G. T. Bowen

vol. XXI no 1

The RED & WHITE

SEPTEMBER, 1914

CONTENTS.

THE RED AND WHITE

VOL. XVI. WEST RALEIGH, N. C., SEPT., 1914. No 1.

EDUCATION AND VOCATIONAL TRAINING.

By E. A. RICKARD.

One of the greatest questions which faces our country today is that of the relative emphasis to be placed upon education and vocational training in our schools. Shall our educational institutions be strictly cultural, or strictly technical, or shall they combine elements of both? The manner in which this question is decided will largely determine the future status of our country among the other great nations of the world: "For as our education is, so will our future be."

The intimate, and indeed vital, connection between education and national character is conclusively verified by reference to history. The Spartans, with their military education, became a nation of soldiers. They live in history through the exploits of Leonidas and his "immortal three hundred." No great masters of literature, art, or philosophy flourished within their borders. In Athens, on the other hand, symmetrical development was sought, with special training of the aesthetic sense—the sense to appreciate the beautiful in literature, art, philosophy and natural science. Let us note the result. In military affairs it was not Sparta that took the lead in repelling the great Persian invasion. The glorious culmination of the war was brought about by the master mind of Themistocles, an Athenian. And, in addition to the military glory, Athens could point to a line of sculptors, poets and philosophers unrivalled by any other city of the world.

In the history of the Hebrews—"God's chosen people"—we find this same vital connection between the educational system and their national life. Their education was pre-emi-

nently religious. Their nation lives in history through the religious system that they developed. They have been the religious leaders of the world. The Egyptians and Arabians will live in history for their contributions to theoretical and practical sciences.

Since history verifies this vital connection between education and national character, what type of education is best adapted in our day for equipping the individual for complete living? To the answer of this question there is widespread difference among educators, due largely to the many interpretations of the meaning of education. Is not education the development of all man's powers of mind, body and spirit in preparation for complete living? In any case, education is something more than any mere training for dexterity in the performance of a certain round of duties. Preparatory to all technical training should be a course of general education which broadly and profoundly develops the powers of the whole man.

Can vocational education furnish such a development? Is its scope sufficiently broad and are its methods sufficiently thorough?

Since the purpose of vocational education is to prepare the individual for the performance of the specific task to which his professional life is to be devoted, it is evident that vocational education alone can develop these latent possibilities and characteristics that go to make us ideal citizens and ideal leaders, and that cause us to forget our own self-interest and develop those characteristics that are really worth while, and that really make life worth living.

On the other hand, can cultural education alone develop the whole man? With all that can be said in favor of cultural education, it is evident that it cannot furnish this complete development. However, it does develop leadership and individuality to a remarkable degree. The alumni of Amherst—one of our oldest and best institutions of learning—boldly announce that the one true purpose of a college education is

the training for leadership. It is also a noteworthy fact that many of our universities are being severely criticised because of the fact that they are tending to become allied sets of vocational schools rather than centers of culture.

Much of this severe criticism has been uncalled for, and offered by men who do not realize the fundamental doctrine of equal opportunity for all in education. There is a reason for this tendency toward vocational education in our own country. The rapidly expanding demands of our industrial system has led to a remarkable development for practical education—vocational education, part of which has been at the expense of cultural education.

This same tendency is manifested in elementary and high schools. We look forward to the time when every child in the country will have the opportunity for an elementary education. High schools, in which departments of manual training, practical work and domestic science, have been introduced in connection with the cultural side of education, are being rapidly erected in all our cities. Through them the secondary and vocational education are within reach of all the fit. But what of the equality of opportunity for the higher and professional education? Shall we limit it to the children of the rich, or of professional men, or even of the moderately well-to-do? Shall not the higher education also be put within reach of all the fit? Everywhere the urban population is now increasing ahead of the rural. "Therefore, if we are to carry out our doctrine of equal opportunity for all in education, we must have municipal universities to put the higher education within reach of the youth of the city," says Dr. Schneider, of the University of Cincinnati. The small colleges, normal schools, agricultural colleges, and State universities have done much to open the way for the young people of both urban and rural districts to obtain the higher education. These various schools do not make the opportunities easily available for the sons of the middle and poorer classes of our rapidly growing cities. For this reason the

municipal university of Cincinnati was established. It is a new type of institution, and is doing much to democratize the higher professional education. Since it has paved the way, other similar institutions will be established.

What effect will such institutions have upon our educational system? The chief effect will be to democratize the system to an extent never known before. Cultural and vocational training go hand in hand. Symmetrical development is sought; that is, the emphasis on technical or vocational training is in harmony with that on the purely cultural education. Some of our professional schools realize the importance of a liberal education to the extent that they admit to their courses only holders of baccalaureate degrees.

In view of what has been said, it is evident that our educational system should be both cultural and technical. Upon this symmetrical development lies the hope of our country as a leader in the world's civilization and progress.

RETRIBUTION.

By C. C. PROFFITT, '15.

Trouble was a thing unknown to Hugh Waggoner and his wife Ruby. Although they had been married for more than a year, they were as much like lovers as in their courting days. Living in a simple but cozy cottage on a small farm which Hugh tilled to good advantage, they gained the esteem and good will of their neighbors.

But like the murky hue of the storm cloud that mars the brightness of a spring day, so their life of happiness and pleasant simplicity was to be darkened by the evil designs of a merciless scoundrel.

To Ruby Waggoner the news of Jack Lamson's return came like a thunder-bolt out of a clear sky. True to his word, he had returned to carry out his oath. Her mind went back to her wedding day. How vividly she remembered it. As they stood on the church steps, receiving the congratulations and advice of their many friends, with the customary showers of rice and confetti, Jack Lamson came through the crowd about them.

"Hugh Waggoner," he said, "before you came to this place, and cursed be the day you came, my heart would leap with joy at a single glance from the girl who is now your wife. I was happy in the thought that I loved her, and I believed that my love was returned until you came; then she turned from me to you, blasting all the cherished hopes of my life. You were the cause of my rejection, Hugh Waggoner, and as sure as there is a God in heaven I will make your life as miserable as possible."

Jack Lamson left the country soon after, news which Ruby thankfully received. Now he was back to carry out his villainous threats.

"Hugh,' she said, one morning not long after Jack's return, "please don't go to the cove-field to-day. I had such a

terrible dream last night. You and I were standing together when there came a blinding flash of light, and I was hurled to the ground. When I regained consciousness I saw you lying on the ground still and cold. As I was trying to warm you back to life with my tears and kisses, I heard a mocking laugh. Turning, I saw the leering face of Jack Lamson. I awoke to find it was only a dream."

"Hush, little girl," he replied, "you are unnecessarily worried over the dream. Take a good rest to-day and you will soon be over your nervousness," and he tenderly kissed her good-bye.

The day passed by—a long and weary one for the little wife. Try as hard as she could, she could not get the dream out of her mind.

The time for Hugh's return came and passed. The setting sun crowned the western hills with a halo of crimson glory, and the evening shadows brought peace and quiet over the land, and still Hugh did not come.

As the first signs of coming day appeared over the eastern hills, a searching party wended its way up the mountain side. They found him at the edge of the clearing, with the damp of death on his brow, the victim of a cowardly murder. Those who bore him home will never forget the heart-rending anguish of the little wife as they laid the dead body of her husband before her. Strong men as they were, they wept like children.

* * * * * * * * *

To Jack Lamson the evening seemed unusually gloomy, and the road unusually long. The very air seemed charged with a depressing influence. Was it the drinks taken or the money lost in the gambling den that so confused his senses? No, he was hardened to such as that.

"Jack Lamson," a voice broke into his musing, "I desire to speak with you." Out from the balsam thicket fringing the path stepped a woman clothed in black. Her hair hung in wild confusion over her shoulders, and her eyes gleamed

with a light so terrible that he shrank before the glance. A revolver held firmly in her right hand was cocked, and her finger was on the trigger. "Jack Lamson," she said, in a voice that continued clear and steady, "you have exactly five minutes in which to say your prayers. At the end of that time I will shoot you as I would a dog. You are not fit to breathe the same air with your fellow men, you cowardly murderer. You were not satisfied to make my husband's life miserable, you had to kill him. You were on your way to cross the divide to-night, fleeing from the scene of your crime, but you reckoned without me. You shall cross a divide to-night, but one over which you will not return."

The wretch on his knees in the path was silent. His face was distorted with fear. He racked his brain for a means of escaping the end that seemed inevitable. There was only one chance. Why not risk all in one desperate effort to overpower her? Eagerly he grasped the suggestion, as a drowning man clutches at a straw. Nearer he edged, inch by inch, as the seconds flew by. His body trembled, and cold perspiration gathered on his forehead. He gathered his energies for the spring. His eyes gleamed like those of a wild animal at bay. With a wild cry, like a soul doomed to perdition he sprang. The clear report of a revolver cut the stillness of the evening air, and all was silent.

THE TRAITOR'S DEATH-BED.

By DANIEL A. MONROE, '17.

Far away in London's suburbs
In a garret's dismal hall,
While the deathwatch throbbed distinctly
In a rudely garnished wall,
Cruel winter chilled the forehead
Of an exile from his land;
There unseen, unloved, uncared for,
Lay an unknown, dying man.

Worn and ragged were his garments,
As his face was worn with care—
Bent and old he was reeking
To remorse which brought him there.
Close beside him lay the garments
Of a soldier brave and true—
There with all the flag of freedom
With its stars and stripes of blue.

It seemed his life had been a blunder
From the earth's great tower of fame,
For he loves some distant country—
Ah! he tries to speak her name.
Oh! the room is filled with horror,
As the dying heaved the sigh—
"Oh! for my land—America—
Would I gladly fight and die."

Then the garret door was opened
And a sainted priest is seen
In his long great coat so darkened,
But a face of kindest mien.
The dying lips grow pale and death-like,
And his voice is low and weak,
While the minister spoke of heaven
And of Jesus low and meek.

Then the dying gave a shudder—
Called the minister by his name:
"Tell, oh! tell me, sir, I pray thee,
Canst thou give me back my fame?
If you have no honor for me,
Take your Bible—let me go.
My home is fixed with other traitors
In that lake of grief and woe.

"Come with me, thou sainted minister,
To the land I love so well—
Listen closely, catch each whisper,
Of the story I shall tell:
On yonder heights of Saratoga
Did I the victorious laurels wear,
But there, oh! there is where I yielded
To a bribe I could not bear.

"Hark! I see the British red-coats—
Hear the drumbeat as of old.
There! I see a traitor yielding
To a bribe of English gold.
Oh! these people who once loved me
As the apple of their eye,
Would part their lips and loudly curse me
When I in my coffin lie."

Choked with tears and pangs of conscience,
Crying honor as before,
He dropped his head upon his pillow,
Closed his eyes and breathed no more.

HE LEARNED ABOUT WOMEN FROM HER.

By S. O. S., '15.

"If only myself could talk to myself,
As I knew him a year ago,
I could tell him a lot that would save him a lot
Of the things he ought to know."

CHAPTER I.

To be sure such action on the part of Donald McIlwain could be accounted for by the one simple fact that it was spring. All the trees in the park were in full foliage, and from their green depths came the myriad voices of many birds. However, McIlwain did not excuse himself on any such grounds as this. He placed the blame, if such it may be termed, on no one thing. It was an inexplainable something within him which made him feel that this girl was different from all others whom he had met and chatted with in this same park, and it was for this reason he had retraced his steps after having passed several yards beyond her.

She was a young girl of about nineteen—not what a man would call beautiful, and yet all her defects were well cancelled by the extremely interesting and attractive air of the lady.

"I suppose you think I was foolish and indiscreet in giving you such a cordial smile, but to tell the truth I was lonesome," she said, as McIlwain took his seat beside her on the bench.

"Not in the least," replied Donald, "it was most welcome." But after this statement he wondered to himself if it was so welcomed after all, for when meeting Miss Beth Baker, as he soon found her name to be, he was at that moment on his way to keep an afternoon engagement with the girl whom he some day hoped to marry. But he threw the thought out of his mind with the inward statement, "I can see Dorothy most any time, and I'm going to make an afternoon of it with this girl."

"What have you scheduled for the afternoon?" he asked.

"Not a thing; didn't I tell you I was lonesome?" she replied.

"Well, then, if it's agreeable, let's go out to Sunset Park, get a row-boat and have a little pull up the river," he suggested.

* * * * * * * * *

Save for their one lone boat the river was practically deserted, and so for some time they went on, chatting agreeably and interestingly. A large, jagged rock near the shore caught her gaze, and she moved that for a change they get out and rest awhile. This was exactly what Donald had contemplated suggesting, and yet he was glad she had saved him the trouble.

"You have experiences like this many and many a time, do you not?" he asked, at the same time taking her hand in his.

"Yes, somewhat similar," she answered, not seeming to notice that he held her hand, "but not with quite so interesting a second party as I believe you to be."

"Now come on; let's do away with the boquets, and I think we'll get along better," he said lightly.

For several minutes neither of them spoke. Each sat idly watching the running water at their feet. The pressure and touch of her hand seemed to send a mad current, far swifter and more dangerous than that below them, through McIlwain's entire body. His arms stole swiftly around her; there was a flush in his cheek. She raised her head suddenly as if startled. Her gaze met his, and she madly tore herself away from him. In that one second she had read in his eyes a warning that McIlwain had no knowledge of.

She spoke calmly and quietly: "When I first met you I thought you were something different, but you are like all the rest of them. It does seem that in all my traveling I would meet one man, at least, who had mastered the beast in him."

By this time Donald's wits had rallied and he said, somewhat haltingly and with feeling, "I have no apologies to

make. But I will say that any girl who would act towards me, or any other man, as you have to-day, is either the wisest or most innocent girl in the world, and it seems that you happen to belong to the latter class. I'm glad you do; let's shake hands and forget it all." This satisfied her completely, and soon they were again chatting amiably.

The more he saw of Beth Baker the greater became McIlwain's interest in her, and he well knew that this interest was different from that which he had usually stimulated for the girls whom a man could "butt-in" with in the park down town.

His companion would talk on any subjeect which he wished to broach—always with the frank and open air of a lady; and yet, with all her apparent frankness and gaiety, something inexplainable—something felt rather than seen—told Donald that under all her polished armor there was something far more serious and perhaps not quite so frank.

Being an admirer of Whitman, he remarked, "I bet anything Whitman would have liked to have met and talked with you, because you talk so intelligently upon his pet themes, and yet somehow do it with the air and bearing of the lady I believe you to be."

"Since Walt did not have the pleasure of meeting this entertaining personage at your side, and since you have had such, why don't you write a few poems in 'competish?' I am confident that yours would soon banish his to the limbo of other long forgotten things," she said rather sarcastically.

"Perhaps I will," he answered, shortly. He was angry with himself, for in every exchange of wits he always came out at a great disadvantage.

The afternoon passed quickly, and as the shadows lengthened and the stars peeped out, they made their way back to the city.

"Beth," he said, as he escorted her to the boarding-house at which she was stopping, "there is a good picture on at the 'movies' to-morrow night. How would you like to take it in?"

"Delighted," she replied, "and *au revoir* until then."

"The modern woman," he muttered to himself as she left him and entered the house.

CHAPTER II.

Tuesday night came; the couple went to the show, and afterwards in the drug store Donald came face to face with Dorothy Hamilton, the lady with whom he had broken a date with the previous afternoon. He introduced Beth and said to Dorothy: "Remember that date I have with you to-morrow night, and chief among all things I want to explain on that occasion the cause of my not showing up yesteday afternoon."

"All right, Donald, the date still holds," she said in a colder and more formal tone than she used to use.

"Oh, you'll catch it to-morrow night, all right, all right," said Beth after Dorothy had gone, "I read it in her eyes."

"Well, I wont let it bother me until the time comes, and even then I don't know as it will matter so much, since I have had the pleasure of numbering you among my girl acquaintances," he answered flippantly.

"Boy, it will matter more than you think it will," she said somewhat moodily.

"What do you mean, Beth? I never heard you speak in that tone before." It seemed to him that she was on the point of relieving her mind of something which troubled her.

"Oh, nothing!" And she appeared to draw herself out of the humor into which she had fallen.

* * * * * * * * *

"Miss Dorothy will be down in a few minutes," the servant announced, as she ushered him into the library, their usual sitting place, on the following night. He had not long to wait. A rustle of silk heralded the coming of the lady. A slight flush was present in her cheeks, and her hand seemed exceedingly hot when he shook hands with her.

Only a few minutes of light conversation had passed when,

as if it were a thunder-bolt from a clear sky, Dorothy burst out: "Donald, I'm not going to fool along with you any longer. I want to tell you that I have heard of your wonderful lady, whom you have the nerve to flaunt in my face, and that I think you must be mad to run around with such as she. Just think what people will say. My brother told me that she was stopping at the Hammond House, and you know as well, if not better than I, what that alone means. Brother also said that she is nothing but an adventuress, and has taken you in for an E-Z mark."

Donald could stand it no longer. In words which fairly trembled on his lips he said, "If your brother said that, he lied. I'll tell his sister so now, and him the first chance I get."

"That is enough from you, Mr. McIlwain," Dorothy said, icily. "Our acquaintanceship ended with that last remark from you."

As the front door opened he said slowly and with feeling, "To explain would have been so easy, but perhaps it is best that things have ended as they have."

* * * * * * * * *

On Wednesday night McIlwain wrote to his former roommate at college, and told him part of the events which had transpired—not the bitter ending of the whole affair, but told of his meeting with Miss Baker; that she mentioned having lived in his town, and described the lady, her charms and her personality at great length.

Almost unbelievable and impossible was the hasty answer which he received; but there it was before him in Jack's own handwriting: "That lady (?) whom you mentioned and extolled so highly most assuredly did at one time live in this town. 'Boe,' take some advice from an old pal and cut her acquaintance *immediately*. To my certain knowledge she is an adventuress of the most dangerous type, utterly void of all good, and fit only to drift from place to place." The last words of the letter rang in his ears, "For God's sake break with her before she ruins you, as she has so many others."

The room reeled before him, and he felt as if something was hammering heavily upon his brain. He wanted to call the whole thing a lie, and yet he knew that Jack never repeated a thing unless he knew it to be the exact truth; he had never known him to have made a false report of any kind. His desire was to see Beth Baker and have it out with her, yet he knew that he was in no condition to see her at that time, and so forced himself to wait at least until the morrow.

CHAPTER III.

McIlwain walked—he knew not where nor how long, but finally came back to his room feeling throughout his mind a longing desire to see Beth Baker and let her hear from his own lips what he was well aware she already knew.

The next day was Sunday, and by Sunday night Donald felt calm and composed enough to meet the situation which he knew would arise when he next saw Beth, so at eight o'clock Donald called at the Hammond House for Miss Baker. When she came into the parlor he talked for a while as though nothing unusual had happened, and casually suggested that they take a walk to the place of their first meeting.

The night was bright and clear, with here and there a patch of fleecy clouds drifting lazily across the sky, which from time to time momentarily obscured the moon from view. All was quiet and still in the park, save the slow and dismal toll of a far-off church bell. It was almost as though the two were alone together in a great wilderness, and that ness, and that peace and quietude held the world in their peace and quietude held the world together in their sovereign power, yet, despite the outward calm with which Donald spoke, a mighty tempest was then tearing at the very roots of his soul.

"Beth," he began, "I could not imagine a better place or a more ideal time to say to you what is on my mind." He was

watching her like a hawk to note any change in her demeanor, but she was the quintescence of perfect self possession.

"All right, Donald, go ahead."

"Beth," his voice was cold and mechanical, "I had no idea when I was with you yesterday that I would see you again to-night, but something of extreme importance and terrible consequence, to me at least, has happened since then."

"Oh! what is it, Donald, please tell me; possibly I could help some," she said with a somewhat puzzled expression on her face.

"Simply this, Beth," he answered, but from the tone of his voice she knew that it was something of very serious nature. "You perhaps remember during our first conversation that you told me you had lived in Clarksville? Well, last night I received a letter from a friend of mine there—the best friend I ever had—and what he told me has literally changed my whole view and aspect towards women. That letter," he continued, speaking rapidly as if in a hurry to be done with it, "not only said that you were an adventuress, but that you had married once to cover a sin. This act alone throws you into the rank and file of the underworld as far as I am concerned."

"The person who wrote that letter is——"

"Don't interrupt me until I have finished," he said with the tone of one who is master of the situation. "I know what you started to say, and you need not finish; there is no need for you to attempt to lie. The person that wrote that letter spoke the truth, and further offered to furnish names, dates and numbers should I desire such detail information. I do not consider it worth while to tell you how much this whole thing has hurt me or how greatly it has shaken my faith in womanhood, for I do not think you capable of either understanding or appreciating—but I will say this much—that I will never forget the lesson this affair has taught me, should I live to be a thousand. It isn't so much the specific incident, but it is the principle of the thing. I can forget

you and the whole episode, but I'll swear that I could never again put any faith in a woman." Now he seemed not to be talking so much to her as to himself. "The worst of it is, I had wanted to be a friend to you, and how I had tried to be a gentleman with you, when everything within me seemed to say, 'You are making a fool of yourself and wasting your time,' but I was ashamed of such feeling and of myself for permitting such thoughts of you, so I put them out of my mind with the determination that I would show you what a gentleman could be. And now, just think, I have had all those dreams and visions only to be awakened to find the dreams all false and the visions only maddening mirages which lured me on." He uttered all this not in a melodramic, assumed tone, but it was the eloquence in both words and manner of a boy who had dreamed dreams and thought thoughts of all that was purest and best in women and himself.

"Ische bibble, Donald," and she tried to touch his hand. This speech and action of Beth's grated sorely upon his shattered emotions and showed him more than volumes of explanations could have done—what she really and truly was. To him he felt that her entire mask dropped with the utterance of this popular quotation, and she must have realized this fact herself, for before Donald could speak she said with assumed gaity and lightness, "Yes, Donald, you have found me out—all that letter said was true."

"Well, tell me what was your object—what sort of game were you playing. You did not seem to care for money?"

"It was this way, Donald: At heart I knew you were really a gentleman. It was awfully foolish, but it has always been my desire to test myself and see what a good line I had and how long I could run my bluff and get away with it. I succeeded far beyond my expectation, for I thought you would call me the first afternoon, but you didn't, and after that it was so much easier. But it's all up now, and after this we'll understand each other."

These last words were spoken in the typical speech of the world to which she was really a part, but all in all it made Donald sick at heart, for he had hoped against hope that she would "stand the acid test," or at least make some defense for herself.

"No, damn you, there will be no 'after this,'" muttered McIlwain in muffled tones, and he strode off into the night.

The only reply to this was a gay "Ische bibble," spoken in a harsh and metallic voice, which seemed to echo back and forth through his brain time and time again.

THE END.

AS IT IS.

By E. P. Holmes, '17.

I.

A boy rushed in the office
Of the college Registrar,
With a melancholy look
And a letter from his Pa.
Mr. Owen gave him permission
From his work in the dairies
And the next scene finds him
In the parlors of St. Mary's.

II.

The next fellow came in
With a rag around his head,
With an exclamation, I'm ill—
In fact I'm nearly dead.
Mr. Owen gave him permission,
And his story was also myth,
For the next scene finds him
In the parlors of Meredith.

III.

The third man came in
With an exclamation, "I've found
The evening train has brought
My mother into town."
Mr. Owen looked up in anguish—
Said, "Will this trouble never cease,"
And the next scene finds this man
On the road that leads to Peace.

SCIENCE

THE DEPARTMENT OF HYDRO-ELECTRIC POWER IN NORTH AND SOUTH CAROLINA.

By B. W. Setzer, '15.

Fifty years ago the waters of our rivers ran idle to the sea. Their only important duty was to drain the land. But to-day we have only to look around to see the great changes that have taken place The country is fast becoming covered with a network of electric transmission lines. There are but a few important towns in the States of North and South Carolina that are not being furnished with electric current for power and light; and this current is not being generated by the expensive method of steam power, but by our rivers.

Why have all these changes taken place so readily? The answer to this question cannot be put in a single sentence, for more than one force has been at work to produce the change. Leaving out the needs for a cheap and efficient means of furnishing light and power, we will find two principal causes for the great strides taken in hydro-electric development in the two Carolinas: (1) The development of the electric generating unit; (2) the improvement in the long distant transmission of electric current. After the invention of the incandescent lamp by Edison, and his application of the electric motor to railway work, the attention of the engineer and inventor was then directed to the improvement of the electric generating unit. The laminated armature in our modern machines took the place of the old solid type. About the same time another radical change in dynamo design came about in the form of the multi-polar type, in which the two pole field magnets of the old type were replaced by four, six, or as is seen in the alternators of recent design, fifty or more field magnets. The next step toward increasing the efficiency

of the generator were the revolving field and the laminated pole tips. These various improvements have changed the electric generator from a very inefficient to one of the most efficient machines.

When the Niagara power plant was completed the science of electric transmission was in its infancy as compared to its present stage of development. The engineers had in mind the utilization of most of the power at Niagara. The highest voltage used on transmission lines at that day did not exceed 22,000 volts; so it was almost impossible to transmit power further than twenty miles. But the engineers predicted that the time would come when Buffalo would be reached and all other towns within a radius of fifty miles. To-day we find in our own State transmission lines carrying a voltage as high as 110,000, capable of being transmitted, without excessive line loss, for more than a hundred miles. Thus we see that these improvements have opened up almost a new field in the engineering world, and brought the great force that nature has given us in the form of water power to our very door, though the hum of the machine and the fall of turbulent waters may be on the other side of the State.

Statistics show that in 1911 fifty per cent of all the cotton mills in the South were within a radius of one hundred miles of Charlotte. We may assign various reasons for this, but one that we cannot ignore is the fact that within the last ten years The Southern Power Company has been offering to the manufacturing interests of that section an abundant supply of electric power at reasonable prices. To give you some idea of what this one company has at their disposal, let us review their plants in the two States. On the Wateree River in South Carolina they have two plants of 32,000 horse power each, one at Great Falls and the other at Rocky Creek. On the Catawba, at Fort Mills, they develop 10,000 horsepower, and in two years on the same river in our own State they will have in operation at Lookout Shoals a plant of 23,000 horse-power. At Ninety-Nine Islands, on the Broad

River, they develop 24,000 horse-power. The Saluda plant at Saluda yields 35,000 horse-power, making a total of 156,000 horse-power for this one company alone. Most of this enormous amount of energy is expended in driving machinery and at a cost per horse-power which is very much less than if it were developed by steam. Leaving the developments of the Southern Power Company, let us notice those at Whitney, N. C., undertaken by a French corporation. Here we find that some forty or fifty thousand horse-power will be developed for the manufacture of aluminum. Omitting a number of smaller companies, we pass to the Carolina Power and Light Company, whose main office is in our city. This company develops about 30,000 horse-power at Buckhorn. They supply Raleigh, Weldon, and part of Durham with power and light. Thus we see that within the last decade the two States of North and South Carolina have taken foremost steps in development of hydro-electric power.

NORTH CAROLINA GEOLOGICAL AND ECONOMIC SURVEY.

Chapel Hill, N. C., September 1, 1914.

MINERAL EXHIBIT AT STATE FAIR BY SCHOOL CHILDREN.

The State Fair, which is to be held in Raleigh October 19-24, offers—under Department N—Minerals and Building Stones—awards as follows:

Two dollars for the "best collection of minerals and rocks made by any pupil of a public school."

A diploma for the "best collection of minerals made by any child under thirteen years."

A silver medal for the "best systematic collection of rocks from North Carolina, not less than 50 specimens, labeled with name and locality."

A gold medal is offered for the "best systematic collection of minerals from North Carolina of not less than 100 specimens, labeled with name and locality."

These awards are made in order to interest the school children of our State in making collections of minerals and becoming interested in that phase of our natural resources. It is hoped that the school superintendents and teachers will encourage their pupils to prepare such collections for exhibit. Any one desiring to make such an exhibit can obtain further information by writing to

JOSEPH HYDE PRATT, *State Geologist,*
Chapel Hill, N. C.

THIS IS A GOOD SUGGESTION FOR YOUR FARMERS.

To the Farmers of Buncombe County:

All indications point to *grain as the money crop* for the farmer during the coming year.

In view of the conditions brought about by the great European War, there will naturally arise an *increasing demand for wheat and corn.* The price has already advanced considerably, and shows every indication of further increase.

This condition presents a *splendid opportunity* for our farmers to *profit* largely through *planting more wheat this fall* and *more corn next spring.*

Many of the European wheat fields will be idle next year because the men are at the front fighting.

The Asheville Board of Trade, therefore, urges every farmer in *Buncombe County and Western North Carolina* to profit by present conditions by *planting more wheat, more corn, and other grains.*

Agricultural experts are agreed that land plowed during winter months give greater yield than with spring plowing. Also that subsoiling is very valuable as a crop increaser.

Yours very truly,

ASHEVILLE BOARD OF TRADE,
Agricultural Department.

J. A. NICHOLS, *Chairman.*
N. BUCKNER, *Secretary.*

COLLEGE BULLETIN.

SENIOR CLASS.

F. K. Kramer ---------- President
H. B. Constable ---------- Vice-President
L. C. Atkinson ---------- Secretary
W. F. Kilpatrick ---------- Treasurer

JUNIOR CLASS.

W. C. Albright ---------- President
C. S. Abernethy ---------- Vice-Persident
T. L. Milwee ---------- Secretary and Treasurer

SOPHOMORE CLASS.

J. W. Artz ---------- President
---------- Vice-President
R. L. Coleman ---------- Secretary and Treasurer

FRESHMAN CLASS.

Francis Whitaker ---------- President
J. C. Rose ---------- Secretary

HONOR COMMITTEE.

J. R. Williams, Chairman ---------- Senior Class
J. F. Nealy ---------- Junior Class
W. K. Scott ---------- Sophomore Class

Y. M. C. A.

J. S. Howard ---------- President
L. O. Henry ---------- Vice-President
J. F. Harris ---------- Treasurer
J. D. Ray ---------- Secretary

PULLEN LITERARY SOCIETY.

J. R. Williams ---------- President
J. O. Ware ---------- Vice-President
K. L. Greenfield ---------- Secretary
E. A. Hester ---------- Treasurer
J. E. Trevathan ---------- Censor
R. P. Harris ---------- Critic
G. W. Underhill ---------- Chaplain

LEAZAR LITERARY SOCIETY.

A. L. Teachey ---------- President
J. P. Robertson ---------- Vice-President
S. M. Credle ---------- Secretary
L. O. Henry ---------- Treasurer
G. L. Jeffries ---------- Censor
J. S. Howard ---------- Critic
M. M. Fountain ---------- Sergeant-at-Arms
S. G. Crater ---------- Chaplain

ELECTRICAL ENGINEERING SOCIETY.

A. C. Fluck ---------- President
G. L. Jeffers ---------- Vice-President
R. Crowder ---------- Secretary and Treasurer

MECHANICAL SOCIETY.

F. K. Kramer ---------- President
D. L. Hooper ---------- Vice-President
B. M. Bolunt ---------- Secretary and Treasurer

BIOLOGICAL SOCIETY.

R. P. Harris ---------- President
E. C. Turner ---------- Secretary
H. A. Lilly ---------- Treasurer
H. Spencer ---------- Corresponding Secretary
C. C. Proffitt ---------- Critic

RURAL SCIENCE CLUB.

J. D. Ray ---------- President
---------- Secretary and Treasurer
J. E. Trevathan ---------- Corresponding Secretary
A. L. Teachy ---------- Critic

THLARIAN GERMAN CLUB.

M. L. Correll ---------- President
O. S. Anthony ---------- Vice-President
J. McK. Spears ---------- Secreary and Treasurer
H. B. Constable ---------- Floor Manager

ATHLETICS.

ATHLETIC ASSOCIATION.

R. A. Plyler ---------- President
M. L. Correll ---------- Vice-President
H. B. Constable ---------- Secretary and Treasurer
J. R. Leguenec ---------- Chief Rooter
P. R. Rand ---------- Assistant Chief Rooter
B. Temple ---------- Assistant Chief Rooter

FOOTBALL.

B. W. Setzer ---------- Manager
C. D. Brittain ---------- Assistant Manager
R. H. Hill ---------- Assistant Manager
R. A. Plyler ---------- Captain

BASEBALL.

C. Osborne ---------- Manager
O. S. Anthony ---------- Assistant Manager
W. W. Riddick ---------- Assistant Manager
H. E. Winston ---------- Captain

TRACK.

L. C. Atkisson ---------- Manager
E. K. Herman ---------- Assistant Manager
G. H. Webb ---------- Assistant Manager
W. O. Potter ---------- Captain

BASKET-BALL.

D. Daily ---------- Manager
C. S. Abernethy ---------- Assistant Manager
W. C. Albright ---------- Assistant Manager
J. H. Mason ---------- Captain

ATHLETIC COUNCIL.

Prof. W. C. Riddick ---------- Chairman and Secretary

ALUMNI ATHLETIC OFFICERS.

J. W. Harrelson ---------- Graduate Manager
R. H. Merritt ---------- Alumni Representative
W. C. Ethridge ---------- Assistant Representative

PUBLICATIONS.

AGROMECK.

B. White ---------- Editor-in-Chief
L. P. Denmark ---------- Business Manager

RED AND WHITE.

C. C. Proffitt ---------- Editor-in-Chief
J. C. Carpenter ---------- Business Manager
W. A. Kennedy ---------- Assistant Editor-in-Chief
F. S. Klutz ---------- Assistant Business Manager

WAU GAU RAC.

B. W. Setzer----------Editor-in-Chief
L. C. Atkisson----------Business Manager
W. C. Albright----------Assistant Editor-in-Chief
C. C. Cooke----------Assistant Business Manager

THE RED AND WHITE

THE MONTHLY MAGAZINE OF THE STUDENTS
OF THE
NORTH CAROLINA COLLEGE OF AGRICULTURE AND MECHANIC ARTS.

[Edited by the Pullen Literary Society (P. L. S.) and the Leazar Literary Society (L. L. S.).]

SUBSCRIPTION:

One year, ... $1.00 Single copy, ... 15 cents.

Entered in the West Raleigh Postoffice as second-class mail matter.

Students, Professors, Alumni and friends of the college are each and all invited to contribute literary articles, personals and items. All contributions, accompanied by the writer's name, should be sent to the Editor-in-Chief, and all subscriptions to the Business Manager.

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

EDITORIALS.

Once again, after an intermission of three months, THE RED AND WHITE extends greetings to all, with fond hopes of securing the esteem and support of its readers during the coming year.

To the Freshman on our campus we wish to extend the heartiest welcome. The first month of a man's college life is a very trying one; nevertheless it is one that every college man must pass through. It will be surprising to you how these early obstacles and difficulties will fade away, as you put your shoulder to the wheel, and show to both students and faculty that you mean business. It is only by sharing hardships, as well as pleasures together, that we learn to know each other as real friends. The man who is willing to mix

a liberal amount of good, hard work with his pleasures is sure to succeed. It is now up to you to prove yourselves worthy of the title which you now hold (A. & M. men).

We are glad to note that such a large number of new men are joining the literary societies and other college organizations this year. A lively interest, and a liberal amount of time given to such work is very beneficial to every college man. A man without book learning and without the ideas and influences that are obtained from systematic and well conducted organizations, is likely to be narrow-minded as long as he lives. If a man ever expects to take advantage of his opportunities and be a leader, he must learn how to handle men as well as implements, and an active part in some organization is the best means by which he may acquire this rare quality.

The interest of every student is now keyed up to the highest point of expectancy as they look forward to the rapidly approaching date of the anniversary celebration of the twenty-fifth successful year in the life history of our institution. It is indeed with great pleasure that THE RED AND WHITE and the student body as a whole welcome back to the "old hill" those who have gone out from the college during the last quarter century, and who will come back to tarry in our midst for a few short days.

It was verily a red letter day in the history of North Carolina when that group of six men, the Watauga Club, first conceived the idea of establishing an Agricultural and Mechanical College, and a vote of thanks is due them that such a celebation as is now upon us can be enjoyed at this time.

The college has made wonderful progress in these few short years—not alone in the number of students, but also in

its facilities, and is now offering to the young men of the State the best form and methods of modern day educational systems. Each of us recognizes this fact, and become more and more impressed with it, as day by day we live according to its principles and ruling.

Students of A. & M., it is our rare opportunity and delight that we have the honor of being hosts to those returning to their Alma Mater, and the sentiment of Senior and Freshman alike should be: "Gentlemen, at your service; command of us what you will!"

ATHLETICS

R. O. LINDSAY, '16, *Editor.*

FOOTBALL.

From all indications at present Coach Hegarty is going to produce a football team this year as good as ever represented A. & M. College. With nine of last year's South-Atlantic champions back to hold down their old positions, and with some new material that looks nearly as good as last year's varsity, there is no doubt that the Aggies will make a record that every A. & M. student can look back over with pride.

The members of last year's varsity back to take their old posts are Tenny, Van Brocklin, Seeifert, MacDougal, Anthony, Cooke, Riddick, Plyler and Winston. Tenny, whose middle name is "Touchdown," Van Brocklin, the husky quarterback, and Riddick, one of the greatest punters on the Southern gridiron, are lads who make the foe sadly shake their heads and say, "What's the use?" Seifert, MacDougal and Anthony, who did spectacular work as ends last year, are in excellent form for the fall work. Cooke would very probably have been an all South-Atlantic tackle if he had not got his collar bone broken before the season closed last year. He certainly has the goods when it comes to playing football. Captain Plyler has also made a record for himself. He has been on the team three years, and always on the job. He is not the kind that gets hurt. Although Winston has just been on the team one year, he shows up just as well as the rest, and is in better form than ever.

This leaves three vacancies to be filled by new men. Among the most promising for these positions are Brunner, who demonstrated his aptitude for football in last year's class games; Sharp, who is showing great skill in the back field; Derby, who is also going good in the back field, and Young,

a last year's scrub, who is doing good work in line. There is some good material among the new men, and the Coach is expecting to develop some excellent players.

Coach Hegarty, whose assistance was essential in putting out the champion eleven last year, is fast rounding these lads into a team that works like a machine. He has the knack and the personality that a coach needs to put the fighting spirit in a fellow, to give him some "pep," and to bring out all there is in him. It is an interesting sight to be on the practice grounds every afternoon and see 'em fighting for a place even as a scrub.

The elementary work of weeding out those candidates showing the least aptitude and skill is over, so that the coach is now able to give more attention to the individual player. However, the thirty that remain on the squad throughout the year are almost too many for only one coach to give each player a fair amount of time. It is therefore fortunate that John Bray, an old A. & M. star, is coaching the scrub eleven, which has proved no easy foe for the varsity.

Viewing the whole situation, our prospects for the coming season are very bright. Although the Aggies are before one of the hardest schedulees they were ever up against, we are more able to face this kind of schedule than ever before. With good material, and with a good coach to coach 'em, we are confident of possessing our old title as South-Atlantic champions for another season.

COMICS

J. E. Trevathan, '15, *Editor.*

First Freshman (mispronouncing roster)—"Have you filed your rooster yet?"

Second Freshman (misunderstanding)—"No, we cut his head off with an axe."

Indefinite Definition.

Prof.—"What is milk?"

Fresh.—"It is fluid given by a cow."

A Good Reason.

Hopkins (thumping a ripe watermelon which he was carrying on his shoulder)—"Ram, listen how green this watermelon sounds now. It sounded ripe before I picked it up."

Ramseur—"Hop, you know what causes that to sound green? It is the vibrations running through you."

What Next?

A very wise freshman smelled his peanut butter and said he thought it must be honey.

On a post card which one of the boys received the other day was the following notice: "If you do not receive this card, please notify me at once."

A specimen of the near-English language and "The Reason" for business English courses:

Mr. Milwake raleroad

Dear sers,

it takes me grate pleasure to let you kno i am going to rite you about mine pet dog Dick which was kilt by one of yous trains that goes est on mundy and west tuesday in afternoon this train was going quik and hit mine dog on the west ent of my feld at wher the trains go the dog was hit by the engin first and was kilt rite away without dieing when i fond mine dog he was al ded with to hind legs and his back hurt and his hed was al mashed in my dick was a fine dog he were a good dog only he wer blin in 1 iy an had 1 leg brok when he ben a pup Al of mine childs culd play by he and he only bit 1 now if you don have no subjecshun i wuld like to have her mine Dik, $5. pls let me no what i will do as i want to do sumthin abot it

i. r. rank.

—*LaSalle Extension Magazine.*

A SIDE STEP.

Bix—"Can you lend me $5 for a month, old boy?"

Dix—"What the deuce does a month-old boy want with five dollars?"—*Boston Transcript.*

GOOD RIDDANCE.

"So Miss Biffers is married at last?"

"Yes."

"And who is the happy man?"

"Her dear old dad."

—*Birmingham Age-Herald.*

LOCALS.

K. L. GREENFIELD, *Editor.*

"Turpentine" Clark arrived on the campus about the middle of September. He says he liked it so well in South Dakota that he came near not coming back at all. He more than hinted that his heart has been captivated by one of the "wild and wooly" girls of the West, and this no doubt accounts for his late return to college.

"Archie" Farmer, for two years captain of the A. & M. baseball team, was on the campus last month. It is an open secret that Archie is to become a bridegroom in the near future. His many A. & M. friends will wish for him a happy and successful married life.

T. L. Bayne, of the Class of 1914, was on the campus soon after college opened. This year he will take charge of an Agricultural High School. This is beecoming an important field of endeavor for graduates of an agricultural course.

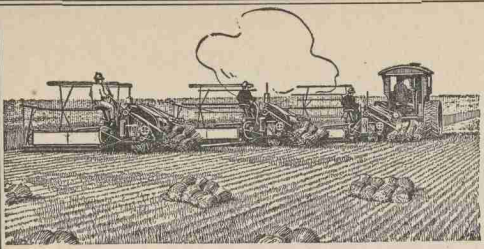
A remarkable interest has been shown this fall in the various technical and literary societies. The new students are entering this work with enthusiasm, and the year promises to be the most successful in the history of the college along these lines.

H. L. Joslyn, of the Class of 1913, is now an instructor in the Soils Department, and is also taking some student work. Joslyn was a leader in college life while here, and we are very glad to have him among us again.

The Freshman class have organized temporarily with the following officers: Francis B. Whitaker, President, and J. C. Rose, Secretary.

ADVERTISEMENTS

LOOK 'EM OVER



Within certain reasonable limits, the more machines there are on a modern farm the greater will be the profits on that farm. No farmer who raises grain would think of trying to harvest his crops without a modern harvesting machine. No dairy farmer who is looking for the most profit would dream of running his farm without a cream separator. Nowhere to-day do you see anything but modern machines in the hay field. Therefore, every man who aspires to be a farmer should familiarize himself with the different lines of farm machines offered, so that he may be sure of buying the most profitable machine when the time comes for him to invest his money.

We offer for purposes of study and comparison the following I. H. C. lines:

Champion, Deering, McCormick, Milwaukee, Osborne and Plano Harvesting, Haying and Corn machines, and Binder Twine; I. H. C. Tillage Implements, Grain Drills, Manure Spreaders, Cream Separators, Feed Grinders, Motor Trucks, Wagons, Oil and Gas Engines, Oil Tractors.

The reputation of these machines is established, and you will find them at work in every farming community.

Local dealers who are friends and neighbors handle our machines. They can give you full information about any machine you're interested in, or, we will send you catalogues on request.

International Harvester Company of America

(Incorporated)

CHICAGO U. S. A.