare he has so earnestly laboured, will feel the loss occasioned by his departure. We wish him all success in his new field of labor and hope still to receive articles from his pen for the *Miscellany*.

—The regular meeting of the Alumni Association was held on the evening of June 29th. An animated discussion was held on the question whether Ceylon should be annexed to India. The ques-

tion adopted for the next meeting was suggested by the arguments presented in favor of the educational system of India. The question is: Is it desirable to have Jaffna College affiliated to an Indian University.

—The Senior Certificate examination was held from May 14th to 19th inclusive. Of the 8 candidates, 7 passed, one in the First Class. Their names in the order of merit are:

First Class.	
J. I. Christmas,	*Tillipally.*
Second Class.	
T. S. Cooke,	*Batticotta.*
P. Valupillai,	*Karadive.*
H. Chellappah,	*Tillipally.*
A. C Hemphil,	*Valany.*
P. L. Christian,	*Araly.*
A. A. Armstrong,	*Batticotta.*

The subjects and examiners were as follows:—

English Poetry, Milton's Paradise Lost, Books 1 and 2	Rev. J. S. Chandler, M. A.
Shakespear's Julius Caesar,	Mr. H. C. Chapin, B. A.
English, General questions,	Rev. T. S. Smith, M. A.
Latin, - -	Mr. H. C. Chapin, B. A.
Trigonometry - -	Rev. S. W. Howland, M. A.
Surveying, - -	Rev. S. W. Howland, M. A.
Natural Philosophy, - -	Rev. T. S. Smith, M. A.
Chemistry - -	Rev. G. T. Fleming.
Astronomy - -	Rev. T. P. Hunt.
Rhetoric - -	Mr. F. K. Sanders, B. A.
Evidences of Christianity -	Rev. E. M. Griffith, B. A.

—The meeting of the Board of Directors was held on Saturday May 26. A large number were present. Two new Directors were elected, Rev. E. Rigg, and Dr. L. S. Strong. The Principal's report was read and accepted. It was voted to take a new class with the beginning of a new year. Some interesting questions came be-

fore the body which called forth an earnest and spirited debate and it was quite late before they adjourned.

—The graduation exercises connected with the close of the 11th year of Jaffna College took place on Thursday the 8th of June.

The Gymnastic exercises commenced at 5 P. M. and the rhetorical exercises at about 7. Otley Hall was crowded, and at least 50 or 60 were unable to gain entrance within the room.

The decorations were better than usual. The instrumental music was good, the songs were too full of flattery to be acceptable to any of the foreigners and we are sure to many of the educated natives also.

The orations, tho not quite up to the mark of previous years, still showed thought; the delivery was fairly good. We append the order of exercises.

READING OF SCRIPTURE AND PRAYER.

MUSIC.

Oration—Hindu Astronomy—A. C. Hemphill.
Oration—The Power of Music—H. Chellappah.
Oration—Singleness of Aim—A. Armstrong.

MUSIC.

Oration—Respectability—K. Clough.
Oration—New Enterprises in Jaffna—T. S. Cooke.
Oration—The Ideal and the Real—P. Veluppillai.

MUSIC.

Oration—The Scholars' Influence—P. L. Christian.
Oration—Influence of Religion on Social Progress, with Valedictory. J. I. Christmas.

MUSIC.

Address of the Principal to the graduating class.
Giving of Certificates and distribution of Prizes.

MUSIC.

—Prizes have been awarded as follows for the past year:—

SENIOR CLASS.

Scholarship prize—J. I. Christmas.
Conversation prize—T. S. Cooke.
Chemistry prize—T. S. Cooke.

SENIOR MIDDLE CLASS.

English prize—G. C. Lee.
Natural Philosophy prize—G. C. Lee.
Trigonometry prize—A. Arulampalam.

JUNIOR CLASS.

Moral Science—S. Kathiravelu.
English—1. S. Kathiravelu.
2. V. S Henry.

JUNIOR MIDDLE CLASS.

Declamation prize—1. V. Kandiah.
2. V. Arumugam.

FRESHMAN CLASS.

Scripture History—1. T. S. Arnold.
2. E. N Charles.

The musical prizes were awarded to E. B. Hunt and G. C. Lee.

Payment of the following subscriptions is hereby acknowledged with thanks.

Dr. S. F. Green	*America*	.68	Miss. E. Agnew	*Jaffna*	1.00
Mr. David Thambyah	*Tangalle*	.56	Miss. K. E. Hastings	"	.50
T. M. Tampoo, Esq.	*Jaffna*	1.12	Mr. Henry Lawrance	"	1.00
G. H. Hallock, Esq.	"	.50	" C. M. Sanders	"	1.00
R. Breckenridge, Esq.	"	.5	" Wm. Joseph	"	.50
A. Subramanier, Esq.	"	.56	" A. Daniel	"	.50
Dr. M. H. Hitchcock	"	.56	" E. K. Appathurai	"	.50
" A. Arumugam	"	.50	" S. G. Lee	"	.50
Rev. W. W. Howland	"	.50	" M. Buell	"	.50
Miss. S. R. Howland	"	.50	" N. S. Adams	"	.50
Miss. M. Leitch	"	2.00	" E. Venasitamby	"	.50
Mr. A.M. Chittampalam	*Colombo*	1.56	" R. Kalingarayar	*Kandy*	1.12

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