

A decorative border in red ink surrounds the text. The top border features a horizontal strip with various symbols: a triangle, a lamp, a gear, a book, and a candle. The bottom border shows a landscape with a sun, mountains, and a river. The left and right borders are vertical, with the left side having a grid-like pattern and the right side having a more abstract, flowing design. Small circular emblems with the letters 'A' and 'M' are located in the corners of the border.

VOL. XIV

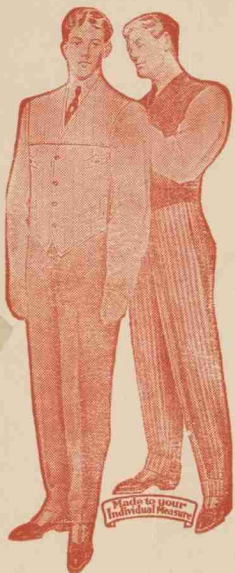
NO. 1

THE  
RED  
AND  
WHITE

OCTOBER  
1912

WEST RALEIGH, N. C.

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# THE RED AND WHITE

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## THE WONDER.

Come, tell me where the maid is found,  
Whose heart can love without deceit,  
And I will range the world around  
To sigh one moment at her feet.

Oh! tell me where's her sainted home—  
What air receives her blessed sigh—  
A pilgrimage of years I'll roam  
To catch one sparkle of her eye!

And if her cheek be smooth and bright,  
While truth within her bosom lies,  
I'll gaze upon her morn and night,  
Till my heart leaves me through my eyes.

Show me on earth a thing so rare,  
I'll own all miracles are true;  
To make one maid sincere and fair,  
Oh, 'tis the utmost Heaven can do!

## THE GREAT SCHOOLS OF THE WORLD.

BY R. D. GOODMAN, '13.

In the past the great schools of the world were those in which the dead languages were taught, but now they are those in which the laboratories and work shops make up a greater part of the work. The professors of this new philosophy are not those who despise industry, but those who have a love for it, as well as for anything else that stands for the betterment of man. This is the foundation upon which America is building her way to prosperity. There are the true universities which every nation needs in order to give her students the accuracy which comes through mathematics and the grace of expression which is acquired by the study of rhetoric. But the technical colleges in which the process of analysis is taught by real object lessons must not be neglected. In them the constructive faculty of a man is exercised in the way that it should be, and the imagination has free play in the realm of invention.

In the making of an argument, men may err without it being noticed by very many people, but in making a machine or engine the slightest error will be detected by a very unskilled mechanic. The world wants men who know how to do things with their hands, to fill positions so that they not only can tell other people how to do things, but can really show them how things should be done.

The philosopher is taught how to mould words, while the mechanic is taught how to mould iron into many useful articles. The conquest of the forest and field and the civilization of man were not accomplished by literature, but by hard, honest labor. The nobles and lords who came over from England to America with the expectation of establishing a colony failed because they had never been taught how to work. The early settlers who did succeed had only a few rude tools, but they were willing to use them with their hands as well as with their brains. The man who is helping to civilize the

world to-day is the one who invents a machine to do a great deal of work at a comparatively small cost, or the one who makes two blades of grass grow where before there was only one.

A country can have no greater and more enduring source of power than a body of skilled workmen who are well-paid and live in villages or cities at convenient distances from their work and circulate their money in their own localities—buying their necessary supplies from the home producer, thereby getting a better product, and besides keeping their money at home and building up prosperity there instead of abroad.

No man has ever risen higher than his ideal, therefore we should aim high—teaching the children of each generation to grow up and live amid surroundings that will give them respect for manual labor in which there is always a future. Man was created for a working piece of machinery and not for an ornament, which is proven by comparing the health statistics of working men with those of men who do not work. Every part of a man was made to do something, and as soon as he stops using that part it begins to waste away. Nothing is more beautiful than the tan face of a boy or the rosy cheeks of a girl, both of which are true indications of health and work either in the shops or in the sun.

It has been truly said that a child's character to work or to remain idle is formed during the first eight or ten years of its life. This shows clearly the need of industrial training during these as well as the following five or ten years. If you are going to school to keep from working in the future, and not for the purpose of learning to do more and better work in the same length of time, you had better ask for a discharge at once and try to change your idea, for the world has no place for such a man.

## SCIENTIFIC MANAGEMENT.

BY T. R. HART, '13.

Rarely has a chance remark caused such wide and sudden interest as one dropped a year ago by Louis D. Brandeis. He was arguing the case of the shippers against the railroads before the Interstate Commerce Commission. "By the application of scientific management," he said, "the railroads of this country might save \$1,000,000 a day." That sentence swept over the country, bringing to a large part of the people the first information that a new principle had entered into industry. Still less did the public know that this new principle is likely to accomplish a change in business comparable only to the change from hand labor to machine production. Its beginnings go back thirty years, and for the last ten or twelve years a corps of experts under the leadership of Fred W. Taylor, the Edison of scientific management, have been installing it in factory after factory.

In the eighties Mr. Taylor, an honor graduate of Stevens Institute, worked up from a journeyman machinist at the Midvale Steel Works to be foreman of the room. In his experience as a laborer he had decided that the workmen were not doing as much work in a day as they should do. He tried to "speed up" the workmen by the old "rule of thumb" methods, but he met with opposition all through the shops. By finding ways to eliminate waste effort, by offering homes to those who passed a certain minimum, which he set for them, he doubled the output of this machine. In doing this a great idea took form in his mind. Why not study men as well as machines. Had any one ever applied the principles of modern science to the problem of eliminating waste effort from labor?

Taylor's idea was that a workman could increase his efficiency by a study of motion and pace. He began work in the yards and shops of the Midvale Steel Works at Philadelphia with some of the simplest kinds of labor—lifting weights, shoveling, etc. Employers had always acted upon



the theory that to increase the efficiency of a loading gang you must either get strong men or work the men to death. Taylor set out to prove that by scientific management maximum prosperity for both employer and employee could be obtained. He selected two healthy laborers of about average strength, and offered them double pay "to do any old thing you're asked and play square." For months the men lifted, carried, pushed and pulled at the word of command from two young college men with stop machines. These experimenters worked their subjects at various paces and with various rests, and recorded absolutely all the data. Moreover, they kept constant and scientific account of the physical condition of the men. When after the first series of experiments they assembled and digested the data, and they found their results unsatisfactory. They tried again, and were astonished at the results, which were more than satisfactory. From the last experiments Taylor worked out a marvelous formula. He raised the capacity of the average laborer to load pig-iron from twelve and one-half tons a day, the old mark, to forty-seven tons a day. In other words he multiplied each man's capacity by four, and did it without overtaxing the workmen. All he needed to accomplish this result was a foreman trained to proper timing, and a few pace-makers accustomed to the method.

The next subject to which the knowledge gained by years of experimenting was applied was shoveling, a grade higher in mechanical skill. At once the problem grew more complex. It involved not only pace and rhythm, but also the size of load and "the thrust" in pile. Any one knows that if he is shoveling coal, it serves him best to scoop along the ground at the bottom of the pile, and that loose dirt gives least resistance if the shovel is thrust in obliquely. But what, asked Taylor, was the exact rule? What load on the shovel would give best results for a day's labor? Thereupon he worked out the laws for shoveling by the scientific method. Twenty-one pounds was the best load for a man of average strength.

Previously the laborers at the Bethlehem Works had used the same shovels for all substances. On fine coal the load was three and one-half pounds; on iron ore fifty pounds. He had new shovels made for every substance handled in the yards, each designed to carry when full twenty-one pounds. Every day the proper shovels were issued for the proper work. The planning room, where all this was worked out, grew into a labor office, from which three men handled like chess-players one hundred and forty men of the Bethlehem yards. Taylor had begun by giving a bonus to such workmen as accomplished the desired results. Each received at the end of the day a white slip informing him of the next day's task. If the laborer received a yellow slip it meant that he had not worked well enough to win the bonus. Those who failed were taken in hand by foremen or "teachers" and instructed in the right methods of doing the work. With a bonus of sixty per cent to successful laborers and an increased number of foremen the average wage to the man was higher, but the results were astonishing. One hundred and forty men were doing the work of six hundred. The others had gone on to departments where the work was better suited to their powers. Before systematic management was applied it cost seven to eight cents a ton to handle material in that yard. Now it costs three and one-half cents a ton. This experiment saved the company more than \$75,000 a year.

Years later when scientific management was spreading throughout the business world Frank B. Gilbreth, a New York contractor, who began life as a bricklayer, became interested in the system. The bricklaying trade had stood still for four thousand years. Pharoah's workmen at Thebes and Gilbreth's workmen at New York used the same kind of bricks, the same composition of mortar, and the same motions on the part of the workmen. Gilbreth began to use his mind on the processes of his trade. He devised first an adjustable scaffold and then a carrier for brick. Cheaply paid laborers arranged bricks and mortar in the carrier. The materials

inspected and sorted came up to the workman at his waist level. With one simultaneous motion of both hands he could take up both brick and mortar. By this study of motion Gilbreth reduced the number of motions in laying a brick from eighteen to five or six. He was putting up a building in Boston. This building had a twelve-inch wall with two kinds of brick and drawn joints. The record for work of this kind was one hundred and twenty bricks an hour to the man. Before the building was completed Gilbreth's gang, working under teachers of the new method, laid three hundred and fifty bricks an hour to the man, and received a salary increase of two dollars a day to the man.

The work of a manufacturing plant may be compared to a foot-ball team. Not only must an individual get the best out of his efforts, but he must correlate his effort to that of his team-mates. The tendency to do this makes it possible to bring the management and workmen into closer relationship. Formerly the management worked from above trying to make the workman do more work by threats, but did nothing to help him solve his problems or improve his methods. Under this system the management is working from below, trying to lift up the workman. The higher officials are planning out his work, and adjusting it to the work of others; petty officials are standing beside the workman teaching him how to do his work on scientific lines and seeing that he obeys his teaching. Formerly one foreman directed perhaps twenty-five men. Under the new system one teacher helps every four or five men. Under these conditions fewer men on nearly the same salary will double, triple and quadruple the production of a plant. This is not "slave driving."

A fundamental principle of scientific management is to work the laborer within his permanent powers. Regular increase of wages, as a reward for applying the system, is another important part of the plan.

In discussing scientific management, Mr. Louis D. Brandeis, who speaks, not as a manufacturer, but as a close and

unprejudiced student of industrial conditions, said in part: "Some persons have assumed that the aim of scientific management is 'speeding up'—that it seems to make the men work harder, thus exhausting the workman. That shows a complete misconception. Conserving human effort and the man is a fundamental tenet of scientific management. The larger production is not attained through 'speeding up.' It comes largely from removing the obstacles for which he is not, and should not be responsible."

"The management sees to it that he is shown the best way of doing his job. The management sees to it that his machine is always in perfect order, and that he is always supplied with the necessary materials. The management sees to it that the work comes to him at the proper time, with proper instructions in proper condition."

Scientific management undertakes to secure greater production for the same or less effort. This does not mean that less people will have work to do. It has been suggested that this system will displace the inefficient. On the contrary it will help the inefficient most. It supplies instruction and offers to the teachers special incentives if they succeed in bringing up the hindermost.

The social gains to the working man through scientific management are greater than the financial gains. He secures development and rises in self-respect and satisfaction with his work. Eagerness and interest take the place of indifference, because the workman is called upon to do the highest work of which he is capable, and because in doing better work he secures appropriate recognition and reward.

This same principle of scientific management has fairly revolutionized agriculture. We now see the farmers rotating their crops instead of planting cotton year after year, and the crude twister stock plows have been replaced by the large turn plows and cultivators. See the results. From one to two bales of cotton are now raised on an acre where one-fourth of a bale used to grow, and from forty to one hundred bushels

of corn now grow where ten and twenty bushels used to be the average yield.

Recently, Secretary Meyer, of the United States Navy, asked Mr. Fred W. Taylor to look over our navy yards and make suggestions towards the installation of scientific management. This system has also been installed in several large manufacturing plants not only in the United States, but also in Germany. When it is introduced into the solution of all our industrial and social problems, then will the world enter into an era of progress and material prosperity that was never dreamed of before.

### THE AEROPLANE.

BY T. L. BAYNE, JR., '14.

Sounding shrill my sonorous song,  
From earth's fetters am I loosed  
To glide then into endless space  
Where I, the Eagle, and God do dwell.  
Upward, pinions motionless, I float,  
The embodiment of a soaring dream;  
From distance's vantage point to see,  
Not the world's stained nor brightest threads,  
But the unsullied beauty of the pattern complete.  
Then, my soul fired by truth,  
Swoop I down with love-lent speed  
To tell the wonder of it all.

## THE RAISING OF THE UNITED STATES BATTLESHIP MAINE AT HAVANA, CUBA.

By W. H. D. BANCK, JUNIOR ENGINEER UNITED STATES SERVICE, C. E. CLASS 1909.

In recent years the advancement in engineering has been astonishing, not only to those engaged in the profession, but to others as well. In this the United States Government has taken the foremost step, and has given to the world several wonderful examples in engineering. Among these two are well known: the Panama Canal and the raising of the United States Battleship Maine at Havana, Cuba. Although the latter took only a short time to execute in comparison with the Panama Canal, it was an engineering feature that can be well praised, because many of the engineering profession condemned the proposed plan for the raising of the once proud mistress of the sea.

It is well remembered by every man, woman and child the calling of the United States Battleship Maine from Key West, Fla., to Havana, Cuba, to protect American interests, this step being taken at the request of the American Minister located at Havana, who felt that such a course was necessary.

The harbor of Havana is formed by an indentation in the north shore of Cuba. It is shaped like a fan, of which the handle is the channel of entrance. The general line of the coast at Havana trends north 65 degrees east, and the direction of the channel entrance is north 125 degrees east. On entering the mouth of the harbor one will find to the right Castillo del Morro and to the left Castillo de la Punta. The length of the channel from the entrance at Castillo de la Punta to the Castillo de la Fuerza, where it widens into the base of the fan, is about 4,000 feet, and its general width between the shore line is 1,300 feet. The harbor is surrounded irregularly by high land on all sides, in which lime stone rock crops out at the surface. These facts are of interest, since they show why the wave action within the harbor is so

small, rarely, if ever, exceeding two feet in height, even when the top of the light house on Castillo del Morro at the entrance, 144 feet above sea level, is obscured by spray.

The United States Battleship Maine was sunk in the harbor of Havana at 9:40 P. M. on the evening of February 15, 1898, as a result of an explosion, while laying at a regular mooring buoy (then No. 4) 1,575 feet east of the south end of the Machina wharf, and 3,100 feet southeast from Castillo de la Fuerza. The wreck laid with the bow pointing toward the Machina wharf, and with the mainmast, the after searchlight platform, wreckage covering the amidships superstructure, and a few pieces of isolated wreckage forward appearing above the level water surface.

After the examination by the naval court of inquiry, and with the removal of all the bodies of the dead that could possibly be located, and also the removal of a few pieces of wreckage which appeared above the water surface, the wreck of the Maine was untouched until May, 1910, when Congress appropriated money for its raising. The total appropriations for the raising of the United States Battleship Maine amounted to \$900,000.00, and of this amount part will be returned to the Treasurer.

A board of army engineers, consisting of Col. Wm. M. Black, Major Mason M. Patrick (now Lieut. Colonel), and Captain Harley B. Ferguson (now Major), were appointed to carry out the work of raising the wreck of the United States Battleship Maine. Under orders from Major Ferguson, proceeded to Havana, Cuba, in September, 1910, to begin work on what is considered to-day to be one of the greatest engineering accomplishments of the present age. Countless times since the terrible evening of February 15, 1898, has the tragedy of the Battleship Maine been told. Not only is it familiar to every man, woman and child in the United States, but all around the world it is recorded as one of the greatest disasters in history.

At the time of Major Ferguson's arrival in Havana, the



wreck of the Maine laid in an average depth of about thirty feet of water, with nothing visible above the surface except the wreck of the midship superstructure, the aftermast and a number of davits and cranes. The keel of the wreck laid at about an elevation minus 45 feet.

A survey of the wreck was made, and from this a cofferdam was designed elliptical in shape. The total distance over all on the X and Y axis inside of the cofferdam was about 370 feet and 170 feet. Twenty cylinders joined by twenty arcs made up the cofferdam. In each cylinder, which was 50 feet in diameter, there were driven an average of 148 steel piles, and in each of the arcs an average of 10 steel piles. The steel piling used in the construction of the cofferdam was made by the Lackawana Steel Company, of Buffalo, N. Y., who were the lowest bidders. These steel piles were inter-locking, 75 feet in length and each pile making 12 3/4 inches of surface wall, in thickness being three-eighths of an inch.

On the wreck a platform was constructed and two stations were taken one about midships the other 200 feet aft of this station. From these two stations by the use of a transit the necessary angles were turned, measuring the required distance on the imaginary line, the center of each cylinder was marked by driving a wooden pile. A wooden templet or wooden circular form, 50 feet in diameter was then floated in position, the wooden pile extending through the center of the wooden templet or wooden circular form. This wooden templet floated on the surface of the water, acting as a guide in driving the steel piling.

Each steel pile was driven 74 feet below mean low tide. On account of the difficulty in driving a pile 75 feet long, due to the wind and motion of the derrick, it was found necessary to drive the steel piling in two separate parts, the lower sections being 40 and 50 feet, while the upper sections were 25 and 35 feet. A 50-foot bottom section was first lowered in position against the wooden templet or wooden circular form, and then a 25-foot section was connected to the 50-foot bot-



tom section by means of a fish plate, which had 16 bolts seven-eighths of an inch in diameter, eight bolts each passing through top and bottom section.

This steel pile was then driven by means of a steam hammer to elevation minus 74 feet below mean low tide. Next a forty-foot bottom section was lowered in position, this interlocking with the other steel pile previously driven. The 40-foot section being lowered, a 35-foot section was connected to a 40-foot section in the same manner as stated previously, after which this pile was driven down to the same elevation as the other, this method being continued until the cylinder was nearly closed, with the exception of about 15 steel piles, when the bottom sections of the remaining piles would be lowered one after another, each inter-locking. Just as soon as all the bottom sections were inter-locked, making the cylinder complete at the bottom, the balance of the top sections were connected to the bottom sections in the same manner as stated above. All these closing piles were driven down by degrees so as to make the closure perfect. A record of the driving of all the piles in the cofferdam was kept, the piles being numbered from the three-way pile or (tee pile) in the cylinders counter clock wise.

The connection between the arcs and cylinders was made by a three-way pile or (tee pile), this pile inter-locking with three piles, two in cylinder and one in arc. The driving of the arcs was the same as for the cylinders, a small wooden section being put in place as a guide in driving the piling.

During the construction of the cofferdam a good many obstructions were encountered such as small pieces of wreckage. In cylinder K, which was near the bow and on the port side the foremast was found by the aid of divers. When the cofferdam was about two-thirds finished obstruction in cylinder N, which was located on the starboard side, just a little aft of the bow, was found, and upon removing same found it to be the top of the forward turret (turret hood) and one of the anchors. In a number of other cases wreckage was found, which was removed.

On March 25, 1911, the cofferdam was completed, and contained 3,200 steel piles. After the cofferdam had been completed, the next step in the progress of uncovering the wreck was the filling of the cylinders. A survey was made off of Regla, which is a small suburb of Havana, being on the east side of the harbor. Off the point of Regla borings were made which showed that clay could be secured at about twenty-five to forty feet below water surface.

Next came the question of how to dig the clay for the filling of the cylinders. A dipper dredge loaned to the United States Government by the Cuban Government was tried in dredging, but the material was so hard and tough that this kind of machine failed to dig the required amount per day, which was allowed for the estimated time. The United States Dredge Barnard, which was brought to Havana, Cuba, in connection with the raising the wreck, and up to this time had been used for a quarter-boat and machine shop, was also given a trial, but being built to dredge only soft material, and with only a plough on her thirty-six inch suction line, made no impression on the hard material, only removing the top layer and occasionally removing small parts of clay. A twenty-inch cutter head dredge was secured. This dredge had just entered upon work in connection with filling a bulk-head located near what is known as Dead-man's Hole, in the harbor of Havana. This dredge, owned by the Huston Trumbo Dredging Co., was started to work. It was not thought wise to use this dredge, because the hydraulic fill would take some time to solidify the effect on the cylinders due to the centrifugal force, was also taken into consideration. The dredge moved in a quarter circle with pipe line properly connected, began to cut into the clay bank, which was about five hundred feet from the cofferdam. When the dredge started pumping with the end of the pipe line emptying in one of the cylinders, it was allowed to pump until the material in the cylinder had filled for about ten feet. Then the end of the pipe line was removed to the next cylinder, this being continued

until each cylinder was filled to the top, in every case filling only ten feet at a time. The arcs were filled in the same manner as described above.

The cylinder filled was allowed to stand for a short time, so it would solidify. The water inside the cofferdam was then pumped out, being lowered five feet each time. At the same time the water was being lowered, the drainage of cylinders was being done.

The drainage of the cylinders was accomplished by a square wooden drain-box three feet by three, placed in the center of each cylinder before filling, the drain-box having holes in it to allow the soft mud from the bottom of the cylinder to enter, during the filling of cylinder, as well as to drain the cylinder filled proper. To assist in the drainage of the cylinders, holes were bored in each of the cylinders on the inside of the cofferdam, letting the drain water from the cylinders empty into the cofferdam basin. These holes were bored in each cylinder as the water was lowered five feet at a time. The material back of the center of each cylinder was removed to the front of the cylinder facing the water, it being removed for an average depth of fifteen feet on an angle of forty-five degrees from center of cylinder, this making an embankment the whole way around the front of the cofferdam. All of the piles having been driven to minus seventy-four feet, leaving only one foot above water, a wooden fence was built on the outer edge of the cofferdam to hold the embankment and to prevent the cylinder filled from being wet, due to water splashing against the outside of the cofferdam.

At the same time the draining and grading of cylinders was being carried on, two sluice-ways were constructed for emergency purposes, one being across cylinder "B," the other across cylinder "C." In construction they were simple, each being an open trough, and in case it was found necessary to flood the cofferdam, the gates were simply raised, letting the water from the outer harbor into the basin of the cofferdam.

Before the unwatering of the cofferdam, measurements were taken across the dam, an eighth inch by one inch board was fastened to each cylinder in a vertical position, a pulley being placed on the top over which ran the wire, it having a weight on one end and being fastened to the wreck on the other. A pointer was placed so it fell on the board, this being marked so many times a day, noting the movement of the cylinders either backward or forward. Other measurements were made, such as a cross dam from cylinder to cylinder, and measurement of diameter of cylinder, a careful record being kept of the movement of the dam as a whole.

In the early part of June, 1911, the water was lowered by means of electric pumps, which had been placed on a barge which was inside of the cofferdam, and as each five feet of water was removed, the barge going down with the gradual lowering, for the first time in a little over thirteen years the upper part of the United States Battleship Maine was to be seen the way she went down on that unfortunate night of February 15, 1898.

As the water was lowered the ship was cleaned of all sea-growth and mud which had accumulated. At the same time this was going on, the wreckage was being removed by the use of an oxygen acetylene torch which gives a bright white flame and an intense heat, by which the cutting of the wreckage was made possible.

To any person who admires the sight of a stately vessel, which once stood as the symbol of invincible power, the view of the Maine which was presented to eye after all of the water was removed was heart-rending. The portion forward of Frame 41, which is located about one hundred and seventy-five feet forward of the stern, clearly shows the force of the explosion which sent two hundred and sixty Americans to their graves without a second's warning.

While the wreckage was being moved forward of frame 41, the turret on the port side aft, which was not damaged by the explosion, was taken down and given to the Cuban Govern-

ment with the guns, this to be erected in the city of Havana as a monument to the Maine heroes. At the same time a wooden bulk-head was built across the wreck at frame 41, this portion aft, which was about one hundred and seventy-five feet, was to be floated in the near future. All of the loose wreckage was removed, the bulk-head finished, and the holes made through the bottom of ship to be used in jetting to break the compact between the ship and her bed which she had laid in so long.

In the early part of February, 1912, the water was allowed to rise gradually in the cofferdam, and as the water was rising the jets were put in operation, and also one-inch pipes hanging over the sides, having previously forced into the mud, these to be used as jets when the water was let into the cofferdam, the United States Dréde Barnard being moored near the bow just outside of cylinders "K" and "L," with a six-inch pipe line running from the dredge Barnard onto the cylinders and then across trestle direct, this pipe line being connected with the jets on side of ship, as well as those through bottom. As the water in the cofferdam came to the level with the water in the outer harbor, before the eye stood the once proud mistress of the sea, floating over her watery grave. Two cylinders were then removed to allow the wreck to pass out into the harbor, and on March 16th, by orders of the War Department, she was removed to sea.

The wreck was towed by a navy tug, which was followed by the U. S. S. North Carolina, and U. S. S. Birmingham, both being detailed as an escort of honor. Following the U. S. S. North Carolina and Birmingham was the Cuban navy, then the U. S. Dredge Barnard with the employees of the Maine on board, followed by many other vessels. The harbor of Havana, for the first time in its history, seemed to be a living village afloat, but one looking at the many flags representing the different nations of the world could realize that it was indeed a living village, but one with all flags at half mast, ready to pay the last tribute of respect due the gallant

mistress of the sea and her noble crew. The navy tug, after reaching the three-mile limit, let go of her tow line, and the holes, which were bored through the bottom of the ship, having been connected to three manifolds, located on the main deck, were opened, and as the old glory waved above the last remnants of the Maine, denoting her rank, these manifolds being opened, the Maine sunk on an angle of forty-five degrees, and old glory made one last dip, then was covered by the clear waters of the Gulf. For three minutes one could hear not a sound, but at the end of this time one could hear the saluting of the U. S. S. North Carolina and Birmingham, being followed by the Cuban navy, and then the sudden outbursts of whistles of all the boats present as a token of respect, this being followed by all flags being raised to full mast, as they proceeded back to the harbor of Havana.

The U. S. S. North Carolina and Birmingham continued on their trip, the North Carolina having on board the remains which were being sent back to the States for their final interment in Arlington Cemetery.

A dredge was started to dredging out the material from the inside of the cylinders, this being done to help in pulling the piles. The first piles out of each cylinder was started by means of hydraulic jacks, after which a forty-ton derrick pulled the balance of the cylinders. All these piles have been pulled, and will be shipped back to the United States. The dredging of the material has started, and in a short space of time will be completed, leaving the harbor of Havana clear of obstruction once more.

## A WORD TO NEW STUDENTS.

BY PROF. C. L. NEWMAN.

The success that will come to a man entering college, not only while a student, but in after life, will depend in a very large degree upon the extent to which he takes advantage of the opportunities that present themselves. There is one opportunity awaiting every student in college, to which I wish to call attention. I refer to the societies and clubs, of which there are several. These are literary and scientific in character and afford some of the best training a man may avail himself of. The good that comes to the individual participating in the work of these organizations is incalculable, and no student can afford to miss the benefits which will come from active work in them. It is a fact that the students who take the most active part in these organizations are the students who have the greatest influence in the student body, who stand best in their classes and who are the most influential and successful in after life.

Participation in the work of these organizations develops a part of the individual not reached by the regular college course and a very important part. The work of these organizations gives to the student practice in putting to use the knowledge he has gotten from the class-room and laboratory exercises. It is largely through writing and speaking that we know of the attainments of any man, and unless a man has some means of imparting what he knows to others, his knowledge does him but little good, and others no good.

It is often the case that a college man, upon reaching his senior year, looks back over the time he has spent in college with regret for having neglected opportunities which, had he accepted, would have given him much needed experience and equipment. When he leaves college and finds himself in competition with thousands of men, he realizes that had he accepted and taken advantage of these opportunities his rise would have been more rapid. This is particularly true of



students taking agricultural courses, since the agricultural graduate has a wider and more varied field of activity and endeavor than other graduates. As opportunities for his advancement or promotion are presented, he finds that his new field of work often brings new demands not supplied by either class-room or laboratory. Some of the best training for his future work comes from active work in these college societies and clubs.

A large proportion of the influence a man may exert over his associates comes through writing and speaking, and it naturally follows that practice in these means of conveying thoughts or knowledge is necessary to their forceful conveyance. Many years of experience in college work has convinced me that the success of a graduate in agriculture depends largely upon his voluntary work in student organizations, such as our Biological and Rural Science Clubs, and I wish to urge that every Freshman, and others in the agricultural courses, who are not members of these clubs, become members before the next meeting.

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### SUNRISE.

BY T. L. BAYNE, JR., '14.

The heavens lightened when the dim altar fires of dawn began to glow at the approach of their high priest. A drowsy bird cleared his voice with a sleepy murmur to his mate, then translated the ecstasy of his emotion into song. A dove sighed with age inspired love and tenderness at the marvel of quickening life. A frog with a croak of disgust at this sentimentality plunged into the depths of his muddy pond. Numberless hymns were given birth by the hearts of the forest minstrels as the day stirred to consciousness. In no burst of splendor did it leap into being, but was born as the smile of a beloved one. The North, the South, the whole earth laughed in harmony, and, so offering praise, began to express in awakened life the dreams of ages.



## LITERARY SOCIETIES.

When we meet a man on the street, in the shops, or in the office, we instinctively form an opinion; we classify him. The two things that go largely to fix that classification are first, his appearance, made up largely of the expression in his eye, and the way he handles himself; and second, the way in which he puts his thoughts into words. In a literary society you not only learn how to handle yourself while standing before others, but you learn how to look the other man in the eye and clothe your idea in such fitting and forceful words that he cannot but see your point of view.

This is a day of organization: the day-laborer, the farmer, the merchant, and the great combine, all are operating through organization. In our literary societies we are instructed and practiced in parliamentary laws. We learn how to organize and handle men. We learn by experience how to weigh the other man's point and carry our own. It is well and good that we should be able to do this, for if, by superior advantage in training, you have a better insight into some truth than the other man, you do him a service when you convince him that you are right. The world is willing to pay you, not for the ideas you have, but for those you are able to express.

Everywhere you go you find men working, sweating, rushing, all striving, in different ways for the same end—satisfaction and pleasure. But as we move about among men we find many dwarfed, wedge-shaped souls that do not seem to have either of these ends in view. We find the miser grimly holding his coins, the drunkard raving for another drink, and the other man in humble servitude to his business. The trouble is not that their aims were not high enough, but they have become so blinded by the means that the end is lost. They have used only a few of their many human functions, the rest have died, till now they are alive in just one or two spots.

It is the ambition of every college man, whether expressed or not, to be more than a mere part of the machinery in the social system. Who wants to be tucked away in some unseen corner to do his little task—even though it is easy—and then die? It is inborn in every man to want to be a real individual, with thoughts and ideals of his own. But no man's life will grow larger or fuller than he is able to express. It is not the object of a literary society to teach a man how to "make a speech," but to train him to express his thoughts before men in such a way as to cause them to act.

Our societies here at A. & M. meet every Friday night, and last from seven o'clock till about nine. At the present time the meetings are held in some of the recitation rooms, but after Christmas we will be in our own halls in the Y. M. C. A. Building, where we shall be in shape to do even better work than at present.

If you wish to join either of the societies you can send in your application by any member, and it will be duly considered.

S.



THE DAWNING OF A BETTER DAY FOR THE  
RURAL DISTRICTS OF NORTH CAROLINA.

BY R. L. SLOAN, '13.

The people of North Carolina have been slow in awakening to a full realization of the great powers which lie latent in the undeveloped intellects of our illiterate youth. It was only in 1900 that North Carolina had the largest per cent of white illiterates of any State in the Union. North Carolina was also making the lowest appropriation per capita for schools, and it was a striking coincidence that she had the lowest productive power per capita, too.

Perhaps from a historical standpoint North Carolina has had since the Civil War more to overcome than any other State in the Union, due to the fact that she sent a larger proportion of her men to the front in the war than did any of the other States, North Carolina having been first to shed blood at Bull Run, and laying down the most guns at Appomattox. Thus deprived of her most loyal sons and with her wealth consumed, North Carolina had first to provide for the physical needs before undertaking to develop her intellectual resources.

However this may be, the fact remains that at the end of the nineteenth century the pages of North Carolina history closed upon the picture of a State one-fifth of whose white population were illiterate, two-thirds of its school population out of school, children were working in cotton factories, and parents were manifesting little interest in the intellectual welfare of their children. At this time educational conditions are indeed discouraging. Rural school houses are deskless, comfortless and cheerless, many of them rude log huts from which the clay daubings have long since fallen, leaving great openings through which the chilling winter winds find access. The few children who are fortunate enough to be permitted to attend school are huddled around the stove, while the only teacher, a girl not yet out of her teens, labors

to drill into the minds of her class, during the three and one-half months out of a year assigned her, those elementary truths which must constitute their mental diet for all time to come. Farm life schools, rural libraries, rural high schools and local taxation are as yet beneath the horizon of future possibilities.

As darkness is deepest just before dawn, and clouds are blackest just before sunshine, so the educational depression overhanging North Carolina at the close of the nineteenth century was preliminary to an awakening which was to revolutionize the educational systems of the State. It was at this time that the voice of a man crying out against ignorance rose above the din of industrial activities. North Carolina's greatest educational statesman, the late ex-Governor C. B. Aycock, was just beginning his campaigns for education, the reforms of which have penetrated into the remotest corners of the State. Even before the old century died, the Legislature of 1899, realizing that thousands of children were on the road to ignorance because the districts in which they lived were unable to support a school-term of adequate length, appropriated \$100,000 from the State funds to be divided per capita among the schools of North Carolina. This appropriation supplemented by another \$100,000 from the Legislature of 1907 had the immediate effect of raising the average school term of the State from seventy to seventy-six days.

In order to encourage still longer terms and better equipment than county taxes supplemented by State appropriations could procure, the right of local taxation has been called into service during the past decade. No higher commendation can be given to any plan than the eagerness with which the districts of this State have voted this special tax upon themselves in behalf of better education. There were only eighteen school districts in the State levying a special tax in 1900, while to-day there are nearly thirteen hundred districts whose people are reaping the benefits of this additional school fund.

Among the various agencies for making country life more

city-like and pleasant for our boys and girls, the advent of rural libraries stands out conspicuously. Only a decade ago not a single bookcase adorned the barren walls of our country school rooms, while to-day three thousand rural libraries are distributed through the schools of North Carolina. These libraries, containing approximately three hundred thousand volumes and representing an outlay of \$100,000, furnish tens of thousands of country boys and girls with approved literature for these long winter evenings. As a factor in agricultural advancement, the good wrought by the rural libraries in deflecting the tide of migration back to the farms is inestimable; and as a factor for creating and sharpening the mental appetite for knowledge rural libraries are surpassed only by the beauties of nature around us. If we would keep the best of the country people in the rural districts we must find a way to bring the best of modern civilization into the country without forcing the country people to leave their homes to get it.

Instruction in the higher branches cannot be placed within reach of nine-tenths of the children of North Carolina unless it is provided in public schools. The rural public high schools were first made possible in North Carolina through legislative enactment in 1907. Last year the two hundred of these schools which have already been established had the remarkable enrollment of more than seven thousand, which is indicative of an almost pathetic eagerness on the part of the country boys and girls to receive high school instruction, and a commendable willingness on the part of the parents to make the sacrifices necessary in order that their children may avail themselves of the opportunities afforded through these schools.

Scarcely had the rural public high schools been installed when our leading educators came forward with the farm-life schools, an infant yet of scarcely a year. The instruction to be offered in the farm-life schools will be arranged to meet the needs of the ninety-five per cent of our country boys and

girls who never enter college, and to prepare them for a nobler existence. They will be fitted to go back to the farm and make farming more profitable, farm-life more livable, and farm homes more comfortable and beautiful. Though the prime object of these schools is to prepare young men and young women to enter directly into the duties of life, many will be inspired by deeper fountains of our higher institutions.

After schools had been placed within easy reach of all, the next greatest boon to the children of indolent parents—and this is especially true of the cotton-mill districts—was the passage of the child labor law. This law prevents brutal parents from forcing their children to work for support of the family to the exclusion of their education during the first fourteen years of their lives, the very time in the child's life when it should be laying the foundations of character, intellect and future manhood or womanhood.

Going hand-in-hand with the child labor law is the compulsory attendance law which, though in the crude yet, is a good move in the right direction, and one that will eventually result in lifting North Carolina from the place which she occupied in 1900, in the lowest ranks of illiteracy to the place which she should rightfully occupy in the front ranks of intelligence along with Washington and Massachusetts.

The rural high schools are being patronized by both the rich and the poor, by those who expect to pursue higher education and by those who are finishing their life-training. Hence they are serving as a unifying agent to bridge the chasms which have separated the social circles of the State.

Another significant advance in North Carolina's educational system is the raising of the standards for and increasing the efficiency of her school teachers; for upon them to a large extent rests the responsibility of moulding the intellect and character of those who must come after us. Our schools are seeking better trained men and women, and then seeking to train them still better in summer schools before allowing

them to take up their duties in the class-room. In further recognition of the need and value of better trained teachers, the annual salary received by the average teacher of North Carolina has since the year 1900 been increased by more than half its original amount, and the total amount expended for rural education has been more than doubled.

Since 1900 there has been an average of one comfortable new school house built for every day in the year, and comfortable desks have been supplied many more. The average length of the school term for North Carolina has been increased by more than a month, the value of rural school houses and grounds has nearly trebled; the school attendance has increased nearly four times as fast as the school population.

But let us remember that improving the school houses, lengthening the terms, broadening the scope of studies and paving the way for compulsory education are but so many landmarks in the evolution of the human race. Without education man could never have harnessed electricity, forced steam to work in submission, learned the causes of disease and organic decay, nor yet learned the art of expression. True education recognizes that—

“We are all but parts of one stupendous whole,  
Whose body nature is, and God the soul!”

Education is a treasure for enriching humanity—a power for the promotion of usefulness, happiness and wealth, and a requisite to purify, enlighten and refine society, nor can its value to mankind be reckoned in mere paltry dollars.

It is the moral right of every child to have a chance to make the most possible of himself through the development of his God-given faculties by education. It is also a divine right, a right as inherent as the right to breathe nature's free air and enjoy her glad sunshine. Following logically from the child's right to have an education it is the civic, moral and religious duty of the State, community and individual to

help give to every child a chance through education to break the bonds of environment by which he finds himself surrounded. "As the twig is bent so the tree will grow!"

To recognize the safety and blessings of proper education, and the danger and curse of ignorance, one has but to turn the pages of history. Who does not know that light is better than darkness; that virtue dwells in light, and that vice lurks in darkness? Knowledge is light, ignorance is darkness. Who does not know that freedom is better than bondage; that power is better than weakness? Knowledge is freedom, ignorance is bondage; knowledge is power, ignorance is weakness. Blazed in letters of scarlet the pages of history bear silent testimony that life and liberty, property and government, society and all things that men should hold dearest and best in life are not safe in the hands of ignorance.

The greatest asset of our State lies not in material wealth, but in her undeveloped intellectual and moral resources. Greater than her towering mountains and her surging seas; her rushing rivers and her fertile fields; her electrical energy and her growing cities; her balmy climate and her starry skies; yes, greater than all these combined are the minds and hearts of her little children, for upon these must depend the development of all other resources. In these must rest the pillars of government and society, and in these lie locked the weal or woe of our State.

The destiny of the twentieth century is being guided by the spirit of universal education. Equality of opportunity for every child born into the world is the inspiring song whose divine music is filling the earth to-day. Thank God! this dear old State of ours has at last caught the spirit of this new century, and is beginning to thrill with the music of this new song:

"Out of the shadows of night  
The world rolls into light—  
It is day-break everywhere."



## SAILING, SAILING, OVER THE BOUNDING MAIN.

BY A. W. T., '12.

"Yep," said Brown, the assistant teller, to the cashier, "going next Wednesday. I know where the fish bite so fast you can't haul 'em in."

"Going by yourself?" asked the cashier.

"Uh-huh. Bill Glass and Harry Fry are going."

"Who's going to handle the boat?"

"Me, of course. I'm getting up the whole thing. I bet Bill and Harry don't know a sailboat from a donkey engine."

"Well, I hope you will have a good time," said the cashier, as he turned to his work.

\* \* \* \* \*

"Sure thing," Fry, the floorwalker in Gadsby's, was telling the chief clerk, "me and Bob Brown and Bill Glass are going."

"When?" queried the chief clerk.

"Next Wednesday. I know just the right place for fish. In fact," he added modestly, "I'm just about running the whole affair. It sure would be a joke to see Bill and Bob trying to sail a boat."

"Well, luck to you," said the chief clerk.

\* \* \* \* \*

"Yuh mighty right," Glass, the young electrician, assured the switchboard operator, "next Wednesday with Bob Brown and Harry Fry. Going in a sailboat with little Willie at the helm."

"Is that so?" grinned the switchboard operator.

"Uh-huh. Out on Phoenix Bay. Man. I know just the proper place to drop your hook."

"And you're going to run the sailboat?"

"Well I should cackle. What Bob and Harry don't know about a sailboat would fill a large book."

"Well, I wish you joy," said the switchboard operator, as he put in a circuit-breaker.

The above conversations took place on Saturday afternoon. At 6.10 of the same day Brown stepped into the little news-dealer's stand on the corner. "I want Billiken's 'Art of Sailing,' please," he told the clerk.

"Yes, sir. Here you are, sir. Ten cents, please. Thank you, sir. Nothing else? Come again, sir."

Brown, smiling happily, disappeared around the corner.

At 6.15 Fry walked briskly into the same shop. "Got anything that tells you about a sailboat?" he queried.

"Yes, sir, here's the very thing you're looking for, sir: Billiken's 'Art of Sailing.' Ten cents, please. Thank you, sir. Nothing else? Come again, sir."

Fry, with a beaming countenance, disappeared around the corner.

At 6.20 Glass rolled breezily into the news shop. "Say," he approached the clerk, "I want Bill somebody's dope on sailing a sailboat. Got it?"

The clerk looked surprised, but was too polite to say anything. He could not help wondering, however, what caused the sudden demand for books on sailing.

"Billiken's 'Art of Sailing?' Yes, sir. Right here, sir. Ten cents, please. Thank you, sir. Nothing else? Come again, sir."

Glass, grinning cheerfully, disappeared around the corner.

At Mrs. Upton's boarding-house that night Brown, Fry and Glass swallowed their suppers hurriedly and hastened to their rooms, much to the surprise of the other boarders; for they were all sociable fellows, and generally lingered over their meal. As soon as each one reached his room, he drew a little black book from his pocket and was soon deeply absorbed in the intricate art of handling a sailboat. During the next three days the three young men were wrapped up in fishing and sailing. They talked of it, thought of it and even dreamed of it. Every night they pored over the little black "Billiken" in secret, for neither one of the three would let the other two know that he had such a book in his possession for worlds.

Their every thought was tinged with the nautical terms and phrases with which "Billiken" abounded, and which were as intelligible to them as so much Greek. Each struggled to master them, however, in order to astonish his comrades with his vast knowledge of the sea.

"Great heavens, man," exclaimed the bookkeeper, "wake up! That's the third time you've asked me for the main sheet. What are you talking about?"

Brown reddened to the tips of his ears and explained that it was the balance-sheet he was after.

Fry woke up with a start after the lady had asked him a question twice. "The silk counter? Yes, ma'm. Just step aft—I mean," confusedly, "that is, you'll find it in the rear of the store."

"For the love of Mike, Bill," said the electrician's helper, "talk United States. First, you tell me to clew something up, and now you're telling me to take a reef in this wire. What's feeding on yuh?"

Bill grinned sheepishly. "Shorten it up, Fred, and let it go at that."

Wednesday morning dawned bright and fair. At 6 A. M. the three fishermen left their boarding place. They carried fishing tackle and a good substantial lunch. They boarded a surface car, rode six miles to its terminus, and then walked two miles to Phœnix Bay. The bay, which was an arm of the Chesapeake, was almost entirely landlocked. It was two miles wide at its widest point and one-half mile at its narrowest point, and was comparatively deep in places. On the shore lay the sailboat all ready for use. The mast was in place and the sail neatly clewed to the boom. The rudder and tiller lay in the bottom of the boat. It was an ordinary little sailboat, about sixteen feet in length, rather trimly built. The centerboard was raised in order to make the launching easy.

Now that the time was come, Bob, Harry and Bill each felt inward qualms as to his ability to sail a boat. Outwardly,

however, each was calm and confident. They put the tackle and lunch in the bottom of the boat, and stood looking at one another. No one wanted to take the lead. Finally Bob said in a tone which he strove to make offhand and matter-of-fact, "Well, I guess we'd better hoist the main sheet."

The other two looked at him in astonishment.

"Do what?" they exclaimed in one voice.

"Well, I guess we might as well raise the sail now as afterwards," said Brown defensively.

"You said sheet," replied Bill.

Brown was up in arms immediately. "If a sheet and a sail are not the same, I'll eat 'em both."

"Old man," said Glass, "yuh sure got a meal coming to yuh. Don't you know that a sheet is a rope, in sailing language?"

Brown muttered something about some people thinking themselves walking encyclopædias.

They wrangled for fifteen minutes as to whether the sail should be hoisted before or after launching, but finally agreed to let it remain as it was.

"Well, let's get the thing launched," Brown snapped, somewhat peevish.

All three grabbed the boat, one on each side and one at the stern, and they pushed and heaved and shoved, but the boat did not budge an inch.

Fry espied two wooden rollers. "Of course!" he exclaimed, "bring one of those rollers and put it under the stern while I hold it up." He then walked towards the bow.

Brown picked up a roller and walked to the stern and watched Fry's struggles at the bow with a great show of cheerfulness. Finally with a mighty effort he raised the bow from the ground. He looked and saw Brown at the other end, calm and serene. "Come here, you muttonhead," he shrieked, "I said the stern."

Brown smiled upon him sweetly. "Exactly," he said, "that's why I'm here. That end happens to be the bow."

Fry dropped it with a thud, and stood looking at it a full minute. "Well, I meant to say bow," he said, with dignity.

They finally managed to get the roller under the bow, and all three shoved hard. When the boat started, it started in a hurry. Consequently, when the roller passed the middle the bow went down, dug into the sand and stopped short. The stern went up, caught the three in the wind, and they were no more good for the next fifteen or twenty minutes.

After a while, puffing, blowing and sweating, they got the boat into the water. The wind was offshore, and the tide was going out, so the boat was inclined to drift.

"I think we'd better anchor," said Glass, "until we get the sail hoisted." So he threw out the stern anchor.

They all set to work with a will and soon had the sail loosened from the boom. It was easy to see how the sail should be hoisted, but doing the hoisting was another thing, for a spread of canvas is no light thing, and besides, the pulley at the top of the mast needed oiling badly. Bob and Harry swung on to the rope, however, while Bill fastened a rope to the end of the boom. Slowly the sail rose until it was fully stretched and made fast. Bill, having finished his task, suddenly released the end of the boom. It flew out at right angles, jerking the end of the rope from Bill's hand. The wind caught the sail and the boat darted forward with incredible speed, only to stop with a jerk that threw all three to the bottom of the boat. Yes, dear reader, the stern anchor was still overboard and was holding its own. The three picked themselves up and cursed that anchor until they were breathless. At the risk of life and limb, they finally secured the end of the rope and pulled the boom in. Then the anchor rope slackened and they pulled the anchor in. They eased the sail off a little, and the boat forged ahead. It sailed fairly fast, but its behaviour was so erratic that they knew something was wrong.

"There ought to be a jib somewhere," said Brown decisively. "Billiken always used a jib."

Harry's and Bill's heads jerked around as if worked by the same string. "Whose?" they demanded in a breath.

"Old Jim Billikens," said Bob, trying to look at ease and failing utterly. "He's the salt I learned sailing under."

"Oh," the other two felt relieved, but still looked at Bill a little suspiciously.

Bill's eye happened to light upon the rudder. "Of course," he said, pointing.

"Of course," echoed the other two in delight.

After more or less trouble, Bill got the rudder hung. He was leaning over to pick up the lever that works the rudder, when the boat suddenly veered, hung in the wind for a second, and then the boom came racing across the boat to the other side.

"Look out for the boom!" shouted Brown.

Bill was straightening up. He looked at the lever in his hand. "I've got the boom all right," he said.

"No, the boom got you," said Harry; for the boom grazed Bill's head, knocking him sprawling. Had it hit him squarely it would have knocked him senseless. As it was, it raised a lump like a hen egg.

Bill looked dazedly at the lever which he still held. "What is this?" he asked.

"Why the tiller, of course," said Harry.

"Oh, I got the tiller mixed up with the boom."

"And you got the boom mixed up with your head," added Bob.

"I sure did," said Bill, as he tenderly felt his cranium.

They got the tiller in place, and then a dispute arose as to where the best fishing place was. They were sailing before the wind, which was due south. Brown favored a place to the east, Fry wanted to go westward, while Glass insisted that they had already passed the best place, which was directly behind them. After a long wrangle, they decided to try each in turn, but they might have saved their breath. They tried to make the boat sail eastward, and almost capsized it; they

tried to turn westward with the same result, and as for turning completely about, it was entirely out of the question. The only way they could sail was before the wind, and as they were almost across the bay, there was nothing to do but to drop their anchors. This they did, both bow and stern. After a struggle, which left them winded, they finally got the sail lowered and clewed up after some fashion. Then they baited their hooks and started fishing.

After about fifteen minutes Harry pulled in a small spot and Brown got a croaker. Harry then pulled in a flounder, and Brown got a spot, which seemed to exhaust the possibilities of the place. Bill never even got a nibble. A little water having leaked into the bottom of the boat, Brown set the lunch basket up on the stern seat where Bill was fishing. They sat there for one hour without a bite. Suddenly Harry exclaimed, "Gosh Almighty in Arkansas! we came off without any water."

Alas! it was too true, and each one immediately developed an awful thirst. But there was no help for it. Suddenly Bill's line gave a jerk. The other two jumped toward him. Bill commenced pulling in rapidly. His elbow struck something, but in his excitement he never noticed it. The fish pulled hard until it got right at the boat, then gave way suddenly. As a consequence, it came over the side with a jerk. It was a big, horrid, slimy toadfish, and it struck Harry squarely in the mouth.

For the next half-hour Harry alternately spit, swore and washed his mouth with salt water. Brown lay back and laughed until he was weak, and Bill sat and looked with disgust at the toad fish, as it swelled and puffed in the bottom of the boat.

Suddenly Bob jumped up. "The lunch! the lunch!"

Yes, Bill had knocked it over with his elbow, and now it quietly floated one hundred feet away, and even as they watched it sank deeper and deeper, and finally disappeared. This fresh calamity caused a deep gloom to settle on the party.

"Let's go in," said Brown.

The others agreed with alacrity.

But alas, there was not a breath of air stirring. It was now about one o'clock and the morning breeze had disappeared. There was nothing to do but whistle for a wind.

Brown started from the bow towards the stern, stepped on the toad fish, slipped and struck the small of his back against the gunwale of the boat, and for a half-hour he could not straighten up.

Fry took off his shoes to let them dry, and then stepped on a fishing hook. He picked his way to the bow, hugged his foot, and conversed with himself long and earnestly concerning the status of a man who would let a fish hook run around loose in the bottom of a boat. Bill reminded him that it was his own hook. This should have made him feel better, but it didn't. In fact, he took on worse than ever.

They lay becalmed until five o'clock. They were tired, hungry, mad, thirsty and sore. Bill's head ached; Harry's foot ached; Brown's back ached. Each accused the other of getting up the thing; they blamed each other because they could not sail the boat. In fact, they were well started towards a life-long enmity when a breeze sprang up.

They hoisted the sail again and tried to sail back. But it was no go. The wind was now straight down the bay, and that was the one way they did not want to go. They piddled around for about two hours.

"We've got to do something," said Harry, in despair.

"I know," said Bob, triumphantly, "we've got to tack."

"What's that?"

"I don't know," vaguely, "but I think you have to sail full speed before the wind, and then suddenly turn in whatever direction you intend to go."

"Well, we'll try it."

And they did.

And the boat promptly capsized, spilling them all into the water. Such a scrambling as there was to get up on the boat,



which lay upon its side in the water. The three clung to the boat and anxiously watched the light fade away and darkness come on. The night was cool, and they were wet and they shivered continually. Also they were tortured by hunger and a consuming thirst. Never was such a miserable night spent as these three endured, huddled on the capsized boat. They were terrified by thoughts of drifting to sea. The night seemed interminable. Never was a sight so welcome as that of the first streaks of light that proclaimed the approach of dawn. It put new life into the tired and worn three. But to their astonishment, when it became light enough to see, they discovered they were not a hundred yards from shore—the wrong shore, to be sure, but still it was land. Bill slipped off the boat and found the water only waist deep. They waded in, spread their clothes to dry, and began the arduous task of getting the boat to land. It took fully two hours.

All of a sudden Bob had a thought. "Well, no wonder we could sail only before the wind. We forgot to lower our centerboard. Of all the boneheads." And the others fully agreed with him.

They reclothed themselves and stood looking at the water. It was two miles across the bay and fifteen miles around by land. They looked at the boat and they looked at each other long, and sadly, and they shook their heads.

"Nothing doing," said the three.

Then an impressive ceremony took place. Bill looked at Brown and Fry; they took a small black book from his inside pocket and hurled it into the waves. Harry looked at Glass and Brown, took a small black book from his inside pocket and hurled it into the waves. Bob looked at Fry and Glass, took a small black book from his inside pocket and hurled it into the waves. Then without a word they turned their backs upon the bay and started on their fifteen mile hike.

\* \* \* \* \*

"Yep," said Brown to the cashier on Friday morning, "had a fine time. Caught more fish than I could carry."

"Did you handle the boat?"

"Sure thing. Those other dubs were regular greenhorns."

"Wish you'd take me along next time."

"Yep, I'll be glad to. (Oh, my back!)"

\* \* \* \* \*

"Sure thing," Fry was telling the chief clerk, "we all went. And talk about fish! Man there's some class to me as a sailor. It was a joke to watch Bill and Bob trying to manage."

"Maybe I'll go along next time."

"Wish you would. I'd be glad to have you. (Oh, my foot!)"

\* \* \* \* \*

"Yuh mighty right," Glass assured the switchboard operator, "I went in a sailboat, with me as the captain, and fish! why bo, I got tired of baiting my hooks. But say, you ought to see those two land-lubbers, Bob and Harry. I sure showed them up."

"I'm going next time."

"Hop right along. The more the merrier. (Oh, my head!)"

\* \* \* \* \*

But deep down in their hearts Bob and Harry and Bill solemnly raised their good right arms towards the blue sky and swore deeply and earnestly, "never again."

# THE RED AND WHITE

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PUBLISHED MONTHLY BY THE LITERARY SOCIETIES  
OF THE  
NORTH CAROLINA COLLEGE OF AGRICULTURE AND MECHANIC ARTS.

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Advertising rates are furnished on application. Advertisers may feel sure that, through the columns of this magazine, they will reach many of the best people of Raleigh and a portion of those throughout the State.

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"Glad to see you!" Of all the expressions which we have heard on our campus during the past month, this has undoubtedly been heard most. At first we may think of this expression merely as a form of greeting, but when we think of it more seriously, we find that it really is true, for it is

a genuine pleasure to get back on the old campus and shake hands with our fellow-students and teachers after being away for three months. We are also glad to see so many new men on our grounds because this shows that our institution, of which we are all proud, is growing. Most of us feel rather reluctant to give up the joys of a pleasant vacation to begin another year of grinding, but when we come back here and exchange greetings with the old fellows, nearly all of whom are here for the same purpose—that of fitting themselves for life—we are better satisfied and are filled with ambition to put more into the year's work than ever before. We hope that every one of us has begun work with a determination to get the greatest benefit possible out of his course this year.

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As we look around us, we find that the college has not been in a state of idleness all the summer, but that it has been making great progress in tearing down old buildings and erecting new ones. When we first arrived in Raleigh, we could not help noticing the many improvements that are being made in the city, and as we read the placards, Wide-a-Wake Raleigh, posted along the streets, we realized that Raleigh really has waked up, and is making long strides in industrial progress. But when we came out to A. & M., no sooner had we stepped off of the street car at "Cattle Crossing" than we saw that A. & M. is also wide-a-wake. The first thing which attracts our attention as we leave the car line is the absence of the unsightly green-house which stood between Primrose Hall and the Library. Going on a little further we find that the old forge shop and the Electrical Building have been removed, and just in the rear stands our splendid new dining-hall all ready for use, while a little farther down the new driveway we see the new Y. M. C. A. Building looking like a finished structure on the outside. Looking across to the other side of the campus we can also see the new Animal Husbandry Building, which has been finished during the summer, and is a beauty to look at. Now let us

all get busy and try to make as much progress in all of our undertakings during the year as the college has made in offering us better accommodations.

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To the new men who have come to our campus for their first time, we extend the heartiest welcome. We give the glad hand to every one of you. We welcome you to share all of our activities, not only all of our pleasures, but our hardships as well, for the overcoming of obstacles draws us closer together and makes us better fitted to meet the greater difficulties which will confront us after we leave college. You will get no more out of your college course than you put into it, so it is up to every man to throw himself into all our activities which promote mental or physical development.

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The new board of editors will make but very few changes in the magazine this year. The readers will notice that we are making the October issue the first number instead of getting out a September number, as has been the custom heretofore. By doing this we expect to be able to publish the magazine the first of the month instead of the last, and still get out the same number of issues during the year.

We are indebted to Mr. Craig, of the Junior Class, for designing the new cover, which appears in this issue.

There will be practically no changes in the general makeup of the magazine. In our opinion the magazine was better last year than ever before, and we will expend our efforts in trying to improve it along the same lines. We believe that we can do this if all the fellows will co-operate with us and do their part to support the magazine. If you want us to get out a magazine that will be a credit to the college, it is up to you to do your part in making it such. Don't wait for the editors to do all the work, but get busy and write something. This being a technical institution, we haven't all the advantages of training which literary college students have, but we do have one advantage. We learn to do things by doing them,

and this applies to writing as much as it does to making hammers. What we lack in theory we can make up by practice, if we will. The only way to learn to write is by writing. Don't wait to consider whether your article will be accepted or not, but do your best and rest assured that your efforts will be rewarded. The amount of interest which a college student takes in his college magazine is usually a pretty good index to his college spirit and loyalty.

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For the benefit of the new men, we will say something about the office of the magazine in college. It is gotten out by the students and for the benefit of the students, and affords them an opportunity for literary expression which they cannot get elsewhere. It makes no difference what course we take while in college, whether it be engineering, agriculture or whatever it may be, after we get out into life, we will be expected and called at some time to express our thoughts in writing. Our ideas are of very little value to us unless we can convey them to others. The college magazine offers an excellent field for practice in conveying our thoughts to others. THE RED AND WHITE represents us not only with the alumni of the college, but in most of the leading colleges of the country as well, and we are judged to a great extent by the kind of magazine which we publish. The college with the best magazine stands highest in the eyes of the world.

The magazine has the same power to wield an influence in our college affairs which the free press exerts in bringing about moral and political reforms.

THE RED AND WHITE was gotten out by the Athletic Association until the spring of 1911, when it was turned over to the literary societies. The magazine was improved considerably last year under the new management, and we hope it will continue to grow better every year.

## Y. M. C. A.

BY T. R. PARRISH.

Under the auspices of the Y. M. C. A., College Night was held in Pullen Hall Friday, September 6th. A record-breaking crowd was in attendance, and on every hand could be seen indication of the ever-growing A. & M. spirit, which is making our college so widely known about the State. "Kid" Taylor, our chief rooter, was on hand early, and started to liven up things, as usual. Once more Pullen Hall resounded with old college yells, the new men joining heartily in the snappy Wau Gau Racs. Speeches were made by several members of the faculty and the student body, explaining to the new students the different college enterprises and introducing them to the college life. After the speeches were over delicious and abundant refreshments were served by the social committee.

The membership committee has commenced canvassing for new members, and so far have about one hundred and twenty-five paid, and one hundred and fifty unpaid. We have a greater inducement to offer the new men this year than ever before, and expect to have nearly every man in college enrolled as a member of the Association. Some men may not realize the influence it has upon the college community; but the welfare of the college depends, to a great extent, upon the Association. For the past few years the college and the Association have grown side by side. Three years ago the mid-week meetings were held in some small room, and seven or eight faithful men would meet regularly and talk over the work they expected to do, and sing and pray with ever-increasing faith. Gradually the number of men attending these meetings increased to seventy-five or eighty, until we are now leading any college in the State in voluntary Bible study.

When the building campaign was started the students rallied around the Y. M. C. A. banner, and the whole student body responded with their money and time. \$5,000.00 was raised among the student body in two and one-half days. The city of Raleigh seeing that we were in earnest, came to our aid, and we soon had the required amount. Many of the fellows who put their money in the building fund have been graduated and left college. What they did was for the boys coming after them, and not for any selfish purpose; theirs was the true A. & M. spirit. The Association will occupy the building after the Christmas holidays, but before we move in the building must be fitted up. Furnishings will cost, perhaps, \$700.00 or \$800.00, and our treasurer is sadly in need of funds. We would feel very much embarrassed if some of the men who worked so hard for the Y. M. C. A. building were to come back here next spring and find the building not completely fitted up. It should be considered a special privilege, after others have done so much, to pay the \$2.00 membership dues. Fellows let us pay our dues as early as possible. It's our building, and our Association, and it is up to us to support it.

Mr. E. B. Crow, cashier of the Commercial National Bank, of Raleigh, addressed the Y. M. C. A. September 8th, which was the first regular Sunday night meeting of the year. The subject of his address was "Day by Day." Mr. Crow read short passages all through the Bible, showing that the great characters of the Bible served God daily. He said if a man wanted a strong arm it would be necessarily exercised every day and subjected to hard work before he could use it in a football game. So it is with our spiritual life. We must work and pray day by day. If we neglect our religion six days in the week, and then expect it to be strong on Sunday we will find it like the athlete's arm that had been put in a sling to prevent injury, but also became weak and soft. We should exercise our spiritual side as well as the mind and



body; here in college we are laying the foundation of life and our characters are becoming set in one direction.

Archie K. Robertson, a 1912 man, and treasurer of the Association last year, is acting as General Secretary in the absence of Mr. Bergthold. During the summer Mr. Bergthold was steward of the Blue Ridge Association Hotel. But now he and Mrs. Bergthold are attending a family reunion at Colony, Oklahoma, which is Mr. Bergthold's old home. We are expecting him to return September 15th and resume his duties as General Secretary. We will be glad to see Mr. Bergthold back, but will be sorry to loose Archie, as he has performed his duties like a veteran.



## ATHLETICS

T. R. HART, *Editor.*

### OUR FOOTBALL PROSPECTS.

In response to Capt. Cool's call for football candidates, about fifty men reported and are trying hard to make the various positions on the team.

Among the men who have reported are six of last year's varsity team. These men are Capt. Cool, halfback; "Dock" Hurtt, tackle; "Big" Sikes, guard; Colin Spencer, halfback; "Oss" Anthony, fullback; Jeff Phillips, end.

The following men were lost through graduation or other causes during the past year: "Dutchy" Seifert, end; "Private" Floyd, tackle; "Big" Dunn, guard; "Piggy" Hargrove, fullback; Harry Hartsell, halfback; Capt. Stafford, quarterback; Nick Fetzler, guard; "Pot" McIver, center; Dave Robertson, halfback. This leaves an unusually large number of places on the team open and every man on the squad is working hard trying to win one of the coveted places.

Captain Cool, one of the steadiest men who ever played the backfield for A. & M., will probably play quarterback this year. Page, a substitute on last year's team, is also showing up exceedingly well at quarterback. Morton and Huntley, of last year's scrubs, are fighting it out for center. Porter, Harper and Rawlings, of last year's scrubs, are having a great battle for the open guard. Terry, Cook and McLeod, new men, and Plyler, a substitute on last year's team, are all working hard in order to win the open tackle. Seifert and Nichols, of last year's scrubs, are giving Jeffrey, a substitute the past year, a great race for the open end. Davis and Hassel, substitutes last year; Jaynes, a scrub man; Brooks, Hudson and Katz, new men, are promising candidates for the positions in the back field.

Other men who are showing up splendidly are Champion, Howell, Sumner, Potter, Geitner, Kilpatrick, McIver, Parker, Briggs, Hamilton, Hatton, Nooe, Brickhouse, McPherson, Nathan, Hill, Cook, Rice, Anthony, O. S., Grimsley, Houck, Rowe, Osborne, Atkinson, Garrett, Ormand, Young, Kernodle, and Garris.

The college is exceedingly fortunate in having Eddy Green to again coach the Red and White to victory on Thanksgiving Day over our new rivals, Washington and Lee University. Coach Green not only understands the game thoroughly, but he is able to handle men and secure their best efforts. For the past three years he has given A. & M. a good football team, and we are all confident that he will do the same thing this year.

"Private" Floyd is back in college this year, and is assisting Coach Green in coaching the team. For the past four years he has played a star game for A. & M., and last year was named as all-South Atlantic tackle—an honor to which he was justly entitled. Floyd is ineligible to play this season on account of the four-year rule, but his personality and knowledge of the game will make him a tower of strength to the team.

The heart of every man in college was saddened last spring when he heard that Mr. James I. McCallum, one of the most popular men that ever walked the campus of A. & M., had resigned as manager of the football team and withdrawn from college on account of his eye. Jim, as he is familiarly known, had almost completed the schedule for this fall when stricken with his untimely affliction. He is still unable to return to college, but we all sincerely hope that he will be back with us after Christmas.

Mr. N. S. Lachicotte, who was elected to succeed Mr. McCallum, immediately began work where his predecessor left off, and has practically completed the schedule, which is indeed a good one. We again play the U. S. Naval Academy. Last year we gave them the scare of their lives, and this year

the farmers expect to bring home the bacon. Georgetown University will be played in Raleigh on Thursday of Fair Week. Georgetown's prospects are unusually good this year, and the game should prove a battle royal. Washington and Lee University will be played in Norfolk on Thanksgiving Day instead of our former rival, V. P. I.

The schedule for 1912 is as follows:

October 5—U. S. Ship Franklin at Raleigh.

October 12—Medical College of Virginia at Raleigh.

October 17—Georgetown University, at Raleigh.

October 26—Davidson College, at Charlotte, N. C.

November 2—Wake Forest College, at Wake Forest.

November 9—(Open date.)

November 16—U. S. Naval Academy, at Annapolis, Md.

November 28—Washington and Lee University, at Norfolk, Va.

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#### ATHLETIC ASSOCIATION.

Fellows, just a word to both old and new men about the Athletic Association. Every man in college is a member of the Athletic Association, and pays his dues when he registers, and should therefore be present at every meeting of the Association. The constitution requires that a notice shall be read out in the mess hall a week before every meeting, so the old excuse, "I did not know there was going to be a meeting" will not go.

Fellows, to have successful athletic teams, every man in college must stand by the Athletic Association and attend its meetings. Do not leave it to some one else to be there, but remember that your vote is as valuable as any one else's, **AND GO YOURSELF**. When a man is nominated for office, vote for the man who, in your judgment, is best qualified to perform its duties.

In former years we had to pay admission to every game that we attended on the home field, but last year the Associa-

tion arranged it with the College that every student upon registration should pay a physical culture fee. By paying that fee we are admitted to all games on the home field free of charge. Let's take advantage of this and go to every game this year, and when we get there show true college spirit by rooting to the best of our ability. We cannot all play on the teams, but we can all share a part of the glory by attending the games and cheering those who are playing, on to victory. Now, since, the Association has made these things possible for us, should we not do something in return for it? Let us all go to the altar of true college patriotism and swear, as the oath was taken of old, that we will stand by our athletics, that we will support them, and that we will attend the meetings and uphold the constitution of the Athletic Association.

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#### ROOTING.

*By W. C. Taylor, Chief Rooter.*

Fellows, to the new man, and in fact to every man in college who is a true A. & M. man, we turn out a good football team. How do we do it? By systematic practice and training.

Now, our reputation in the South for rooting is on par with our teams—the best. In order to root we must practice, so whenever there is a chance to practice, take advantage of it, and do not leave it to the other fellow, but get out and do your share.

By rooting and cheering for our team, we show our appreciation for the work they are doing. They get all the hard knocks—and they never say quit—and we who do not take part in the game, can certainly put our lungs to good use by trying to cheer them to victory. It makes a man play twice as hard, when he realizes that the fellows are taking an interest in him and the team. He is inspired to advance the

ball or croak. We furnish the inspiration or a part of it, so let's keep up the good work.

Every man in college has already paid to see the games. Let's get together when the time comes and yell—yell for A. & M.—for the other fellow also. Treat the visiting team with the same courtesy with which you wish our team treated when away on a trip. In plain words, when the other fellow makes a good play, let's give him credit for it, and he will feel lots better and will want to play A. & M. again. When a visitor gets hurt, yell for him, and when he gets on his feet, give him a hearty send-off; it will help him, his team, our team, and we will get and hold the good will of all rivals.

If there is any one who knows any yells or songs, turn them in to the Chief Rooter before the first game, as all the yells are to be printed, and every man in college given a copy, so he can learn them.

In conclusion, let's every man yell and yell for all he is worth. Take an interest in the team, and you will see that the fellows who are on the team appreciate it, and in the end every one of us will feel as if we have tried to do our duty.



## LOCALS

R. L. SLOAN, *Editor*.

P. L. Gainey, of the '08 class, now Instructor of Botany in the University of Missouri, was here visiting friends the first ten days in September.

Johnny Beal, '11, was a visitor here the opening week of school. Mr. Beal expressed great satisfaction over the improvements on the campus and buildings, and especially did he compliment the Y. M. C. A. Building, on which such rapid progress has been made. Mr. Beal is now Instructor of Botany at the Mississippi A. & M.

W. H. Davis, '11, now with the General Electric Company, Schnectady, N. Y., was here August 30.

T. Frank Parker, '07, who for the past several years has been connected with both the State and the National Department of Agriculture in connection with the boy's corn club work, leaves September 18 for Porto Rico to accept a position as Agriculturist in the University of Mayagnez. It will be recalled that Dr. Stevens was called from this college last winter by the Government and sent to Mayagnez as dean of an agricultural college which he was to establish in connection with the University of Porto Rico.

P. B. Ferebee and C. G. Hall, of the '12 class, who were out last year, are back in college this year.

Dr. Burton J. Ray, who has been with the Department of Chemistry for the past three years, has also accepted a position with the University of Porto Rico. Dr. Ray was very popular in Raleigh, where he resided, and was also very much liked by the students of A. & M. on account of his interest in track athletics, he being the one who did more than any one else to establish a track team for our institution.

The old power house, the old Electrical Laboratory, the building occupied by Mr. Loftin while Steward, and several other eyesores, have been removed during the summer, adding immensely to the beauty of the campus.

J. B. Coward and W. H. Sullivan, of the '13 class, are working for the North Carolina Public Service Company at Salisbury. Mr. Coward was Business Manager of the Agromeck this year, but had to stay out on account of his health. It is rumored that consideration of a matrimonial project prevented Mr. Sullivan's return.

J. I. McCallum, also of the '13 class, and its highly esteemed President 1909-10, is forced to leave again on account of his eyes. Mr. McCallum has been one of the most popular boys in school during the past three years, and was Manager of this year's football team. In this he will be succeeded by N. S. Lachicotte.

J. H. Bryan, '08, now with the Westinghouse Electric Company, Pittsburg, Pa., was here August 28. He was very much gratified over the growth of his Alma Mater. Mr. Bryan says that there are a dozen A. & M. men at Pittsburg all doing well.

Jimmy Sherman has been awarded a Fellowship at the University of Wisconsin for the coming year. He had a scholarship in the same institution last year.

A. H. Bond, '12, is Professor of Manual Training in the Goldsboro High School. He was an A. & M. visitor September 11th.

Geo. Gillette, '11, was the first of his class to enter into the bonds of matrimony.

John Bray, '11, A. & M.'s football star, was married in June.

Fenner Gibson, '12, was on the campus September 15th and 16th. He will continue his studies at Columbia University, New York, this year.



C. L. Proffitt and W. S. Haywood were at Rex Hospital a large part of the summer, confined with typhoid fever supposed to have been contracted from drinking water from Allen Haywood's well.

Mr. A. S. Deal died during the summer of typhoid fever contracted before leaving Raleigh.

The handsome trophy cup, to be held by the winning class in the Rural Science Club, has arrived.

N. G. Fetzer, '12, now holds a position with the North Carolina Agricultural Experiment Station.

N. B. Stevens, '12, is back in college to take his M. S. degree this year.

Prof. McNutt expects to take a class to the Live Stock Show in Chicago again this fall. Students desiring to go will have no difficulty in getting excused from classes. Prof. McNutt is especially desirous that as many freshmen and sophomores as can will go on this trip.

The registration so far is 525, and there are more coming.



## AMONG OURSELVES

W. C. HOPKINS, *Editor.*

"Kid" Taylor was taking subscriptions for the "Wau Gau Rac." One freshman said he did not know whether he wanted to subscribe or not, as some one had just tried to sell him a radiator.

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While Mr. Owen was in the midst of registration work a freshman came strutting in the office and asked for a "bath ticket." We have not as yet found out whether he was successful or not.

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While Prof. Clay was "walking around" the campus a few days before the freshman entrance examinations he was asked by one of those worthy new men which course he intended to register in.

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One of our intelligent freshmen wants to know which side of town Raleigh is in. Won't some one kindly tell him?

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"Louie" Merritt advised "Windy" Hart to buy a Maxim "silenteer."

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"Tim" Nixon applied this summer at a menagerie for the job of tending to the animals. "No," said the menagerie proprietor to "Tim," "you can't have the job to look after the animals, but our pet lion died last week, and we've kept the skin, so I'll give you ten dollars a week to dress up as a lion."

"Right," said "Tim," "I'll be your lion." So he dressed up and lay down in the lion's cage. The menagerie's doors opened and the performance began.

"Ladies and gentlemen," said the trainer, "to show the wonderful friendliness of these animals, we will now let the tiger into the cage with the lion."

"Tim" gave a horrified squeak.

"Hold your noise," the trainer hissed as he opened the door between the two cages.

The tiger advanced towards "Tim," and when "Tim" saw the awful eyes glaring at him he uttered a doleful wail, and tried to crawl away. The tiger strode over to him. "What's the matter with you?" he whispered sharply. "You needn't be afraid. I am from A. & M. myself."

After the show was over "Tim" found out that it was the "Major"—Tub.

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Love has fallen heavy on the Senior Class.

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#### A DISAPPOINTMENT.

She—You puckered up your lips so, then, that I thought you were going to kiss me."

"Gerty" Bain—"No, I got some grit in my mouth."

She—"Well, for heaven's sake swallow it. You need it in your system."

---

"Fresh Boylan" to "Tommy" Ingram: Where do you put the wood in that radiator at.

"Tommy": You fool, put it in at the valves.

---

A country freshman after trying to blow out the electric light, took off his sock and tied it around the light in order to darken the room.

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Prof. Satterfield—Can a man live on \$500 a year?

"Tommy Ingram"—Depends on his family, professor.

When the captain of his company gave the order to "Dress up" Bill Patton started at once to arrange his fatigue uniform in grand style, such as fixing his tie, his shoe strings and everything in general.

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"Fresh Moore," upon seeing picture of the college German Club inquired who the girls in the picture were, and when told that they attended the German Club, he said he did not see why they came out here to study German, as that was the hardest study he had at high school.



## ONE ON YOU

The man who lets a woman rule  
With little airs and graces,  
Is but a poor weak-minded fool—  
I'll show her where her place is.

The man who sighs because her eyes  
Have pretty ways of looking—  
That man I heartily despise:  
A woman's charm's her cooking.

The man who fears a woman's tears  
Or words (a gift she's rich in),  
No man at all to me appears—  
I'll send her to the kitchen.

Frail woman, who with tongue so glib,  
Stole Paradise from Adam.  
I'll keep my freedom—and my rib—  
And do without you, madam.

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### THE TEN LITTLE LODGEMEN.

Ten little lodgemen went out to dine—  
A cocktain killed a Mason, then there were nine;  
Nine little lodgemen drinking to their fate,  
Down went an Odd Fellow, then there were eight;  
Eight little lodgemen, thinking of heaven,  
A smal bottle fixed a Forester, then there were seven;  
Seven little lodgemen, playing funny tricks,  
Another cork— a Red Man—then there were six;

Six little lodgemen, trying to booze and thrive,  
 The next round fixed a Woodman, then there were five;  
 Five little lodgemen, the others on the floor,  
 A Malta Knight gave up the ghost, then there were four;  
 Four little lodgemen on a lonely spree,  
 A Buffalo got his habit on, then there were three;  
 Three little lodgemen, left in a stew,  
 A highball rolled a Pythian, then there were two;  
 Two little lodgemen, pretty nearly done—  
 A Shriner couldn't stand the pace;  
 One little lodgeman, drinking all alone—  
 HE WAS AN ELK. He took the whole bunch home.

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#### THE VERSATILITY OF A WEST POINT CADET.

Captain Smith, instructor of engineering class at West Point, requested the cadets of his class to submit a drawing of a bridge spanning a river between two hills.

On looking over the drawings submitted the Captain found one in which the cadet had drawn two little men sitting on the bridge and fishing from the stream below. The drawing was well executed, and but for the two little men would have received a mark of merit. But the Captain was somewhat nettled at the show of disrespect on the part of his cadet, so he returned the drawing with the endorsement: "Remove the fishermen from the bridge."

When the drawing was again turned in, the next day, the Captain found that the men had been removed from the bridge as per orders, but this time they were calmly fishing from the bank of the stream.

The Captain's anger was now unbounded, and he further endorsed the drawing: "Remove the fishermen from the drawing," or charges will be preferred against you.

What was the instructor's consternation, on receipt of the drawing the third day, to find that the two little men had

been entirely removed from the drawing, but there were two little graves on the bank of the stream, each with its appropriate headstone.

The cadet was not court-martialed.

---

COMMENCEMENT DAYS.

*When the Hurly-burley's Done. (An Inventory.)*

BY ROSCOE GILMORE SCOTT.

*Credits.*

*Debits.*

Three broken hearts (since mended,	One lost heart.
23 badly-used text-books,	\$29 to bookstore.
1 sheepish skin,	\$10 to college registrar.
10 ill-deserved testimonials,	10 notes of thanks.
1 thesis (never read by anybody),	\$3 to my room-mate.
5 Latin words,	\$50 to my Latin tutor.
3 German idioms,	\$13 to my German tutor.
10 French oaths (for daily use),	\$21.50 to my French helper.
1 prospective job at ten per,	\$25 to employment agency.
26 pennants of brilliant hue,	26 pennants for exchanged ones.
1 fraternity pin,	\$10 borrowed from a friend.
And	Therefore I cry,
Sixty-eight cents in real cash.	Does an education pay?

## ENGINEERING NOTES

E. B. NICHOLS, *Editor.*

On returning to college we find that many changes and improvements have been made about the college. The new and well-equipped dining-hall has been completed and adds a great deal to the appearance of the campus, as well as to the accommodation of those boarding in college.

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Rapid progress has been made on the Y. M. C. A. Building, which will be completed about the first of January.

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Among the improvements made during the summer were the tearing away of the old power house, which has been used for a foundry, and the old Electrical Laboratory.

The campus has been greatly improved by the construction of a new driveway, which leaves Hillsboro road near the Textile Building and passes in front of the new dining-hall and the new Y. M. C. A. Building.

---

Besides the yearly supplies, the Civil Engineering Department has added a laboratory to its equipment to be used for testing purposes. The Mechanical Engineering Department has installed a new oil engine and a few other machines in the machine shop.





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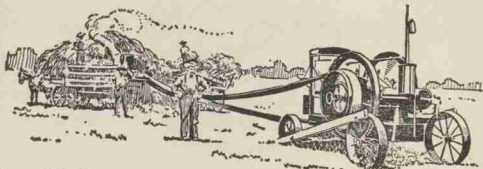
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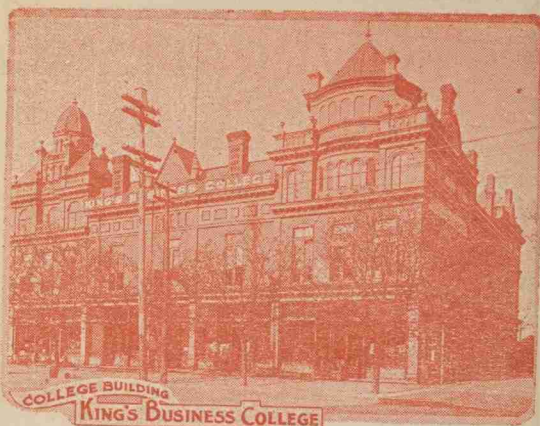
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