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# THE QUARTERLY;

Periodical in connection with the Collegiate Institute Literary Society.

Nous travaillerons dans l'espérance.

Jol. IV.]

HAMILTON, APRIL 1st, 1878.

「No. α.

#### MONEY.

THE necessity for some medium of exchange seems to have always theen among man's earliest wants on emerging from a state of barbarism. s soon as the first approach towards Evilization is made, the individuals of a community cease to depend each upon is own skill or labor to supply all his In a very primitive state of society, every person may be his own saoemaker, tailor, carpenter, &c., but it soon discovered that it is more satisactory to all concerned to entrust the seduction of specific commodities to particular individuals, inasmuch as by being continually engaged upon the ame kind of work, a person will acquire greater skill, will be enabled to manuilacture an article in less time, and will produce a better article than will anther person who has first to turn his and to this and then to that, according as his varied wants may dictate. Thus, instead of each individual of a community manufacturing or producing all that he may require for his comfort or convenience, he will exchange the profucts of his own skill for those of the killof others. This method of exchanging one commodity for another is called arter; and, so long as man's wants are w and exchanges can be quickly and

easily effected, it may be found to answer all requirements; but, so soon as something more than a bare subsistence is demanded, the inadequacy of barter begins to be felt. A has flour, B has cattle, C has clothing to dispose of. A wants a new suit of clothes, but C, having no need of flour at the time, refuses to accept it in exchange for his goods. B requires both flour and clothing, but neither A nor C will take his cattle. C wants bread also, and, fortunately, recollects that the baker is out of flour, Off A and C go therefore to hunt up the A accepts the bread in exchange for his flour, not because he needs it, but because he knows that C will take the bread for the desired suit of clothes. B is less fortunate, but eventually, and after losing much valuable time, is enabled to dispose of his cattle and obtain the flour and clothing he needs. The exchange of commodities thus becomes either impossible or can be effected only by great inconvenience and loss of valuable time, and the persons who deal together are forced to adopt some common object of value which each is willing to take because he knows he can readily get rid of it again in exchange for whatever he may require. This object, of whatever material

it may be composed, is money. By means of it, two persons who do not deal together mutually as producer and consumer are enabled to enter into transactions. B accepts it from the butcher for his cattle, and with it purchases from A and C such flour and clothing as he requires. A employs it to get from Cthe coveted suit of clothes, and C to get his bread from the baker, who again passes it over to A for flour. A buys the farmers' wheat with it, and from the farmer it finds its way to the baker, butcher, tailor, &c., enabling a ceaseless round of exchanges to be made, and that, too, without loss of time.

Besides being a medium of exchange, money serves a second very necessary purpose, for, just as units of length and capacity are requisite for measuring distance and volume, so some unit of value must be agreed upon before an interchange of the products of different localities can be effected, even when barter has to be resorted to. The merchants who trade between different countries, even though they exchange goods against goods, must estimate what they sell and what they buy by some common measure of value. A and the baker will have widely different opinions as to the number of loaves of bread that should be given for a hundred weight of flour. C and A may wrangle hopelessly over the number of loaves to be exchanged for the suit of clothes, and so on until some object is agreed upon in common as a standard of value, by reference to which each person may fix the price of what he has to se11.

But, while money thus furnishes both a medium of exchange and a measure of value there is an important distinction to be observed in the method of using it in the two cases. In the former, it is a real object of value, and is, in reality, one of the commodities exchanged, while, in the latter, it takes no part in the transaction further than to serve as a standard for ascertaining the relative values of the goods bartered.

In the former case, it may be said to ! simplify barter by furnishing an ob parative ject of such intrinsic value and utility 2. The that it can be exchanged against any guantiti other article whatever, and that, too product without loss of time. In the latter, the iniform particular unit of value fixed upon may 3. It have no actual existence. The pound dinary c  $I_{ij}$  can be  $\iota$ sterling is a good example of this. is used in England as the common meal wear or sure of individual, and even of the 4. Th national, indebtedness, although, in itself division merely a symbol, and not a physical oblivalue, so The same is true to nearly as great are wort an extent in regard to our own dollar large pic We estimate value in dollars—articles 5. In cost so many dollars. Canada owes appropriate the cost so many dollars. vast number of dollars, and yet we have there ob no such coin. We have silver pieces there ob whose aggregate value is one dollar hence cives the contract the co We have slips of paper containing probent tim mises to pay a dollar on demand, but both of t no dollar exists. Both the dollar and s very fa the pound serve, in fact, as units by been the which the value of money itself, as an has been article of commerce, can be measured and me Thus, 440 oz., troy, of pure gold are estised in I timated as worth £1,869 sterling lica, cott and our dollar is such that any article astern. worth £15 is also worth \$73. Money for many may be regarded in still a third light in Benga namely, as a pledge which the purchaser. After of an article leaves with the seller when commence he gives him no merchandise in extine coast change. If this pledge consists of some found to substance such as gold or silver, whose this con intrinsic value even as merchandise is the whit fully equal to that for which it is pledged beriwinkl then the transaction may be looked upon made out as an interchange of commodities, each shell. The commodities is the commodities of commodities of the commodities of t as an interchange of commodities, each stell. It giving the other a full equivalent for and polis what he receives. But when the pledge and arran is a bank note, note of hand, bill of extra ewelry. change, &c., itself, possessing no intrinsed by sic value, but being merely an acknowly soney, as ledgment of a debt, the seller receives granded of what may or may not be a full equivalent. The lent for his goods, according as the debt, he colon which the pleader represents will as will change we lent for his goods, according as the debt in which the pledge represents will or will plange w not be discharged. Money is generally mongst one or both of those metals which are gal tende called precious, for the following real fathom:

pe said to 1. They possess great value in coman ob paratively small bulk.

d utility 2. They are produced in nearly equal inst any quantities, and at nearly equal cost of hat, too production, so that their value remains atter, the iniform, changing only by slow degrees, pon may 3. They are indestructible under or-

e pound tinary conditions of the atmosphere, and It can be used or hoarded without much

non meal wear or decay.

this.

of the 4. They are susceptible of easy subin itself division or aggregation without loss of sical obtalue, so that a number of small pieces as great are worth no more nor no less than a 1 dollar large piece of the same weight.

-articles 5. They are homogeneous in their owes a structure, and casily identified.

we have there object except gold and silver, and dollar hence civilized communities at the preng prosent time invariably use either one or nd, but both of these metals for money. Such llar and s very far, however, from having always nits by been the case. Sometimes the standard as anhas been copper, as in ancient Rome easured and mediæval Sweden. Rock salt is are es used in Abyssinia, hides in South Amesterling lica, cotton cloth answers the purpose in Eastern Africa, and the cowrie shell has article Money for many years been a form of currency d lightijn Bengal.

rchased. After the settlement of America had when sommenced, the Indians situated along in exchange the coasts of Long Island Sound were of some found to possess a circulating medium. This consisted of beads of two kinds whose this consisted of beads of two kinds— idise is one white, made out of the end of a ledged periwinkle shell, and the other black, ed upon made out of the black end of a clames, each shell. These beads were rubbed down ent for and polished as articles of ornament. pledge ind arranged in strings or belts into of extremely. These beads and belts were of extendery. These beads and beits were intrin sed by the Indians themselves as cknow honey, and were real money. They eceive regarded one black bead as worth two equival white. This money was called wampum. It is the colonists began to use it for exor will hange with the Indians, and then nerally mongst themselves. It was made the real gal tender in Massachusetts, and, by its real fathom or belt of wampum consisted

One fathom of white of 360 beads. would buy furs which were valued at five shillings, and one fathom of black would buy furs worth ten shillings. was for the Indians, in their limited community, a perfect money. They divided their labors, some hunting and fishing, some who lived on the shore making wampum; they made as much as they chose, or could; it was a produce of labor, and subject to demand and supply; it was, of course, subject to deterioration by wear and use. accounts of the New Netherlands, as the territory now embracing New York State was then called, were, in 1662, kept in wampum and beaver skins; and, complaints having been made of its in creasing depreciation, the Chamber of Commerce at Amsterdam credited all its colonial officials with 25 per cent. additional salary in beaver skins to cover their loss. In 1635 musket balls were used for change at a farthing apiece, legal tender for sums under 12 d.

Early in the 18th century, Virginia adopted tobacco as a currency. It was deposited in warehouses, and receipts for it passed as currency. It was a true money, but not a good one, as it naturally fluctuated considerably in We read also of a bank issuing money and receiving the interest in

hemp and flax.

In 1659 it was ordered by the General Court of Massachusetts that no man should pay taxes "in lank cattle." Hoarding money would have been little security against loss in those days.

In some of these cases the currency used is doubtless the best known to those using it, but in others it can have been but a temporary expedient. The objections to these different kinds of money are numerous; they rapidly depreciate through decay or other ordinary circumstances; they could not be transported easily in any considerable quantity from place to place, and at any time could have been but a local circulation, and were, for that reason, incapable of being used in foreign trade.

Gold and silver then being adopted,

as sooner or later they are sure to be, as the standard money of a country, require, in order to facilitate their use, some guarantee of their fineness, and also some mark by which the weight or value of any particular piece may expeditiously be known. So easily can fraud be practiced by alloying either gold or silver that, unless some such guarantee were adopted, it would be necessary to test both the weight and fineness of every piece of money before accepting The duty of securing the purity and standard of the currency is usually undertaken by the Government of a country, which accommodates its subjects by issuing small pieces of stamped metal These coins possess a cercalled coins. tain weight, and, in order to be current, must have a definite and invariable fine-They are thus rapidly and easily and, consequently, estimated, adapted for use as current money.

The conversion of gold or silver into coined money in no way changed its intrinsic value. The gold sovereign is worth no more than the same weight of gold of the same fineness in any other shape, its purchasing power being enhanced only to the slight extent represented by the cost of coining, and the advantage of having the weight and fineness of the metal instantly ascer-

tainable.

When a government has once fixed the purity and standard of a currency, it should jealously guard against any adulteration of the coinage, and yet in several instances a State has defrauded its creditors by altering its money unit. The Roman as, at first, contained 12 ounces of copper, but in the First Punic War in order to meet the expenses of the State, its weight was reduced to two ounces, and thus the Republic paid off its debts, gaining five parts in six. In the Second Punic War asses of one ounce were made, the Republic thus gaining one-half. The weight finally reduced to half an ounce. The Roman aureus diminished in weight from 40 to the pound when first coined to 72 to the pound in the time of Con-

stantine. In the time of Charlemagn disapp the French money unit contained good r pound of silver. Philip I. violate tion tl this standard, his successors followed This s his example, and in the time of the but a l Revolution it weighed about 70 grains reason The German florin was at first a gold statem coin weighing about 60 grains, when treat p abolished it was 40 cents worth of silven equal 1 Edward I. first tampered with the Eng clipped lish coinage by increasing the number a tax o of shillings made from a pound of sill new co Henry VIII. so debased the coin than t age that the pound sterling only con jeweler tained four ounces of silver, but in the countri three following reigns the degradation strade. was stopped, and the fineness of the to a gr coin was gradually restored.

in was gradually restored. perfect When money below the standard of ence to fineness is issued, its circulation tend formerl directly to destroy confidence and trade coins, s The credit of a country suffers, price money rise, and all the appearance of a genel was ac ral money panic follows. The wretch Another edness, misery and distrust which placing existed in England about the year termed 1695, in consequence of a debase adopted currency, are graphically describe money a Macaulay in his History of Thus, if England:—" Nothing could be pur paying e chased without a dispute. Over ever adopt the counter there was wrangling from morn discharg ing till night. The workman and his expendit employer had a quarrel as regularly a more full Saturday came round." The debase age is o ment in this case was, however, mostly that is, t caused by the clipping of the coil not wort This is impossible with the coins of the market v present time, but at that time the piece lebt wou were not uniform either in weight of by paying size, few of them were exactly round the silver and moreover they had smooth edges all home To clip them, therefore, was a vertior making easy matter, and a lucrative busines places, which was made of it. To such an extendistimated had it been carried, that what had been falue. In originally shillings were so clipped and in the Enhammered as not to be worth morpho gold co than a quarter of a shilling. New over-rated money had, it is true, been coined an standard, issued, but it had disappeared like petween it magic, and in a very short time none dum, 40 sl it could be found in circulation. Ich Canada

emagn disappeared, because whenever bad and ained good money are brought into competiviolated tion the bad will drive out the good. ollowed This seems very strange at first sight.

of the but a brief consideration of some of the grains reasons will readily reconcile us to the a gold statement. The state had of course to, when treat perfect coin and light coin as of f silven equal value, and a coin that had been clipped went as far in the payment of number a tax or a debt as the new coin, but the of sill new coins were much more valuable re coin than the old when melted down for y con jewelers' work or when sent to other in the countries in the ordinary course of dation strade. Hoarding money too, obtained of the to a great extent at this time. perfect pieces were laid up in preferard of ence to the poor pieces; poor pieces tend formerly hoarded, were replaced by new trade coins, so that not only was the good price money withdrawn, but more of the bad genel was actually poured into circulation. retch Another case of one kind of money rewhich placing another occurs when what is year termed a double standard has been based adopted, such as when gold and silver cribe money are legal tender for any amount. Thus, if a purchaser has the option of put paying either in gold or silver, he will ever adopt that method of payment which morn discharges his obligation with the least id hit expenditure of value. To illustrate rly a more fully, suppose the silver in a coin-base age is over-valued in regard to gold, nostly that is, the silver in a shilling piece is coir not worth a shilling according to the of the market value of silver, then, of course, a piece lebt would be more cheaply discharged ht of by paying silver than by paying gold, bund the silver would be adopted in making dges all home payments, and the gold kept versior making all payments to foreign ines places, where the coins used would be xter estimated according to their intrinsic beef value. In our own coinage, or rather land in the English coinage, for we have more to gold coins of our own, the silver is New aver-rated, but gold being the only ant tandard, buyers have not an option lik jetween it and silver beyond a specified ne of sum, 40 shillings in England and \$10

In Canada. Copper, in the coinage, is

very much over-rated, so that were it not limited it would soon drive out both gold and silver. It is legal tender for 12d. in England and 20c. in Canada. Facility in making payments requires a due amount of both gold and silver in a currency, gold being useful for large and silver for small payments, so that when a double currency is adopted any marked change in the relative value of the two metals will give a heavy and cumbrous currency where silver remains, and when it leaves the country the need of small change is felt. The ratio between the value of gold and silver is so unsteady that it seems impossible to maintain a double standard. At the beginning of the present century France, adopting a double currency, fixed the proportion of gold to silver as  $15\frac{1}{2}$  to I. This was undervaluing gold, silver was the cheapest currency in which a debtor could pay his obligations, and gold almost disappeared from circulation. After the discovery of gold in California and Australia the relation was reversed—gold became cheaper, silver was undervalued and rapidly flowed out of the country. Since 1872, in consequence of the increased production of silver in America, its value has fallen nearly 14 per cent., so that France can only retain her gold by keeping some \$90,000,000 worth of silver out of circulation, and closing her mints to its further coinage.

In 1793 the ratio of gold to silver was very nearly 15 to 1. The United States adopted a gold and silver standard, with this relative valuation.

This ratio, however, has scarcely remained constant for two years in succession, and has pretty steadily increased. Gold being thus undervalued at home, sought a market where it could command a higher price, and left the silver to supply the needs of a currency. In 1834 the weight and in 1837 the fineness of the gold coins was reduced so as to increase the ratio to nearly 16 to 1. This was rating silver at too low an estimate; it was worth more as bullion in the market of the

world than as coin in the United States, and the inevitable result followed. The inconvenience caused by the absence of silver coins of small denomination called for a readjustment of the coinage, and in 1853 the silver half dollar was reduced in weight from 206¼ to 192 grains, and smaller coins in the same ratio, in order to retain them in circulation, and at the same time it was enacted that that they should be legal tenders only to the amount of five dollars. The silver dollar was not reduced in weight, and was left legal

tender to any amount, but as few of them were coined the Act of 1853 practically amounted to the adoption of a single gold standard. This was formally done in 1873, when the gold dollar was adopted as the unit of value and the coinage of the silver dollar discontinued. By a recent act, however, the double standard has been re-established in the United States, but the silver has been so grossly over-rated, that gold cannot possibly remain in circulation.

B.

APRIL.

I.

Now roars the foaming cataract down the steep,
From winter's bondage freed; and once more Death
Is overcome of Life. As from a sleep,
Sweet flowers wake and look upward, and the breath
Of a new life is stirring in the trees,
As mid our busy thoroughfares they stand
With naked arms outstretched in mute appeal
To thee, oh April! who, with fitful smiles
Uplift'st thy floating curtains to reveal
Summer advancing down heaven's azure aisles,
With music as of streams and birds and bees,
And flowery fragrance filling all the land.

II.

And we who walk by faith, with longing gaze,
Look upward, hopeful, to yon clearing skies,
Till dimly in the far blue slumbrous haze
We see the calm hill tops of Paradise;
Yea! were it not that in the bough o'erhead
Between us, and those heavens that smiling wait,
There hangs a last year's cold and empty nest,
Whence all the music and the life hath flown,
We might forget all trouble and unrest,
Selfishly turning heavenward alone,
Forgetful of the hearts whence hope hath fled—
Earth's empty nests left cold and desolate.

J. L.

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NOTES ON THE FOURTH BOOK.

# THE NORWEGIAN COLONIES IN GREENLAND.

William Scoresby.—A celebrated Arctic explorer and man of science, was born in Yorkshire, 1789, and died 1857. He made many voyages to Greenland as captain of a whaler. On giving up the sea he became a clergyman. He is the author of several books.

Iceland was colonized by the Norwegians in the year 874 A. D.

Eric Rauda i. e. Henry the Red. Snoefellzness, i. e. Snow Cape Ness is a promontory.

Natural Attractions.—Advantages existing in the nature of the country.

Finished Picture.—Perfect picture, containing all they could wish.

Exodus.—A going out in a body.

Olans Tryggesen introduced Christian-

ity into Norway.

Paganism from Pagus a village. Christianity was first adopted by the cities, the remote regions of the country followed their example very slowly, and hence the term "Paganus" acquired the meaning of one who worships idols. Our word "heathen" also means a dweller on the heath.

Benighted.—Literally covered by night—in darkness—in ignorance. We usea figure called metaphor founded on resemblance. A person in the dark can not see anything, and a person in ignorance knows nothing.

Gospel.—God-spell, good tidings or story.

Osterbygdt.—Eastern colony.

Hamlet.—Little home. Hamilton—town of the little home.

Black Death.—Read of this in the history of England under Ed. III.

Unicorn (unus-cornu).— An animal with one horn. A purely fabulous animal

as it appears on the royal arms.

Aborigines.—People living in a country from the origin.

FOUNDING OF THE N. A. COLONIES.

Other discoverers of the New World were

John Cabot, 1497, discovered Labrador; Sebastian Cabot, 1498, Newfoundland; Amerigo Vespucci, 1498, South America.

Details.—Exploring the rivers, bays, coasts, etc.

Spaniards.—Colon dtheWest Indies, Florida, Mexico and most of S. America.

Basque.—A people living in France and Spain. They are of the oldest settlers in Europe.

Breton.—The inhabitants of Brittany they are Celts belonging to the same tribe as Welsh, Irish and Highlanders.

Jaques Cartier.—See Canadian history St. Lawrence.—Discovered by Cartier on the 10th of August, 1535, (St. Lawrence day.)

Roberval. — Governor of the new colony. He was lost at sea.

Civil Dissensions. — Wars between Catholics and Protestants.

Fostered (originally foodster).—One given food to.

Acadie.—An old name for the lower provinces, including New Brunswick and Nova Scotia.

Pioneer.—A soldier who goes before the army to make roads, etc., hence any one who goes first to prepare the way for others.

Disastrous, dis evil, and aster a star.—
illstarred. A word left us by the exploded science of astrology, by which

men pretended to tell fortunes by reading the stars.

Auspices.—Another word left us by old modes of foretelling. It means watching birds; avis a bird and specio The Romans and Greeks foretold events from the flight of birds.

Often Privations.—Parse.

Pilgrim Fathers.—Men who, not satisfied with the form of worship in England, emigrated to the new world in order to worship God in their own way.

# THE VOYAGE OF THE GOLDEN HIND.

Sir Humphrey Gilbert, born 1539. His mother married Walter Raleigh and Sir Walter their son, thus, was half brother of Sir Humphrey. During the disturbance in Ireland Sir Humphrey' did Afterwards he became a good service. noted navigator.

Sir Walter Raleigh was another noted He was also a historian, navigator. courtier and scholar. He served in Ireland where he received a large grant of land. After a voyage to America, and another to S. America, he served in the navy. He was imprisoned for treason for 13 years. He was finally beheaded. Queen i. e. Elizabeth.

Faculty.—Trade or profession.

Mineral Men.—Mineralogists, assayers

Morris - dancers .- This was at first Moorish dancers, who danced with toy bells attached to their clothes.

Conceits. — Fancies. Something to tickle the fancy.

Fewel.—This really means "a little joy."

Regard.—This word means "to look What we like we often look at, hence, it means here liking.

Mariners.—Sea men, from marinus, a Latin adjective.

Multitude, (multus many).—Many of the rocky islands in the gulf are yet inhabited by myriads of sea-birds. A remarkable example of this is found at Perce.

Salvo of Ordinance.—A salute of ar-Salvo comes from the Latin tillery.

salvo jure, which means "the right being .safe," hence, it means firing off guns for rejoicing.

Anchorage.—The place for anchoring. Winding.—Blowing wind into.

Cornet.—A little horn. Latin, cornu. a horn.

Trumpet.—A trumpeter, a horn blown in triumph.

Hautboy.—Long wood or high wood, an instrument with a long tube.

Outrageous.—From ultra beyond. The word means here beyond measure, or without limits to it fancy.

This i. e. this purpose, viz, to discover,

#### THE DISCOVERY OF AMERICA.

Columbus.—What do you know about! this celebrated man?

Portuguese.—These were very active discoverers about this time. The Cape of Good Hope was doubled by a Portuguese, Vasco di Gama. India and S. America, also, were visited by them.

Subordination, i. e. peing subordinate, obedience.

The Presages of etc., enumerate these signs of neighboring land.

Te Deum.—These are the first wo words of a Latin hymn of rejoicing, used as a name for the hymn, of the same nature are "Paternoster," "Ave Maria," "Dirge," Dulce Domum, (Sweet furnish. Home).

Crucifix.—From the Latin Crux, cross and figo I fasten. A cross with the image of Christ on it.

Issue.—Termination, result.

Castile and Leon.—Where are these places? Who were the king and queen of them?

Admiration.—This word here means wonder which is its old meaning. comes from a Latin word miror to warning wonder at.

Comprehend.—Take into their mind, understand.

Hawk-bells. — Small bells used for hawks or falcons, with which people Chirurged used to hunt.

Islanders.--What island was this?

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people Chirurgeon from Gr. cheir, the hand, and ergon a work. One who cures diseases by operations with the hands.

William Robertson the author of this piece was one of three celebrated historians of the last century. He was a Scotch clergyman, but spent his leisure

time in writing history. His chief books are a History of Scotland,—a History of Chas. V.—the History of America

from which this extract was taken,and a History of India.

# DEATH OF MONTCALM.

No less glorious.—What is the allusion? His King was Louis XV.

Oswego was then considered to be the key to the British position on Lake Ontario.

A color, a standard. Why so called? Fort William Henry was situated at the head of Lake George, in the State

General Abercromby was born in

Scotland, in 1706; served in Flanders and Brittanny. He was appointed to succeed General Loudoun, but, having failed, he was superseded by Sir Jeffrey Amherst. He died at the age of 75.

Ticonderoga was situated on the shores of Lake Champlain, at the mouth of the outlet from Lake George.

Montmorenci.—A river and county a short distance below Quebec.

Lines.—Entrenched positions. Garrison, from French, garnier.—To

(Sweet furnish. A supply of soldiers for guardling a fortress.

Beauport is near the mouth of the Montmorenci River.

Retrieving the day.—Express in other

Such was the impetuosity. Analyze this and the following sentence:-

means Martello.—A circular fort erected to prostect a coast; said to be so called because

to warning was given of the approach of enemies by striking on a bell with a mind, hammer, from L. martulus, dim. of marcus, a hammer.

> Surgeon.— A contracted form of

JACQUES CARTIER AT HOCHELAGA.

Facques Cartier, the discoverer of Canada, was born at St. Malo, France, in 1500. Sent to the west by Francis I. in 1534 on an exploring expedition. Next year (1535) he made another voyage, during which the visit under consideration occurred. He visited Canada once more in 1541, second in command to Roberval. Having experienced many misfortunes, he re-

Hochelaga.—A portion of the Island is still so termed. Pinnace.—A small vessel with oars and

turned to France, and died shortly after.

L. pinus, pine, a ship. sails.

St. Croix (the river is now called St. Charles) is near Quebec. As extremely rich.—Explain the con-

struction; parse as and rich. Lake St. Peter.—About 50 miles below Montreal.

Which he had not.—Explain the use of which here. Palisade.—From L. palus, a stake; a

fence of pointed stakes set in the ground. Cunningly.—skillfully. This word has since degenerated in meaning.

tribe.— First occupied the

northern shore of the St. Lawrence. westward from Montreal, and afterwards the country between Matchedash Bay and Lake Simcoe. The Iroquois waged a war of extermination against them, and pursued them up the Ottawa to the northern shores of Lake Superior, where they were sheltered by the Ojibways. French missionaries afterwards collected the remnants of the tribe and settled

THE BUCCANEERS.

them at the village of Lorette, near

Ouebec.

Buccaneers. - Derived from Carib boucan, a gridiron, from the custom of bucanning beef, etc., to preserve it, after the manner of the natives,

Grand maritime expeditions, were those of the English and French to North America, of the Dutch to East Indies. and of the Spanish to South America and West Indies.

Piracy.—Derived from Gr. peirao to attempt; the crime of attempting to capture ships at sea.

Besides.—Parse, and distinguish from beside.

Peculiar dread.—The cause for this state of affairs is assigned in the next few sentences.

Smuggler.—From A. S. smugan, to creep.

Interloper.—Said to be from Latin inter, between, and Dutch loopen, to run; this word would, therefore, afford an example of a hybrid.

French wanderers, when driven from St. Christopher, went to St. Domingo, on account of the abundance of black cattle and swine which it possessed. They subsisted by hunting these, and thus became veritable buccaneers. Some grew tired of this life, and took to planting, while many more turned pirates, trusting to sell readily to those who remained on shore what they could procure at sea. These pirates were sometimes termed freebooters, from making free prey or booty of whatever came in their way.

Guise.—From French, means literally way or manner; radically the same word as English wise. The French not having the letter w, replaced it by gu. Compare, guard, ward, etc.

Visor.—Part of helmet that covers the face, and perforated, to see through. From L. video, I see.

Portobello (otherwise puerto bello, fine port), an important harbor of the isthmus on the shore of the Carribean Sea.

Galleon.—A large galley. Note argumentative affix on. A galley is a long, low-built ship, with one deck. galleon is a large Spanish vessel, with lofty stem and stern.

Montbars, a gentlemen of Languedoc, France, entertained such a hatred for the Spanish, from reading of the atrocities they perpetrated on the unhappy natives of America, that to avenge them i.e joined the buccaneers.

Castle of San Lorenzo was near the site of the present city of Aspinwall.

THE EARTHQUAKE IN CARACCAS.

No part of the earth's surface is exempt from the influence of earthquakes, situat but they are more active in the vicinity of volcanoes, though the most violent have been felt in districts remote from volcanic action. At the point of greatest disturbance the motion is from below upwards, then the force is spent in all succession of horizontal earth waves often extending to great distances. The the da influence of the great shock at Lisbon immed was felt at Finland in one direction, and day th as far as Canada in the other. It is es in the timated that 12 or 13 earthquakes occur every year, sometimes causing great loss of life. 60,000 persons are circ. said to have perished by the earthquake at Libson, 1755, and 40,000 in that of Calabria.

Several theories have been advanced move. as to their cause, all seem agreed that some change in the molten mass in the centre of the earth is the prime cause. The latest theory and one of the most plausible, is that from the expansion of elastic matter great waves of the molten fluid are produced bearing on their surface the super-incumbent crust of the earth.

# HUMBOLDT 1769-1859.

One of the greatest of naturalists was born at Berlin; he studied at the universities of Berlin, Gottingen and Frankfort, and made extensive scientific explorations in S. America, Mexico, and Asia. He published many works as the result in 1746. of his travels, his last great work Cosmos being recognized as one of the greatest scientific works ever published. latter years were spent in diplomatic service for the Court of Prussia, where he was held in very high regard.

Inhabitants.—In and habito, to dwell! Ignorant.—In not and gnosco, to know Agitation.—Agito. Volcano.—L. vulcan, a god.

St. Vincent.—One of the Br. W. India Islands, 100 miles w. Barbadoes.

Oscillation.—Oscillo.

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*Productions.*—Gold, silver,

Province.—Pro, and vinco, to conquer.

is ex- Caraccas. — Capital of Venezuela, quakes, situated on the N. coast.

vicinity Distance.—Dis and L. sto, to stand. Preceded.—Præ and cedo, to go. e from Destruction.—De and struo, to build.

great- Capital.—Caput, the head.
below March.—Mars

Excessively.—Excessus.

waves Holy Thursday or Maunday, one of the Held Held Holy week i. e. the week Lisbon immediately preceding Easter; on this in, and day the Last Supper is commemorated

Population.—Populus, a people. ausing Church.—Gr. Kurios Lord— A. S., ns are circ.
quake Calamities.—L. calamitas, misfortune.

Indications.—In and dico, to say. Commotion. — Com and moveo. to

Undulation.—Unda, a wave.

Ebullition.—Bulla, a bubble. Prodigious.—Prodigium, a prodigy. Tropies.—Trepo, to turn.

Opposite.—Pono, to place, Completely.—Pleo, to fill. Vaulted.—Volvo, to roll.

Explosion. — Ex., and plaudo, to clap.

Trinity.—Tres three and unus one. Vestige.—Vestis, a garment.

Disastrous.—Dis. aster, a star. Cathedral.—Cathedra, a chair.

Messina, a town in Sicily, destroyed olora- In 1783.

Lima had a great shock of earthquake result in 1746.

Guayra, pronounced gi-ra. Perished.—Pereo, to die.

Illuminated.—Lumen, light. Summit.—Summus. Ingeniously.—Genus, a kind.

Medicine.—Medeor, to heal.

CONQUEST OF PERU.

porax, and all the tropical fruits. History.—Peru is now in its third hisforical period, the eras being: 1st, the Pre-Incarial; 2nd, that of the Incas;

3rd, dating from the Spanish conquest.

Of the people themselves, or of the character and degree of Pre-Incarial civilization, little is known; but, from the remains of temples and other architectural works, we may infer that their civilization was, at least in some respects, superior to that of the Incas.

The only means of ascertaining the history of the middle period is from tradition, and the remains of temples, &c. An historical record called the quipo was left, but the art of reading it was either lost or concealed on the accession of the Spaniards.

The Incas are said to have originated from Manco Capac (ruler), the first Inca. He founded the City of Cuzco, gave a religious system, established social customs, and then "he ascended to his father the sun," 1062, A. D. The territory ruled over by the Incas was small at first, but gradually extended under successive sovereigns until in the reign of Huayna Capac the empire attained its greatest glory.

Religion.—The Incas believed in a Great Spirit, the Creator of the universe; also in the resurrection of the body and They also immortality of the soul. worshipped the sun as the greater of the

secondary divinities. Conquest.—Francisco Pizarro, son of Gonzalo Pizarro, an officer of some note in Spain, had crossed to America about 1510, and, along with Balboa, crossed the Isthmus of Panama, and discovered the Pacific; then, hearing of a country to the south abounding with gold and silver, he set out with two companions, discovered Peru, and, after some time, conquered it. Pizarro was the founder of the City of Lima. The government of the Spaniards continued under Viceroys until 1821, when Peru, the last of the Spanish possession in S. A., gained its independence, and the Government

# CONQUEST OF WALES.

is now a Republic.

guano,

The conquest of Wales had been attempted by several English sovereigns,

but without success, until Edward I., aided by a fleet from the Cinque ports, blockaded the Welsh coast and starved Llewellyn into submission; but rebellion soon broke out again, and then Edward cleared his way with the axe to Snowdon, and then poured his Basque troops, accustomed to such warfare, around the mountain and compelled Llewellyn to march towards the Wye, where he received a lance wound, from which he died. After his death his brother David held out for some time, but, being betrayed into Edward's hands, he was put to death, and Welsh subjugation was Wales now sends completed 1286. thirty-six members to the English Par liament. The story of the massacre of Welsh bards by Edward seems to be much exaggerated.

Snowden.—A mountain range and summit 3,471 feet high, the culminating point in Great Britain.

Saxon.—Seax, a short sword.

Merlin.—A Welsh prophet and enchanter; was believed to have lived about the time of the Saxon invasion. He was the adviser of Vortigern and King Arthur, and is alluded to by Spencer in the Fairie Queen, and by Tennyson in his Idylls to the King.

Caernaryon.—A seaport town on the Menai Straits; was fortified by Edward I. It was here that Edward II. was

born.

Gray, Thomas.—A poet, born in London, 1716; educated at Cambridge; composed his Elegy written in a Country Churchyard in 1749; Pindaric Odes, 1757. Was offered the post of Laureate, but declined. His poetry, except the elegy, never became popular.

HERMANN, THE DELIVERER OF GERMANY.

Germania, the name applied by the Romans to modern Germany, part of Belgium, and north-eastern Gaul, was bounded on the north by the Baltic Sea; west, by the Rhine and Celtic Gaul, south, by the Danube; east, by the Vistula and Carpathian Mountains.

The first event in connection with their history was the appearance of the Cimbric and Teutons in the present Styria, where they defeated the Roman Consul Papirius, B. C. 113. They were defeated and subdued by Julius Cæsar, who led an army into Trans-Rhenic -Germany. After Cæsar's time they rose again, and Drusus was sent against him; he also defeated them. After this Varus was appointed as Governor, A. D. 7. The Germans, now goaded men by the imposition of taxes, and by Roman institutions, rose in revolt, under succe Hermann, the Roman Arminius. Hermann, skilled with a knowledge of were Roman language and military tactics, craftily lured Varus on to his own destruction, and by his bravery and skill overthrew the Roman power.

Germania.—Gairm, a loud cry; hence the application of the name from the German habit of uttering a sort of war cry when about to engage in battle.

Formidable.—Formido, fear. Insurrection.—Insurgo. Governor.—Fr. Governeur. Extorted.—Torqueo, to wrench. Fashion.—Facio, to do.

According.—Cors, heart.

Complaint. — Plango, to beat the the co breast.

Advocate.—Voco, to call. Pettifoggers.—Petty, and fog to prac-

Fasces.—Fascis, a bundle. Corporal.—Corpus, a body. Symbol.—Ballo, to throw. Conquering.—Quaero, to seek. Opportunity.—Opportunitus. Tactics.—Tasso, to arrange. Princes.—Prinus, and caput. Vengeance.—Venum, a sale, and dico,

Oppressors.—Premio, to press. Wodin, or Odin,-The name of the God of the tribes around the Baltic.

Legions.—Lego, to collect. Meditated.—Meditor, to think. Despair.—Spero, to hope. Savage.—Silva, a forest.

Viper.—Vivus, alive, and Pario, to produce.

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Detmold—A town on the river Werra. of the key miles southwest of Hanover.

# CORTEZ IN MEXICO.

I. Cortez Hernando, born in 1485, A. D., at Medellin, a village of Estremadura, Spain. Under Velasquez against distinguished himself in the conquest of After Cuba, in 1511. He was despatched by vernor, Velasquez with a force of some 600 goaded men to undertake conquest of Mexico. and by In 1528, Cortez returned to Spain, to , under successfully defend himself against the Her-accusations of his enemies. His services dge of were at length forgotten by his sovereign, tactics, and he died in 1547 at Seville.

2. Lay to—Express in other words.

Montezuma.—This was Montezuma II. nephew of the last and grandson of a ; hence preceding monarch. He had been m the elected to royal dignity in 1502 in preof war ference to his brothers, for his superior qualifications both as a soldier and

> Gorgeous.—Derived from old French gorgias, beautiful, or Prov. gorgieus, neckarmour.

Recalled to Spain.—This statement is incorrect. He did not return till after the the complete subjugation of the country. His absence from the city of Mexico at this juncture was due to the fact that Welasquez, jealous and enraged at the unexpected success of his subordinate, had sent Narvaez with a force of 10,000 men to wrest from Cortez the fruits of his campaigns. Equal to every emergency, Cortez met and vanquished this force and secured its allegiance for himself.

Cruelties, &c.—This refers chiefly to the inprovoked massacre by Alvarado of 500 of the nobility of the city when engaged in the celebration of a religious Alvarado afterwards exculpated himself on the ground that it was o intimidate the Aztecs from any inşurrectionary movement.

Set the Example.—This may refer to the dreadful slaughter of the Cholulans y Cortez on account of their design to stay his further progress.

Blood Hound.—This affords further

instances of the cruelties inflicted on unhappy Aztecs. Blood hounds were afterwards employed to pursue runaway slaves; they hunt from scent, and are so called from their ferocious nature.

The first to Fall.—This account of the death of Montezuma differs from that given by Prescott. He appears to have lived some time after, and to have pined slowly to death from mortification of spirit rather than from the severity of his wounds.

Castile.—The central district of the Spanish peninsula as well as the central seat of the monarchy. Castile and Aragon united by marriage of Ferdinand and Isabella, 1469; and from these provinces the present monarchy was extended, which was not fully established till 1576 under Charles I.

Etiquette.—Originally a ticket on which the forms to be observed at court on particular occasions were inscribed.

The monarch was Charles I. of Spain and V. of Germany.

### THE BURNING OF MOSCOW.

Before Napoleon set out on his Russian campaign he had so far succeeded in his design of universal empire that all Europe, except England and Russia, lay at his feet. In the conquest of Russia he intended to open the way to India. He extended the limits of France to the borders of Russia, and, in so doing, he dispossessed of his dominions the Grand Duke of Oldenburg, brother-inlaw of Alexander I., Czar of Russia. Russian commerce was injured by the "Berlin Decrees," which ordered that all the ports on the continent should be closed against British trading vessels.

Elements of Nature.—Fire, air, earth and water. Napoleon attributed all his misfortunes to the severe Russian win-

Vast Host.—His grand army consisted of over 500,000 men, and his losses amounted to over 450,000. Over 130,000 perished from cold and hunger.

Ancient Capital.—Moscow was the metropolis as well as the ancient capi-

It was likewise the Holy City of the Russians, since the Kremlin contained the tombs of all the Czars up to the time of Peter the Great. He founded the new capital. St. Petersburgh, in The population was about 300,-000, who betook themselves to the wandering life of their ancestors.

Czar.—Derived probably from the name Cæsar. Feminine, Czarina. His oldest son is called Czarewitch, and his

oldest daughter Czareowna.

Segur was a French General who took

part in the campaign.

Give the derivation of the following words: Disaster, ambition, campaign, melancholy, remnant, parapet, ambition, capital, calamity, rapacity, noise, presentment.

## THE BATTLE OF THERMOPYLÆ.

Thermopylæ.— Gr. thermos, hot, and pule, a gate, means Hot Gates. It was so called from several hot springs which are found in that place. It is a pass leading from Thessaly into Locris, and from its situation has been called the key of Greece. The pass is about five miles long and was then about fifty or sixty yards wide. The sea and an impassable morass were on one side, and a lofty cliff on the other.

Xerxes was king of Persia and son of Darius I. He attempted to carry out the design of his father, viz: to conquer all Greece.—(See Schmidz's "Ancient

History" pp. 222-228)

Hellespont.—The modern name is Dardanelles. It is a narrow channel separating European from Asiatic Turkey, and unites the Sea of Marmora and the Grecian Archipelago.

Transported the Army.—This was done by means of a bridge of boats and it is said to have lasted seven days without intermission. Mention a similar in-

stance in history.

·Thessaly and Phocis, N. of Greece, (see map).

Sparta, or Lacedaemon in Laconia, (see map).

Tegeatæ, (te-ge-a-te), the men from

Tegea, in Arcadia.

Mantineans from Mantinen, where the Thebans under Epaminondas defeated the Spartans, B. C. 362.

Poloponnesians, the men from the was or Poloponnesus, or Morea, (Gr. Pelogwent abo and nesos-an island). It is joined pretence Greece by the Isthmus of Corinth.

Utterly, from utter, a comparative an adjecti

Defence, L. de.-From and fendo, which the rike, or ward off.

Valor. — Give, derivation and syntheses.—

Palace. strike, or ward off.

nym.

Leaped out of his Throne. - Xerx the en witnessed the battle from a lofty sewas for a l which had been erected for him on the Rome. mountain side.

Renegade, L. re-against, and neg Belgravi deny. Patriotism and military glossindon. I deny. Patriotism and military gloudon. were so highly esteemed among the Acme. – Spartans that Leonidas would have the been despised if he had returned Sparta without offering battle. For the a tanl same reason the Greek historians ofte gurt for

Thespians, from Thespiæ, a town mestici).

Bœotia.

Singular.—Remarkable. What oth Patron.—

meaning?

Manhood, L. virtus.—When Xers Mosaic we sent a herald to the Greeks, comman tances and ing them to lay down their arm Archives, ing them to lay down their armital family r Leonidas answered "Let him con and take them."

Raleigh's "History of the World Syrian at See British history. lesson giving derivation of words lesson giving derivation of words capital of Sy classic origin and a synonym of ear in Peristyle.—
Give abstract nouns from adjectives pillar. A

#### THE DESTRUCTION OF POMPEII.

Pompeii, (pom-pa-yee.)

Fashionable,—L. facio, I make.

Senate.—I. senex, old; the council w generally composed of old men.

Villas.—L. villa, a country house in Ho whence village.

Frescoes, singular fresco.— A durale kind of ornamental painting on wet be; large ey fresh plaster.

Charming.—L carmen, a song.

As beautiful, as blue, &c .- Parse as tenor, king each case.

Lounging.—L. longus, long.

Sauntering, (san-ter or sawn-ter) pation of we From L. sanctus, holy and terra lateremain and

:Gala.— Purple.gery rare :

Temple.-

Impluviu exaggerated the number of their enpassages si with the h

> ependants neans the re Pamask was

inside by a re Bust.—Wh bust and a Achilles wa

in the Trojan Briseis, (B Europa.—C

bilbeauty am ous history tilded by Jupi

that was originally applied to those who r. Pelor went about asking charity under the joined pretence of going to the Holy Land. Gala.—Noun meaning mirth, but here inth.

trative and adjective.

Purple.—L. purpura, a shell-fish from fendo, which the color was obtained. It was ery rare and hence costly.

nd syn Vases.—L. vas, a vessel.
Palace.—From L. palatium, the home - Xerx of the emperors, because their abode ofty se was for a long time on the Palatine Hill n on thin Rome.

Temple.—Gr. temno, I cut.

id neg Belgravia. — A fashionable part of try gloriondon.
ong the Acme. — Gr. akme, the top. Parse

d havadme.

Impluvium.—From L. pluere, to rain; For the a tank or cistern in the entrance ns ofteourt for receiving the rain. eir enpassages surrounding it were adorned ith the household gods (Lares dotown mestici). They were the images of virtuous ancestors.

at oth Patron.—A Roman citizen who had rependants or clients attached to him.

Xerx Mosaic was inlaid work of hard sub-mman tances and resembled painting. arm Archives, (ar-kivz).—The place where

arm farchives, (al-nive).

confide family records were kept. It also means the records themselves.

Syrian Cloths.—The principal export er Syria at the present time is silk. amask was first made at Damascus the ords

of each peristyle.—Gr. peri, around and stylos, tives pillar. A building surrounded on the 'EII. inside by a row of pillars.

Bust.—What is the difference between

bust and a statue? ncil w Achilles was one of the Grecian leaders

nithe Trojan war. An account of him hous given in Homer's Iliad.

Briseis, (Bri-se-is).

dural Europa.—Gr. eurus, large and ops, the wet be; large eyes were esteemed a mark beauty among the Greeks. In fabulogs history she was the daughter of

se as genor, king of Sidon. She was capiged by Jupiter and carried off to Crete. Amazons were according to tradition ter) attion of women who suffered no men langremain amongst them, but were commanded by a queen and fought their own battles.

Arabesques, (arabesks).—Fantastic ornaments.

Anacreon, (an-ak-reon). - A Grecian poet, born 540 B. C.

Imprecation.—L. im upon and prex, a prayer, a curse, a malediction.

Scoria.—The melted matter cast forth

by volcanoes. (pu-mis)—A volcanic pro-Pumice. duct. It is formed by the union of

THE TAKING OF GIBRALTAR.

several substances when melted.

The Straits of Gibraltar are between Cape Ceuto in Africa, and Cape Tarifa in Europe. The rock is on the extremity of a low, sandy isthmus, connecting it with Spain. The town and the bay of Gibraltar are on the west side of the isthmus. New Mole is a high part of the rock overlooking the bay.

The war spoken of is known in history as "The War of the Spanish Succession." Charles II. of Spain died leaving two claimants for the throne, Philio V. grandson of Louis XIV., founder of the Bourbon dynasty in Spain, and Charles III, Arch-Duke of Austria. England, Austria and Holland were united in the Grand Alliance in favor of Charles III.

Sir George Rooke a distinguished British admiral.

Tetuan, (tet-00-an).—A maritime town of Morocco.

Hesse-Darmstadt, (hess-darm-statt).— Grand-Duchy of Germany.

Summoned.—L. sub and moneo.

Pinnace.—L. pinus, a pine tree, a small light vessel navigated with oars and

Lieutenant, (lev-ten-ant or lu-ten-ant). -An officer next in rank to a captain.

Redout, (re-dout).—L. re and duco, a fortification.

Scaling the back of the rock means climbing up with ladders, scaling, L. scala, a ladder.

Forlorn Hope.—A body of troops sent on to lead an attack.

Onadruple Alliance, (quod-ru-pl). -Formed in 1718. (See Collier's British History, p. 273).

# THE TWO STREAMS.

[By HENRY CLAY.]

In the deep and briny ocean,
Mid its winds and mighty roar,
That with turmoil and commotion
Roll their waves along the shore;

Where its billows white and foaming, In obscurity profound, Spread a mighty world of waters That the plummet cannot sound;

Where above the mighty tempest Rocks the waters into foam, And beneath voracious monsters, Free, innumerable, roam;

Where the coral insect hidden,
With its dangers strews the deep,
And the sea-weed's tangled masses
Join the current's scouring sweep;

There amid the surging waters
Of a fierce and angry sea,
Flows a calm and peaceful river,
Onward, rolling, silently.

Onward, though the northern currents
Dash against its peaceful breast;
Onward, though the world's revolving
Roll its waters toward the west.

Ever onward flows the river, With its warmth and gentle glee, Like the balmy air of summer, Gladdening everything we see.

In its depths the tender sea-plant, Upward struggles to the light, And the weary, ice-bound sailor Hails its presence with delight.

In the world's great field of action, Mid its noise and anxious strife, Swelling loud in tones of thunder, Care and difficulties rife; Where the rich, in princely splendor, Grasp the iron rod of power, And the trembling sons of labor, Lacking fortune, meekly cower;

Where false friends with honeyed phrases
Lead us into shame and sin,
And the faint and heart-sick traveller
Wearies of the toil and din.

Though ignoble, selfish motives
Seem to mould the acts of man,
There's a loving tide of mortals
That adopt a nobler plan.

Calm, unruffled mid the tempest,
Meek and lowly, full of love,
They aspire to help the needy,
Free their heart, their sorrows soothe.

Small in number, but in courage Valiant, as are patriots true; Every soldier does his duty, Silent as the falling dew.

No vain noise, no idle boasting, Yet they free from slavery's rod, Their's the noblest warfage waging, They the living church of God.

# ALONE.

The sun may shine in cloudless skies, And joyful rivers flow; With silver light the moon arise, And stars with brightness glow;

But all is darkness to my soul,
While here I dwell alone;
As from the wintry northern pole,
The light of day is gone.

# SOLUTION OF THE CHEMICAL PROBLEMS OF THE LAST THREE INTERMEDIATE EXAMINATION PAPERS.

What quantity of oxygen is required for the complete combustion of roo grains of pure charcoal?

The atomic weights of carbon and oxygen are respectively 12 and 16. In the complete combustion of carbon, one atom of the former requires two atoms of the latter to form one molecule of carbon dioxide (C O 2); therefore, 12 grains of carbon require twice 16 grains (or 32) of oxygen for total combustion, and 100 grains require 266.66 grains of oxygen.

 Calculate the percentage of the various elements in nitric acid, ammonia, sulphuric acid, and common salt.

Solution:—Nitric Acid contains one atom of hydrogen, one of nitrogen, and three atoms oxygen (H. N. O.<sub>3</sub>), and their respective atomic weights are I, 14 and three times 16, and form one molecule weighing 63. Therefore, <sup>1</sup>/<sub>0</sub> part is H; <sup>1</sup>/<sub>0</sub> N.; and <sup>8</sup>/<sub>0</sub> O.; or H. equals 1.59 per cent.; N. 22.22; O. 76.19.

Ammonia consists of one atom of N. (14) and three of H. (1).

(N. H.<sub>3</sub>), N.= $\frac{14}{7}$  and H.= $\frac{3}{17}$ . Therefore, N.=82.35 per cent. And H.=17.65 per cent.

Sulphuric Acid contains 2 atoms of H. 1 of S. and 4 of O., and the atomic weights are 2, 32 and 64, to form one molecule (H.<sub>2</sub> S. O.<sub>4</sub>) weighing 98. Therefore, H.=<sup>2</sup>/<sub>2H</sub>, S. <sup>3</sup>/<sub>2</sub> and O. <sup>6</sup>/<sub>4</sub>;

Or, H.=2.04%, S.=32.65, and O.=65"31.

Commom Salt is sodium chloride (Na. Cl.). The atomic weights of Na. and Cl. are 23 and 35.5.

Therefore, the sodium equals= $\frac{33}{38}$  and chlorine  $\frac{35}{38}$ . Or, Na.=39.32% and Cl.=60.68%.

3. How many grammes of oxygen are required to burn 24 grammes of carbon, and 32 of sulphur?

Solution:—As in 1st question 12 of carbon require twice 16 of oxygen. Therefore, 24 grammes of carbon require 64 of O.

In the combustion of sulphur, I atom of sulphur require two atoms of oxygen to form sulphur dioxide (or sulphurous acid gas)—S. O.2. The atomic wts. of S. and O. are 32 and 16. Therefore, 32 grammes of S. require 32 grammes of O.

4. How many lbs. of zinc are there in 350 of zinc sulphate?

Solution:—Zinc sulphate (without water) (Zn. S. O.4) consists of 1 atom of zinc, 1 of sulphur, and 4 of oxygen. Their atomic wts. are 65, 32 and (4 times 16), therefore, one molecule weighs 161. Therefore, 65 parts of the 161 are zinc, and in 350 lbs. there are 141.3 lbs. of zinc.

5. What quantity of oxygen by wt. and by volume can be obtained from the decomposition of 100 grains of potassic chlorate?

Solution:—Potassium chlorate, contains one atom of K, one of Cl., and 3 atoms of O.—(K Cl. O.). The atomic wts. are respectively 39, 35.5 and 48, and the wt. of the molecule is 122.5. Therefore, in 122.5 grains of (K. Cl. O.), there are 48 of O., and in 100 grains there are 39.15 grains of O.

100 cubic inches of air weigh 31 grains, but O. is 1.106 times as heavy as air.

Therefore, 100 cubic inches of O. weigh 34.24 grains, and 39.15 grains

equals 114.3 cubic inches.

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6. What wt. and volume of carbonic acid would be produced by burning 5 gram-EE

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mes of carbon in oxygen gas? Solution:—12 grains of carbon unite with twice 16 grammes of oxygen to form 44 of C. O.2. Therefore, the combination of 5 grammes of C. would produce 18.33 grammes of C. O.<sub>3</sub>.

As the wt. is in grammes, the volume will be in litres. II.2 litres of the elementary gases equal their atomic wts. in grammes. Thus, 11.2 litres of O. weigh 16 grammes, of chlorine 35.5 grammes, etc. But, of the compound gases 11.2 litres equal (in most cases) one-half of the wt. of the molecule. Thus, a molecule of C. O., weighs 44, and 12.2 litres of C. O., equals one half of 44, or 22 grammes. Therefore, if 22 grammes of C. O. =11.2 litres, 18.33 (the wt. found) will equal 13.44 litres.

### MATHEMATICS.

The Mathematical Papers given at the recent Intermediate Examination, with solutions and answers.

( is used as the sign of addition in the following solutions.)

### ARITHMETIC.

- Ques.—Simplify  $\frac{\frac{1}{3} + \frac{1}{5} + \frac{1}{7}}{\frac{1}{2^{1}} + \frac{1}{3^{1}} + \frac{1}{4^{1}}} \times \frac{1}{7^{\frac{3}{1}}}$  of  $7^{\frac{1}{3}}$ , and reduce 8 oz. 6 dwt.  $37^{\frac{9}{3}}$  grs. to the fraction of a lb. Troy.
- I, T3. Ques.—Divide, to six decimal places, nine million eight hundred and forty thousand and eighteen 10-millionths, by one hundred and fifty-nine thousand nine hundred
- and eighty-two 100-millionths. Ans.--615. 070320. Ques.—What will it cost to purchase bricks for a wall 150 feet long, 6 feet high, and
- 18 inches thick, bricks being worth \$6.25 per thousand, and each brick being (including mortar) 9 inches long, 4½ inches wide, and 3 inches thick?
- Ques.—"Toronto, December 1st, 1876. -For value received, I promise to pay A. B. \$1,500 one year after date, with interest at eight per cent. per annum." This note is endorsed as follows: January 23, 1877, \$400; August 20, 1877, \$500. Find the amount required to pay the note when due (no days of grace). Ans.—\$681.36.
- Ques.—Explain the terms—stocks, shares, dividends. When is stock at par? At a premium? At a discount? A man having \$25,000 Dominion Bank stock, paying eight per cent. per annum, sells out at 120 and invests in Bank of Commerce stock, which is at 125, and pays eight and one-half per cent. Find the alteration in his income.
- Ans. \$40 gain. Ques.—How much sugar at 8 cents, 9 cents, 10 cents, 13 cents and 14 cents per pound must be taken to form a mixture of 400 lbs., worth 12 cents per pound.
- Ans.—30, 30, 90, 110, 140, is one solution. Ques.—A coin whose weight is 2224 of an ounce contains 37 parts in 40 of gold, and the rest is silver, gold being worth \$17 per ounce and silver worth \$1.10 per ounce, find the value of the coin. Ans.-\$5.

Ques.—If at Toronto sterling exchange is quoted at 101, and at Liverpool exchange ٠8. on Paris 26 francs 85 centimes per £1, find what a Toronto merchant, remitting through Liverpool, must pay to discharge a debt of 12,000 francs. (Brokerag included in the above quotations).

Ans.-12,000 francs =  $\mathcal{L}_{\frac{12000}{25.85}}^{\frac{12000}{25.85}} = \mathcal{L}_{\frac{9000}{770}}^{\frac{9000}{900}}$ and  $\mathcal{L}^{8}$  ???? = \$25.89 ×  $\frac{178}{178}$  \$ = \$2,189.94. Ques.—If the diameter of a twenty-cent piece be to that of a twenty-five-cent piece 10 to 11, find the ratio of their thicknesses.

Ans.—Thickness of 20c. piece: thickness of 25c. piece: 362: 352 = 121:12 Ques.—Two trains, respectively 99 yds. and 132 yds. long, and moving on paraller rails, pass each other in 63/4 seconds when running in opposite directions; when

moving in the same direction the one passes the other in 471/4 seconds. Fin their rates per hour. Ans.—The difference of their rates is 231 yds. in 47 1/4 seconds.

That is 33 " " " " 63/4 And the sum of their rates is 231 .. The rate of the faster is  $\frac{7}{2}$  (231  $\frac{1}{4}$  33) or 132 yds. in 634 seconds. And the rate of the slower is  $\frac{7}{2}$  (231 - 33) or 99 yds. in 634 "This gives respectively 40 and 30 miles per hour.

# ALGEBRA.

Ques.—If x = 10, y = 11, z = 12, find the value of

$$[x^2-(y+z)^2] \times \frac{x+y-z}{x+y+z}$$
; and subtract  $(y-z)a^2+(z-x)ab+(x-y)b^2$ 

from 
$$(y-x)$$
  $a^2-(y-z)$   $ab-(z-x)$   $b^2$ .  
Ans.—a. Expression  $=(x-z)^2-y^2=4-121=-117$ .

$$b. (z-x) a^2 + (x-y) ab + (y-x) b^2.$$
The Multiply  $1/a^2 + 1/a^2 +$ 

Ques.—Multiply 
$$\frac{1}{2}a^{\frac{1}{2}} + \frac{1}{3}b^{\frac{1}{2}} - \frac{1}{4}c^{\frac{1}{6}}$$
 by  $\frac{1}{2}a^{\frac{1}{2}} - \frac{1}{3}b^{\frac{1}{2}} + \frac{1}{4}c^{\frac{1}{6}}$ ;

Divide  $a + (a+b)x + (a+b+c)x^2 + (a+b+c)x^3 + (b+c)x^4 + cx^5$  by  $1+x+x^2+x^3$ .

Ans.—a. Taking the product of the sum and difference gives 
$$\frac{1}{4}a - \frac{1}{6}b^{1/2} + \frac{1}{16}b^{1/2}c^{1/2} - \frac{1}{16}c^{1/2}$$
.

b. Divide by Horner's method; 
$$a+bx+cx^2$$
.

3. Ques.—Resolve into factors 
$$(x+y+z+a)^2-(x-y-z+a)^2$$
,  $a^2-b^2-c^2+d^2+2bc+2ab^2$  and  $20x^3+12ax^2+25bx^2+15abx$ .

Ans.—a. 
$$4(x+a)(y+z)$$
.

b. Expression  $= (a+d)^2 - (b-a)^2 - (a+b-c+d)(a-b+c+d)$ 

b. Expression = 
$$(a+d)^2 - (b-c)^2 = (a + b-c+d)(a-b + c+d)$$
.  
c.  $x(5x+3a)(4x+5b)$ .

4. Ques.—Find the square root of 
$$9 - 24 \times \frac{1}{1} \cdot 58 \times 2 - 116 \times 3 + 129 \times 4 - 140 \times 5 + 100 \times 1$$
  
Ans.  $3 - 4x + 7x^2 - 10x^3$ .

5. Ques.—Solve (1) 
$$\frac{4x\frac{1}{1}5}{x\frac{1}{1}1} + \frac{x\frac{1}{1}5}{x\frac{1}{1}4} = \frac{2x\frac{1}{1}5}{x\frac{1}{1}2} - \frac{x^2 - 10}{x\frac{1}{1}3} + \frac{1}{1}x$$
.

$$(2)\frac{5x-1}{\sqrt{5x+1}} = 1 + \frac{\sqrt{5x-1}}{2}.$$

(3) 
$$\frac{1}{2}x + \frac{1}{3}y + \frac{1}{4}z = 9$$
,  $\frac{1}{3}x + \frac{1}{4}y - \frac{1}{2}z = -1\frac{3}{4}$ ,  $\frac{1}{4}x - \frac{1}{2}y + \frac{1}{3}z = 1$ .

Ans.—(1) Divide each numerator by its denominator and the equation becomes
$$\frac{1}{x + 1} + \frac{1}{x + 1} = \frac{1}{x + 1} + \frac{1}{x + 1}, \text{ whence } x = -2\frac{1}{2},$$

(2) 
$$\frac{2}{5}$$
 or  $\frac{1}{5}$ . (3)  $x = 6$ ,  $y = 9$ ,  $z = 12$ .

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received 20 oranges more for the same money the whole would have cost him only 40 cents a dozen. How many did he buy? Ans.-160.

Oues.—A farmer took to market two loads of wheat, amounting together to 75 bushels; he sold them at different prices per bushel, but received on the whole the same amount for each load; had he sold the whole quantity at the lower price he would have received \$78.75; but had he sold it all at the higher price he would have received \$90. Find the number of bushels in each load.

Ans.-40, 35.

Oues.—Shew how to find the square root of  $a+\sqrt{b}$ . Find the square root of  $1 + V_{1-a^2}$ .

Ans.—a, Text-book, b,  $\frac{1}{2}V_{2\frac{1}{2}2a} + \frac{1}{2}V_{2}V_{2-2a}$ .

Ques.—Solve  $\frac{6x+5}{2x-7} + \frac{4x-1}{x-2} = \frac{7x+1}{x-3}$ ; and find the value of  $\alpha$  when

 $ax^2 - 36x + 81 = 0$  has equal roots. Ans.—(a) 5,  $\frac{1}{4}$ . (b). If roots are equal then  $36^2 = 4 \times 81 \times a$ , a = 4.

Ques.—If  $\frac{a}{b} = \frac{c}{d}$  prove that  $\frac{a + c}{b + d} = \sqrt[3]{\frac{a^3 + c^3}{b^3 + d^3}}$ , and that  $\frac{a + b}{a - b} = \frac{Vac + Vbd}{Vac - Vbd}$ Ans.—Let -=-=x, then a=bx, c=dx, then substitute bx, dx, for a and c.

Ques.—Show that  $a^3(b-c)+b^3(c-a)+c^3(a-b)$  is exactly divisible by a+b+c; and resolve the expression into its factors.

Ans.—Put  $\alpha = -(b+c)$ , then the expression becomes = 0.

The factors are (a-b)(b-c)(c-a)(a+b+c).

### EUCLID.

Ques.—Define straight line, right angle, parallel straight lines. Supposing you have a flat ruler, how could you ascertain according to Euclid's definitions-

(a) Whether the edges are straight?

(b) Whether the ends are cut at right angles to one of the edges?

(c) What more than Euclid's definitions would you need in order to ascertain whether the edges are parallel?

- Ans.(a) Draw any line with one edge; turn the ruler over and, using the same edge, draw a line joining the extremities of the first. These two lines will coincide if the edge is straight.
  - (b) Place the ruler, draw AB along the edge and BC along the end; turn the ruler over, keeping the same edge along AB, and draw BD along the end. BC, BD will thus be on opposite sides of AB, and the straight line joining
  - CD should pass through B. (c) Draw AB along one edge and CD along the other; turn the ruler over, place
  - the same edge along AB and keep the ruler on the same side of AB, then along the other side draw EF; if EF coincides with CD the edges are parallel.
- Ques.—The interior angles of a triangle are together equal to two right angles. The perpendiculars let fall from the extremities of the base of a triangle on the opposite sides will include an angle supplementary to the vertical angle, i. e., the included

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angle and the vertical angle will be together equal to two right angles.

Ans.—ABC the  $\triangle$ , BD, CE the perpendiculars cutting each other in F; then since the <s at D, E are right angles, : the <s DAE, DFE together equal two right angles.

Ques.—(I. 40). The straight line joining the points of bisection of two sides of a triangle is parallel to the third side.

Ans. —  $\overline{ABC}$  the  $\triangle$ , D, E, bisections of AB, AC; then DBC = one-half ABC = EBC, and DBC, EBC are on the same base and  $\therefore$  between the same

Oues.—(I. 43). If through any point in the diagonal of a parallelogram, or in the diagonal produced, lines be drawn parallel to the sides, cutting the sides produced if necessary, the two parallelograms so formed through which the diagonal does not pass are equal in area to one another. (Prove for a point taken in the diagonal produced.

Ans.—The two os so formed are the complements of the os about the diagonal produced.

Ques —(II. 13). The sum of the squares on two sides of a triangle is double the sum of the squares on half the base and on the line joining the vertex to the middle point of the base.

Ans.—Todhunter, p. 293.

# NATURAL PHILOSOPHY.

Ques. - Define force.

(a) What is meant by a force of 20 lbs?

(b) Two forces of 8 lbs. and 15 lbs. respectively act at a point p in directions perpendicular to each other. If the 8 lbs. force be represented by a horizon tal line AB, two inches in length, how must the 15 lbs. force be represented?

Ans.(a) Hamblin Smith's Statics p. 4 \ 13.

(b) A line 3¾ in long at rt. < s to AB. Ques.—State the parallelogram of forces?

(a) What would be the magnitude of the resultant in question I, (b)?

Ans.(a) 17 lbs

3. Ques.—Apply the triangle of forces to obtain the conditions of equilibrium of a heavibody on a smooth inclined plane, the power acting parallel to the plane.

(a) A weight of 915 lbs. is supported on a smooth inclined plane by a power

acting parallel to the plane, the reaction of the plane being 900 pounds Find the power which acting horizontally, would support the weight.

Ans. (a) Base: length: reaction: weight 900 915 60 6 I

and if 60, 61 be taken as base and length of a plane its height is 11.

Then 60:11: 915:1673/4 Ans.

Ques.—State the condition of equilibrium of moments. (a) Two boys weighing 70 lbs. and 90 lbs. respectively, play see-saw, sitting 15 ft apart on a plank weighing 40 lbs. How must they share the 15 ft. to balance each other, the centre of gravity of the plank being mid-way between the boys?

Ans.—Resultant of the 3 fces=200, and its moment about one end of the plank= sum of the moments of the fces about that end. Ans. 81/4 and 63/4.

Ques.—State the conditions of equilibrium of parallel forces.

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(a) What would be the pressure on the fulcrum in question 4 (a)?

Ans.—200 lbs.

6. Ques.—Define specific gravity.

(a) A body weighs 6 oz. in a liquid of sp. gr. .9. and 10 oz. in another liquid of sp. gr. .8; find the weight of the body.

Ans.(a) The body will displace  $\frac{1}{6}$  less of the second fluid than of the first, but it displaces 4 oz. less, : it displaces 36 oz. of the first liquid and : weighs 42 oz.

Oues.—Describe the common hydrometer

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Ques.—Describe the common hydrometer.

(a) If an hydrometer sink in pure water to within 4 in. of the top of the stem, and in a liquid of sp. gr. .9 to within 3 ins. of the top, what is the sp. gr. of a liquid in which it sinks to within 2 ins. of the top?

Ans.(a) Take the volume of one inch of the stem as the sp. gr.

Ans.(a) Take the volume of one inch of the stem as the cubic unit ... the hydrometer displaces 9 cubic units of water, 10 of the second liquid, and 11 of the Oues.—Describe the common barometer.

(a) Explain the principle of its action.

(b) The mercury in a barometer at the surface of a pond stands at 30 ins. At what height will it stand if the barometer be sunk 4 ft. 3 ins. in the water.

13.(b) The height of the barometer is 3.6?

The sp. gr. of mercury being 13.6?

Ans.(b) The height of the barometer will be increased by  $\frac{1}{13.6}$  of 4 ft. 3 ins., or  $3\frac{3}{4}$  ins.

Its height will : be  $33\frac{3}{4}$  ins.

# MISCELLANEOUS PROBLEMS.

A sum of money is borrowed and is to be repaid, principal and interest, by a constant early payment. To find this yearly payment—

Let  $\cdot$  be the sum borrowed, r the rate, n the number years, P the yearly payment, and

The amount due at the end of the first year is

The first payment P is then made, leaving AR - P

At the end of the second year this will amount to  $AR^2 - PR$ 

The second payment is then made, leaving  $AR^2 - PR - P$ Similarly after the third payment is made there remains the second payment is made there are the second payment is made there are the second payment is made there are the second payment is the second paymen

Similarly after the third payment is made there remains  $AR^3-1R^2-PR-P$ After the fourth payment

 $AR^4-PR^3-PR^2-PR-P$ After the  $n^{th}$  or last payment

But since the last payment discharges the debt, this expression must—0

$$P(R^{n-1} + R^{n-2} + \&c + R + 1) = AR^{n}$$

$$P(R^{n-1} + R^{n-2} + \&c + R + 1) = AR^{n}$$

$$P(R^{n-1} + R^{n-2} + \&c + R + 1) = AR^{n}$$

$$P(R^{n-1} + R^{n-2} + \&c + R + 1) = AR^{n}$$

The G. C. M. of any number of fractions is a fraction whose numerator is the G. C. M. of all the numerators of these fractions, and whose denominator is the L. C. M. of their denominators

Let 
$$\frac{a}{-}$$
,  $\frac{c}{-}$ ,  $\frac{m}{-}$ , &c., be any number of fractions in their lowest terms,  $\frac{b}{b}$ ,  $\frac{d}{d}$ ,  $\frac{d}{n}$ 

$$\frac{x}{-}$$
 one of their C. M.'s also in its lowest terms,  $y$ 

Then each of the fractions -, -, -, &c., when divided by - must give a whole number or quotient.

$$\therefore \frac{a}{b} \times \frac{y}{x} \equiv \text{ whole number.}$$

And since neither a and b, nor x and y, have a common factor, therefore a must contain x, and y must contain b.

Similarly, since 
$$-\frac{c}{\times} \times -\frac{m}{a} = \frac{y}{x}$$
 and  $-\frac{y}{\times} -\frac{w}{x}$  are all whole numbers,  $c$ ,  $m$ , &c.,

must contain x, and y must contain d, n, &c.; thus y is a multiple of b, d, n, &c., and x is a measure of a, c, m, &c.

Now, — will be the *greatest* common measure of these fractions when it has its greatest y possible-value, that is when its numerator is greatest and its denominator least, that is when x is the *greatest* common measure of a, c, m, &c., and y is the least common multiple of b, d, n, &c.

 To show that a proper fraction is increased by adding the same number to both its terms.

Let  $\stackrel{u}{-}$  denote the fraction and n the quantity added.

Then 
$$\frac{a \div n}{b \div n} = \frac{a}{b} \times \frac{b}{a} \times \frac{a \div n}{b \div n}$$

$$= \frac{a}{b} \times \frac{ab \div n}{ab \div an}$$

$$= \frac{a} \times \frac{ab \div n}{ab \div an}$$

$$= \frac{a}{b} \times \frac{ab \div n}{ab \div an}$$

$$= \frac{a}$$

- If a is greater than b or the fraction improper, this proof shows that the fraction is diminished.
- Similarly it can be shown that a proper fraction is diminished and an improper fraction increased by substracting the same number from both its terms.

# THE NAUGHTY GREEK GIRL.

[By Prof. J. B. L. Soule.]

Miss  $\alpha$ , though she led her class, Was yet a most unlovely lass; She had a little sister  $\theta$ , And she would often bang and  $\beta$ , And push and pinch and pound and pelt her, And many a heavy blow she  $\delta$ ; So that the kitten, e'en, would  $\mu$ , When  $\theta$ 's sufferings she  $\nu$ .

This a was so bad to  $\theta$ . That every time she chanced to meet her, She looked as though she longed to  $\eta$ ; And oft against the wall she jammed her; And oft she took a stick and  $\lambda$ ; And for the pain and tears she brought her She pitied her not one  $\iota$ ; But with a sly and wicked eye Would only say, "Oh fiddle  $\varphi$ !"

Then  $\theta$  cried with noisy clamor, And ran and told her grief to y, And y with a pitying  $\phi$ Would give the little girl some  $\pi$ And say, "Now darling must n't  $\chi$ ."

Two Irish lads, of ruddy cheek, Were living just across the creek—Their names, o and  $\omega$ , The one was small, the other bigger.

For  $\alpha$ , so demure and striking,  $\omega$  took an ardent liking; And Mike, when first he chanced to meet her, Fell deep in love with little  $\theta$ ; And oft at eve the boys would go And on the pleasant water  $\rho$ .

So when the little, hapless  $\theta$   $\nu$   $\alpha$  was about to  $\beta$ , She down upon the bank would  $\zeta$  And cry aloud, and shout like fun—"Run, Mike! run, Mikey!  $\sigma$ !

#### Moral.

Have you a sister? Do not treat her As a did her sister  $\theta$ .

# THE QUARTERLY.

Nous travaillerons dans l'esperance.

HAMILTON, APRIL 1, 1878.

# FOURTH BOOK LITERATURE.

OF late years there has occurred a marked improvement. marked improvement in the study of English in our schools. The critical reading of such authors as Goldsmith, Scott and Shakspeare, cannot fail to elevate the literary taste of the pupil, and to give him such a knowledge of the language as he would be unable to receive from the study of the grammar alone. It is in vain we pursue studies in the abstract; there must be an immediate application of the knowledge thus acquired in order to secure beneficial results, and the student who takes up literature in connection with his grammar will be amply repaid by a higher conception of what is choice and exquisite in literature. The study of the literature of our language is not yet pursued to its proper extent in our Public Schools, although the present tendency is towards improvement.

We publish elsewhere a review of the Fourth Book literature required by candidates examined for entrance to the High Schools. The necessity for some work on this subject has been greatly felt. Our notes will be found sufficient for all purposes required, and should be carefully perused by those interested in the preparation of pupils.

# SENIOR LITERARY SOCIETY.

The success which has hitherto attended the Literary Society still continues, and it has at present brighter prospects than ever. It is now called the Senior Society, a title which it certainly merits, if increase and success may be taken as a criterion. session the friends of the society were elated over a membership of sixty-three.

This session the large influx of ne bun students, together with the attraction of the weekly meetings, has increase This the membership to a grand total of or the pro hundred and five, with an averaginereas attendance of eighty. The introduction and a of instrumental and vocal music haship in greatly added to the interest of the that o meetings. This serves not only as a require entertainment, but also to introduce then joy t programme of the evening. First i Accorder is an essay, and that is follower younge by two readings—one by a lady and the orga other by a gentleman - after whid Master comes the debate. This is regarded taince a the most interesting part of the premake it gramme, as it is certainly the mostermed useful, for it enables the student work v cultivate those faculties which serve that be educated to make known their idealing the fresh from the fountain of a traincits frien mind, and to overcome that diffidend The which is so painful to witness wherevery V seen, as it often is, in a man of higher four literary attainments. Although the der of society does not claim to do any of the s work of the class room, yet it affortable fe the students of the Institute an opportrompti tunity to train those social qualities pond which must ever characterize the trumittee. educated. As such it is recognized an one men encouraged by the Masters. It is affect of: source of pleasure to witness the intare as for provement made by some of the President members in their manner of speaking Ist Via after a second or third appearance and Via Brake Via B audience to be addressed, together with Treasure the presence of the ladies, serves as Council stimulent to the debater, who therefore strives to do justice both to himself at the subject. In after life the memoral which we will all have of our former the or classmates will be doubly enhanced introd the recollection of the many pleasat want le evenings spent with them as members even a the Literary Society. mysic. issemble

The following are elected Officers for the next christer the

ter:
President.

Ist Vice,
Ist Vice,
Ind Vice,
Ist W. Martin.
Ist The mark ux of ne JUNIOR LITERARY SOCIETY.

attraction s increase This society was organized during total of or the present session. Owing to the large n averagine rease of students in the higher forms, itroduction and a consequent increase of membermusic hastip in the Literary Society, it was found est of that one society could not meet the only as a requirements of all who might wish to roduce the njoy the benefits of its culture.

First Accordingly, when a number of the s followers dunger students made known their wish dy and the organize a society of their own, the fter whid Masters at once rendered every assisegarded stance and encouragement necessary to of the promake it a complete success. This newly the mosformed society at once proceeded to its student twork with a will. So far, its efforts serve that we been attended with results surpasstheir idealing the most sanguine expectations of

a traincats friends.
diffidend The members hold their meetings iess wherevery Wednesday afternoon, beginning in of higher four o'clock. The programme and ough therefore of business are the same as those any of the senior society. One most crediit afforetable feature of those meetings is the an opposition member with which every member qualities ponds to the call of the General Comthe truinittee. There are no fewer than sixtymized arode members, with an average attend-

It is stice of fifty. The officers of the society s the inare as follows :-

of the President, speaking Ist Vice, W. C. LIVINGSTONE. . A. RENNIE. 1xt Vice, . 2nd Vice, A. S. Wallace. arance d 3rd Vice, . W. H. MILNE. intellige 🔯 Secretary, MISS N. WALKER. other with Treasurer, . Councillor, MISS J. McCALLUM. A. PATTERSON. erves as

# THE GLEE CLUB.

e memo ur form The organization of a Glee Club, and hanced introduction of a piano, have supplied r pleasa want long felt in the Institute, and nembers wen a new impulse to the study of music. The members of the club issemble to practice twice each week. he next extreder the direction of Prof. Johnson. life marked improvement already made ILSON. by many of the students in this branch BRODIE ducation is but a faint foreshadowing W. BOTHER What is yet to be, and the deep interest manifested by the members at their meetings is a natural sequence to the untiring efforts of their teacher. Like the Literary Societies, this club adds another attraction to the many pleasing features of our Institute.

"The man that hath no music in himself, Nor is not moved with concord of sweet sounds, Is fit for treason, stratagems and spoils; The motions of his spirits are dull as night, And his affections are dark as Erebus: Lot no such man be trusted."

#### SHAKSPEAREAN SERIES OF LECTURES.

Last year a Lecture Association, composed of the Masters of the Collegiate Institute, was formed for the purpose of securing the services of a thoroughly accomplished reader. was felt that, while the Institute was carrying out more thoroughly than any other School of the same kind in the Province the provisions of the High School programme, yet that it was suffering for the want of special instruction in elocution. All the other departments of study were represented, viz., Mathematics, Classics, Modern Languages, including English, French and German; Natural Sciences, including Natural History, Chemistry, Botany, Geology, Astronomy and Physiology; Ancient and Modern History, Geography, Drawing and Music; while Reading, as a science and an art, was not represented by a special master. The object, therefore, which the Lecture Association had in view in making arrangements with Prof. Bell, to give a series of Shakspearean readings, was not simply to afford themselves and the friends of the School pleasing and profitable recreation, but also to supplement in some way a want much felt. And although last year fears were expressed by some, and entertained by others, that the attempt would end in failure, yet it was made. Larger and more appreciative audiences at each succeeding Reading assembled in the examination Hall, until finally, to accommodate the large

therefo

imself a

audiences, it was found necessary to hold one of the final Readings in the Hall of the Mechanics' Institute. The pleasure, profit and success which attended the literary entertainments then given encouraged the Lecture Association to make an early attempt to reengage the same distinguished reader for this season. Already ten of the twelve of the series of Shakspearean Readings have been given at regular fortnightly intervals, with gratifying Notwithstanding the unfavorsuccess. able state of the weather and other disadvantageous causes, good and attentive audiences have on each occasion assembled, and have gone away delighted and profited with what they heard.

The objectionable tendencies and influences which too often accompany modern theatrical representations of Shakspeare's plays and on account of which many are even prejudiced against the world-wide favorite dramatist, cannot be said to attend Prof. Bell's literary evenings, and it is believed by many that in but few theatres can there be given a more living representation of the leading characters in a play, the different feelings and passions by which they are severally impelled, than by a reader possessing the elocutionary power and dramatic ability of Prof. Bell.

While it may be said that there is no literary production that can test the histrionic powers of a reader better than Shakspeare's plays, yet there can be but few who possess the physique, power, compass and distinctness of voice, facial expression, conception of the diverse characters in the play, matured powers, versatility of talent, of Prof. Bell, in order to do justice to the greatest of dramatists.

The Lecture Association consider themselves fortunate in the selection of the programme, as well as in having secured the services of a gentleman so long and favorably recognized as an author and elocutionist on two continents. The following list contains the series of Shaksperean Readings, and the order in which they are read :-

ENGLISH HISTORICAL TRAGEDIES.

I. King John.

2. King Richard II.

3. King Henry IV. (part 1).

4. King Henry IV. (part 2).

King Henry V.

King Henry VI.

King Richard III.

8 .King Henry VIII. COMEDIES.

1. As You Like It.

2. The Merry Wives of Winds March 18.

3. Much Ado About Nothing, March 29.

Remaining historical play, 1, Juli incentiv Cæsar, April 15.

In addition to the above, selection in from modern poets and humorists, whi spines i always have formed a very pleasis feature of the evening's proceeding will not are read.

The Lecture Association, believed it it that in consequence of these literary distance tertainments, a taste for good readily bouths the boar at involved the second readily bouths to the second readily between the second readily between the second readily between the second re has been stimulated, the Litera Societies benefited, a relish for a megothing careful perusal of the best Englishing, i writers encouraged, and a higher elist on appreciation of the excellence of incidence. English language and English lite put em ture, feel amply rewarded for any tillely fo they expended to secure such results

THE Canada School Journal in January number says, regarding School:—"Perhaps it might not amissto suggest that the time has alm generally come for making the bold step of p viding the School with the appliant necessary for enabling it to retainings." I students up to the end of the first y of the University course." We happy to inform this excellent jour owth. that the "bold step" was taken year, and that first year University work, as well as the work required 1st Class Provincial Certificates done during 1877, and with what such may be seen by referring to our rathere are for the year. All the subjects of the absorb Upper School programme without exceptions are taught this session.

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\GEDIES

# THE POWER OF INFLUENCE.

JE are all familiar with that admirable little ditty.—

> " Little drops of water, Little grains of saud, Make the mighty ocean And the beauteous land "-

Winds

ng,

Because, together with rhymes of a like instructive nature, it was constantly reiterated in our youthful days, as an

, I, Julian Continue to studious efforts. Whether its failure in this direction was due to

selection stupidity, or whether by misists, which is a second of the lost by producing mental inactivity, we pleast will not venture to decide. Sufficient occeding the know that its force is generally

to know that its force is generally believing it be questioned in particular iterary distances, rest assured it is by those d readitions who are at present enjoying its Literation monotony. If persons of or a method of the control of the

or a mesperience approve an undoubted wise ling styling, it is surely more becoming to high styling, it is surely more becoming to high styling and the surely more presents to that a high list on their side in preference to that ce of ich inexperienced youth. As this simple

ish literate emphatic rhyme is introduced any tiedely for the purpose of comparison,

results we will proceed to discuss its sympaial in Hetic blending with the power of liffluence. Hasty spirits are always t not impatient of slow growth, and they

nas alm renerally despise small beginnings, but, p of particles of particles and experience prove, "small ippliant beginnings have sometimes great endretain ings." If space permitted, we might first y supendous results of slow and silent

we stowth. But, as the facts regarding aken these are indisputable, it will be un-Jniversecessary to make allusion to them uired. The proper study of mankind is man,"

nuired and, however muchinterested in abstract ates at such science ordinary minds may appear, at successful and successful at successful and succ

We exhibit great charity for one on.

another when we are thus enticed from higher fields, and the sentiment does us immense credit. We confess it

would be a dreary world were all completely engrossed in some particular "ism" or science, and we might some

day awake from our absorption to find the world at a dead-lock. Let us admit

with humble candor our interest in our fellow beings-not by any means a

curious, prying interest, intent on petty aims-but an honest avowal that

the living, sentient being is of supreme

The education which consideration. we gain at school, and that which is

acquired practically through life, should

merely as an armor. be regarded Academic knowledge too often inflates

its possessor with pride, but a naturally

bright youth blushes at his own ignor-

ance of technical knowledge. No one

will deny that home is the main source

and centre of influence. It is there

every one's character stands out in its The verdict of home is a true light.

pretty faithful guide to character Boys

are not cut on the pattern of Henry V.,

nor girls on that of his feminine proto-

type. The youth is a fair indication

of what the man or woman will be.

You see the sun best as its luminous

rays skirt the horizon; so you can best

observe the individual in the morning

of his life. But it is a melancholy fact that children endowed with fine natural

ability. and full of promise, are

frequently placed in most wretched

homes - wretched, not from

poverty, but from coarse and base

influences. Many such have risen to

eminence, but not a few have wilted as

would an exotic placed in an open gar-

But the most of us experience no extremes—our life passes in what might

be termed hum-drum repetition; we are

influenced by most insignificant circumstances; our joy or grief, at least while

young is not very deep-seated, but daily matters make up the same total of life. We are ignorant of what great influence we exert over one another for good or evil; a word, a look, is sometimes sufficient to determine a grave matter. History is replete with instances of court diplomacy that warded off many a menaced danger, and not unfrequently saved a human head. The ready wit of Catharine Parr in saving her life is well known, while the history of France abounds with anecdotes of sparkling repartees and exquisite tact which served manya French diplomatist in goodstead. But in these peaceful times, no great issues call forth whatever ready wit we may possess. If our lives hang on no such slender thread as the caprice of a tyrant or a mob, there are, nevertheless, many occasions on which by the exercise of ordinary common sense, we might benefit not ourselves alone but associates.

It would be altogether too presumptuous to claim tact as a feminine gift, but judges have decided this sixth sense, or rather the life of all the other senses, in favor of women. Now, it well becomes an individual who is invested with a certain dignity or virtue—whether he deserve it or not-to maintain his position in the eyes of observers; if he merit the compliment, he will find no difficulty in acquitting himself honorably; but if not, he will at least shock no one's sensibilities if he act his part cleverly. Now, if tact is accorded to women, let her establish her rights to it, by displaying its possession on occasions where it would be most appropriate. Tact is certainly a most desirable gift, but, there are some persons who succeed admirably without it, merely by the force of their simple honesty and consistency, and this is what constitutes true influence. From the cradle to the grave we are all subject to good and bad influences, and it depends upon ourselves which shall actuate us. No one is great or wise enough for himself, and it is injudicious to rely implicitly upon our own opinions; a judicious friend is indeed a rare possession. In the home

circle brothers and sisters exercise an important influence upon each other. Sisters are supposed to refine and elevate their brothers, by calling forth all their gentleness and strength, which are the true expressions of gallantry. But girls need not limit their happy influence to their own brothers. If they are so fortunate as to be fellow-students with their brothers and their friends, good effects should be seen from their presence in the class-room. But too often girls are silly and flippant, and instead of gaining the respect of their boyish companions, only succeed in provoking their contempt. School is but a miniature world, and in its narrow circle gentleness, modesty, and genuine merit will always win the esteem of those whose opinion is worthy of respect.

## LOCAL.

ROWING CLUB.—This club, with a membership of 30, is now fully organized for the coming season. The officers are:—W. Alford, *President*; J. Reid, Sec. and Treas.; the Captains are Messrs. Malcomson, Reid, Reesor, Griffin, Lawson and Miller.

The music of the school is improving greatly under Prof. Johnson's efficient direction. Those of our friends who wish to hear really fine singing should pay a visit to the school on the afternoons of Monday, Thursday and Friday.

The specimens of drawing done by Mr. Foster's classes are very creditable. Instructions in water colors and oil painting are given in class-room No. 8, after 4 o'clock.

The wooden guns used by the boys in military drill are not suitable to modern drill exercise. What is to be done to meet the difficulty is the problem that now engages the attention of the masters.

It may interest those beginning Greek to know that the Endings of the Third Declension form the sentence

ραινψωξυς

#### THE SUNBEAM.

[Written for the Quarterly of June 30th, 1875.]

A sunbeam left the Capitol
Of light, to seek a distant Ball;
And bore away through solemn space,
Outstripping Angels in the race!
Nor swerved, though danger flaunted near,
A seething comet, in career
Erratic! fierce, audacious vain,
Encumbered with an endless train
Of planet dust and captive light,
Reft from Creation in its flight.

II.

Straight to her destiny, the beam,
O'er Mercy's summits wrapped in gleam,
Sped onward gloriously, to skim
Near the green zone on Venus' rim,
By science seen afar; and soon
Reached the lone precincts of the moon;
That moon condemned to every stage
Of unresenting vassalage;
Through tantalizing phases, still,
Of faithfulness a miracle.

III.

But one short stretch:—the goal! the goal!

Earth's dapple disk from pole to pole
Loomed large, in orbit swift propelled,
And grandly waxed, till near beheld,
The islands, continents, and mains,
The mountain chains, and shadowy plains.
Assuming limits well defined,
Surpassed the sweep of sight and mind:—
No finite powers could amplify
To grasp the rolling mystery.

IV.

That Beam in ocean was not lost; No mountain peak her pathway crossed; The teeming vales were not for her; She soared above the city's stir; Nor deigned to shine and court neglect, Where tinsel only wins respect; She came not to illume the sage, Nor as a theme for poets' page. Within a hut, upon a moor, She flashed and blessed a widow poor.

v.

"Oh, precious light! Oh, blessed ray! Aimed by Omnipotence my way! Past higher worlds and brigher skies, Past palaces and monarchs' eyes; Past all the garnished homes of Earth! To dance upon my humble hearth. The breath of Heaven is on thy wings; Immortal freshness round thee clings; And on my ear thy whispers fall":—
"In Him no darkness is at all."

REX.

### COLLEGIATE INSTITUTE.

George Dickson, B. A., Head Master.
W. H. Ballard, M. A., Mathematics.
T. C. L. Armstrong, M. A., Modern Languages.
P. S. Campbell, B. A., Classics.
C. Robertson, M. A., Modern Languages.
J. W. Spencer, B. A., Se Ph. D., F. G. S., Science.
G. W. Van Slyre, 1st (A) Provincial, Mathematics.
N. McKechnie, Fourth Year Undergraduate, Toronto
University, Assistant in Classics.
H. McKay, Commercial Master.
Andrew Patterson, Master of First Form.
D. E. Sheppard.
J. McInnis, Assistant in Mathematics and English.
Miss Bell, Teacher of Lower First Form—Girls.
Mrs. Dayldson, Teacher of Lower First Form—Boys.
W. G. Foster, Drawing Master.
Prof. Johnson, Music Master.

The work of preparing students for the Universities is made a specialty. The following classes are maintained for this purpose:

1. Class for senior matriculation—honors in all departments.

2. Class for junior matriculation— honors in all departments.

3. Class for junior matriculation—pass.

4. Class for matriculation in medicine. | ments are made for those who have all There are also classes for all grades of the subjects for matriculation prepared,

certificates—First, Second and Third Class.

Those reading for matriculation in the LAW SOCIETY are classed with the "pass" matriculation students, and do the same work.

Candidates for examination in Engi-NEERING recite with the honor class in mathematics for junior matriculation.

The special features of the school are:

ist. Each department of the upper school is taught by a University trained man, who has made the subjects of his department a specialty in his university course.

and. Complete equipment for doing the work of both upper and lower school. Not only is there a full staff of masters, but there is an ample supply of maps, mechanical apparatus used in applied mathematics, chemicals and chemical appliances for experiments, and apparatus for illustrating physics.

3rd. Large classes reading for matriculation in the universities. Arrangements are made for those who have all the subjects for matriculation prepared.

except classics and modern languages, to join special classes in these subjects, to enable them to advance more rapidly than they would in the lower school.

4th. A course of instruction in practical chemistry. Students will be taught both to manipulate and extemporize

apparatus.

5th. A large collection of fossils and minerals; also several cases of Canadian birds, human skeleton, etc., to illustrate

the lessons in physiology.

6th. Two flourishing literary societies among the students for the purpose of improving themselves in public speaking, reading, writing of essays, and in

general literature.

7th. A course of lectures on Shakspeare's plays, by Prof. D. C. Bell, late The following plays of the of Dublin. series have been read: King John, King Richard the Second, King Henry the Fourth (part I and 2), King Henry the Fifth, King Henry the Sixth, King Richard the Third, King Henry the Eighth, As You Like It, The Merry Wives of Windsor, and Much Ado About Nothing. The series will conclude for this season with the Roman historical tragedy of Fulius Cæsar.

8th. Classes in free-hand, oil and

water-color drawing.

9th. Publication of a school journal by the Literary Societies.

10th. Advanced class in vocal music.

# THE SCHOOL AT THE UNI-VERSITIES.

URING the last four years 40 students of this School have entered Toronto University; of these

29 are now attending lectures.

During 1877, 28 of our students passed University examination; of these, 2 passed the first year's examinations in Arts direct from the School, I passed in Engineering, 5 passed the Matriculation examination held in June. passed the Senior Matriculation examination held in September, passed the first year's examination in Arts at the McGill University, 15

passed the McGill examination for Associate in Arts, and 3 matriculated in Mcdicine.

The following Scholarships have been won by the pupils of the School since 1873 :-

In 1873-2 Scholarships at Toronto University.

" 1874-3 Scholarships at Toronto University, and I at London (Eng).

"1875—3 Scholarships at Toronto University, and I at Knox College.

" 1876—3 Scholarships at Toronto University, and I at Knox College.

" 1877-2 Scholarships at Toronto University, and 2 at Knox College.

Altogether, 13 at Toronto, 1 at London (the Dominion Gilchrist Scholarship), and 5 at Knox College, making a total

of 19 Scholarships.

In addition to the foregoing it may be stated that the School ranked first at the primary examination at Osgoode Hall last May, first at the school examination held at McGill University in Mathematics and Science, first at the three intermediate examinations; our School was the first to send girls to University examinations, eight having passed the McGill examination in May, and one passed the regular Matriculation examination in June.

Taking the four intermediate examinations together, no fewer than 93 passed.

At the 1st Intermediate Examination 21 passed.

2nd Intermediate Examination 23 passed.

" 3rd Intermediate Examination 16 passed.

" 4th Intermediate Examination 33 passed.

We make no distinction between intermediate candidates and those for second classcertificates; the two classes of candidates received the same instruction and passed on the same examination papers. Nor do we include in our list those who had previously passed the examination. The following are the names of those who passed the recent intermediate and second class examination:

Ambrose, Alexander Bell, C. E. Crawford, Thomas Fairclough, H. R. Griffin, E. W. Graham, Nicholas Hunter, Walter Livingston, C. McCallum, N. Malcomson, Alex. Mills, T. F. Shields, Alfred Shuttleworth, Wm. Smith, Jno. Stoddard, Jas. Stuart, D. E. Wallaco, Allan Whalley, Jno. West, Edward Young, Thos.

Calder, Miss Annie Cusaek, Miss L. Dickinson, Miss L. Dixon, Miss M. Lixon, Miss M. Hamilton, Miss J. McPherson, Miss A. Poustie, Miss J. E. Somerville, Miss J. Stewart, Miss D. Troup, Miss M. Troup, Miss A. Wetherall, Miss F.

Last year two of our pupils obtained first class provincial certificates, and at the last examination of the Ontario College of Pharmacy Mr. H. R. Fairclough passed as a chemist and druggist.

We understand that all the subjects included in the *Upper School* programme of studies are now taught, and that classes are organized for Senior as well as Junior Matriculation, and for *First* as well as for *Second* Class Teachers' Certificates.

#### PERSONALIA.

Mr. John McInnis, a first-class honorman of Toronto University, and a former student of the school, was appointed at the beginning of the year as assistant master of the Institute. We congratulate Mr. McInnis on his appointment.

Mr. W. A. Duncan of the Upper Fifth Form, was recently appointed mathematical master of the Strathroy High School, at a salary of \$800 per annum.

Mr. A. B. Davidson, of the University class of '76, and first-class honor-man

of Toronto University, is now teaching the science class in place of Dr. Spencer, who, we are sorry to say has been ill for a few weeks.

Mr. Adam Carruthers, (Classical Sch., Tor. Univ.,) is now assisting in the classical department.

Mr. S. F. Johnston, (Lower Fifth Form), has received the appointment of head master of the Public School at Kinsale.

Mr. James Miller, (Fourth Form), is now teaching at Brougham.

Mr. Peter Strang, (Mathematical Sch., Tor. Univ.,) is teaching near Goderich.

Mr. S. B. Sinclair, of the University class of '76, paid us a visit a few days ago. He is going up for his second examination in *Arts*.

Messrs. Young, Graham, Whaley, Bell and Stewart, attend the Ottawa Normal School during the current session; and Misses Smith, Hamilton, Poustie, Cusack, the Toronto Normal School.

Messrs. Mutch and Bryden of the University class of '76, are to be sent to Muskoka for the summer months by the Missionary Society of Knox College.

Mr. Hector McKay, late writing master of the Ottawa Normal School, was appointed last week commercial master of this school. Mr. McKay, has had upwards of seven years of experience in teaching, as head master of the Owen Sound Public Schools, as teacher of writing in the Brantford Schools, and latterly at the Ottawa Normal School. He is an excellent penman, having been awarded two first prizes for penmanship at the annual Provincial Exhibition of Ontario, and, also a special prize for engrossing. We claim that we have the best penman in Ontario, as commercial master of this school.

WEIGHT OF THE BRAIN.—The average weight of brain in man is 45 oz. Thos. D'Arcy McGee's weighed 59 oz.; O'Connel's 54 oz.; Depuytren's 58 oz., and Cuvier's 59½ oz.

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hing WIT AND HUMOR.

Some of the students are troubled with room-mate-ism.

Mush-a-rooms.—Those students who hire rooms and live on mush.

Question in English literature. — Should Lamb be bound in sheep or calf?

Thiscity is something like Cincinnati, one is Ham-ilton and the other Porkopolis.

HO the corn, means water the corn, as  $H_2O$  is water.

Water ye say?

Do they teach anything here that a farmer's boy should learn? Certainly, Gee-haw-metry.

Specie.—No sir, it is not correct to designate the Quarterly the 25 cent-ly.

The last rose of summer.—When a fellow gets up on the 31st of August.

The Princetown students are in favor of Hayes.

A student asks if it is right to go to the theatre? No, unless you get a free pass.

Collegians who are turned out of the Institute always go to the Normal School, because its a good place Toronto (To-run-to).

Is'nt it about time for the Normalites to be making preparations for obtaining advance sheets of the mid-summer examination papers?

What is the question? asked an inattentive student. "To be or not to be," answered his Shakspearian friend.

"Take your seat," said the professor sternly. Certainly, where shall I take it to? asked the student.

A Scotch student says this is the most literary locality in Canada, because "we ha-Milton, wae us."

Don't imagine that the Quarterly is issued on the first of April out of contempt for the editor of this Department.

An Institute man who is good at the oars is said by a Shakspearian to be the "noblest Row-man of them all."

A Normal student wants to know if the Quarterly is published every month. Come west young man if you ever want to learn anything.

By the way, some students strew paper, etc., around their desk, it might be imagined they were studying letterature.

The boys who keep house for themselves are known as stew-dents. This may seem a tart apple-ation, but the pie-ous fellows are so well bread that this won't tease them.

"Which of all the nations that Russia has to deal with is the hardest to hold to a treaty"? asked the class historian. "The greased Pole," was the answer.

"Which do you think the sweetest of Byron's poems," asked a Hamilton young lady of a Collegian. "Chilled hair-oiled," he coldly replied. The young lady said he was evidently well up in the history of Grease.

"Do you know where the Collegiate Institute gets the ink used in it"? pensively inquired a student of a crowd that hovered round. They couldn't tell, but wanted to know where. "In Barrel-Inkton-Bay," was the answer. (Friends of the deceased please attend without further notice.)

THEY DIDN'T KNOW THE MAN.

"Who is Colonel Inst," asked one postoffice clerk of another on Wednesday last. "I haven't the honor of the Colonel's acquaintence," replied clerk No. 2. "Well, here is a letter for him," said the first. "Oh! that goes up to the old stone college; he gets all his letters there, I guess he teaches there." The letter was addressed,

> Col. Inst, Hamilton, Ont.

The Editors have received some fine specimens of poetry for insertion in the QUARTERLY. One starts out with:—

The excitement is oar, The boat club is ready, They sweep from the shore With strokes long & steady.

He goes on to moralize on the beauties of rowing, and at the end modestly requests that his name be not printed, but that the piece be marked by a few stars. He must be an \* his name in that way.

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# AMERICAN HUMORISTS.

THEY CONTRIBUTE TO THIS NUMBER OF THE QUARTERLY.

Letters from M. Quad (Detroit Free Press man), Mark Twain, Max Adeler and that renowned statesman, George Francis Train, written exclusively for the

# "QUARTERLY."

The Detroit Free Press man probably writes more fun in less time than any other man in America. He is a medium sized man with a straight-forward look and brown moustache. There is at times a comical twinkle in his eye, but he generally gets off some of his wittiest things with a grave face. original ideas about school and colleges, and frequently gives it as his opinion that none of them amount to much. He thinks the education of this country should take a more practical form than it does. He thinks that a child should know the names of the principal members of Parliament as well as understand all about elections and the manner of law making. Mr. Lewis writes exclusively for the Detroit Free Press now, although until the beginning of the present year he wrote for several magazines and numerous papers. He has written two books of sketches besides a few novels. He rarely takes a holiday, seldom goes to the theatre, as he thinks the finest pieces tiresome, and don't care much for reading. He never read a novel in his life, although he has written both novels and plays. He sends us the following:

My DEAR SIR,—When you ask me for my opinion on schools and schoolmasters, and on the subject of education in general, you renew my youth, though nothing but hair-dye will refresh these silver threads, and nothing but Perry Davis' Pain Killer will take these rheumatic twinges out of my legs.

I have been to school; I have met school masters. If education could be

chopped off the tree of knowledge and sold and devoured by the chunk, a great deal of time could be saved for kiteflying, meion stealing, and holding conspiracy meetings down behind Johnson's horse-barn. School teachers could also bend their energies in another direction. and there would be an immense saving of black-boards, chewing-gum, ferrule timber and brain fever. But, alas! We must all begin with A B C and leave off with cracking a bank or making a Congressional speech on the necessity of protecting American manufacturers of silver-tipped crow-bars and doubleheaded tack-hammers. Whenever I lose a situation worth \$20,000 per year through my lack of education I always feel glad-first, because all the schoolmasters who ever tutored me have met violent deaths, and second, because it would worry me to death to have to squander such a sum yearly.

I sometimes sit down on the back steps and reflect on my school days, and I always come to the conclusion that my teachers didn't give me a fair show. None of them ever told me that the King of Spades was a bigger card than the Queen of Clubs, nor hinted that the man who bets on the best horse in a race is certain to lose his cash. They never sat down with me in a fatherly way and told me of Captain Kidd and Sixteen-String Jack, and warned me of the shoals on which those gentlemen grounded. If I am ever hung for piracy or highway robbery, I shall make a scaffold speech and put the blame where it belongs.

This broken leg—these spliced ribs—this dislocated shoulder, and these many scars remind me that I used to go to school. I don't think the teachers meant to kill me, but it was plain that they hankered to come within an inch of it. It was no fault of mine. When old Dayball asked me what a cape was, and I answered that it was a loose garment to be worn over the shoulders, did I know that he referred to Cape Ann or Cape of Good Hope? When old Bludgeon asked me what "man" was, and I answered that he was an adverb, why

the need of slashing me with a Bowieknife. The trifling difference between a noun andan adverb wouldn't buy a dozen eggs in any market. Besides, I like to see folks have opinions of their own. There was neither poetry nor sentiment in any of my teachers. Many a time when called upon to step out and receive a further token of their esteem, it would have taken half the pain away had the teacher first smoothed back my hair and predicted that I was bound for the gallows; even when I wrote poetry they wouldn't appreciate it. Some of the worst of these scars resulted from the following touching idyl, written on the school-house door :-

> If he loved us As we love him, He'd leave this town With awful vim.

But, don't ask me for more. I never have an offer to help pack a ward caucus or sign any one's bail-bond that I am not painfully reminded of the fact that I hunted wood-chucks when I should have been hunting bays and gulfs, and that I was slying up to harvest apples when I should have boldly approached pronouns and conjunctions. The golden hour has fled forever, and in deep humility I sign myself your friend.

his C. B. X LEWIS.

Samuel L. Clemens (Mark Twain). lives at Hartford, Ct. A gentleman in that city who promised to write a description of him for the Quarterly, says: "There is little to write about as Twain has been described so often, and besides his pictures are well known. His hair is becoming sprinkled with grey, although his heavy tawny moustache shows no symptom of age. I spoke to him about that, and he gave as his reason that his hair is older than his moustache. He has a rather severe cast of countenance. but he practices that to scare book agents and insurance men, he is far from severe with his friends. He has lots of money and no inducement to work, and

don't. You ask how he occupies himself? Well, I found him lounging round in old clothes that fitted him easily and employing himself smoking, I found him smoking and left him at the same arduous task, he says he intends to go to the Paris Exhibition soon and will close his quaint brick house among the trees at Hartford. He desired me to state to all who wished his Autograph or desired to visit him, that he left for Paris six months ago." He writes us—

MR. EDITOR,—I am going to ask you to make my excuses to the readers of the QUARTERLY, I would cheerfully write the school a paragraph, but it is among the impossibilities, for I am lying very low with a disease which has clung to me during all the forty years of my life, and has got the best of me at last, I have forgotten the medical name of it, but the uneducated call it laziness. There are distempers with finer names, but there is none that so saps the patient's energies, I am in the final stages, so charitably take the What-I-woulddo-if-I-could for the What-I-couldn'tdo-if-I-tried, and be generous with the stricken. I am not writing any book now. I have got four of them STARTED, but have stopped work on them all until the solitude and retirement of the summer "vacation" shall give me that freedom from interruption which isn't to be had in any other circumstances.

Within a week or so, State, Woodman & Co., of New York, will issue a tencent paper edition of my latest sketches (with half a dozen of my old ones), title, "Punch Brothers, Punch" and other sketches, and throw it on the market to see if cheap literature will go here as well as in England. I am taking my holidays now, when the r'. I of the world begins to take its holiday, I intend to go to work. The longer I live the more I see the riskiness of putting off your holiday till summer, you might die you know.

Yours truly,

S. L. CLEMENS.

# CHARLES HEBER CLARK, (Max Adeler.)

Is well known to the public through his humorous sketches. He is a member of the Phil. Bulletin staff, but he contributes to several papers. His two books are "Out of the Hurly Burly," and "Elbow Room." In reply to a letter asking for a sentiment on education, he evidently finds himself in an unknown channel, for he sends the following short letter:—

"MR. EDITOR.—I haven't a sentiment upon the subject of school anywhere about me, and as there are lying around here no available sentiments belonging to any other man, I must ask you to excuse me.

Yours,

# CHAS. HEBER CLARK."

Robert Burdette, the Burlington Hawkeye man, is off lecturing. His business partner sent a note saying that Mr. Burdette would write a sketch for the QUARTERLY, but up to the time of going to press it has not come to hand.

As madness and genius are nearly allied it was determined to have a sketch from the renowned Geo Francis Train, to serve as a dessert to the letters of the funny men. Mr. Train is around lecturing at present, but, was caught on the wing by a friend of the QUARTERLY and the following is the result:—

"SIR,—I know I hold the power of life and death, and that is absolute dictatorship through Psychelegie Eidutive. If you want my Psychology to bring you health, prosperity and happiness, in addition to attending my lectures on week days and sermons on Sundays, you should subscribe for my paper which will report the essence of these independent mass meetings. I wish that no acquaintance or friend will shake hands with or speak to me when I leave the hall as I wish to reserve my magnetism, electricty and longevity;

all children rich or poor are invited to call on me, but their parents or nurses are requested not to draw on my Pyschology by remaining with them.

GEO. FRANCIS TRAIN."

#### THE THREE STUDENTS.

Blink, Jinks and Brad, are three Coll. Inst. students. They board in different parts of Hamilton; they live on mush and milk principally and consequently are constitutionally hungry; but living was cheap and they looked cheap as well. Some wicked person in the Institute wrote the following letter three times:—

Dear-

Meet me in the parlor of the Royal Hotel, to-morrow, Saturday, at II. I have ordered dinner for three, myself and — will be there. Say nothing about it to any one and we will have a big time.

# Yours ----

One was filled with Blink in the first blank, and Brad and Jinks in the other. Each of the three students got an invitation for dinner on Saturday at the same hotel, at the hour of 11, and each thought the other was to pay for the dinner. Of course they met; for the first hour they were the jolliest crowd in Hamilton; after 12 their mirth began to wan, and they looked anxiously for the coming of the dinner. were resolved that nothing should mar the pleasure of the feast so none of them had indulged in the luxury of a breakfast. As one o'clock struck Blink remarked that he always DID hate those stylish late dinners. Jinks asked him why he didn't tell the waiter to hurry then. Blinks replied that that was Brad's business, while Brad indignantly asserted that Jinks was the man to attend to that. Howling discord soon became a fourth guest by the

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empty table, and at a quarter past two Jinks jammed on his hat and swore he would never speak to Blink again, while Brad looked scowlingly at the departing Jinks until Blink remarked that for two cents he would lick Brad. At half-past two the hotel parlor empty and so were the students.

# NOTES TO THE FIFTH READER

By T. C. L. Armstrong, M. A., Modern Language Master, Collegiate Institute, Hamilton. Jas. Campbell & Son, Publishers.

The selection of a specified number of lessons from the text-books for the purposes of the test examinations for entrance to High Schools, and for third class certificates, has called forth a set of notes on those lessons that will be found of great advantage to the student. While they all aim at giving information calculated to assist at the examinations, the notes by T. C. L. Armstrong, M. A., our Modern Language Master, has a second and perhaps more important object, viz: that of supplying teachers with a general plan of teaching the Fifth Book.

A concise and yet full treatise on the method of teaching English is first given, well calculated to assist both teachers and pupils in a methodical and scientific treatment of the study of our own language as a training medium, as a source of information, and as a useful acquirement. The chapter on Derivations is intended to supply a want that has long been felt by public school teachers, that of a concise and systematic view of the nature and use of derivation as a school exercise. It is claimed for this chapter that it gives the gist of the subject in a convenient form, that will be found useful for reference. Versification is treated more fully than by most of our grammars, and contains much informa- l tion necessary for a just analysis and application of a poetical extract.

The notes on the lessons aim at brevity and usefulness; a concise biographical note on each author is given which may be committed to memory. No information is given that can be easily acquired from the text books. The common fault of making the collateral information demand more attention than the text is avoided. fault of most teachers is that of attempting to compensate for the want of methodical or scientific treatment by a vast collection of disjointed facts.

The Tyro, published by the Students of the Canadian Literary Institute, Woodstock, is a neatly printed quarto of twelve pages, fresh with College gossip and replete with sparkling humor. We rejoice with the Tyro on its success, and congratulate the Institute on its ever . increasing efficiency.

The following Scholarships have been won by ex-students of the Hamilton Collegiate Institute at Knox College at recent examination: 1st year, W. G. Hanna; 2nd year, John Mutch; 3rd year, John Gibson; and year, Scholarship in Exegetics, A. W. Marling.

It may not be generally known that the earth in 365 days makes 366 complete revolution or that if the earth moved from east to west instead of from west to east we should have 367 days in the year when we now have 365.

The following extract from the Head Master's Report for the month of March, shows the magnitude of the school. Total number enrolled, 432; of them 221 are boys; average attendance for the month, 394. 167 boys take Latin; very few take the non-classical course. Upper school, 63; average attendance,

# OFFICERS OF THE QUARTERLY.

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# WENTWORTH TEACHERS' ASSOCIATION.

The next regular meeting of this Association will be held in the Lecture Room of the Collegiate Institute, Hamilton, on Friday and Saturday, 3rd and 4th of May.

#### PROGRAMME.

Friday, May 3rd.

10 to 11 a.m. Miscellaneous business.

11 to 12 " Examination questions, arithmetic and grammar.

1.30 to 2 p.m. Election of officers. 2 to 3 " English literature. T. C. L.

Armstrong, M.A.
3 to 4 " Training of Teachers. Geo.

Dickson, B.A. 4 to 5 "Question drawer.

7.30 "Moral Culture. Rev. S. D. Rice, D.D.

" A Talk about Tennyson.— Rev. W. Stewart, D.D.

Saturday, May 4th.

9 to 10 a.m. Music and how to teach it.
A. Scott Cruickshank.

10 to 11 "Stocks and percentage. W H. Ballard, M.A.

11 to 12 " How to teach reading. G. M. Johnson.

12 to 1 p.m. Miscellaneous business.

Vocal and instrumental music will be furnished by Professor Johnson and the Collegiate Institute Glee Club. These meetings are open to the public.

David Bell,

I. H. SMITH,

Secretary.

President.

APRIL 22nd, 1878.

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