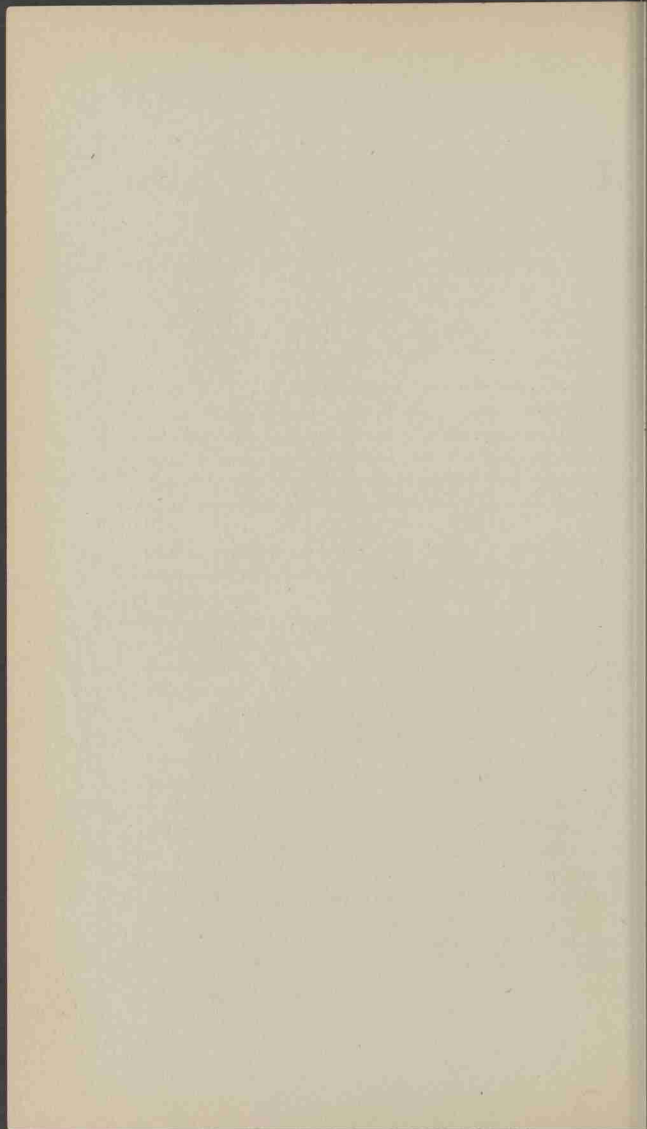


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G. W. GILLETTE, *Manager.*



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WHY STUDENTS OF TECHNICAL INSTITUTIONS SHOULD STUDY ENGLISH.

To be asked for reasons why anyone who has mind and opportunity should study English, is comparable, in some respects, to being asked to demonstrate that a straight line is the shortest path between two points. Only some definitions seem necessary. A clear comprehension of what the study of English means should furnish a sufficient answer to the question.

English, as a college study, may be considered as having two closely related branches—the language and the literature. The language is studied for two purposes: *First*, to gain the power of acquiring adequately, through the spoken or the written word, the thought of other men, which process we may call impression; and *second*, to gain the power of conveying effectively, in speech or in writing, our own thought to others, which process we may call expression.

The literature is studied with several ends in view. The study of literature is one way—probably the best—to obtain that somewhat elusive quality called culture, the possession of which somehow makes a man pleasanter to hold intercourse with, whether in society or in business. Literature has a further practical value, in that it contains the thoughts of men with regard to the weightiest secular matters that have engaged their attention, and also with regard to those higher principles that determine their destiny. It embodies the intellectual and the spiritual experience of mankind. Literature, moreover, furnishes an unfailing source of enjoyment, pure and ennobling, of which life stands sorely in need.

The study of literature, therefore, tends to transform, without lessening his professional efficiency, one who might become merely a farmer or an engineer into a well-rounded man. It is difficult to imagine a man who has appreciatively read the Waverley Novels being otherwise than in some degree a gentleman of chivalrous regard for women and of quick, helpful sympathy with the weak and the oppressed. No one can pass with Thomas Carlyle through the *sturm und drang* of his soul-agonies without having one's own vision clarified and perspective corrected—one's outlook on the world made broader, loftier, and more strictly true. No thoughtful man will deprive himself of the means of intellectual and spiritual development, of pleasure as well, which the reading of good literature affords.

The students of all the colleges, and particularly of those in which science makes a large part of the course of study, must have, for accurate scholarship, that training in English, to be obtained from the study of both the language and the literature, which will enable them to master technical textbooks. "I can teach mathematics," said an experienced professor, "to any man who knows English." This statement is applicable to all sciences. Hazy ideas and the slovenly expression of those ideas are both due, in many cases, to inadequate English training. The eminent electrical engineer, Dugald C. Jackson, makes a plea for "that fuller training in the construction of the English language which is requisite to clear thinking and to clear writing." Note that English training made an essential of clear thinking.

If the graduates of the schools of technology are to become leaders in the uplift of their communities, as they ought and are expected to do, they must accomplish this end by impressing upon people the ideas derived from the study of science; and this impression must be made through the medium of correct, forceful English. To become most effective public men, college graduates of whatever school must have the ability to speak and to write accurately and convincingly.

Mr. Herbert T. Wade states in the current number of *The Engineering Magazine* that "seventy per cent. of the revenues from the issues of city corporate stock in New York has been expended on permanent engineering work; and that practically every municipal department, both in construction and in operation, demands the work of the engineer." Yet engineers are not given positions on the highest administrative boards. They are called in as experts; but they are denied the dignity, the honor, and the influence that would accrue from actual membership on these high commissions. The reason given by a distinguished engineer as most largely accounting for this condition is deficiency in the broad training which would enable the engineer to meet cultured people on common ground, and to impress his ideas upon others. The power to do these things is rarely possessed by men whose English is defective; for to do them a man must at least create the impression of being educated, and as President Butler of Columbia University said some years ago, "The first two evidences of an education are correctness and precision of speech, and refined and gentle manners."

To put the matter bluntly, the man who says or who writes, "I have went," or "I seen," or "He is right smart better," or who spells "buisness," may run off a true line, or give a correct estimate for the construction of an electric plant, or build accurately proportioned columns, but the presumption is against him. A man who fails to perceive nice distinctions in his own mother-tongue will, if he be a contractor, probably have his building rejected for violations of the plans and specifications. If he can neither interpret nor convey thought accurately, it is by no means certain that he will do things exactly.

A writer in *The Outlook* says: "One of the undeniable shibboleths of life is good English; and the man who has that password may often slip in where his brother, worthier perhaps, it may even be better educated, has yet to climb the gate which was shut in his face because he chanced"—to write, "yours respectively."

DR. T. P. HARRISON.

MECHANICAL DEPRECIATION.

Depreciation in the mechanical field is of three kinds: that due to physical decay, that due to becoming out of date, and that due to inadequacy. It is of great value to mechanical engineers, as well as others, to be familiar with depreciation for several reasons; *First*, in calculating the present value of a plant; *second*, in calculating the cost of product, and, *third*, the fixing of rates for service.

Maintenance and depreciation are very closely related. If proper attention is not paid to maintenance, depreciation increases very rapidly. But no matter how careful maintenance is looked after, there will still be some depreciation.

Depreciation by physical decay needs no explanation, as the term itself is sufficient. We may class physical decay under two heads: normal and accidental. Normal, meaning that of gradual decay due to wear and decay. Accidental, meaning injuries caused by accidents.

We all know that in a time like the present, up-to-date machinery must be used or competitors will be turning out better goods than you at the same or lower cost. If you install new machinery and sell the old you can never sell it for its true value. It may be far from being worn out, but the selling price will be far from what you paid for it. This is a good example of depreciation due to machinery becoming out of date.

Depreciation due to inadequacy is seen when a boiler or machines may be giving perfect satisfaction, but, owing to the growth of the concern, it becomes necessary to install a new boiler or machines. On trying to dispose of the old material only a low price can be obtained.

In figuring out the depreciation for your machines, we find that it varies for different kinds of machinery. The life of an engine is about twenty-five years; that of coal and ash-handling machines is very much shorter. We might take an

average of twenty-five years. This would allow about 5 per cent per year for nominal depreciation alone. To get at the total depreciation per year it is almost impossible, as so much depends on circumstances. It is safe to say that the total depreciation in the mechanical field would be much higher than 5 per cent per year. We readily see why this is true when we consider the fact that the machinery may become out of date and be discarded, or may be replaced by heavier; and then, too, accidents must be considered also.

Experience teaches us that it is not accurate to estimate an equal amount of depreciation for each year. It has been proven that for the first few years, depreciation takes place rapidly. It then decreases in rate until about ten years have passed. If it has been well taken care of it will perhaps be at a standstill for a few years and then start on the decline again, gradually becoming faster until it becomes unfit for use.

O. M. S., '11.



WHERE THERE'S A WILL THERE'S A WAY.

"Oh, dear!" said the girl with a sigh in her voice, "of all the unlucky girls, I am the unluckiest."

She sat in the bay window of a spacious country mansion, looking out upon a road, from which a drive wound its way to the front of the mansion. She appeared to be about twenty years old, and was undeniably pretty. She was well built, being about five feet, six inches tall, and was a vision of young beauty and shapeliness. Her hair was a lovely brown; her eyes were a deep, beautiful blue, and her nose was the most delightful nose imaginable, being the slightest amount in the world retrouse. Her mouth—well, suffice it to say that a kiss from those ruby lips would be compensation for almost any sacrifice. Her chin showed signs of a good, firm will, but did not appear to show any signs of being of the English suffragette order.

And now for the explanation of the above plaintive remark. She was the daughter of Major Jackson, a good old Southern gentleman, who was confined in the house nearly all the time with chronic rheumatism, combined with gout. He had been born just at the end of the war, and one month after his birth, his young mother received news of the death of her husband at Appomattox Courthouse. As a consequence, he had been filled with bitter enmity towards the North and all those of the North, and retained all of his enmity to the present day. He had been left this house and little else. However, he had inherited a small amount from an uncle, and managed to keep up the estate and educate his daughter, but never having known the value of money, he did not know how to make any, and so his daughter must needs stay at home. Not having the wherewithal to furnish entertainment for any guests she might invite, she could not accept any of the invitations she received.

Judge of her delight when the mansion lying adjacent to

their property, and the only one among a number of small farms all around them, was rented by a handsome man of about thirty years. Likewise, you may judge of her dismay when her father, having learned that the gentleman was from the North, refused to have anything to do with him. It was somewhat like the cup of Tantalus. Wherefore, having just been acquainted with his decision, she uttered the remark with which the story started.

"Oh, dear!" she continued, "after waiting for two weeks while papa pattered around trying to find out all about him before calling on him, to be disappointed like this."

From that it would appear that Helen, for such was her name, was somewhat foolish concerning men; but consider that she had been now over two years alone in that house with no one but her father to talk to, and her conduct is not only excusable, but without need of excuse. After contemplating the landscape for a few minutes she stood up, walked over to the couch, sat down, and for thirty minutes sat there in a deep study. Suddenly she stood up, called her dog Rover and disappeared for the rest of the afternoon.

Two days later she went for a walk in the woods, which formed a part of both estates. Coming to a small stream she slid down the gravelly bank, and jumping across with ease, she scrambled up the opposite bank. Having rested a few moments she continued the walk, but had not gone far before she stopped, and, addressing that totally undeserving dog, said:

"Rover, I believe I have a gravel in my slipper."

Receiving no reply, she stopped, sat down on a projecting root, removed the slipper and disclosed a perfect little foot. Seeing there was nothing in her stocking, she reached for her slipper, but did not get it. Turning around, she saw Rover about twenty feet off with the slipper in his mouth.

"Come here, you bad dog, and bring me my slipper."

Rover did not move. She begged, coaxed, pleaded, whistled, all in vain, and was just about to give up when a man's

form hove in sight. He stopped abruptly upon catching sight of the tableau and emitted a low, surprised whistle.

"May I be of any assistance?" he asked politely.

Why, yes, if you can get my slipper without any great inconvenience, I would be greatly obliged to you."

He took his turn at the dog, varying his commands by intermittent chases after the dog, but with the same result. Finally he said:

"If you will permit it, I have my horse and buggy right on the road, and if you could manage to hop along by leaning your hand on my shoulder, I could drive you home."

"Oh! you do not know how thankful I am; but you must set me down somewhere where my father cannot see me, or else he will be very angry with me."

"Certainly, wherever you wish," was the prompt reply.

And so they traversed the short distance to the road, and he drove her to the side porch, where the Major could not see them. When he had helped her from the buggy he said:

"Miss Jackson, you do not even know who I am, but I would like to call upon you. I have met several of your classmates who told me about you, and any of them would be glad to give me a letter of introduction, if you would permit it."

She stood for a few moments in deep thought, and then answered:

"It is needless to state that I know your name, Mr. Huntingdon, as you are the first arrival in this neighborhood for some time. Your request to be allowed to call, since it was supplemented by your last sentence, I think would be easily granted under ordinary circumstances, but these are not ordinary circumstances, and I will explain. My father has conceived a most violent dislike for you for the simple reason that you are from the North."

"I am to understand, then, that I may not call?" in tones of regret.

"Mr. Huntingdon, I want you to listen for a few minutes

without interruption, and try to understand my position. I am twenty-one years old and, therefore, my own mistress. My father does not wish you to call, but since I am rather lonely I would be glad to have you call. Hence, I am going to do something very much to be condemned under other circumstances. I am going to receive you in the summer-house, with Aunt Dinah as chaperone. Of course, as a gentleman, you hate to do anything underhanded, but as I think father is unreasonable, and I think I am due some consideration, I will adopt this plan."

"I can only express my deepest thanks, and will endeavor to deserve such good luck," said he, with a perceptible warmth in his voice. "And when may I call?"

"To-morrow afternoon at 3 o'clock. And now I must go in. Good-bye, or rather *au revoir*."

"*Au revoir* it is." And he drove off.

Promptly at 3 o'clock the next day, which was a Wednesday, he was at the summer-house, where she and Aunt Dinah met him, or rather she met him, and Aunt Dinah sat herself well out of hearing and would have taken herself out of range of eyesight had it not been for her mistress' express orders. At first, they were rather diffident, but that soon wore off, and they were soon talking merrily. After they had been talking some time he looked at her with a twinkle in his eye, and said:

"Miss Jackson, if I tell you something, will you promise not to spoil my pleasure by stopping these open-air calls?"

"These?" with eyebrows uplifted.

"Why not? This isn't the last, is it?" with a smiling face.

"Well, no; I guess I might let you call again in the course of a month."

"Then I'll not tell you."

"Two weeks?"

"No."

"One week?"

"No."

"Well, then, I do not wish to hear it."

"All right, I'll be good; I heard you the next to last time. But you haven't promised."

"Didn't I?"

"No."

"But how do I know how much I am promising?"

"It will not harm you any."

"All right, I promise."

"It is simply this. I am a Southerner. My father knew your father's family very well, but he went North when I was a boy, and I guess lost all connection."

"Oh, isn't that nice; and I guess the next time you come I will meet you on the front porch," with a trace of a smile.

"No, I don't think so," with a positive voice, "not unless it is my actual body, for I will be here."

"Isn't he the most ungrateful person you ever saw?" addressing the circumbent atmosphere.

"No, I don't think so, after mature deliberation," responded, not the air, but the man at her side.

"I guess you can call here, then. But here it is 5 o'clock. You will have to go now; you have stayed long enough for one time."

And that night he dreamed of blue eyes and brown hair and an adorable nose and a maddening mouth.

And the next night he did the same.

And the next.

And until the following Wednesday.

Promptly at 3 o'clock he was there. Again they enjoyed themselves, but, mindful of the century of time that the last week had been, he managed to extract permission to call also on Sunday—and he kept it up until he had every day of the week on his schedule.

About one month after he accomplished this, he came bounding up the slight slope to the summer-house, at 2 o'clock, and found her waiting, without Aunt Dinah, as he had asked her to do the day before. He somehow couldn't keep still. He fidgetted and he squirmed and he walked up

and down and he sat down, and it appeared as if he had suddenly become demented. Finally he stopped square in front of her and, looking at the ground, blurted out:

"Helen, I came here to-day to say something to you. I—is that someone coming?"

Having satisfied himself that it was not, he came back and sat down alongside of her and reached for the slim white hand resting on the bench beside him—and it lay quiescent in his clasp.

"Helen, when I saw you first, you took all my heart, and since then I have had to exist without one. I love you with all my being and would do anything to make you happy. Is there any hope for me?"

He mustered up courage enough to glance up at her, and he witnessed an exceedingly fair sight. Her head was half turned away, and her cheek was mantled with a lovely rose pink. Softly his arm stole around her waist and he drew her to him until her head rested upon his breast, where it seemed content to remain.

"Sweetheart, look up at me!" imperatively, yet imploringly.

Slowly the head came up, cast a quick glance at his steady, happy eyes and then sought refuge on his breast again.

"Are you listening, dear?"

She nodded her head.

"There is a certain girl, and she has the most beautiful, the most tempting, the most maddening, lips I have ever seen, and I want her to lift up her head and let me satisfy my soul's desire."

For a moment she hesitated, and then her head came up, and with the happiest look in her eyes, and their lips met in a long, perfect kiss.

Then with eyes turned down, she asked half shyly, half doubtfully:

"Were your expectations fulfilled?"

"The realization was far better than hope, sweetheart. Still, I am not yet satisfied."

"What is the trouble?"

"I haven't heard you say it."

"Say what?"

"You know."

Two or three times she started to speak, and then in a breathless whisper:

"I love you."

Having said it, she buried her head in her haven of refuge. Slowly he lifted her head, and looking long in her eyes reached up one hand, tilted her head back, puckered up her lips and received his reward.

About fifteen minutes later she said in a sweet, shy voice:

"Fred, I have something to confess."

"What is it, dearest?"

"It took two hours to teach Rover that trick."

"You adorable little darling, that deserves severe punishment. Kiss me three times."

"Must I?"

"You must."

And she did.

About three hours later, he managed to descend to the commonplace long enough to ask:

"When shall I see your father?"

"To-morrow."

"All right; to-morrow it is."

A few minutes later:

"And we will go to live in the city after the honeymoon is over?"

"Yes, dear."

Whereupon, he did what any self-respecting young man would have done.

H. L. TAYLOR, '12.

A COLLEGE EDUCATION.

Why have a college education? Why spend four or more long years of early manhood off at school preparing one's self for the tasks of life? Why not be working at some occupation of life during these four years spent at college, and thereby save money, and become acquainted with the ways of the world at the same time? Why is it that one should not be ready to enter upon life's work when he has learned arithmetic and writing, and then not have to be bothered with any foreign language, history or higher mathematics? Such are some of the questions that are constantly being asked in everyday life.

The one who has to stop his studies at such an early period of life turns his back upon his books just at the time he begins to feel an interest in them, because he is beginning to understand them, and enters, possibly the office, the store, the shop, or the factory, there to sigh and long for the return of his schooldays and for his few daily tasks, which, when completed, made him leap for joy and feel as though he had completed some very hard task and was now "free" for a few hours. Very different it is, though, with the boy who goes to work so early in life, for each day is almost a repetition of the day before, and at the close of the day's work he leaves his place of employment with the thoughts of only a few hours are to pass and he will find himself back at the same place to go over another twelve hours of labor; and then on the same way the year through.

Many get their knowledge of accounts and bookkeeping by the sad experience of errors, which cost their employers much more than tuition fees. Then the young man fitting for the store is taught only those branches which will enable him to perform the duties of his place. If he reads at all, he does not go to history or biography, for he has no taste for such, but his reading most probably will be of some highly-wrought

novel. As he has no lessons to study at night, he will most likely be found learning practical geometry on a billiard table, where he learns angles with a vengeance, and often forgets on his way home from such a resort the mathematical principle that a "straight line is the shortest distance between two points."

The business man with an education is far-sighted and is better prepared to carry on his business. He can see the advantages that are before him, and grasp them. Honesty is the motto in all things, and proves to be the only way in which a business can be carried on successfully.

While at college, one is taught to be honest and square in what he does and in his dealings with those with whom he comes in contact. College education adds culture and refinement to one's life; it shows a man the duties that are before him, and prepares him for the work. By knowledge, man is led to the truth and is shown what he can do and be among mankind.

Ignorance has been the ruin of many nations. The majority of the criminals of the world are of the ignorant class. Ignorance has been at the bottom of many mistakes that would not have been had the people been educated. Nations would not have the need of so many prisons and like places of punishment were it not for the broad-spread of ignorance throughout the country.

It is rather strange that so much of human effort is bestowed upon the reforming of evils which might have been prevented in the outset. After an alarming conflagration that burns down a large part of a city, an efficient fire department is established. After an epidemic has spread and gotten a strong hold of the citizens, the mayor of the city looks carefully to the cleaning of the streets. Churches are built, and ministers fed, to reclaim the vicious man, whose youth and early manhood was neglected.

The literary societies of a college are a great factor for the training of young men. Among the many good results from

such organizations is the training of the mind for clear-thinking and the gaining of the power to be able to speak before an audience, expressing one's thoughts clearly and forcibly.

From statistics based upon a careful study of the lists of prominent persons and the education they received, as published in *Who's Who in America*, show conclusively that the chances are 17 to 1 that the college graduate will excel the high school graduate commercially; 405 to 1 that he will excel the common school graduate; and 1517 to 1 that he will excel the man who never went to school.

Education is development. It is not simply instruction, facts and rules revealed by the professor, but it is discipline, a development of latent powers, a growth of the mind. It trains the mind to think independently; it awakens its powers to observe, to reflect, to combine. All of the faculties are developed by mental cultivation. Education is the knowledge of how to use the whole of one's self. All that we have not at our birth, and all that we have acquired in our years of maturity, shows the need and effect of education.

College training teaches one to do his work with greater skill and in less time than one who has not had the advantage of a college education, for while at college one has had impressed upon him the value of system and exact methods. College life, college training, college thought, have a tendency to make one well-balanced, tactful and self-reliant.

It is knowledge that has converted the world from a desert abode of savage men to the beautiful home of civilization.

What, at first sight, appears to be so insurmountable an obstacle to the intercourse of nations as the ocean? But knowledge has converted it into the best and most expeditious means by which they may supply their mutual wants. What so violent as steam, or so destructive as fire? Yet wisdom has rendered these unmanageable things as aids to the necessities and comforts of life. The crossing of the ocean by the great steamers, and the crossing of our continent by rail, are both due to the knowledge of man as to the controlling of fire and steam.

In this enlightened age, ignorance is a voluntary misfortune, for all who will may drink deeply at the fountain of knowledge.

Having seen now some of the reasons for, and the advantages derived from, a college education, naturally, the first question to be asked by the young man is, To which college must I go to complete my education? As he looks around him he finds colleges with open doors on all sides trying to persuade him to enter. We, being students of a technical college, would, of course, try to show to him the advantages derived from a technical education, and the positions in which technically-trained men stand in the world to-day.

The Anglo-Saxon nations have outstripped all others in commercial growth and national prosperity because of their practicability of methods and principles. Our technical school of to-day has for its ideal the training of men in the practical side—the training of their hands to a better use and in making more proficient machinery. Not at the expense of theory, however, for such schools give to the young man such subjects as are essential to a liberal education and at the same time train him in some particular profession both practical and theoretical. It sends out men into the world whose brains are stored with the theory of his particular profession, and whose hands are so trained as to execute all practices derived therefrom.

To make a success of one's self the man must have—first of all—knowledge and an acquaintance with the particular profession in which he is engaged, and then to lend every effort towards its accomplishment. He must have the ability to create and to think accurately and consecutively.

The time has come when it is the day of specialization. The day of the man who does odd jobs—more commonly known as the “jack of all trades”—has passed and is gone forever. The “smatterer” has already lost out, and we hear every-day mention made of someone as being an “expert” gas-engine man, or an “expert” along some particular branch of

a profession. The call for technically-trained men is louder to-day than ever before. There is a demand for them everywhere. Farmers are wanted who understand nature's laws, so that they may fatten barren soils, irrigate dry "spots" of the world, and to reclaim swamps.

In a country still so new as ours, the greatest need is for men who can do things, who can build railways and bridges, open up mines and other sources of natural wealth, and organize industries and manufacturies. Opportunities for wealth, power and social usefulness smile everywhere upon the man of action.

M. F. W., '11.



A FACTOR OF SOIL FERTILITY.

For many years the question of soil fertility was not a very important one to the American farmer, but since there is no longer a frontier, an altogether different state of affairs exists. When it was easier to clear new fields than to keep older ones in a profitable state of cultivation, farming was a less difficult business. To-day, however, we are confronted with the problem of larger demands from a less fertile soil. It is evident that something beyond primitive methods must be resorted to. New conditions require new ways of doing things, and in no line of work is this truer than in agriculture. It is a foregone conclusion that our soils must be kept fertile if we are to meet the demands made upon them. Much has been said and written about soil fertility; many theories have been advanced concerning it, but even now it is a more or less perplexing problem. One of the more recent of these is that plants excrete toxic, or poisonous, substances which render the soil unfit for the satisfactory growth of plants.

The United States Bureau of Soils, under the direction of Mr. Milton Whitney, is the leading exponent of the toxic theory. The position taken by the bureau is that it is not natural for soils to become unfertile, and that our unproductive soils are the product of unnatural conditions.

In the forests where a variety of plants grow, the soil grows more fertile; in the field, with one kind of plant year by year, the soil rapidly becomes impoverished. It often happens that where such soils are treated with slight applications of manure or fertilizer the increased yield exceeds the value of the plant-food applied. Often, a change of crops or the use of non-fertilizing salts produce practically the same results. We are, from these results, led to conclude that a one-crop system leaves the soil in a condition which the above agents tend to modify in some way.

It is conceded that plants breathe and take up food, but no

allowance is made for their excretions other than respiratory. It is perfectly reasonable to suppose that they do produce other excretions in unknown amounts, which are lost sight of in the soil. And just as any given animal's excrement is injurious and poisonous to it, although other animals may thrive on it, it is reasonable to assume that plants act in a similar manner. Granting this, we can easily imagine how the excretions from a continuous one-crop system might accumulate until the soil would be rendered no longer congenial for the best growth and development of that crop. Just as chemicals will hasten the decomposition and transformation of animal excreta, it is reasonable to suppose that they might likewise decompose plant excretions, rendering the soil fertile. If this be true, we have a very plausible theory for the marked effects of both manures and fertilizers, both of which are great soil rejuvenators; and likewise we find a reason for the often-beneficial effects of non-fertilizing salts.

It is, therefore, very evident that it is necessary to know the exact truth about this theory of plant excretions. If it is true, the fertilizing practices of the country might be more economical than \$100,000,000 per year, or fertilizers might not be so extensively used, since a mere change in crops on various soils of the United States gave better results in 96 per cent of the cases, and only 4 per cent were more productive from the use of fertilizers and manures.

One of the most convincing experiments in all the literature from the bureau is that, in an extract from a poor soil, wheat seedlings made markedly poorer growth than they did in pure water. In water, they lived three weeks, and in the extract they died within two weeks.

If, to an extract from a poor soil, a carbon absorbent is used, the yield may be increased materially—27 per cent in one case above a similar extract containing no absorbent. It has also been shown that if a portion of an extract be distilled, the distillate will give a transpiration of 25 per cent against 100 in the pure extract, although the latter contained

chemical salts. Ferric hydrate was found to overcome toxic effects by absorption for a while, but on continued use it was found harmful.

Another very conclusive proof of the existence of toxines in soils is shown by the following experiments: Five plots of pure sand were planted to wheat, as were five other plots that had previously grown wheat, for twenty-one days. Both sets of plots were similarly planted and treated, there being only the above difference. No fertilizing nutrients could come from the glass sand; however, the fresh sand produced 65 per cent more than the other. When the experiment was repeated, plots in which wheat had previously grown were treated with ferric hydrate before planting. In this case there was only 6 per cent greater yield in favor of the pure sand.

In experiments with agar as a medium, it was found that a crop of wheat always rendered the medium harmful to succeeding wheat, but harmless to corn, and slightly harmful to cowpeas. If agar in which wheat has been grown is poured over a plate of pure agar, or if sections are inserted into plates of pure agar, the roots of succeeding wheat will *always* shun the agar in which wheat had previously grown.

Thus, experiments of various kinds, no matter how often they may be repeated, always indicate the presence of something produced by the growing plant which is toxic to that plant in the next generation, though harmless to other plants. Hence it is important to know what each crop produces and to what plants these products are poisonous.

A pure crystalline organic body which cannot be found in fresh soil can be isolated from cowpea sick soils. This substance is extremely poisonous to cowpeas in culture media, though harmless to wheat, with which it seemingly disappears, for cowpeas may successfully follow the wheat.

Several toxic organic bodies have thus been extracted from soils that have grown different crops. Some are found to be waxy, others fatty and of various consistency, being nitrogen,

or potash, compounds in some cases. These substances easily change through oxidation, although they remain stable in some soil, as indicated by the permanent infertility of certain soils. The breaking down and destruction of these bodies may be hastened by cultivation or manurial applications.

In the case of unproductive wheat soils, two of these harmful organic substances have been separated and experimented with, showing that they are detrimental to the growth of wheat. One of these substances is called picolene carborylic acid. It is a nitrogenous body, definitely crystalline, having very faint acid properties, also acting as a base towards very strong acids. The other compound that has been isolated from wheat soils is known as dihydroxystearic acid. It is a non-nitrogenous crystalline compound and is in no way related to picolene carborylic acid. Both of the compounds are extremely harmful to the growth of wheat seedlings in all tests. The former is injurious in concentrations of 100 parts per million, and, like many other poisons, exerts a stimulating effect when present in small quantities, while the dihydroxystearic acid was harmful in all concentrations tested, and ultimately caused death to the plants in concentrations of 100 parts per million.

Conclusions from these experiments indicate that these substances are but slightly soluble in water, sometimes volatile with steam and sometimes not. Soil extracts containing these are usually more or less acid, but the acidity is not itself the cause. They are probably organic and can be absorbed by finely-divided solids.

These experiments indicate that plants produce substances in the soil that retard their growth the following year, but which seem harmless to other plants, which either appropriate them to their own use or in some way most probably have something to do with their decomposition. Thus a change of crops appears to be a very practical thing.

The bureau has gone so far as to say that practically the only value of fertilizers and manures is their beneficial effects

to the soil in rendering it sanitary by their action on the toxic materials in it. Many do not agree with this broad statement, for the evidence is too conclusive in favor of the direct beneficial effects of materials containing fertilizing elements. However, it is evident that in many cases where the plant food is not exhausted, the only effect of manures and fertilizers may be on the toxic materials. While much is yet to be learned about this theory of toxic excretions and their effect on fertility, enough is already known to convince all of the necessity of a crop rotation of some kind. It remains to be learned just how much fertilizers effect fertility by overcoming toxic materials. But whatever the conclusion may be, no one can, in the light of the present knowledge, ignore the theory of toxic excretions as a factor to be reasoned with in the maintenance of fertile soils.

J. P. Q., '11.



POWER PLANT PRACTICE.

FEED-WATER HEATING.

The introduction of feed-water at a high temperature increases the economy and tends to prolong the life of the steam boiler; and when the temperature of the feed is raised by the exhaust steam or by the waste gases in the uptake, the saving of fuel is considerable. If this temperature rise in the feed-water comes from the waste gases or exhaust steam which would otherwise make no return for their heat, the gain is clear. There is no gain in thermal economy by heating feed-water with live steam, although the injurious effects of unequal expansion by the introduction of cold water would be diminished by so doing.

There are several ways of heating the feed-water. In condensing engines, the condenser discharges directly to the hot well, and the water is usually drawn from that place at a temperature of 100 degrees to 140 degrees, though for the best economy, feed-water at this temperature should be passed through some form of feed-water heater. In the non-condensing engine plant it is absolutely necessary that in some way the feed-water should be heated by the exhaust steam, or by the waste gases from the uptake; the apparatus in the first case being called a feed-water heater, and in the second, an economizer.

The feed-water heater should not alone heat the water, but at the same time purify it, precipitating the calcium and magnesia salts, thereby preventing incrustation on the boiler plates and maintaining a higher conductivity through the same.

There are two types of feed-water heater: the open, which is most frequently used in stationary practice, and the closed, which may be used either on land or at sea. In the open heater, the steam raises the temperature of the water by mingling with it in direct contact. The closed type of heater

resembles in its action a surface condenser, the steam used for heating purposes surrounds tubes which contain the feed-water, or the water circulates about tubes through which the steam passes.

The "Baragwanath," "Hoppes" and "Cochrane" heaters are each an example of combined heater and purifier of the open-heater type. The "Goubert" is a familiar type of closed heater, and also includes the purifying feature to a certain extent.

One noticeable difference in the two types of heaters is that the open type is piped to the suction side of the boiler feed pump, and the closed type is piped to the discharge side. In some steam plants both types of heater are used on the same pump.

F. H. THOMPSON.



THE AWAKENING OF JACK RAYMOND.

When Jack Raymond was seven years old he made his maiden speech at school, and from this time he determined to be a great lawyer. An enthusiastic mother listened to his first speech with a sympathy that only young mothers know how to feel for their sons. Young Jack acquitted himself manfully, and his mother predicted that he would startle the world as a great orator. Master Jack was a sensitive boy, open to conviction, and he took these sayings and praises to heart and pondered over them as only a care-free boy knows how to think seriously. His father was a judge, which impressed his immature mind more strongly that a lawyer who could sway men with the impetus of speech was the highest ideal to be reached in life.

Judge Raymond resided at Ashburn, a beautiful village in the historic county of Belhaven. He was a man of fine culture and education and was highly respected by the people throughout the country. His advice was sought not only on legal subjects but also in a neighborly way. The judge was a kind father, affectionate to his children, rejoicing in their joys, and mourning in their sorrows. He was of firm conviction that the profession of law presented the highest calling to a young man. When Jack said he was going to "make speech" when he got big, the father's heart boiled with pride for his young son.

Dating from this time, every inducement was offered Jack to become a lawyer. The judge's fine library was always open to him, his studies were especially arranged by his father, and he was urged to do extra work in the school society. All this, coupled with his natural inclination to be a speaker inherited from his father, gave him an excellent education and superior training for the one thing he was devoted to in life. As young Raymond was by no means a "bookish" boy, he indulged in the sports and games of his classmates. The

weight of influence carried by him in being the judge's son, and the desire to rule, easily made him a recognized leader on the field. Jack was at all times fair in his dealings and never tried to rule in a high-handed way that provoked other boys to anger and hatred. His leadership was carried from the playground into the classroom, and was recognized by his teachers as an exceptionally bright boy.

Jack's ideal grew with him during his school years. Often, Jack was victor on speaking occasions, and everything seemed pointing directly to a purely literary education for this brilliant son of a literary father. At the age of fifteen, with only one more year to attend school, and everything arranged to go to the State University, an event occurred that had a marked influence on the rest of his life.

One day during vacation, Jack made a visit to some relatives living in Graydon. A farmers' institute, which was becoming so popular, was here on this day. Anything that savored of a speech had a fascination for Jack, and he listened attentively to the men who were talking on subjects of small moment to him. But Dr. Morgan, the most popular and farsighted man in the State, touched upon a theme that awakened young Raymond to new energy. This was, "The Education of Our Sons." The speaker began by recounting in a general way the immense advantages that was open to a boy to get an education, and that it was the duty of every father to give his son more training than he himself had received. In ten minutes, Dr. Morgan had completely captivated Jack's attention; at this juncture the speaker came more directly to the point of his argument.

"For the energetic, live American boy, for the boy who desires to win a name for himself and be of benefit to mankind, the industrial college presents the decided advantage; and of all the many branches of industrial training, that of agriculture affords the greatest field of usefulness—the widest sphere of knowledge, the most pleasant, absorbing occupation that a young man could bend his energies to."

Dr. Morgan then spoke of the great cry that was being heralded through the Southland—the cry for trained men to revolutionize our system of farming. He depicted the dire need of the one-horse cotton farmers, the misery of their state and the small enjoyment they were getting out of life.

“To overcome this,” he said, “we must have men—trained, thoroughly-educated men—who can go out among our people, point out their faults and mishaps, supply the remedy, demonstrate to them that there is a more pleasant and more profitable road to traverse than that trod by their forefathers. We must have men who can tell our people that the South could be made a veritable paradise of corn and cotton, horses and cows, equaling and surpassing our Western neighbor; men who can give to our people, through the medium of farm papers, all of the precious facts and truths that by every right of true citizenship should be theirs. We need men who will dare to go in our Legislature and demand appropriations for the great work—this noble calling that is always whispering to us to go back to the beautiful country life. . . .”

By this time, Jack Raymond had a peculiar feeling, his conscience had resolved itself into two parts, and a small strife was being waged. But during all of this battle, he gave close attention to this thrilling speaker, who was well able to hold many spellbound.

Jack went back home in an uneasy frame of mind—his ideal had been shattered, but still he would not give up. Nothing was said to his father, and he determined to live down the thought that ever kept ringing in his head: “Must I give up my longed-for ideal for an agricultural education?” But it would not down, and more fuel was added to the blazing flames by an article in the newspaper that caught his attention. This article told of the great joy to be derived from farming, what opportunities an agricultural training presented to the young man of to-day, and ended by giving a sketch of the State Agricultural College. This decided Jack. He was open to conviction, and he was really losing only a

part of his cherished ambition, for he realized that the science of agriculture needed great orators just as much as the profession of law.

Jack dreaded reconciling his father to the new ambition. The judge was a thoroughly literary man, loving his book far more than the beauties of nature, and had never taken much interest in the great revival that was sweeping over the agricultural Southland, although he was reared on the farm. So it was in a dubious frame of mind that Jack broached the subject to him. Consent was not given readily, but the judge was wise, knowing that turning the head of a determined boy was harder than stemming the flow of a mighty river, and he had arrived at the age when the farm was beckoning to him as it does to everyone sooner or later. Finally, though reluctantly, he gave way, and Jack had at last found his ideal—"Go to the agricultural college, learn the principles of agriculture, and revolutionize the deplorable farming conditions of the State."

Jack entered the agricultural college at sixteen, and here, too, he easily became a recognized leader on the field and in the classroom. This, his closing year, bids fair to see him graduate at the head of his class. He has an ideal to serve his State in bettering the condition of her people. He has had success in the past with little things; will he not have greater success in the future with big things? Some day we may expect to hear from Jack Raymond. "A.G."

THE USE OF GAS AND GASOLINE ENGINES IN THE SOUTH.

The use of gas and gasoline engines is so related with other industrial conditions that a study of them is necessary.

Thirty years ago, the total bituminous coal produced in the United States was about 40,000,000 tons. In 1909, the Southern States mined over twice this amount. The South to-day is producing almost as much pig-iron as the entire country made in 1880. France, Germany and Great Britain have altogether only about one-fourth the number of square miles of coal land possessed by the South. Practically all the coal in the South can be easily mined, and with increasing transportation facilities be quickly and profitably marketed. With a practical monopoly of that one commodity—cotton—which all the world requires, with its iron ore, its water powers and its gas, together with the other natural resources, such as phosphate, marble, granite and lumber, the Southern States are beyond question destined to become as great or even a greater industrial center than Massachusetts or other New England State. There is not to be found under similar conditions in any portion of the world, except the South, those requirements for the foundation of all great manufacturing industries, such as coal, iron, cotton, gas, copper, phosphate, oil and lumber. The iron ore for Pennsylvania and Ohio blast furnaces must be hauled from the Lake Superior region 1,000 to 1,200 miles before it can be utilized. In the Southern States, the iron ore, the coal and the limestone are frequently found in large quantities in the same country. The United States Steel Corporation is spending at the present time \$13,000,000 in the Birmingham district alone, and the plans for the next five years will require \$50,000,000 for the completion.

Through the development of the great fertilizer interests of the South, a former waste product which, in its raw state, was once thrown away now sells for \$100,000,000 annually.

The growth of Southern cities and towns is so rapid that rents are high, and storage space for fuel is very expensive. The small power user, therefore, cannot afford to buy coal in large enough quantities to obtain a substantive discount, because the cost of storage exceeds the discount on large quantities, and the final cost of fuel is higher for steam power with the necessary stand-over losses than for gas or gasoline power.

Negro labor is almost universally employed for operating steam boilers, and as it does not represent the skill attained by the best white labor, the lower grades of bituminous coal cannot be profitably used under boilers, since more skill is required to fire poor coal economically than is required with good coal. The same skill that is now displayed in the average steam plant should produce much more economical results in the gas-producer plant, as less skillful handling of the fuel is needed in the latter.

The absence of a boiler where unskilled labor must be largely depended upon eliminates the greatest element of danger. If a boiler is not properly cleaned or is otherwise neglected, highly dangerous conditions are had. If a gasoline engine be neglected, a shut-down is about the worst that can happen. The cost of labor to maintain safe and fairly economical conditions is much lower with internal combustion engines.

In the South will be found a larger proportion of plants dependent upon farm products, such as cotton gins, cotton seed oil mills, etc., than can be found in the North. Many of them run from eight to ten months of the year. The depreciation of a gasoline engine is much less than of a boiler and engine. For intermittent service, the gasoline engine is not only the cheapest but the safest power.

The International Harvester Company have recognized the possibilities of the South. They published in December, 1909, an honor roll of the ten agencies having the largest sales of gas engines. Among these ten were Atlanta, Charlotte, Richmond, Nashville, Memphis and Birmingham. I. S., '11.

THE BOAT PLAYS CUPID.

"Well, come on," half growled Strong as he started for the river, his usually handsome face overclouded.

Dick Strong was in a decidedly bad humor. Here he had promised to go over to Bob Eason's and arrange about that trip in his yacht, and now couldn't go just because his sister had promised some girl he would row her up the river. Hang girls, and this one in particular. Girls never were his long suit anyway. He didn't believe his sister's explanation about some other man being detailed for the job and being called to town at the last moment. It was just another plan of Ella's to get him married off. *Dod gast it!* Why was it that girls always had designs on their poor, innocent brothers. And what kind of girl was this Miss Lancaster, anyway, that she could be shoved around from man to man without the slightest demur on her part!

But here Dick looked up with a start to find that he had traversed half the distance to the boathouse by himself. He looked back. The girl was rocking serenely on the veranda. He retraced his steps, his frame of mind not bettered by the fact.

"Ain't you coming?" he asked. He would have liked to express his mind, but common courtesy forbade it.

The girl calmly surveyed him with a pair of clear grey eyes.

"No," she said. "I had not the slightest idea of doing so. I merely agreed in order to set Ella's mind at rest. She felt badly about Lenox having to leave, and she herself had to go to see that sick woman in the village. I meant to explain this to you, but you did not give me a chance."

"Besides," she continued, her eyes returning to the fair country spread in front of them, "I prefer the freedom of the house and veranda at all times to being confined in a small boat with a sulky and ill-natured young man."

Dick reddened. Then he laughed. It was a relief to be talked to in that manner. Most girls were mortally afraid of offending him. But here was one who cared not for his opinion, good or bad.

Christabel Lancaster had been at his sister's house-party for a week, but he had not exchanged half a dozen words with her. Consequently this arraignment came as a complete surprise.

All Dick's bad humor had vanished like a flash.

"You're right," he exclaimed. "I am an insufferable bore. Thank you so much for telling me so. And now," with a twinkle in his eye, "that I have been convinced of the error of my ways, won't you reconsider your decision about the ride?"

The girl shook her head.

But Dick was determined now that she should go.

"Oh, please," he said coaxingly, with one of his sweetest smiles—and one of Dick's coaxing smiles were worth seeing.

The girl relented with one of her own smiles, which likewise, was not to be sneered at.

"Oh, well," she said graciously, "if you insist."

"But I do," said he.

And so she went.

It was about three in the afternoon when they left the boat-house. The blue sky overhead was cloudless. The sun shone hotly upon the river. Along the banks where Dick was pulling the boat, however, was heavenly.

Dick and Christabel progressed amazingly. They found that they both liked the same books, both held the same views on most of the live subjects of the day—even the suffragette question, strange as it may seem—both played the piano, and both sang.

By the end of the first hour Dick knew that his fate was sealed. Christie's frank, open speech; quick, merry laugh, and bewitching eyes had wrought havoc in his heart and he was fettered for life, never to escape. But then he didn't

want to escape. He wondered how he could have allowed a whole week to pass without falling in love with her. What a beautiful complexion she had, he thought; and that mouth was certainly made primarily to kiss.

"May I inquire why you are staring at me so hard?" the girl broke in on his thoughts.

"You may," replied Dick. "I was thinking what a kissable mouth you had."

"Oh!" said the girl.

Christie, on her part, was more than interested in her companion. She had met many men, but not one had affected her like this one. His handsome face and strong, well-knit figure awakened an admiration, while his blithe laughter and the cheery tones of his voice struck a responsive chord in her, somewhere.

Dick pulled on up the river until, at about half-past five, they reached a place where the river widened to about two and one-half or three miles in width. Almost in the center of the stream was an island, called Pear Island from its shape. It was about half a mile long and one-quarter mile wide at its greatest width. It was rather thickly wooded and was famous for its wild flowers, both for their abundance and their variety.

"Oh, let's go to the island and get some flowers," said Christie.

Dick headed for the island, and soon they reached it. They leaped out and ran up the island like school children. They ran hither and thither gathering the flowers for the greater part of an hour. Then they sat down on a mossy little knoll while Christabel arranged them.

"My! how late it is getting," said Christie, jumping up, her task being completed. "Why, the sun has almost set."

"Yes," said Dick, "we'll have to hurry."

But when they had made their way back to where the boat had been left they could only stand and stare, for the boat was not to be seen.

"We forgot to tie the boat," cried Christie in dismay.

It was kind of Christie to say "we."

"Yes," said Dick, "and goodness knows how long it's been gone."

"What can we do?"

"I can swim ashore."

"With all your clothes on! I don't believe you could do it. There are no boats there, anyway. Besides, I don't want to be left here by myself. I'm afraid," with a nervous little laugh.

"Well, we'll just have to make the best of it. Thank goodness, there is no danger, but it will be very uncomfortable and disagreeable for you to remain here all night."

They made their way back to the edge of the woods, and Dick picked out the driest place he could find. He then collected wood and made a small fire to keep off the chill arising from the river.

Sitting on each side of the fire, they chatted about mutual friends, mutual views, and mutual desires. It was the final touch to the day's happenings—this tale in the twilight, while the moon arose from the horizon and the stars appeared one by one. They were both hopelessly in love, and they both knew it. The conversation waned and died, and a long silence fell between them. But it was a most satisfying silence. Finally, her eyelids closed sleepily.

Dick waited until she was sleeping soundly, then made his way to the river's edge. He took off his shoes and stockings and part of his clothing, plunged into the water and swam with long, steady, strokes down the river.

About two miles down, the river narrowed suddenly and made a sharp bend at the same time. It was almost impossible for the boat to pass here, and here Dick hoped to find it. Nor was he disappointed. There lay the boat, gently rubbing its sides against the bank. He climbed in the boat and took a good rest after his long swim. He then rowed back to the island. He got his clothes again and went back to where Christie was sleeping. He gently roused her.

"Hello," she said, sitting up and rubbing her eyes. "Is it morning already?"

"No," he replied with a happy laugh, "it is only 10 o'clock, but I have the boat."

"The boat! Where did you get it?"

He told her.

"O, you dear boy," she said impulsively, and then blushed rosily at her own warmth.

They got into the boat and rowed down stream.

"I'm so happy," said Christie. "I wonder why."

Dick thought he might explain, but was afraid of upsetting the boat.

Impelled by Dick's steady strokes, it was not so very long before they reached the landing. Dick tied up the boat, and they strolled across the turf towards the house. Dick seemed to have something on his mind which he could not get rid of.

He stopped suddenly.

"Christie," he said (oh, how he pronounced that name), looking down into her eyes, "do you think it is possible for a man and woman to fall hopelessly in love with each other in one day?"

"I—I don't know, Dick." Eyes suddenly downcast, but a sweet smile hovering around her lips.

"Can I persuade you that it is so?" eagerly.

Then her clear grey eyes looked into his.

"You can try, Dick," she said softly.

And he must have succeeded, for the moon shining down upon them cast but one shadow on the dew-bespangled turf.

A. W. T., '12.

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Collier's Weekly for February 11 contains an interesting article on the class of athletics among the several Conference Colleges of the South, East and Middle West. The writer of this article highly endorses two rules of those Conference Col-

leges—one, the ruling off their schedules any college which has preliminary training or men on its team who are professionals; and another, the cutting out of training tables, training quarters and coaches. We heartily agree with the writer as to preliminary training before the beginning of the term. As to the ruling off the schedules teams who have men on them who have played professional ball, there is not the shadow of a doubt that if every such college in the South and East were left out, there would be no more baseball, and less than a half dozen football teams at work south of Mason and Dixon's line or east of the Mississippi. The cutting out of training tables, training quarters and coaches is impracticable to the point of absurdity. The plea is that so much attention to athletics detracts the students from the real work of college life. If it were not for training and coaching, there could be no athletic teams, and it must be clear to the serious thinkers that the college is for the upbuilding of the physical as well as the mental man. While athletics specialize on the physical training, it is a well-established fact that in an athletic team, mental training—"head-work"—is a fundamental element, and at the same time we should remember that an unhealthy body hampers a healthy brain. The best indication of a prosperous college is a successful athletic record. We admit that there are excesses in athletics just as there are excesses in studies. Let us curb the faults in each, but in so doing we must be careful not to make our remedy worse than the fault, for we are well able to say that there is no college in the South with any cleaner athletics than those at the A. & M. College to-day.

ATHLETICS

BASEBALL.

The practice season for baseball opened with very bright prospects. At present, there are about fifty men on the squad and it is easily sure that there is good material in it.

On the squad, there is practically the entire team of last year. Black is absent on third base, and Sexton out of the box. These places will be filled by some one from the squad of fifty strong, and there is no doubt that they will be filled well.

In addition to the new men who were mentioned in last issue, Jaynes and Farmer should be remembered. Jaynes is a big mountaineer from the Western part of the State and is expected to make us a good pitcher. He has never had much experience in baseball, but has had enough to show the people that he has the making of a good man. Farmer is from Wilson, and from appearance he will make some one work to keep him off the team.

Following is the schedule:

March 20—Trinity Park, at Raleigh.

March 24—Amherst, at Raleigh.

March 25—Philadelphia Nationals, at Raleigh.

March 27—La Fayette, at Raleigh.

March 31—Swarthmore, at Raleigh.

April 1—Wake Forest, at Wake Forest.

April 3—Davidson, at Raleigh.

April 7—University of South Carolina, at Columbia, S. C.

April 8—Davidson, at Charlotte.

April 10—Guilford, at Raleigh.

April 11—Richmond College, at Raleigh.

April 15—Delaware College, at Raleigh.

- April 17—(Easter) Wake Forest, at Raleigh.
- April 20—University of South Carolina, at Raleigh.
- April 21—Wake Forest, at Raleigh.
- April 24—Guilford, at Greensboro.
- April 25—Richmond College, at Richmond, Va.
- April 26—Catholic University, at Washington, D. C.
- April 27—Delaware College, at Newark, Del.
- April 28—Georgetown University, at Washington, D. C.
- April 29—Virginia C. C., at Lynchburg, Va.
- May 3—Virginia Polytechnic Institute, at Raleigh.
- May 6—Maryville College, at Raleigh.
- May 8—Washington and Lee, at Raleigh.
- May 12—Virginia C. C., at Raleigh.

A. & M. WINS FROM WAKE FOREST—FIRST GAME OF COLLEGE BASKETBALL EVER PLAYED IN RALEIGH.

In the first game of college basketball ever played in Raleigh, A. & M. turned the tables on Wake Forest for its defeat of last Thursday night (February 16) in Wake Forest, by a score of 33 to 6, and came back strong, defeating the Baptists 19 to 18.

The game was hotly contested throughout, but owing to a slippery floor both teams were at a disadvantage. The score at the end of the first half stood 15 to 11 in favor of A. & M. The Baptists played hard in the second half, keeping the Red and White on the jump. Every man on the A. & M. team did good work, while for Wake Forest, B. Holding and McCutcheon and Dowd did particularly good work.

The line-up:

A. & M.	Position.	Wake Forest.
Cool	R. F.	McCutcheon (Beam)
Chambers	L. F.	R. Holding
Ferebee	C.	B. Holding

(Robertson)		
Seifert	R. G.	Utley
(Legrand)		
Phillips	L. G.	Dowd
(Swole)		

Time of halves—20 minutes. Referee—Crosier. Umpire—Freeman. Timekeeper—Stafford. Goals from field—A. & M., 9; Wake Forest, 8. Goals from foul—A. & M., 1; Wake Forest, 2. Attendance—550.

CROSS-COUNTRY RUN.

The A. & M. second annual cross-country run was pulled off on Saturday, February 4th.

“Happy” Eason, of the Senior Class, carried off the honors of the day by leading home a classy field of sixteen fleet-footed runners. The time for the course of three miles and a half being 17 minutes and 49 seconds, a decrease in the time made in last year’s race of 22 seconds. Although Eason won the race, it was not without exerting himself to the utmost, as it was not until the last fifty yards that he was able to shake off Trotter, who finished second but five yards to the rear, and who, in turn, landed a scant three yards ahead of King, a sturdy little Freshman of the Agricultural Department.

The first five men to finish were: (1) Eason, '11, (2) Trotter, '12, (3) King, '14, (4) Kephart, '14, (5) Smith, '13.

Several of the Raleigh merchants showed their interest in the college by offering prizes for the winners in this race. Whiting & Horton gave a sweater, Herbert Rosenthal a pair of shoes, Cross & Linehan a Stetson hat, and A. C. Hinton a fancy vest.

OUR NEW TRACK.

At last one of our fondest hopes has become a reality, and we are to have at our disposal a cinder track on our athletic field. Heretofore the track squad has been compelled to use the Fair Grounds for practice, and this is quite out of the way, or else be content to use a makeshift track on the old field, and this is exceedingly slow. Now, the squad will be able to reach within a few minutes a fine, fast track, which is located centrally from all of the dormitories.

Those who have been down to have a look, or have been so enthusiastic as to offer their services in accomplishing the object, have already seen the track, which is one-fifth mile in circumference and which encircles the football and baseball fields. In order to put in a track of this size, it was necessary to cut away quite a bit of the bank on the east side of the field and grade the lower half as there is quite a drop in level from the home plate to the lower corner of the field. This has been done, and to-day the track is ready to receive the cinders, which are already on the field.

But this much has not been accomplished without much work and untiring efforts on the part of the few who have been instrumental in bringing things to pass. To Prof. Newmann, without whose assistance the work could not have been done, we are profoundly grateful. Through his generosity we had the use of the four college teams, plows, scoops, etc., for four days and a half, and, moreover, he was always on hand to make suggestions and add enthusiasm by his presence. You can always count on "Sunny Jim" to do far more than his share! Dr. Ray has proved himself a most valuable friend to track athletics, for he was the prime mover of the enterprise and an efficient manager. Prof. C. B. Williams was also so kind as to give us the use of one of the Station teams for a day. For the cinders, we are indebted to Mr. H. S. Leard, Division Passenger Agent of the Seaboard Air Line Railway. Through his personal efforts, the Seaboard placed on our siding two carloads of cinders free of all cost

to us. Without this donation, the track would have been an impossibility this year. Mr. Leard has always been a warm friend of the college and has more than once, for our sake, brought things to pass which looked hopeless. We are further indebted to Mr. Speas for the design of the track and for the trouble he took in laying it off with the greatest of care. Manager Hinkle of the track team, and Captain Sherman have worked faithfully in carrying out the details of the work, and have given much valuable time to the project.

Finally, we wish to express our appreciation to Mr. Eaton, the foreman of the college farm, who superintended the grading; to the men in the Winter Course, who gave four days and a half of their time to the work, and to all of the men who came down and gave their services if only for an hour.

This track has come through a long pull, a hard pull, but most of all, through a pull all together.



Y. M. C. A.

RELIGIOUS MEETINGS.

The association has been very fortunate during the past month in its speakers for the Sunday night meetings, most of whom were members of the State Legislature, among them being Senator Coxe, Senator Davis and Senator Barbour. All of these men gave talks that were helpful and encouraging and were much appreciated, as well as attended, by the students. During the session of the Interstate Convention we had the honor of having an address by the Hon. Henry B. F. McFarland, of Washington, D. C.

Perhaps one of the most enjoyable, and unquestionably the most unique programs ever given here was an entertainment by "The Three Tots," consisting of Virginia Terrell and Dorothy Park, both aged eight, and Horace Dowell, Jr., aged six. Dorothy and Horace sang a duet entitled "I believe That He Meant Me," which came near the hearts of all present. Then Virginia told the story of Jesus from His birth to His death so clearly and so accurately that many of us grown-ups felt ashamed of ourselves, and all of us listened with bated breath to be sure not to miss a single syllable of that greatest of all stories—on this occasion, told almost literally "out of the mouths of babes." Dorothy then sang a solo which very fittingly brought the program to a close.

We take this opportunity to thank our little friends and their parents for affording us this pleasure.

Another feature of the meetings since Christmas has been the exceptionally good singing, to which our friends from the city and other places have treated us during this month. Those singing for us were Miss Baker, of Palmyra; Miss Haynes, of Raleigh; Miss Young, of Rowland; and Mr. Betts, of Raleigh.

BIBLE STUDY.

We note with gratification that the holidays did not cause any relaxing of the interest in the Bible Study groups. Two of the leaders had to be replaced, but beyond that, little disturbance was caused; on the other hand, several new men have since been added to our classes, and the attendance is keeping up to the high standard set before the holidays. The faculty group is again vigorously at it and is setting the student groups an encouraging example.

The following sub-committees of the Bible Study Committee have been appointed to aid in the efficiency of the work of this committee: Committee on Normal Groups, Committee on New Members and Class Attendance, Committee on Selection of Leaders, and Committee on Socials.

MONTREAT.

The last issue of THE RED AND WHITE contained an able article on the above subject written by Mr. J. W. Harrelson, who himself spent ten pleasant days at that place last June during the conference of the Young Men's Christian Associations. The conference will again be held at the same place this year, beginning June 16th and continuing for ten days. We were represented last year by eight delegates, and should this year have a delegation of fifteen of the very best men in college.

During April, or early in May, Mr. H. S. Johnson, the Interstate Student Secretary, will visit A. & M. with a number of stereopticon slides showing the life in the mountains during these ten days. I bespeak for him at this early date a full attendance of the student-body, and confidently expect that this lecture will induce many of the students to take this summer outing.

BASKETBALL.

Ever since the spring of 1909 we have been trying to establish basketball as one of the college sports, but not until just recently have we met with any encouragement. Last fall the association appointed an Athletic Committee, with Guy Bryan as chairman, and through his efforts and those of his committee and of P. B. Ferebee, all of whom have worked cheerfully and with dogged determination in face of the most discouraging conditions till their efforts were finally crowned with success in the recent magnificent game with Wake Forest, the first game on our own floor, which disproves the claims of some of our number that the game would never be successful, financial or otherwise. Never was there a more enthusiastic crowd, and never was a crowd more highly entertained.

Basketball, thanks to Ferebee and Bryan, has come to A. & M. to stay; and when after long years the history of this great college sport at A. & M. shall have been written, the names of G. K. Bryan and P. B. Ferebee will stand out in glaring letters as the pioneers on the frontier of this form of athletics at their Alma Mater. To the able manager of this year's team, W. H. Davis, will be given the credit of the financial success of this the opening of basketball.

NAPLES.

I hope many of the men will read the article found elsewhere in this issue on "Student Work in Italy." The secretaries of the Southern colleges at the conference last summer agreed to try to raise \$2,500 for the support of the work that is being done in Italy by Miss Leavitt and Sen. de Pertis. To accomplish this, all the secretaries took it upon themselves to get their associations to raise from \$100 to \$250. Our part of this work would be \$100. Although our associa-

tion has some old debts which must, by all means, be paid, yet if every man would be prompt in paying in his dues, all of this could easily be taken care of and extension work could be consistently thought of. The man that lives only for his own benefit is of no use to this world. So it is also with an association.

FINANCES.

A little more than half of the men who have joined the association have paid their dues. This ought not to be so. There will be no need for the money this summer unless we are compelled to make debts to carry on the work. The time when we need the dues is *now*. The treasurer hopes to collect all student dues early enough to make them of use this year.

NEW QUARTERS.

We are earnestly hoping that the faculty will allow us to take possession of the main floor of Primrose Hall as soon as the drawing classes can be moved to the new Engineering Building. The little Y. M. C. A. room in the basement of the main building has done much for the association, but that is entirely too small to hold any meetings in, and is difficult to keep attractive on account of its location below the surface of the ground and its poor floor. In Primrose Hall, we could keep more papers and magazines on our tables, could have some small games, and could hold most of our meetings in a comfortable way. There is no doubt but that its influence would be for the best among the students, and besides, it would be an easy matter to fix a place in it where we could receive our mothers and sisters when they visit us.

We earnestly hope that the faculty will make the decision in this favor, and in case they do, we shall make it a point to keep a man in the room each hour, which would assure good order in the room.

Letter received by Mr. Bergthold on February 15, 1911:

"SALOTTO"

Via Duomo 33

NAPOLI, February 4, 1911.

MR. J. W. BERGTHOLD,

A. & M. College,

West Raleigh, N. C.

MY DEAR MR. BERGTHOLD:

I have a letter from Dr. Weatherford, which brings all you Southern secretaries vividly before me. I am back in Lake Forest that Sunday afternoon, telling of our work in the Salotto, of our difficulties, our hopes, and our convictions as to the possibilities of the student field as we are in relation with it. I wish you might be here long enough to look over the field and talk with us fully about it.

It is not that you have not difficulties and trials, too; they are everywhere; but you have a Christian atmosphere and backing, where we are, in such a true sense, alone. If you could see just how we are placed, you would better understand what your promise of material aid, and the quick sympathy which prompted it, mean to us, and with what grateful hope we look to you. We both wish to thank you once more, and very heartily, for that promise, and we trust that in fulfilling it the blessing of the giver may be yours.

We trust also that you will have received our little monthly paper *Salotto*, and that it may serve to bring you more closely in touch with us, whom you are so unselfishly seeking to help.

With warm greetings from Sig. de Pertis and myself,

Very sincerely yours,

ALMIRA FAY LEAVITT.

THE STUDENTS OF ITALY.

The Southern secretaries during the Secretaries' Conference at Lake Forest, Ill., this summer, had the pleasure of meeting there, and associating with, Miss Almira Fay Leavitt,

a consecrated Christian lady, who has, for the past five years, been giving her entire life and a good share of her money to the work of Christianizing the students of Rome and Naples, the two great student centers of Italy. To affect this, she has established a "Salotto" (students' home), which corresponds to a Y. M. C. A. building in this country.

Nearly all of the Italian students are of Catholic descent, but, as a matter of fact, there is hardly one that adheres to that religion because, deep, shrewd thinkers as they are, they cannot consistently believe it, for they have seen the result of its sway, which is that, instead of making them free, it has made them slaves to it. It does nothing for its adherents, but is constantly requiring something of them.

Miss Leavitt interested them first by forming among them scientific clubs and other organizations for culture and education, by supplying them with good current reading, by serving them in every way possible without asking remuneration (something unknown there), by teaching them English, serving luncheons, and various other ways, as well as by supplying the home life through the building. When she had thus gained their confidence she introduced the study of the Bible, "The message of the only true God, and the record of the only real religion," and from this beginning the work has naturally developed into a social revolution, has induced students to render unselfish service, and has brought many to the feet of Jesus and to a confession of His power through love.

Members of the Salotto meet foreign tourists at Naples, protect them, and act as guides for them during their stay in the city.

For the benefit of the members of the Salotto, a building was rented last year and equipped as a gymnasium, and instruction was given periodically.

Miss Leavitt has found that the work, with its social, educational and religious service, its physical and extension work, has grown to such an extent that it is impossible for

her to do the work alone, consequently she has employed one Sen. de Pertis, a native graduate from the University of Naples, and a strong man intellectually, who has just completed a translation of the New Testament from English to Italian for the use of students, as her assistant and as secretary for the young men of the Salotto, while she (Miss Leavitt) retains general supervision of the entire work, and has the young women students in charge.

To carry on this work will require for the next three or four years an annual expenditure of \$2,500, and this amount the secretaries of the South agreed to try to raise in their fields.



LOCALS

The reception given by the Biological Club in the Agricultural Building on Monday evening, February 6th, was one of the most enjoyable events of the year. About four hundred guests were present, including a large number of Senators and Representatives, Meredith College guests and visitors from town.

Mr. Wheeler, representing the International Harvester Company, gave a very interesting illustrated lecture in the Agricultural Hall, February 20th, on the "Romance of the Reaper," which was enjoyed by a large audience.

The Sunday evening meetings of the Y. M. C. A. have been especially interesting during the past month. Several Senators have given talks, and a number of young ladies from Meredith College and Raleigh have sung at these meetings.

The Winter Course for agricultural students closed February 28th. This has been the most successful course we've had, and over sixty men attended.

Under the supervision of Prof. Sherwin, the Work-Course students are laying out a system of drainage for the entire college farm, which will be installed by them whenever funds are available.

Two members of the 1898 class have recently made visits to the college. Mr. H. M. Lamar is in the employ of the Forestry Division of the Philippine Islands, with his office

in Manila. He has been in the island for the past five years. Mr. E. A. Cahoon, also a Forester, is in charge of one of Uncle Sam's big forests in the far West. His office is in Eugene, Oregon.

Mr. Louis Moseley, of the 1902 class, paid us a visit very recently.

Mr. J. W. White, of the class of 1903, was on the campus a few days last week.

Mr. W. F. Pate, of the 1901 class, has recently become an instructor in the Chemical Laboratory here.

There is talk of Primrose Hall being occupied by the Y. M. C. A. after the new Engineering Building is completed. The association has enough chairs now to seat this hall, and we certainly hope that this arrangement can be made.

Prof. McNutt has recently purchased three holstein heifers for the college herd from Jones & Loomis, of Newport News, Va. These animals are all from high-producing ancestry and are all doing good work in the college herd at the present time. A two-year-old purebred Jersey heifer bred at the college is now making an excellent record in both milk and butter productions, leading the whole herd at the present time.

Prof. McNutt visited the South Carolina Live Stock Association, February 3d, and delivered an address to the associations on "The Preparation of Live Stock for the Show-ring, and Exhibiting Live Stock. Although a comparatively young man, Prof. McNutt is one of the strongest members of the faculty. He has only been with us this year, but already

has a host of friends, and the confidence of the entire student-body. He is not only greatly improving his own department but takes an interest in all college activities.

A number of donations were made to the Textile Department during 1910, including the standard grades of cotton as adopted by the United States Department of Agriculture. One one-half horsepower motor to drive loom, given by Allis Chalmers Company; one five-sided cylinder jacquard, from Laham & Whlinger.

Mr. T. B. Summerlin, of the '10 class, is now working with the new Republic Mills of Great Falls, S. C.

Mr. T. K. Bruner, of the '10 class, has been appointed assistant superintendent of the Francis Cotton Mills at Biscie, N. C.

The largest work ever undertaken in a railroad way in this section has been inaugurated by Messrs. J. E. Porter & Company, who have secured the contract from the Atlantic Coast Line for about thirty-five miles of second track from Battleboro to Pleasant Hill. The contract will aggregate about \$175,000, and includes grading the track work and all mason work, concrete piers, bridges, etc. Mr. Porter graduated with the 1900 class and has risen rapidly in his profession as an engineer.

The Executive Committee of the Trustees, consisting of Messrs. W. H. Ragan, High Point; R. H. Ricks, Rocky Mount; O. L. Clark, Clarkton; M. B. Stickley, Concord; N. B. Broughton and C. W. Gold, Raleigh, met on Thursday and inspected for acceptance the Engineering Building. With the exception of some minor changes directed by the commit-

tee, the building was accepted. Preparations will be made to move into the building at once. The east wing will be occupied by the Civil Engineering Department, the west wing by the Electrical Department. The third floor will be entirely given over to chemical work. In addition to the classrooms, the laboratories of both the college and Station will be located on this floor.

We were pleasantly surprised to have with us for a few hours on the 22d of February the Senior Class of the Greensboro Normal College. The young ladies went through the different departments and seemed very much interested.

We were delighted to have with us recently, Senator J. W. Buchanan, of Roper, N. C. "Buck" is an old A. & M. man, and will long be remembered as "one of the boys."

HONORS FOR THE MONTH OF JANUARY.

The following men made an average of 90, or over, on the following number of subjects:

Ten subjects—H. L. Taylor.

Nine subjects—R. W. Graeber, F. S. Hales and A. W. Taylor.

Eight subjects—P. D. Davis.

Seven subjects—H. B. Briggs, McN. DuBose, R. M. Hardison, F. C. Smith, O. Z. Wrenn.

Six subjects—L. A. Ammons, E. D. Bowditch, V. W. Breeze, E. D. Cloyd, J. B. Coward, T. F. Gibson, T. J. Hewitt, E. B. Hunter, J. G. Kellogg, M. Liferock, R. T. Melvin, T. K. Mial, B. M. Potter, J. B. Rees, C. L. Rhyne, L. N. Riggan, Ira Short.

Five subjects—N. O. Alexander, C. R. Bailey, G. L. Bain, J. M. Beal, C. E. Bell, R. L. Boylin, J. R. Buchanan, D. D. Cox, L. M. Craig, N. S. Edwards, N. G. Fetzer, C. F. Gore, W. P. Gwaltney, H. L. Joslyn, J. E. McGee, W. R. Mann, J. P. Quinerly, D. E. Roberts, G. T. Rowland, J. M. Smith, E. P. Speer, J. R. Townsend.

Mr. Ivey, a forestry engineer and a member of the New Hampshire Forestry Commission, made the students a brief but forceful address at chapel, Thursday morning, February 17th.

DANCE.

The February dance of the Thalarian German Club was given Saturday night, February 11—this being the most enjoyable event of 1911. The dance was most gracefully led by Mr. C. A. Stedman, dancing with Miss Elizabeth Johnson. Music was furnished by the college orchestra.

Those dancing were as follows: Mr. J. E. Brown with Miss King, of Wilson; Mr. J. M. Sherman with Miss Mamie Hay, Mr. G. T. Roth with Miss Mildred Holding, Mr. L. L. Merrett with Miss "Patsy" Hinton, Mr. T. W. Thorne with Miss Lillian Fountain, Mr. H. R. Holding with Miss Gladstone, Mr. E. S. Blount with Miss Lizzie Lee, Mr. J. A. Chambers with Miss Hill, Mr. E. J. Jeffress with Miss Mildred Hall, Mr. F. H. Wrightson with Miss E. Rogers, Mr. G. H. Anthony with Miss M. McKimmon, Mr. E. E. Hedrick with Miss Jene Thackston, Mr. O. M. Sigmon with Miss Skinner, Mr. W. L. Moody with Miss Ruth Lee, Mr. J. M. Beal with Miss Juliette Crews, Mr. E. V. Freeman with Miss Grizzelle Hinton, Mr. J. W. Hardie with Miss Betty Russ, Mr. S. B. Wright with Miss Fannie Johnson, Mr. F. D. Poisson with Miss Betsy Haywood, Mr. E. R. McCracken with Miss L. Swindell, Mr. J. B. Fearing with Miss Lewis, Mr. G. W. Ross with Miss N. Rogers, Mr. F. G.

Tucker with Miss Daisy Haywood, Mr. A. T. Bowler with Miss E. Thompson, Mr. "Rat" Jackson with Miss E. Swindell, Mr. Harry Hartsell with Miss L. Lee, Mr. Harvey Hill with Miss E. Hill, Mr. Phillips with Miss Ann McKimmon.

Stags—J. C. Murchison, Prof. R. P. Latane, Prof. R. I. Smith, Harry Grimesey, N. W. LeGrand, E. C. Latham, Wilson; Cormickle, "Monk" Haynes, T. G. Dortch, "Strapy" Strange, Doug Jeffreys, "Boo" Lachicotte, N. S. Lachicotte, John Carroll, Grimes Carroll.



COMICS

Dr. Harrison—"Mr. Martin, tell us something of Gullivers' Travels."

"Chick"—Gulliver traveled through London.

Mr. Peckham—"Mr. Dortch, what figure of speech is in this sentence?"

Dortch (as someone whispered to him "alliteration"—"Elevation.")

"Nick" Fetzer's favorite toast: "Here's to my nose, and over she goes—gone."

Fresh.—"Miss Huntington, what will it cost to mail this package?"

Postmistress—"Is it merchandise?"

Fresh.—"No, madam, it is a pennant."

Dr. Williams—"Mr. Goodman, what is the odor of iodine?"

Goodman—"Yellow."

Joe Brown—"Boys, I'm sick."

"Rummie"—"Well, what's the matter?"

Joe—"I have rheumatism in my eye."

Prof. Satterfield—"Mr. Freeman, what is brass made of?"

"Buck"—"Bronze."

Dortch (filling out roster)—"Nick, help me make out my program."

Who was it that felt so small on hydraulics ?

A conondrum: Why didn't "General Greene" Cruise take his lady friend to the Grand ?

"Pat" McIver—"Capt. Tucker, I have heard you talk about fire closers a lot, and now you tell me what they are.

"I know I'm long, and some people say
I've a lean and hungry look;
Some call it love;
But I happen to know
That it's from poring o'er my books."
—"Legs" Dunlap.

Conondrum: Why did Capt. Davis buy a Shaw University post card ?

"Nat" Street says that if A. & M. is ever "redeemed" because of smallpox he is going to leave on the first train.

Prof. Cecil—"Mr. Fetzler, what county are you from?"
"Nick"—"Concord."

Fresh. (in book store)—"What kind of a safety razor is that?"

Bray—"That's a Gillette."

Soph.—"You mean a 'Bray and Gillette.'"

Bray—"No; but while you are using the 'Gillette' you will 'Bray' all right."

You make a little call,
And you have a little chat;
You eat a little chocolate fudge,
And then you get your hat.

You say good-bye to sweetheart,
 And kiss her if you can—
 Now isn't that a h—l of a night
 For a great big healthy man! —“*Aus.*”

Prof. Newman—“Mr. Glenn, what are some of the abnormal growths of the corn plant?”

“*Gov.*”—“The ear, grain, shuck, cob, blades, tassel and stalk.”

There once was a lady named Moore.
 She's gone; her loss we deplore.
 Her manners were shocking—
 She threw down a stocking
 To some youths who were standing below her.

RESOLUTIONS OF RESPECT.

Whereas, by the mysterious workings of an all-wise Providence, whose beneficent will and intention it is not becoming in us to attempt to divine, two of our well-beloved, highly-respected and deeply-mourned members—John Dunlap and Surry Dunn—have been taken from our midst:

THEREFORE, BE IT RESOLVED, That the Veterinary School of the North Carolina College of Agriculture and Mechanic Arts present their respects to the departed brothers. May they exist in peace in the life to which they have been called.

BE IT FURTHER RESOLVED, That a copy of these resolutions be published in THE RED AND WHITE.

THE VETERINARY SCHOOL.

EXCHANGES

Should a college periodical be taken seriously? I was very much interested in the criticism of an editor of a weekly newspaper, as to a college man who had begun work on his staff. The editor remarked concerning a write-up of what came near to being a serious fire by the young member of the editorial staff. "Oh, well, such knocks are all right in a college publication, but you know older men in after-life don't appreciate a bunch of tommy-rot and slight remarks." The young man had been for the previous year editor of a college weekly, and to a large number of the college men had been quite the proper man. Is there not danger of us making our college magazines, in the true sense of the word, a joke? Do not think that I anticipate the blotting out of our joke departments, but rather the development of them to a more true sense of humor. If we are preparing ourselves for usefulness, and that is our aim, then should we not attempt, in our work with the college periodical, to produce something that is born to live and not to die? Many of our college journals do produce history of their college, of their church or State, and love stories and poetry built upon some thread of thought that is truly appreciative to the sympathies of college men for all time; and this more substantial matter is what we wish to encourage, and what we hope to see less of in our magazines is the light "pipe-dream" stories and the silly and absurd jokes which are appreciated by only a few, and by the few only for a moment, leaving with them absolutely no food for thought.

In *The State Normal Magazine*, "The Violin" is a beautiful half-dozen lines expressing the real and true life of the

sweet music of the violin as that instrument talks to man. "Student Government in Our College" is a powerful argument, placing upon the shoulders of students that duty of self-development and self-control, and the inspiration of this article will extend into institutions other than that of our sister school. We do not wish to encourage even slang, but a story like the "First Client" demands language natural to the character described, and that character should perhaps be changed and not the slang expressions. The story, however, has its good merits. The essay on "Henry Jerome Stockard" is in its length a most excellent one, and material of this nature is a valuable brick in the make-up of the magazine. "The Little Live Trunk" is interesting and amusing, full of appreciative dialect. Another valuable asset of this magazine was that of "Abram J. Ryan." Let us keep fresh in our minds the good deeds of our own people.

For the few short years that our State Normal College has been in existence, she has made a record envied by others, and has spread upon pages of history, recounting in detail, events which have made our sister school the pride of our State. And it is for the interest that a brother school has in this college, that we give much of our Exchange Department to them this month, and because in the January number there appears a discussion of what is, in our mind, the deep-rooted principle that has marked the much-praised characteristic of our Normal graduates. And it is to the proposition of open or secret societies that we wish to offer the ideas of another, not that we wish to advise, not that we are capable of suggesting ideas for another institution, and certainly we do not claim to know the principles peculiar to girl schools; but as much as we may abuse gossip, we must admit the final "Count of public opinion" is to be recognized by every one, and especially State institutions. Our nation, our State, our people, are lovers of the United Republic, and it is upon the true democratic ideas that we have grown with such progres-

sive steps. The State Normal is undoubtedly training its daughters to the service of our people as no other college can train them. But if there should arise within the student-body (and I don't believe it is there now, to any marked degree) principles which would tend to classify the students by social standing, causing the girl who has been blessed with social training and development to fail to stop and pull up her college mate (her society mate, if you please), the great sister love would be impaired, and all the powers of the faculty could not stop the oncoming fault. Now, why do we say all this? Because we believe that it has been the sister love and society fellow devotion of the two literary societies, working under the past principals and within themselves, that has caused the Normal girl to stand out as the most democratic, and a woman of the greatest love and sympathy. Loosen a band from your society that will lessen excitement, rivalry and pride, and you will loosen the great underlying power which has made you envied by a few and loved by many. It has been the experience of all organizations, at all times, that secrecy binds love and determination, and that such an organization can and will be a dynamic force to its members and will spread light on those around. I hope the Normal girls will not risk any so-called "progressive ideas" that would improve the strength of their societies in their democratic love which has undoubtedly been extended within their secret halls, and which pride might cause embarrassment in the same act, whether they be for the intellectual, physical or moral development, were there others of different minds looking on.

The Wake Forest Student deserves the highest praise of any college magazines which have come to us. The January issue being "Benefactors' Number," The February issue being a review of the men now in service of the State who matriculated at Wake Forest. Their record is indeed an enviable one.

Magazines received: *Lileston Topics*, *College Message*, *Wake Forest Student*, *V. P. I. Skirmisher*, *The Tatler*, *University of Virginia Magazine*, *Davidson College Magazine*, *State Normal Magazine*, *Guilford Collegian*, *St. Mary's Muse*, *Pine and Thistle*, *The Palmetto*, *The Sage*, *The Criterion*, *The Athenian*, *Transylvanian*, *Winthrop College Journal*, *Lenoirian*, *Radiant*, *The Conquest*, *Bessie Tift Journal*, *Collier's Weekly*.

