

The Spectrum.

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THE PHILIPPINES AND THEIR INHABITANTS.

It is rather difficult to give a true picture of the Filipinos. There are so many different types of them that it is practically impossible to point out any individual character and say, "That is a representative Filipino." A true insight into their modes of living, manners, customs and traditions can be gained only by a long sojourn amongst them; even then most persons would leave the islands carrying with them the conviction that the Filipinos are a riddle which they are not able to solve.

In and about the city of Manila the majority of the Filipinos are more intelligent than those further away from the city. The men are about the average height of 5 feet 3 or 4 inches, the women being somewhat smaller. The laboring class are, as a rule, of very muscular build, being very active, and apparently stronger in proportion than their white-skinned neighbors. Filipinos of every shade of color, from pure white to tawny black, are found in large numbers, the lighter colored being as a rule, more intelligent than their darker brothers. This diversity of complexion may, perhaps, be ascribed to intermarriage with the Spaniards during the latter's sovereignty over the islands.

More remarkable still than the diversified color of the people is the diversified architecture of their homes. In Manila every imaginable form of residence may be found, from the luxuriously furnished villas of the upper class to the lowly huts of the poor fishermen. The wealthier class of Filipinos have very large and commodious houses, well furnished with everything necessary for the comfort and pleasure of the

occupants. The majority of these houses have stone foundations, which rise about seven feet above the ground. Upon this foundation rests the house, which is built of wood, having fine mahogany floors and furniture which generally consists of mahogany or other valuable wood. The rooms are large and well ventilated; they are, as a rule, provided with three sets of sliding windows, so that the occupants may arrange the light and temperature of the rooms to suit any conditions. The first, or outer set of windows, are very little more than shutters, so arranged as to permit the free entrance of air, while darkening the room and preventing draughts of air from entering; the second, or middle set, are ordinary glass windows, which permit the entrance of light in the fullest possible degree. The third, or inner set, is made of sea shells, cut in small squares of about 2½ inches, and scraped very thin. When these windows are closed the shells seem to filter the glaring sunshine, which is so common to that country, and give a subdued and mellow light which is very pleasing to the eye, and appears to have a refreshing effect upon it.

Pictures in Filipino homes seem to be confined, almost entirely, to reproductions of some old saints, the Madonna, etc., but the quantity is evidently intended to make up for the quality, as each room has a good share of these pictures. One universal feature of all Filipino homes is the presence of a small altar and crucifix, with all its attendant paraphernalia. In the homes of the wealthier class, a room is generally set apart for this purpose, and daily

devotional exercise are a regular part of the Filipino's home life.

The beds of the upper classes are made of hard wood, with interwoven cane bottoms. As a rule, there is a large canopy hanging over each bed. Those who make pretension for elegance have curtains hanging around the beds. Chairs are made either of wood or wicker-work.

The walls of the houses are generally covered with pretty and peculiar designs. The regularity of these designs are often remarkable, all the work being hand painted. Representations of flowers are found which present a very pleasing appearance. The lower part of the houses, inside the stone foundations, are used as general storerooms; the family live on what may be termed the second floor, though it is in reality the first. Entrance is gained by a small stairway, or rather something between a ladder and a stairway, or a ladder having two or three rounds in place of one.

The houses of the middle class are neither so well built nor furnished as those of their more fortunate brethren. Instead of the stone foundation we find a number of heavy poles placed at the corners and along the sides, the space between these being filled with a kind of compact fence, made of inter-woven strips of bamboo. A number of poles are then laid transversely across the uprights, and fastened in various ways, and from this foundation the house is constructed. The walls of the rooms in which they live are generally made of rough boards, with only the sea-shell form of sliding windows, while the roofs of the houses are made of long thin strips of bamboo, which are interwoven and covered with a variety of long, coarse grass known as "nipa," which forms a very good protection. The floors of these houses are made of long, thin strips of bamboo, about one inch wide and half an inch thick. These are fastened to the framework of the floor, about half an inch apart and make

a very durable and springy floor, besides being very easily kept clean, as all dirt falls through the interstices to the ground below, where it is conveniently out of the way. As a general rule, most of these people have durable cane-bottomed beds, but without the canopies and curtains of the upper class. The lower part of the house, below the floor on which the family lives, is used as a storeroom, and sometimes as a barn, for the shelter of the little horse or the sluggish caribou. Of course, this is not in strict accordance with the rules of hygiene, but the Filipinos seem to enjoy it.

The poorer classes live in houses which are raised but a foot or two from the ground. The sides of these houses, if such they may be called, are made of interwoven bamboo strips. The roofs are covered with "nipa," and in most cases, the walls, during the rainy season, are protected in the same way. An oblong space is left in the position desired as a window, and a swinging shutter is made to cover this space, when it is desired to have the "window" closed. Beds are a thing unknown to this class, a few blankets of various descriptions being spread on the floor when the occupants desire to sleep. No store-houses are needed by this class, as they have nothing to store, their few possessions being placed in a small box or two and placed in a corner of the room, or hung on one of the bamboo poles in the roof.

As a remarkable contrast to these poor homes, we see, scattered all over the islands, churches of great size and splendor, of very massive construction, each church having a monastery and a barrack for troops connected with it, the whole forming a perfect fort, as the walls are, in most cases, from four to ten feet in thickness. These churches are fitted out in a very elaborate manner, almost all being furnished with mahogany woodwork and having silver ornaments. The windows are, as a rule, about twenty feet from the floor, and

in the more pretentious churches the ceiling is sometimes almost one hundred feet from the floor. With the exception of a few rough benches along the walls, there are no seating accommodations. The floors are sometimes of tile, and sometimes of marble. Almost all the churches are built in the form of a cross, having two very large and spacious wings, and with one of these wings is connected a storeroom, in which all the emblems, images, robes, etc., are kept. The number and magnificence of these images is beyond belief. In fact, there seems to be an endless store of them, attired in silk and satin robes, and wearing ornaments of pure silver.

On each church there is a large tower, varying in height from one to two hundred feet. These are invaluable as watch towers, and were probably built for that purpose. In some of the churches there is, back of the altar, a large room which is used as a vault for the remains of monks and priests connected with the church, the thick walls being used as a kind of catacomb.

The natives are, as a rule, religious, or at least they present the form of religion. The women, almost without exception, wear some kind of sacred image around their neck, sometimes having it attached to a rosary, sometimes to a mere string. The image, or picture, is generally that of the patron saint of the district in which they live, each district having its own patron saint. When passing in front of a church, if it be anywhere near to the street, the majority of the Filipinos will stop and face toward the entrance, then, taking off their hats, they bow very lowly, at the same time making the sign of the cross on their breast. They also remove their hats and bow very reverently when they meet one of the priests on the street. This custom is not uniformly observed on account of the controversy over different orders of priests and the warfare between the Spanish and native priests. One thing,

however, is certain, and that is that the Filipinos would be perfectly justified in disowning them all, as the money and labor necessary to build the churches on the islands must have sapped their finances and energies ever since the Spanish conquest.

The people are, as a rule, capable of assimilating the manners of civilization and learning very rapidly. From the Spaniards they have learned to be courteous to a wonderful degree, and, therefore, treat all strangers with the utmost politeness. A person cannot help feeling though that this politeness is merely a cover for the most cunning treachery. Circumstances show that, in a great many cases this is so, but it would scarcely be fair to condemn the many for the wrong doings of a few.

Agriculture around Manila seemed to be at a standstill, only enough land being cultivated to give the owner and his family a scanty subsistence. Rice is the principal crop of that part of the country around Manila, but further out there is a great quantity of tobacco grown, also sugar cane. The primitive mills for the extraction of the sugar are a common sight in the interior of the island, though they are very scarce around the city of Manila. Judging from the amount of hemp seen along the water front, awaiting shipment, the productive capacities of the islands must be immense. The thought naturally presents itself: "If such a quantity can be produced by Filipino methods, which at best must be taken as 200 years behind the times, what will be the output when science and modern methods come to the aid of the producer?" The question is one which time alone can answer. Naturally the same thought presents itself when one considers the tobacco, sugar, cocoa, and dozens of other different branches of industry. Again, the finest known quality of straw hats are made by the Filipinos, while we have another typical product in "pina" cloth, a kind of silk which is said to be manufactured

from the pineapple fibre. Mahogany and other valuable woods, though they are not found close to the principal city, are in such abundant use that they must grow conveniently near.

Volumes might be written about the different products of the country, its fruits and vegetables, its picturesque scenery, and quaint peoples.

When the Filipinos once discern the beneficent results of American rule, and the full wealth of their island home is developed, when education and intelligence take the place of superstition and

ignorance, then they will bless the United States for its actions in assisting them despite themselves; then, and then only, will they realize that Americans and Spaniards are very different, and their strides toward the goal of civilization and enlightenment will rival, if not surpass, those of their Japanese neighbors. After being deceived for over a century by Spanish diplomats, they cannot be blamed for being suspicious of American promises, as they naturally suppose that all whites are the same.

J. M.

HAYSEED IN HIS HAIR.

We kin all of us remember,
How along about September,
That the papers ust ter tell
About the caucus or the fair.
End them fellars from the city
Ust ter git uncommon witty,
On the fellar with the duster,
What had hayseed in his hair.

They had fun in legislators
With the man what raised pertaters,
Ef by 'ery hook or crook or chance
Elected and sent there.
End the reportorial friskers
Ust ter comment on the whiskers.
End the carpet sack of Olson
What had hayseed in his hair.

But ef you've lately bin observin'
Whom the colleges are servin',
It's the fellar with chin whiskers
That is slowly gettin' there.
End by 'er little calkerlatin'

'Long with all this edurcatin'
Success shall crown the fellar
What has hayseed in his hair.

Then you "culture" student fellars
Will all carry green umbrellars,
End your trousers wide across the seat
Will make the dudelets stare.
But to pass the clearest muster,
You will wear a linen duster,
End when you want to throw on style,
Put hayseed in your hair.

Now they say hayseed is rising,
Which is not at all surprising.
For the sons of toil are studying agri-
culture everywhere.

And you men who rule creation (?)
All throughout this Yankee nation
Will do well to mind the fellow
With the hayseed in his hair.

—Anon.

EXPLOSIVES.

(Read before the Chemical Club December 14, 1899.)

Upon the great importance of the invention of explosives, we need not dwell. Not only has it revolutionized the art of war and given the forces of civilization a great advantage over mere numbers and savage valor, but it may even be urged that the very improvements that have rendered modern military machines more deadly, tend to make war more expensive and destructive, and, therefore, to prevent its being

as frequently undertaken as of old. Besides such indirect services to civilization, explosives have been and are of great use in times of peace.

Explosives date from the accidental discovery, many years ago, of the deflagrating properties of saltpetre when in contact with incandescent charcoal. The consequences of that discovery, gradual as they have been, and intimately bound up with the progress of chemical and mechanical science, were dwelt upon in the paper on gunpowder

read at our last meeting. By distilling nitre with oil of vitrol, the alchemists obtained a corrosive fluid commonly known as nitric acid, which parts with its oxygen even more readily than saltpetre; so that if the strongest nitric acid be poured upon finely powdered charcoal, the latter takes fire at ordinary temperatures. About a half a century back it was discovered by some French chemists that upon treating various organic substances, such as starch, the sugars, and cotton fabrics, with concentrated nitric acid under proper precautions, the chemical composition underwent a change, and they became endowed with violently explosive properties. To this discovery we owe a distinct class of explosive compounds, the most powerful for practical purposes yet known, such as guncotton, nitroglycerine and dynamite.

Explosives are generally divided into two distinct classes—(1) explosive mixtures and (2) explosive compounds.

In the first class, we find those explosives which are merely intimate mechanical mixtures of certain ingredients and which can be again separated, more or less completely, by mechanical means, not involving chemical action. Such mixtures may be divided, according to the nature of the oxidizing ingredient, into two principal classes, the nitrate class and the chlorate class.

Any nitrate may be used in this class, but on account of the force with which oxygen is held in combination in the nitrates, it requires a powerful disturbing cause to separate it from the other elements. This class of explosives is comparatively safe, as they do not decompose readily and have a gradual action. Gunpowder is taken as the representative of the nitrate explosive mixtures.

The chlorates part with their oxygen far more readily than do the nitrates, the strong affinities of chlorine for the metals coming into play, and consequently chlorate mixtures, such as Horsley's powder, which has an explosive

power five times greater than gunpowder, are very sensitive to friction and percussion, and explode with great violence, as in the fuse compositions used in exploding torpedoes and contact shells. Barthelot, who discovered potassium chlorate and recognized its oxidizing power, was the first to suggest its use in manufacturing service powders, but his own experiments and those of others in this direction were attended with so numerous and serious accidents that investigations in this direction were temporarily abandoned. This danger seems to be due to the inherent chemical properties of potassium chlorate, which is practically the only salt that has been used.

All chlorate mixtures are liable to explode in the presence of certain materials, particularly acids or those liable to generate acids, and all chlorate mixtures are easily exploded by combined friction and percussion or by mere percussion alone. It can be seen from this that the mixing of these powders is very dangerous, and too much caution cannot be used either in the mixing or in the storing.

The explosives of this character may be divided into two classes; those in which no attempt is made to reduce the dangerous sensibility of the chlorate mixture, and those in which an effort is made to reduce this sensibility by the addition of some diluting ingredients or by some special mechanical treatment.

Of the vast number of chlorate powders proposed, only those mixtures intended for use in fuse compositions have proven of general value in practice.

We will now consider the explosive compounds. In these the oxidizing agent is introduced chemically into the molecule, thus forming no longer a mixture but a true chemical compound, each molecule of which contains the oxidizing atoms, and, the atoms having a strong affinity for oxygen. There are two classes of explosive compounds. (1) Nitro substitution compounds and (2) nitric ethers.

Most of the nitro substitution compounds are themselves explosive or enter as important ingredients into a large class of explosives. They differ from nitric ethers in that they cannot be decomposed by distinct reactions, so as to reproduce the original substances which combined to form them.

The principal organic substances so far used in connection with explosives of this series are the hydrocarbons of the aromatic series, which are, as a rule, richer in carbon than the fatty compounds, containing at least six carbon atoms. As a class, they are less energetic in their action and more stable than the nitric ethers.

One of the best examples of this class is picric acid, which was discovered by Hausman in 1788. He made it by treating indigo with nitric acid. It may be obtained in various ways, but the cheapest and best is from the action of nitric acid on phenol. Picric acid is made commercially by melting carbolic acid and mixing it with strong sulphuric acid and then diluting the "sulpho-carbolic" acid with water, and afterward running it slowly into a stone tank containing nitric acid. This is allowed to cool when the crude picric acid crystallizes out, the acid liquid (which contains practically no picric acid, but only sulphuric with some nitric acid) being poured down the drains.

The crude picric acid, after being drained, is transferred to the "boiling-stones," where it is dissolved in water by the aid of steam and afterwards allowed to cool, when most of the picric acid recrystallizes.

The "mother-liquor" is then transferred to the precipitating tank, in which the picric acid still left in solution is precipitated by the addition of sulphuric acid.

The picric acid left in the "boiling-stones" is once more dissolved in hot water, and this second solution is transferred to the crystallizing tank, where it is left to cool, and where the picric acid again crystallizes. Finally, the

picric acid, after draining in the tank, is transferred to a centrifugal machine to remove the excess of moisture and then dried on glazed earthenware trays in a steam-box in which the temperature is not allowed to exceed 100° F. According to Hill and Abel, picric acid does not explode, but when heated it burns quickly and sharply with a bright flame.

Desortiaux states that when heated slowly it vaporizes without undergoing any decomposition, but when heated brusquely to a temperature a little above 300° it explodes with violence.

The only powder that I shall consider in this class is lyddite. This is a new explosive being used by the English government in Africa and is attracting the attention of the world through the claim of the Boers that lyddite shells come under the head of explosive bullets. Lyddite is composed of picric acid, brought to a high state of fusion, mixed with some oxidizing substance. The proportion is not known, owing to the secrecy of the English government. The destructive effect of a shell filled with lyddite is some eleven times greater than of powder. Common shells of forged steel, filled with lyddite, are used with 6 and 12-inch breech-loading guns and howitzers and also with 4 to 6-inch quick-firing guns.

Referring to these shells, the London Graphic says: "All lyddite shells are equipped with percussion noses only; hence, their explosion takes place on impact in the following fashion: The percussion fuse ignites a picric powder exploder, which in turn ignites the bursting charge of lyddite, the detonation of the fuse and of the two explosives inside of the shell being instantaneous. The picric powder exploder we should add, is inserted in a recess left in the lyddite for that purpose. A lyddite shell is to some extent less barbarous than shrapnel, exploded by powder, for, though widespread, its death-dealing effects are due more to air concussion than to the wounding

effects of flying fragments. in other words, in the case of a lyddite shell bursting in the midst of a group of men, the greater number will be killed, not by the pieces of the shell, but by the blow of the suddenly compressed air."

The second class of explosive compounds may be subdivided into two classes; nitric ethers and nitric esters, according as they are obtained by the action of the nitric acid on simple or complex alcohols.

Nitric ethers are obtained by the action of nitric acid on simple alcohols. If a nitric ether be subjected to the prolonged action of water and dilute alkalis, both the original acid and alcohol are entirely reproduced, while in nitro esters the original ingredients are only partially reproduced, the acid being destroyed.

Nitro-glycerine may be taken as the representative of the nitric ethers. It was discovered by Sobrero in 1846. It is formed by the action of concentrated nitric acid upon glycerine at a low temperature.

It has a sweet, pungent, aromatic taste, and is an active poison, mere contact with it producing nausea and an exceedingly painful form of

headache at the base of the brain. It freezes at 40° F., and slowly liquefies again at 50°. When frozen it is less sensitive to explosion. It is used largely for blasting purposes in the form of dynamite.

Guncotton is the representative of the nitro esters. As its name implies, guncotton is an explosive made from cotton by immersing pure, dry cotton in a mixture of the purest and strongest nitric and sulphuric acid.

The fibrous guncotton seen in ordinary light differs little in appearance from which it is made, but as seen under the microscope by polarized light, the fibre of guncotton appears dull and only feebly colored, while cotton fibres, under the same conditions, are brilliant in lustre and iridescent.

Guncotton is harsher to the touch and less flexible than cotton; when dry it becomes quite highly electrified if rubbed between the fingers, and is luminous when rubbed in the dark. It is completely insoluble in water.

Guncotton is used as a service explosive in the navy for torpedo service. It is used to some extent in the big guns of both army and navy, but is too easily exploded to be used to any great extent.

C. J. P., '01.

MECHANICAL NOTES.

The new blower is now doing good work.

Professor Rose has his hands full these days during shop hours, as the shops and engine room are filled to the limit, and to accommodate the wood workers and blacksmiths he has to make two divisions, one for forenoon, the other afternoon.

There are two classes of short course students taking engineering; those taking it for three months in one class, those here for a year in the other. The purpose of the department is to give those who are here for the shorter

period as much of the practical work as possible, such as, adjusting moving parts, valves and making ordinary repairs. Those taking the year course have more time, go deeper into the subject, and are given some of the theory of engines with the practice. Besides being taught to do ordinary engine-tender work, they are given instruction and problems in dimensions and construction of engines, of computing their horse power, the use of the indicator and interpretation of the diagrams produced. At the end of the year it is expected that a diligent

student will have mastered the subject sufficiently to successfully operate any portable plant with credit to himself.

A new carpenter calorimeter is on the way for the department. It will not be long ere some reliable fuel efficiency tests may be looked for from the juniors and seniors.

Considerable trouble is experienced by those operating the different machines in the shops owing to meddlesome fingers working the adjustment screens and levers and moving things out of their place generally, after or before work hours. You may look at these things, boys, but kindly keep your hands off.

The use of the traction engine for agricultural purposes is coming into more extensive use every year. The steam traction engine has become a very efficient piece of machinery in the field, but is yet open to so many objections that an improved form of motive power would find ready use from users power would find ready purchasers.

Probably the two greatest objections to the steam engine are, the danger of explosions and the number of men required for operation.

There is to be organized in the near future an engineering club, to which will be admitted any member of the college working in the Mechanical department. With the large number of students pursuing courses of engineering this organization should be a very

prosperous and profitable one. Meetings will be held once in a week for exchange of ideas and a general discussion of mechanical problems.

A change has been made in the textbooks on Engines and Boilers.

The great success in the use of gasoline for stationary plants gives great hope for the future of the gasoline traction engine. The difficulties with those on the market at the present are the difficulty of starting in cold weather and the lack of a convenient reversing arrangement. There is no doubt that in the near future these difficulties will be overcome and the steam traction engine be superseded by the gasoline engine, which can be used with much less expense and which is also less liable to accidents.

It is a notable fact among engineers that compressed air has begun to supersede electricity in the transmission of power. This is due to the fact that the modern compressed air machines have reached such a high stage of efficiency that it is more economical, safer and better adapted for transmitting power than its rival, electricity. Many people have the idea that electricity can be transmitted any distance without loss of energy or the expenditure of extra power. But this is far from being a fact; it is anything but an economical transformation of energy, and it is largely due to this fact that compressed air is superseding it to some extent.

EXCHANGES.

Self denial is that virtue that is most admired and least practiced.—Ex.

The January number of the *Nebraskan Hesperian* comes to hand with several articles on debating, but hardly enough in the literary line.

The "Greece her Knees" anecdote of Theodore Roosevelt seems to be going

the rounds of most of our exchanges. Should think the knees would be pretty well greased by this time.

The *High School World* for December has quite an article on "Reformed Foot-ball, and the way it will be played when the millenium comes." It is plain to be seen that the author at one time attended country school.

The last number of the Student has not yet appeared on our tables.

Indoor base-ball is in a very flourishing condition in Eastern colleges. Why not here?

Rain or shine, the Purdue Exponent is always on hand with its customary high grade of matter.

Flirting is a good deal like squirrel hunting. You don't get much game, but its mighty good exercise.—Ex.

The Volante has fallen into the ways of city newspapers, and is distributing advertisements freely among the locals.

Locals are conspicuous by their absence in the College Exponent for December, the whole paper being given up to foot-ball and ghost stories.

The Blue and Gold believes in taking things in small measures, as is evidenced by their December number. Glad they think we are improving.

The December number of the Wahpetonian contains a number of articles on the Methodist Epworth League. So much for having a religious editor.

The editor of the Wahpetonian seems to spend most of the time in his sanctum with scissors and paste pot cutting and pasting clippings from other papers.

First Soph: "What made you yell last night in your sleep?"

Second Soph: "Oh, I had a terrible dream. I thought we were having another week of exams."—The Comenian.

The Yankton Student says that the foot-ball season of '99 has closed and Yankton, though not on top, has borne her defeats with proper resignation to her fate and her victories without any too hilarious demonstration of glee. As much can be said for our college, even if our defeats outnumbered our victories.

The December Phreno Cosmian contains an account of the Dakota Univer-

sity vs. U. N. D. foot-ball game. Great credit is given the North Dakota boys, and the opinion expressed that they are equal to any team west of Chicago.

The Rotary, a bright, breezy little sheet devoted principally to primary education, comes regularly to our tables.

The Industrial Collegian seemed last month to have been taken up mostly with the details of a college "scrap" between the juniors and the seniors, originating from an innocent little game of basket ball between the junior and senior girls, in which the former were victorious. Our girls take warning, it would be awful to have a battle between the preps and the soph'rs. "So perfectly rude, ye know."

According to an exchange, this is how base-ball started: The Devil was the first coacher. He coached Eve when she stole first. Adam stole second. When Isaac met Rebekah at the well she was walking with a pitcher. Samson struck out a good many times when he beat the Philistines. Moses made his first run when he slew the Egyptians. Cain made a base hit when he killed Abel. Abraham made a sacrifice. The prodigal son made a home run. David was a long distance thrower, and Moses shut out the Egyptians at the Red Sea.

We notice in the January Mercerian a very able article on debating in literary societies. This class of college education in which so few become proficient is held up in its strongest light, and many of the points maintained in the article could be well taken to heart by most of our literary societies. Debating should be cultivated far more than it is at present, for beyond a doubt more benefit is derived from it than from any other branch of literary work. To be able to talk well and express one's self clearly and forcibly is something every college student should be able to do.

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We would call the attention of our readers to the merchants and business men who advertise in our columns. They are thoroughly reliable, and by patronizing them it is giving value received and helping our work along.

Wishing you a happy new year has, without doubt, become trite before this time. We cannot refrain, however, from extending to all a new year's

greeting with this, our first issue in 1900. Every one's life is a book. Each year is a chapter, and each day a page, and however old new year's wishes and resolutions may appear, they should always be welcomed and the spirit they carry should be entered in the noblest living language in our great life book. Every author should endeavor to give the public his best, and try to make each page and each chapter grander than the preceding; remembering the sublime words of the poet:

"What hath been written shall remain,
Nor be erased and written o'er again;
The unwritten only still belongs to thee,

Take heed and ponder well what that shall be."

Chief Justice Fuller has filed a protest with John Addison Porter, secretary to the President, because Mrs. Dewey on the arm of Secretary Long, passed before the presidential reviewing party immediately after the diplomats had finished paying their respects at the presidential reception on New Year's day.

Our unbounded admiration for the hero of Manila Bay has never waned since the news of his victory first came to us. We were glad when we learned that he had taken a wife to share his glory, and hoped that she would prove worthy of her place. All doubt is now gone she certainly would be ready to enter another Manila bay with the Admiral at any time. When she sailed into a reception hall that is far more heavily mined (with social torpedoes) than was ever Manila Bay, she demonstrated beyond the least shadow of doubt that she is the one woman in the world for Admiral Dewey. She knew her place and took it, and we love her for it.

The English people have waxed wrathful over the supineness of General Buller in crossing the Tugela, and possibly they have a cause. However, we

Just watch us come into chapel.

Wm. Probert, with 'or, visited the city during X-mas week.

Walter Treat rendered a piano solo in chapel December 15th.

Orators, remember that a college contest comes off within a few weeks.

Students, don't call on Professor Mills between 12 and 1:30 p. m. He says he is home for dinner.

All those who contribute articles to THE SPECTRUM are requested to use good paper and to write in ink.

A dinner was served to the board December 12, Misses Manning and Barrett having charge of the affair.

Jimmie said that the oysters were wooden, but the rest of the party claimed that they were only burned a little.

Members of the Rhetoric class have given lectures on wit and humor writing; also writing and reading letters to the class.

Who was the Great Triumvirate? A suitable reward will be given by Miss Barrett to the person answering the above question.

Some one made the librarian a present of a whip, which she is to use on the few unruly boys who disobey the rules of the reading room.

Jas. McGuigan and E. D. Stewart have been appointed bouncers by the editors, whose purpose is to keep the office clear of loafers.

The D. E. department deny the charge that the cake, which was suspended on the bulletin board, was to be sent to the Paris Exposition.

From all appearances the college has one basket-ball team that will be a winner. The team played a game with the Moorhead Y and won by a score of 24-7.

President Worst, in giving a word of advice to the students, said, "Go to church Sundays if for nothing else than for the exercise, but do not go out of the state."

Don't holler out Hello! in the college halls loud enough to be heard across the campus. Please remember that there are others who might be studying.

The classes in engineering and blacksmithing are so large that they are divided into two sections.

Mrs. Burnham visited the college January 8th for the purpose of starting a class in vocal culture.

Mr. Jno. R. Selby, business manager of the Student, U. N. D., paid the college a visit on the 6th inst.

It is a mean trick to have a gang come in when a fellow is asleep and eat up his X-mas candy. It is not quite so nery, though, as inviting one's self to a reception.

H. W. Rose, international secretary of the Y. M. C. A., addressed the students in the chapel January 8th on the work of the Y. M. C. A. in other institutions of learning.

The daily papers had it reported that the A. C. students would have a mask ball soon after the holidays. Students, don't believe everything you read in the newspapers, they sometimes prevaricate.

Our college Y. M. C. A. has started in with a goodly attendance this term. Meetings are held every Sunday afternoon in the chapel. The officers to be elected for the term are: president, vice-president, secretary, treasurer.

Phelan visited Waldron's room during vacation in quest of a paper. Not finding the paper handy, he proceeded to confiscate all eatables in shape of candy, dates, and oranges that he could find.

Although the recent works of fiction are selling by the hundred thousands, they are not supplanting the works of Dickens, Thackeray, and Hawthorne, large new editions of these latter having lately issued from the press.

George Laizure met with an accident in the shape of a shinny club handled by a zealous player. As a result George is shy parts of two teeth and has four teeth knocked loose. Don't mind little things like that, as such things will happen in every day life.

The next Legislature will have to appropriate money to enlarge the present buildings and erect some new ones if our attendance increases as it has during the last two years. At present the chapel will not hold all the students and many of our class rooms are overcrowded.

Ask Drake why he missed physics' class Monday.

Miss Helena Peck is helping the post-mistress this term.

Miss Spencer rendered a piano solo in chapel January 11.

Professor Bolley recently gave the Sophomore class a lecture on "Culture in Society."

The student who rides "ponies" in examinations is in a fair way to walk later on.

Dr. Stark of Mandan visited the institution and his son, Carlyle, on the 11th instant.

The Sophomore girls were heard inquiring for "alimony" in the chemistry class the other day.

Contrary to the expectations of a select party, Miss Senn was not "At Home" last Friday.

Very interesting specimens of cotton, wool and silk have been purchased for the sewing department.

Miss Manns won the prize for the best essay written by members of Professor Mallarian's rhetoric class.

The Agricultural department is sending out a great deal of Bromus Inermis seed and pedigreed seed wheat.

During these short days the college clocks have been turned back 15 minutes to accommodate the late risers.

Sunday, January 21st, Professor Bolley will finish his talk on "Evolution," in the Unitarian church.

The Athletic Association started in the new year by making a few dollars on a basket-ball game held in the Armory.

J. McGuigan, while playing basket-ball last Thursday, cut his hand so badly that it was necessary to secure the services of a physician.

The back hallway of the sewing room has been converted into a music room for the accommodation of students taking instrumental and vocal music.

Thirty-five girls are enrolled in the Domestic Science department. We ought to have a few good cooks out of the number. The inspecting committee will soon call to see that they are doing good work.

Since instruction in penmanship has been procured for the short course students, it might be well if members of the faculty would take advantage of this instruction, so that their students would have less trouble in translating their notes.

A halo of cigar smoke around the main building, a smell of good tobacco on the college ground and a look of green envy on the faces of a good many of our students is a sure indication of a meeting of the board of trustees.

Corporals were appointed in the uniformed companies at the first of the term. Those appointed in Co. A are: Cronan, J.; Cronan, A.; Slingsby, Gamble and Schmidt. Corporals appointed in Co. B are: C. Chacey, Willison, Scott, Spencer and Barnes.

Something must be wrong with the disciples of Meinecke; the other day the Domestic Economy department baked three lemon pies and, strange to relate, they failed to mysteriously disappear, although left on the tables over night. Wake up, boys, and don't let a thing like that happen again.

Not only in this college, but in all the Agricultural Colleges in the United States, the study of agriculture is fast becoming popular. The fact is coming to be recognized by the farmers themselves that it requires just as much education and intelligence to succeed in farming as it does to succeed in any other business or profession.

Some one desiring a little fun a short time since, sent invitations to a number of the students for an "At Home" to be given by Miss Senn at Francis Hall on Friday evening. It was not until about a dozen of the boys had secured company and sent in their acceptances did they come to the true facts of the case by an announcement in chapel that no such event would occur.

There seems to be a tendency among some of the students to change a poor pair of rubbers, or, as is sometimes the case, no rubbers at all, for a good pair. These exchanges may be all right for the first party, but for the person who gets the poor pair or no pair at all it is rather hard lines. One of these days a "trader" will be caught in the act, and there will be another person placed on the retired list.

Can the Colonel play pedro?

Watch the faculty play basket-ball.

Our editor-in-chief has decided to take piano lessons.

The A. C. quartet sang at the Unitarian church January 7th.

Ernest Schollander has returned to resume studies at the college.

Last month it was "red pop," this month red socks are all the go.

Professor McArdle has entertained over three hundred callers the last week.

Professor Keene's house is ready for occupancy.

The Athletic Association have decided to purchase ten basket-ball suits for the teams.

Miss Edith Hill has been appointed assistant business manager on THE SPECTRUM staff.

Elmer McCartney has a new Washburn guitar, with which he soothes the nerves of his fellow roomers.

President Worst gave an address at the Unitarian church January 7th. Subject, "Education as a Moral and Directing Force."

One of the chemical students says that she can take no comfort in working in the laboratory for fear of having her head blown off.

At last our basket-ball team is getting down to hard work. Keep the good work going, boys, as we want to make a showing this year.

Many would-be students had to return home on account of not being able to find boarding places. We hope that next year there will be places enough for all.

The University of Pennsylvania is to have a \$250,000 Physical Laboratory. The professor of the department is examining the laboratories of other schools for pointers.

The State Oratorical Board met at the Webster on the 6th inst. and made arrangements for the coming state contest, which takes place February 28th. The local contest takes place on February 8th.

The Oratorical Association met Monday, January 8th, and elected officers

for the year: President, Miss Edith Hill; vice-president, Jas. McGuigan; secretary, L. B. Greene; treasurer, T. W. Osgood; member-at-large, C. J. Phelan.

It is rumored that the assistant horticulturist will take unto himself a wife.

The Faculty gave a "Pound Party" to Professor and Mrs. Keene at Professor Bolley's residence January 14th. Among the donations received were: a duck neatly dressed in red and college colors, a bar of soap and a bar of Sapolio.

A party of young gentlemen visited the Domestic Economy department and requested their usual handout; but they were asked if they thought that the department was running a free lunch counter.

One of our rising young men in the college bought a cigar, for which he paid the sum of 12½ cents, or equivalent to an hour's work. The young man placed the cigar in his trunk with the intention of keeping it for a Sunday smoke; but, sad to relate, a fellow student discovered the whereabouts of said cigar and as a result the first young man went without his Sunday smoke. Moral: Don't smoke or else smoke your cigars when you buy them.

Hon. J. M. Rusk, our first national secretary of agriculture, left us this prophecy: "I say unhesitatingly that the young men of our country who will bring to agriculture the education and intelligence, the industry and perseverance necessary for success in every career, whether mercantile, industrial or professional, will in the next twenty years attain a far greater degree of material well-being on the average than awaits them in any other calling."



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